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1 **Responding positively to "children who like to eat": Parents' experiences of skills-based**
2 **treatment for childhood obesity**

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6

7 **Abstract**

8 This study aims to understand the challenges parents of preschoolers with obesity face. We
9 assessed parents' experiences of a group treatment program focused on parenting skills; the
10 treatment program was evaluated in a randomized controlled trial in Stockholm County. After
11 completing the program's 10 weekly sessions, parents were invited to participate in a semi-
12 structured interview. The interviews were audio recorded, transcribed and analyzed using
13 thematic analysis. In total, 36 parents (67% mothers, mean age 39 years, 33% foreign
14 background, 50% with university degree) were interviewed. Two main themes were
15 developed: *Emotional burden* and *Skills and strength from others*. *Emotional burden*
16 encompassed the parents' experiences of raising a child with obesity. Parents spoke about the
17 difficulties of managing their child's appetite and of seeking help and treatment, as well as
18 their feelings about the social stigma attached to obesity. *Skills and strength from others*
19 encompassed the parents' experiences of participating in group treatment. Parents reported
20 that they appreciated the practical behavior change techniques taught, especially those
21 regarding food and how to make everyday life more predictable, and said the focus on
22 parenting skills gave them the confidence to apply the techniques in everyday life. Parents
23 also highlighted the strength of the group setting, saying it enabled them to discuss perceived
24 challenges and learn from other parents. Our findings show that childhood obesity carries
25 social and emotional implications for parents, and that an intervention that provides parents
26 with skill-building and a discussion space can help in negotiating these implications. This
27 suggests that childhood obesity intervention programs benefit from including a parent-based
28 approach which offers training in parenting skills and support in managing socially and
29 emotionally challenging situations.

30 **Keywords:** appetite regulation; childhood obesity; emotion regulation; feeding; family;
31 hunger; interventions; stigma

32 **Introduction**

33 According to recent estimates, nearly 124 million children worldwide are classified as having
34 obesity (Collaboration, 2017). While there is some evidence that the overall prevalence of
35 childhood obesity is stabilizing, this is not true for the preschool age group (Skinner,
36 Ravanbakht, Skelton, Perrin, & Armstrong, 2018). The increasing prevalence of obesity in
37 preschoolers is concerning, as childhood obesity often tracks into adolescence and adulthood
38 (Simmonds, Llewellyn, Owen, & Woolacott, 2015). Furthermore, as childhood obesity is
39 related to numerous physical and psychological co-morbidities, including cardio-metabolic
40 risk factors, decreased health-related quality of life and depression (Farpour-Lambert, et al.,
41 2015; Sanders, Han, Baker, & Cobley, 2015), effective interventions are needed in the
42 preschool age group. Despite mounting evidence that the treatment of obesity should start in
43 early childhood, when dropout rates are lower and treatment is more effective compared to
44 later in childhood (Danielsson, et al., 2012; McPherson, et al., 2017; Waters, et al., 2011), it is
45 still unclear what treatment program components are especially helpful in supporting parents
46 (Pont, et al., 2017).

47

48 Parent-based treatment programs that provide parenting skills training have been
49 recommended for childhood obesity, as they target behavioral strategies in the family in
50 addition to offering advice on eating habits and physical activity (Foster, Farragher, Parker, &
51 Sosa, 2015; Ling, Robbins, & Wen, 2016; Loveman, et al., 2015). Programs specifically
52 developed to strengthen parenting practices are still rare in clinical obesity treatment
53 (Boutelle, et al., 2017; Ek, et al., 2019; Gerards, et al., 2015; Magarey, et al., 2011; Moens &
54 Braet, 2012; Stark, et al., 2018; West, Sanders, Cleghorn, & Davies, 2010), and only two have
55 been developed for children in the preschool age (Ek, et al., 2019; Stark, et al., 2018). The
56 extant programs, however, have yielded promising weight status outcomes, which could

57 inspire wider clinical use of parenting programs to address obesity in early childhood (Ek, et
58 al., 2019; Stark, et al., 2018). To place these outcomes into context and thereby inform the
59 future development of similar programs, it is essential to develop a greater understanding of
60 parents' lived experiences of parenting young children with obesity (Haugstvedt, Graff-
61 Iversen, Bechensteen, & Hallberg, 2011; Stewart, Chapple, Hughes, Poustie, & Reilly, 2008;
62 Turner, Salisbury, & Shield, 2012), as related to their experiences of parent-based childhood
63 obesity programs.

64

65 A challenge to weight management at all stages (including at the level of recruitment for
66 treatment interventions) is that parents perceive childhood obesity as a very sensitive and
67 difficult matter to discuss (Andreassen, Gron, & Roessler, 2013; Bentley, Swift, Cook, &
68 Redsell, 2017; Pont, et al., 2017). Parents avoid using words such as overweight and obesity,
69 and some feel it is inappropriate to talk with their child about this topic (Eli, Howell, Fisher,
70 & Nowicka, 2014a), arguing that discussing weight status could harm their child's self-esteem
71 (Andreassen, et al., 2013; Eli, et al., 2014a; Haugstvedt, et al., 2011; Turner, et al., 2012).
72 Some parents also worry that treatment for childhood obesity could potentially cause an
73 eating disorder (Andreassen, et al., 2013). At the same time, parents of infants wish to be
74 informed about their child's obesity from health care professionals in order to intervene
75 appropriately (Bentley, et al., 2017), and parents of young children appreciate such
76 information if conveyed empathetically and non-judgmentally (Bentley, et al., 2017;
77 Edmunds, 2005; Eli, et al., 2014a; Pont, et al., 2017; Stewart, et al., 2008). Recognizing that
78 parents may experience particular difficulties in the context of treatment, where childhood
79 obesity is continuously discussed and where parenting skills may be challenged, this study
80 explores parents' experiences of parenting a young child with obesity and of taking part in a
81 skills-based treatment program for obesity at an early age.

82

83 The present study aims to: (i) understand challenges that parents of preschoolers diagnosed
84 with obesity face and (ii) assess parents' experiences of a parent-based group treatment
85 program evaluated as a part of a randomized controlled trial, the More and Less (ML) Study,
86 in Stockholm County, Sweden.

87

88 **Methods**

89 The ML Study evaluated a group treatment program for parents of children with obesity, aged
90 4-6 years, in comparison with the current standard treatment offered in Stockholm County.
91 Sixty families completed the program; group sizes ranged from 5 to 12 families. On average,
92 families participated in 71% of the sessions. The ML group treatment program was comprised
93 of 10 weekly sessions, 1.5 hours per week, which provided training in positive parenting skills
94 and limit-setting strategies. The program also included facilitated discussions on obesity-
95 related lifestyle components (e.g., food and beverages, sedentary behavior, physical activity
96 and stress). The children did not attend the group sessions. After the program concluded,
97 randomly selected participants received phone-based booster sessions during the remaining
98 nine months of the study. The booster phone calls were conducted by one of the treatment
99 group leaders and took place every 4-6 weeks; each booster session phone call lasted about 30
100 minutes. The program has been described in detail elsewhere (Ek, et al., 2015; Ek, et al.,
101 2019). The reporting of this study follows the Consolidated criteria for Reporting Qualitative
102 research (COREQ) checklist, see Supplement 1 (Tong, Sainsbury, & Craig, 2007).

103

104 *Participants*

105 During the last session of the ML parent group, the group leaders informed all parents that
106 they might be contacted by a researcher and asked to participate in a semi-structured
107 interview. For the interviews to provide rich content, only parents who attended at least three
108 sessions were selected. Participant selection was designed to ensure representation of booster
109 and no-booster session program participants, and of fathers and mothers. Because more
110 mothers than fathers took part in the group sessions, in families where both parents attended at
111 least three sessions, we allowed both parents to participate in separate interviews in order to
112 increase the number of interviewed fathers. Between three and six months after the last
113 session of group treatment, the selected parents were contacted by phone with an invitation to
114 take part in the interview. All invited parents agreed to participate. The interviews were
115 scheduled for a time convenient for the interviewed parent.

116 *Interviews*

117 The interviews were conducted over the phone up to six months after the completion of the
118 ML program. The interviewer was one of the researchers (a research assistant with a Master's
119 in Public Health or the principal investigator, a family therapist with a PhD in Pediatrics).
120 Both interviewers were women, and both were experienced in communicating with parents
121 whose children have obesity, with training and/or previous experience in conducting research
122 interviews. Neither interviewer led the ML program in the groups her assigned interviewees
123 attended. An interview guide with semi-structured questions was developed by the research
124 team. The interview questions were mainly targeted at program evaluation; examples of the
125 questions asked include: "Was there something that could have been addressed more during
126 the program?"; "Has the program affected your sense of being a competent parent?"; "What
127 parts and which parenting skill presented during the program have been helpful to you?"; and
128 "What lifestyle changes has your family made during the program?" (See Supplementary
129 table 2). Probe questions were used depending on individual answers. Following the first few

130 interviews, the research team met to review the interview guide and ascertain whether any
131 questions needed adjustment, based on the interviews; the team decided not to change the
132 original set of questions. Each interview lasted approximately 23 minutes (14 min – 35 min).
133 All interviews were audio recorded and transcribed verbatim by a research assistant, and by
134 KN and PN.

135

136 The interview transcripts were analyzed using thematic analysis with an inductive approach
137 (i.e., a data driven approach rather than a theory driven approach) (Braun & Clarke, 2006).
138 Following Braun and Clarke’s (2006) delineation of thematic analysis types, the thematic
139 analysis followed a realist approach, one which “reports experiences, meaning and the reality
140 of participants” (Braun & Clarke, 2006). All material was carefully read by PN, KN and AE
141 for an overall understanding of the interviews. PN carried out the initial coding, and KN
142 coded interview transcripts independently, to establish inter-coder reliability. PN and KN
143 discussed the codes, revised them, and then met with AE to develop themes based on the
144 codes. After these themes were developed, all authors discussed the themes and resolved
145 disagreements regarding the thematic framework. The original Swedish-language transcripts
146 were used in the analysis. For this manuscript, selected quotes were translated from Swedish
147 to English, to illustrate the themes.

148

149 *Ethical considerations*

150 The study was reviewed and approved by the regional ethical board in Stockholm (dnr:
151 2011/1329-31/4; 2012/1104-32; 2012/2005-32; 2013/486-32; 2016/80-32)). Parents received
152 verbal and written information about the interview study and were told that participation was
153 voluntary and that it would not affect their future participation in the ML Study or their

154 children's treatment. Before the interviews, participants were given the opportunity to ask the
155 researcher questions about the study. All parents provided written informed consent, which
156 was sent by post to the research team. Participant confidentiality is maintained throughout the
157 manuscript.

158

159

160 **Results**

161 Table 1 displays the descriptive characteristics of the participating parents and their children.

162 In total, 36 parents were interviewed (including separate interviews with two parents from the
163 same family), with 51% (18/35) of the families having received the booster sessions.

164 According to the thematic analysis sample-size standards defined by Guest et al. (Guest,
165 Bunce, & Johnson, 2006), the number of 36 interviewees suggests that data saturation was
166 reached. All invited parents who were asked to participate agreed to be interviewed. Most
167 interviewed parents were female (67%, 24/36), of Swedish origin, and with a university
168 degree. Parents had a mean age of 39.1 years (min-max 27.7-65.5 years) and an average Body
169 Mass Index (BMI) of 27.9 kg/m² (min-max 19.5-41.0 kg/m²). Their children were on average
170 5.1 years old (SD 0.8, min-max 4.1-6.7 years); 43% (15/35) were girls and the mean BMI
171 standard deviation score (SDS) was 3.0 (SD 0.7, min-max 1.8-4.7). Compared to families who
172 participated in the parent group but not in the interviews, the families of the interviewed
173 parents included a greater proportion of mothers who had a university degree (56%, 19/34)
174 and a greater proportion of fathers who were born in Sweden (65%, 20/31).

175

Table 1. Descriptive characteristics of the participating parent and child at baseline.

	Parent (n=36) ^a
	<i>Mean (SD)</i>
Age (years)	39.1 (7.4)
BMI (kg/m ²)	27.9 (5.5)
	<i>Number (%)</i>
Gender	

Female	24 (67)
Male	12 (33)
Foreign background	
Yes	12 (33)
No	24 (67)
Weight category	
Normal weight	11 (32)
Overweight	14 (41)
Obesity	9 (27)
Highest school grade	
Grade school	1 (3)
High school	16 (44)
College/University	18 (50)
Missing	1 (3)
Working situation	
Full time	24 (67)
Part time	6 (17)
Not employed	3 (8)
Student	2 (6)
Missing	1 (3)

Abbreviations: SD, standard deviation; BMI, Body mass index.

Foreign origin: parent and both grandparents born in a country other than Sweden or parent born in Sweden and grandparents born abroad.

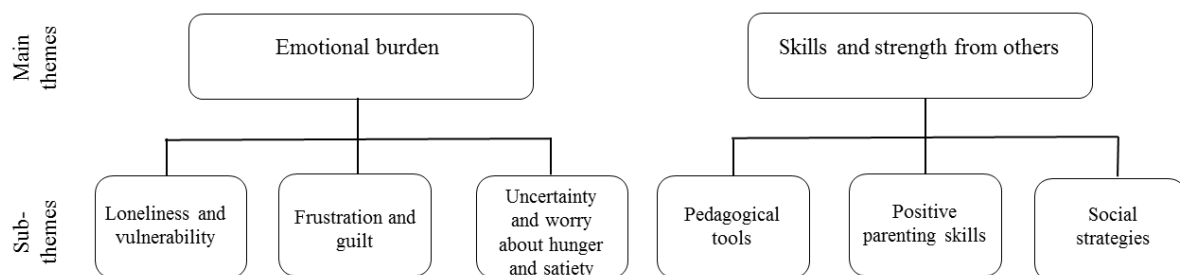
Parents were classified as having normal weight, overweight or obesity according to the World Health Organization's cut-off criteria for BMI.

^a Both parents of one child were interviewed separately.

176

177 Two themes were developed through the analysis: *Emotional burden* and *Skills and strength*
 178 *from others*, each with three sub-themes (Figure 1). Each participant quote has been labeled to
 179 indicate the interviewed parent's gender (M for mother and F for father), the type of parent
 180 group attended (B for Booster and NB for No-Booster) and the interview number.

181 **Figure 1.** Themes from the thematic analysis



182

183 ***Theme 1: Emotional burden***

184 The first main theme encompasses parents' experiences of raising a child with obesity. This
185 theme includes three subthemes: *Loneliness and vulnerability, frustration and guilt* and
186 *uncertainty and worry about hunger and satiety*.

187

188 *Loneliness and vulnerability*

189 Parents described having no one to talk to about their child's weight problem and no one to
190 share their worries with. They often experienced a lack of understanding from health care
191 professionals, as well as from relatives, friends and neighbours, who did not appreciate the
192 efforts parents made, since these efforts did not always result in the child losing weight. Even
193 when parents decided to seek treatment, they still experienced loneliness and vulnerability,
194 feeling judged by health care professionals. One parent reflected on an earlier visit to a
195 dietitian with her child (which took place before she participated in the group):

196 *It was a very big difference. There [in the outpatient setting] I felt very lonely*
197 *and almost as if I were attacked even if that perhaps was not the case*
198 *(Code MNB27).*

199 Another dimension of loneliness occurred within the family, when one parent was more
200 engaged in lifestyle changes than the other parent. Highlighting this disparity in parental
201 involvement, some parents said it was particularly important to them that both parents
202 attended the treatment program: "*Then there is a disadvantage that it was I who was more*
203 *involved so to speak, but I feel that it is my husband who needs more information*" (Code
204 *MNB6*). For separated parents whose children divided their time between two homes, it was
205 sometimes difficult to find consensus regarding food and activity.

206

207 Managing a child's weight was not limited to the household, but also required the
208 involvement of other important people in the child's life, such as grandparents. However,
209 some parents said it was difficult to receive support from grandparents. For example, one
210 mother explained that her parents initially resisted her requests for help to manage her child's
211 weight:

212 *At first it was a bit of a roadblock, [they said] well `she is only 4... she is so*
213 *pretty and all', you know. Then we talked about it, [her weight status] that it is*
214 *all about creating good habits ... It is about a long-term commitment, and*
215 *everyone needs to be involved (Code MB19).*

216 As this quote underscores, when grandparents resisted parents' requests for involvement in
217 managing young children's weights, this was often because they did not perceive child
218 overweight or obesity as problematic. Previous research has found that grandparents and
219 parents tend to describe children's higher weight status as indicative of cuteness, strength, or
220 health (Eli, et al., 2014a). Thus, when parents tried to involve grandparents in child weight
221 management, they not only had to explain the practical changes they wished to implement,
222 but also justify their decision to implement these changes.

223

224 *Frustration, guilt and lack of power*

225 For the participating parents, childhood obesity evoked very strong feelings, as captured in
226 this quote by a mother:

227 *Yes, you felt somehow powerless. My thoughts were: `what are we doing*
228 *differently from others? or why does he keep gaining weight when other*
229 *[children] do not?` What are we doing that the others are not doing, so you*

230 *compare what you are doing. I do not give him more food or more sugar etc.*
231 *(Code MB26).*

232

233 Some parents said they felt like bad parents if they stayed indoors all day when it was raining,
234 or if they went to a fast food restaurant for dinner. They expressed that they knew what to do,
235 but they needed help to test their knowledge in real life conditions. As one mother said “... I
236 *am constantly aware of what to do in different situations. The difficult part is to actually*
237 *apply them [tips]” (Code MNB30). The frustration often resulted in a tense atmosphere at*
238 *home, and parents described having many conflicts over small things. This was explained by*
239 *a mother who said she needed guidance in “... how to handle my feelings and how to be able*
240 *to put forward to my child what is good for her and what is not good for her without me being*
241 *angry...” (Code MNB27). This mother also described the intensity of these situations: “... I*
242 *became so angry that I used to scream and nag [at her] and yes I got really pissed off. But*
243 *now I explain [what I expect from her] from the start” (Code MNB27).*

244

245 Paired with frustration was a sense of guilt about being a supposedly ‘failed’ parent who, as
246 one participant described it, “*had allowed the child to become obese” (Code FNB15). When*
247 *parents tried to manage their child’s weight, they faced even greater guilt, because regulating*
248 *children’s food intake and physical activity at this young age is not socially accepted. A father*
249 *described this double bind:*

250 *As you say, it is social situations, there is a lot to eat, it is really hard [in social*
251 *situations]. Yes, especially among other children ... you look like a bad parent*

252 *when [your child] has become fat. And when you try to do something about it*
253 *then it becomes even worse somehow” (Code FNB15).*

254 Notably, this father described his feelings of guilt as grounded in social situations where he
255 was subject to judgment and blame. As previous research has found, the social stigma
256 attached to obesity also extends to childhood obesity, with parents often blamed for their
257 children’s obesity (Pierce & Wardle, 1997; Turner, et al., 2012). In the present study, we
258 found that the guilt parents felt was not simply internalized but was relational – it was
259 continuously triggered by social situations where they faced stigmatizing attitudes anew, such
260 that guilt and social isolation compounded one another. Parents who themselves had obesity
261 as a child found it even more difficult to contend with these feelings of guilt. These parents
262 often saw themselves in challenging situations that their child had experienced, or they
263 worried about the stigma their child might face if they did not manage to reduce their child’s
264 weight status.

265
266 *Uncertainty and worry about hunger and satiety*

267 Some parents described feeling burdened with uncertainty when they tried to interpret
268 whether their child was full or not. Parents felt that understanding and responding to young
269 children’s appetites was difficult, especially when children had large appetites, a keen interest
270 in food, and frequent food cravings. One father, for example, described his daughter’s
271 preoccupation with food as constant:

272 *It used to be, all the time, ‘what is for dinner?’ and when we were eating dinner*
273 *.. if ‘we could have a sandwich after dinner’, ... ‘what’s for lunch tomorrow?’*
274 *(Code FNB32).*

275

276 Nearly all parents said that, in addition to expressing keen interest in food, many children also
277 said they were hungry throughout the day. To handle this omnipresent hunger, parents placed
278 restrictions on candy, sweetened beverages, chips and other calorie dense foods, and some
279 restricted the intake of fruits and other nutritious foods, which many children sought as
280 snacks. For many parents, however, children's expressions of hunger made managing their
281 food intake particularly challenging. Parents expressed how hard it was not to serve the child
282 another portion, even if the parents knew the child had already eaten enough. This was
283 especially difficult late in the evening, when parents worried the child would go to bed
284 hungry. Explaining why she served her child potentially unneeded food, one mother
285 explained:

286 *One of the problems we had was that she used to ask for more food, that she was*
287 *not full and I felt that as a mother I could not deny her food. ... For me, the*
288 *biggest problem I had was when she said, 'Mommy I am still hungry', I do not*
289 *have the heart to deny her food. But currently I do not deny her food, just*
290 *certain kinds of food (Code MNB30).*

291

292 As captured in this quote, faced with children's expressions of hunger, parents associated
293 denial of food with denial of care, such that managing their children's diet seemed to clash, at
294 times, with their parental role.

295

296 **Skills and strength from others**

297 The second theme encompassed the parents' experiences of participating in group treatment,
298 with particular focus on their appreciation of learning and starting to use practical tools and

299 techniques that made everyday life easy, structured and predictable. This theme consisted of
300 three subthemes: *Pedagogical tools*, *positive parenting skills* and *social strategies*.

301

302 *Pedagogical tools*

303 The participating parents said they had great interest in gaining knowledge on nutrition and
304 appropriate feeding. In particular, they appreciated the information provided in group
305 treatment regarding the appropriate portion sizes of various foods and meals throughout the
306 day. Parents reported that, after participating in the program, they made different choices
307 when grocery shopping. For example, they chose low-fat dairy products over full-fat products.
308 In fact, parents said they engaged in making healthy choices for their child, even if they had to
309 compromise their own preferences. Most parents reported they appreciated visual tools
310 provided in the program, saying these tools made decisions easier. For example, the Plate
311 Model, showing the proportion of different food groups on a plate, allowed parents to
312 visualize appropriate portions of pasta, meatballs and vegetables in relation to one another.
313 Another tool parents found helpful was the Keyhole symbol (the Swedish National Food
314 Agency's food label to help consumers identify healthier options), which was discussed in the
315 program as a tool to use when buying food. Parents described how the Keyhole symbol
316 guided them in finding foods higher in whole grains and fiber, and lower in fat, salt and sugar.
317 Parents said they showed the Keyhole symbol to their children when grocery shopping, asking
318 the children to be detectives in the store and find foods with this symbol, as this father
319 described:

320 *Now that [the child] chooses cornflakes for example, he reasons with himself:*
321 *'this cereal I want, but I won't take it, as it has no keyhole....we have promised*
322 *him Saturday and Sunday he can eat [cereals] without the keyhole but all other*
323 *days there should be a keyhole on them.... The funny thing is that when we eat,*

324 *he checks [the food package], “Keyhole, a weekday, good, I take it!”... so he*
325 *has really learned to look for keyholes when we go to the store (Code FB21).*

326 Previous research has found that young children are aware of the social scripts of grocery
327 shopping with their parents, that they aim to play a helpful role in choosing and finding food,
328 and that they express interest in healthy food choices (Gram, 2015; Gram & Gronhoj, 2016).

329 As captured in this quote, offering the Keyhole symbol as a practical tool wove into the
330 cooperative aspects of parents’ and children’s grocery shopping interactions, and presented
331 children with a tangible guide to assuming a helpful role while co-shopping.

332

333 Underscoring the importance of pedagogical tools, some parents also said that the group
334 would have benefited from more prescriptive tools. One mother stated she would have liked
335 to know exactly how much food should be given to her child, saying that *“a handout that you*
336 *could give [to the preschool] and also so that you would know yourself how much a child is*
337 *allowed to eat”* would be useful (Code MNB6). Along similar lines, one mother said she
338 *“would have liked more details regarding cooking food, like tips and such”* with *“a recipe*
339 *book”* provided in the group setting (Code MNB17).

340

341 *Positive parenting skills*

342 A skill parents frequently said was useful, particularly when faced with a challenging
343 parenting situation, was focusing on encouragement and motivation. In response to the open-
344 ended question, ‘what was most helpful?’, one parent answered: *“Encouragement, I think,*
345 *because it opens so many doors. Everything becomes easier when you encourage.”* (Code
346 MB26). Parents of children who engaged in picky eating particularly appreciated the use of
347 reward systems called “charts”, which were introduced in the program as a form of

348 encouraging children to learn new behaviors. The parents said the charts helped them focus on
349 behavior changes and reward the children when they tried new foods. As one father described:
350 *“When we began to use the motivational charts my son started to eat vegetables. This became*
351 *part of our routine and we continually used it. We have finished with the motivational charts*
352 *now, but if we feel he needs it, we will begin to use it again” (Code FB3).*

353

354 Diverting the child’s attention was another skill parents appreciated. For example, parents
355 divided one portion into two smaller portions or engaged the child in dinner preparations to
356 take the child’s mind off feelings of hunger. Parents also said that planning and preparing the
357 child for challenging situations (such as grocery shopping or going to a party) were especially
358 helpful techniques. Through planning, parents knew how to act, and through preparing the
359 child, the child knew what was expected and thus had a greater chance of coping well. One
360 mother explained:

361 *No, I do not think we have changed much in the way we set limits. [We prepare*
362 *our child more] for what is going to happen and it will be like this and that, and*
363 *then you do not have to set that limit. That is a way of limit setting but from the*
364 *other way around (Code MB19).*

365

366 Several parents described how planning took shape in everyday contexts. For example,
367 parents said that, before entering the grocery store, they told their children they will only shop
368 for particular items, such as milk or vegetables, thereby preempting requests for energy-dense
369 foods. Many parents also mentioned the importance of consistency and clear limit setting. For
370 instance, as this father stated,

371 *Setting limits is very difficult... but I think we have become more consistent at*
372 *setting limits. We focus on the right occasions. ... `no´ means `no´ when I say*
373 *`no´ and when I do not say `no´ you can do what you want to do. We have learnt*
374 *to anticipate the situations that may arise and are prepared to say `no´ if*
375 *needed. Before it was more like `oh´, and you were surprised and said `no´ half-*
376 *heartedly, and it became something in between. Now, I think that limit setting is*
377 *much more clear, when it is needed (Code FB3).*

378

379 Parents also highlighted that meeting other parents in a group setting allowed them to
380 consider different perspectives on recurring challenges. The parent groups had a good
381 atmosphere, with open discussions and mutual feelings of respect. One father described the
382 strength of the group setting as follows: “*We could help each other, by merging ideas then*
383 *you might come up with something better than what you could come up with on your own”*
384 *(Code FB25).* The value of meeting others in similar situations or with similar challenges was
385 repeated throughout the interviews. Being able to open up to others and share concerns
386 produced relief, acceptance and hope. This was well captured by a mother who explained:

387 *To me, we all have the same problem. We need to say no a lot, no to an extra*
388 *portion, no to chocolate, no to ice cream, no to... You feel you get some type of*
389 *psychological support [from the group], that it is not only me [saying no], there*
390 *are many parents who go through the same thing. Sometimes it wears you out,*
391 *sometimes you feel mean when you need to say no all the time ... (Code*
392 *MNB27).*

393

394 Parents also reported how discussions in the group made it easier for them to relate to their
395 own child's appetite; as one mother explained:

396 *Yes, it was a lot of fun and extremely rewarding to meet parents who were in the*
397 *same situation. I felt that most of them did not have children who ate a lot of*
398 *candy, but rather children who liked to eat [food], and that was the main issue,*
399 *and that was a relief in a way. It was not like 'we all drink soda and eat candy,*
400 *but we actually just like food' ...” (Code MB19).*

401 Societal misperceptions about what children with obesity eat and drink – and the blaming of
402 parents due to these misperceptions – are a common frustration expressed by parents of
403 children with obesity (Eli, Howell, Fisher, & Nowicka, 2016). In the group setting, however,
404 parents were able to speak about their experiences and identify with one another, without
405 worrying that their child's weight status would be “read” as a sign of unhealthy feeding. Thus,
406 as conveyed in this quote, group discussions had the added value of destigmatizing and
407 validating the experience of parenting a young child with obesity, a finding which was also
408 observed in another study of parents' experiences of a childhood obesity intervention
409 (Edmunds, Rennie, King, & Mayhew, 2014).

410

411 Most parents felt that the social support they received in the group setting left them with a
412 calmer state of mind even after the program had ended. Parents reported that, through this
413 calmer state of mind and through practicing the parenting techniques they were taught, their
414 patience with their children and the atmosphere at home improved considerably.

415

416 *Social strategies (towards others)*

417 Parents said that social situations – for example, events and gatherings that involved meeting
418 with other parents, other children, or family members and relatives – posed challenges to
419 managing their children’s eating. A key challenge in social situations was coping with the
420 availability of energy-dense foods:

421 *The most challenging thing has been the social context (...) (pause)... There is*
422 *so much candy and ice cream around other kids that do not have problems with*
423 *their weight and trying to have him not eat so much [is hard] (...) Trying to*
424 *avoid these situations has been the hardest.... For instance, when other kids*
425 *come over, you should not offer baked goods. Or when he goes to a friend’s*
426 *house to play and they are pressing the parents [for unhealthy food], they have*
427 *no issues with it [weight], but then he gets ice cream and cookies. My partner*
428 *thinks that it is hard to tell other parents that they cannot serve him candy or ice*
429 *cream. Then word spreads that he is overweight, that has been the most difficult*
430 *thing (Code FNB15).*

431 In social situations, parents struggled not only with limiting their children’s intake of energy-
432 dense foods, but also with how to communicate about limit-setting with other parents or adult
433 relatives, a finding which has been observed in previous research (Eli, et al., 2016) . This
434 difficulty was compounded by the social stigma attached to the child’s weight status. Notably,
435 FNB15 concluded the quote by saying that “the most difficult thing” is when “word spreads
436 that [the child] is overweight”, linking her attempts at limit-setting in social situations with an
437 increase in gossip – and, by implication, stigma – directed at her child. Accordingly, positive
438 communication was highlighted by parents as a key skill they gained through the parent
439 program – a skill that allowed them to navigate challenging social situations both effectively
440 and diplomatically:

441 *What I have thought of more, or what [the group leader] mentioned, it was to*
442 *talk in a more encouraging and positive way (....) I have thought of it when*
443 *talking with other people such as our mothers, that you can start by praising*
444 *and telling [them] what you think is good and that you appreciate that you get*
445 *help and such instead of directly telling them what they do that you do not*
446 *like...” (Code MNB17)*

447

448 In addition, parents said that meeting other parents of children with obesity provided them
449 with a new frame of reference when navigating social situations, such as visits to relatives or
450 birthday parties their child attended. Group discussions inspired parents to talk with family
451 members and with the parents of their children’s friends, and thereby receive their support
452 when navigating food-centric social situations. Parents also felt empowered to have repeated
453 conversations with relatives and friends, as needed, to make sure they would comply with
454 their limit-setting priorities: “... you need to remind them that even though it is Saturday you
455 do not need a really large bag of candy. Kids will be just as happy with a small bag as with a
456 large bag” (Code MNB22).

457

458 For some parents, the preschool setting posed difficulties in managing their child’s eating.
459 These parents said they appreciated hearing from other parents that it was possible to
460 communicate with teachers about regulating their child’s eating at preschool, and that teachers
461 would cooperate; as explained by this mother:

462 *I feel much more empowered to go to the preschool and talk about it [child’s*
463 *weight]. I know that many parents go directly [to the preschool] and talk about*
464 *it. Before, I had no thoughts to go to the preschool to talk about regulating what*

465 *my child eats there. So it is positive that now I can go and talk to them about it.*
466 *(Code MNB6).*

467 According to the interviewed parents, then, the parent group helped in navigating social
468 situations both through the program’s skills-based curriculum and through facilitating a space
469 for discussion, advice, and sharing among parents.

470

471 **Discussion**

472 In this study we interviewed parents of preschoolers with obesity who participated in a parent-
473 based group treatment program for childhood obesity. Two main themes were identified: (i)
474 *Emotional burden* and (ii) *Skills and Strength from others*. Participants expressed how
475 parenting a child with obesity evoked feelings of loneliness, guilt, and frustration, and how, at
476 times, they felt unable to cope with these feelings. However, they also said that participating
477 in the parent group program offered useful parenting strategies and practical tools that
478 allowed them to manage the emotional and social difficulties they faced. The group setting
479 provided a safe and positive environment in which parents did not feel judged when raising
480 issues and concerns regarding their child’s weight status. According to the participants, the
481 program helped to reduce guilt and thus empower parents to support their child to eat
482 healthfully and reach a healthy weight.

483

484 A key finding was that parents of children with obesity struggle with feelings of loneliness,
485 frustration and stigmatization. Parents often reported they did not have friends or relatives in
486 whom they could confide about the challenges they faced, and some even expressed feelings
487 of loneliness within their own nuclear family. This aligns with previous research that explored
488 the impact of weight stigma expressed in families (Eli, Howell, Fisher, & Nowicka, 2014b).

489 Parents also said they felt loneliness and frustration when extended family members did not
490 recognize the child needed their support. In the UK, Edmunds et al conducted a study similar
491 to ours, concluding that providing parents with strategies to manage other people's attitudes
492 and behaviors is an overlooked area in childhood obesity interventions (Edmunds, 2005). For
493 the parents in our study, sharing strategies on how to seek effective support from friends,
494 relatives and teachers was a particular highlight of the group program.

495

496 In our study, parents also expressed loneliness in relation to obesity treatment, for example, if
497 a spouse was unwilling or unable to participate in the treatment program. This needs to be
498 taken seriously, because changes in the home environment require involvement from both
499 parents (Patterson, Mockford, & Stewart-Brown, 2005), and lack of family support often
500 underlies treatment discontinuation (Dhaliwal, et al., 2017). When both parents participate in
501 childhood obesity interventions, this helps parents work as a team and create social networks
502 that support lifestyle changes. Thus, clinics should facilitate participation in treatment by
503 offering more scheduling options and appointments closer to the family's home, incorporating
504 interactive alternatives, shortening programs if needed, and adjusting treatment content to
505 match families' needs (Dhaliwal, et al., 2017; Perez, et al., 2018; Tremblay, et al., 2016).
506 Although group treatment schedules are less flexible than individual treatment schedules, in
507 the ML program, we provided childcare during the treatment sessions to facilitate attendance.
508 Furthermore, parents who were unable to attend certain sessions received written information
509 about what had been discussed in these sessions. As a result of the interview findings, we
510 adjusted the program to match parents' needs and increased the group size to ensure better
511 discussions.

512

513 The frustration parents articulated was linked to uncertainty about how to manage their
514 children's obesity. Parents felt they were socially judged as 'bad parents' because their child
515 was obese, but also because they tried to manage their child's eating. A Danish study
516 identified this dilemma – between caring for children's physical health and caring for their
517 emotional health – as a reason parents avoid seeking treatment (Andreassen, et al., 2013).
518 Interestingly, a Swedish study found that pediatric nurses thought parents of preschoolers with
519 obesity were more likely to seek treatment due to the child's appearance and risk of being
520 bullied, than due to concern for physical health (Isma, Bramhagen, Ahlstrom, Ostman, &
521 Dykes, 2012). An earlier study, where parents of children aged 4 to 15 years were interviewed
522 about their experiences of seeking treatment for their child's overweight or obesity, found that
523 many parents thought the advice offered by health care professionals was no better than the
524 advice provided in general public health recommendations (Edmunds, 2005). This suggests
525 that parents' uncertainty about addressing their children's obesity is grounded not only in
526 concerns about social and emotional wellbeing, but also in concerns about the ability of health
527 care providers to provide effective interventions.

528

529 Some of the interviewed parents felt particularly vulnerable vis-à-vis social and medical
530 discourses about childhood obesity because they remembered being in these situations as a
531 child with obesity themselves. A similar finding was reported in the Grandparents Study,
532 where both parents and grandparents related their childhood recognition of their own body
533 weights to negative experiences or feelings; many stated that as they became more cognizant
534 of their body weight, this negatively affected their self-esteem, leading to lifelong body image
535 problems (Eli, et al., 2014b). While studies stress the importance of including key people
536 around the child to provide support (McPherson, et al., 2017), weight stigma is a challenge
537 that health care professionals need to consider when recommending that parents include

538 teachers and relatives in discussions about the child's obesity (Pont, et al., 2017; Puhl & Suh,
539 2015). Moreover, while initiating treatment early increases the child's chances of a healthy
540 weight, the attitudes of some health care professionals to childhood obesity make it difficult
541 for parents to seek treatment. Thus, health care professionals need training in how to approach
542 the parents of a child with obesity, how to listen to their concerns with respect and
543 understanding, and how to communicate in a non-judgmental way.

544

545 The interviewed parents said their experiences of participating in group treatment were
546 positive. Parents said that the group setting allowed them to share experiences and ideas
547 openly and without risk of being judged, as everyone participating faced similar issues and
548 shared an understanding of the difficulties that parents of children with obesity face. This is
549 consistent with previous studies reporting that a group setting empowers parents, strengthens
550 feelings of belonging, reinforces hope, and makes it easier for parents to discuss the
551 challenging emotional and social aspects of childhood obesity (Andreassen, et al., 2013;
552 Edmunds, et al., 2014; McPherson, et al., 2017; Nowicka, Savoye, & Fisher, 2011; Yalom,
553 1995). Parent-based group treatment programs also have the advantage of providing parents
554 with skills without placing the burden of treatment participation on the child.

555

556 The parents in our study reported that their children liked food and enjoyed eating. Some
557 parents also described their child as preoccupied with food, for example, wanting to eat
558 constantly and always asking for a second portion. Eating in absence of hunger (EAH) or
559 eating palatable foods beyond satiety may be one possible cause of obesity in children as
560 young as 3 years of age (Boots, Tiggemann, & Corsini, 2018; Fisher & Birch, 1999;
561 Lansigan, Emond, & Gilbert-Diamond, 2015). EAH is a multifaceted phenomenon, and

562 appetitive traits are thought to have both individual and familial characteristics (Fildes, et al.,
563 2014). Individual characteristics associated with EAH include the child's weight status, age,
564 eating style, and genotype, whereas familial characteristics associated with EAH include
565 maternal feeding practices, dietary disinhibition, and maternal restriction on palatable foods
566 (Lansigan, et al., 2015). Indeed, a recent study by Corsini et al. found a positive association
567 between restriction of snack foods and EAH in toddlers; however, this association was
568 moderated by access to snack foods in the home environment, and only observed when access
569 was high (Corsini, Kettler, Danthiir, & Wilson, 2018). Most parents in our study had
570 restrictions regarding candy and other energy-dense foods before participating in the ML
571 program. However, the parents appreciated receiving further support in estimating the
572 appropriate portion sizes of energy-dense food. Furthermore, parents appreciated the tips
573 provided in the program, for example, if snacks and sweets are not in the home they will be
574 consumed less often. This made parents even more observant about foods they had at home
575 and allowed them to decrease conflicts about food. To date, there is no standardized treatment
576 for EAH; however, the use of behavioral training in order to increase self-efficacy to manage
577 food cravings may decrease EAH in children with overweight or obesity (Lansigan, et al.,
578 2015). Many of the techniques taught in the ML program, such as diverting the child's
579 attention from food or offering vegetables when the child was hungry, were cited by parents
580 as especially helpful in managing cravings and hunger and reducing EAH.

581

582 Parents also said that, after the ML program, they were better able to regulate their emotional
583 reactions and handle problematic situations with their child, creating a calmer home
584 environment. A study by Bekelman et al. found that caregivers of American children aged 3-6
585 years tried to create daily routines in accordance with cultural ideals, as well as social and
586 economic resources (Bekelman, et al., 2018). However, a lack of time, busy work schedules,

587 and obstacles in handling their child’s eating prevented parents from meeting their ideal daily
588 routines (Bekelman, et al., 2018). Parents in the ML study mentioned similar challenges to
589 daily routines. This is important because parental stress has been linked to a higher risk for
590 childhood obesity (Wilson & Sato, 2014). The ML group leaders were specially trained to
591 focus on positive parenting and to support parents in their efforts to reduce stress levels using
592 techniques such as noticing positive behaviors, preventing or handling power-struggles, and
593 effective limit setting. These techniques helped parents feel more in control and follow their
594 planned daily routines.

595

596 **Strengths and limitations**

597 The main strength of this study is its large sample of parents of preschoolers with obesity.
598 Additionally, the sample was heterogeneous, including participants from diverse
599 sociodemographic backgrounds. A particular strength of the study is that while the interview
600 questions were targeted at program evaluation, the responses they elicited also captured lived
601 experiences of parenting a child with obesity, as all parents used examples from their
602 everyday life when reflecting on the program content. A limitation of the study was its
603 reliance on parents who had completed the ML program sessions, as it is possible that the
604 parents who chose to discontinue had different experiences. However, reasons for
605 discontinuing the program were most often family and work related, rather than directly
606 related to content of the program (Ek, et al., 2019). The short duration of some of the
607 interviews may also be seen as a limitation. However, while some interviews were below our
608 median length of 23 minutes, all interviews provided sufficient detail about experiences of
609 group treatment and experiences of parenting a child with obesity, and saturation was reached.
610 Finally, it is possible that the experiences of parents who participated in the ML program and
611 in this interview study are not representative of the experiences of parents of preschoolers

612 with obesity more broadly; of note, participants of higher education levels were over-
613 represented in our interview sample. Further research should focus on the experiences of
614 parents who dropped out of the ML program, as their experiences might represent harder to
615 reach populations.

616

617 **Conclusions**

618 Childhood obesity carries social and emotional implications for parents that are difficult to
619 overcome without support. This is especially true for families where handling a child's large
620 appetite is a constant challenge. Parents who participated in the ML parent program described
621 how the program helped them respond positively to their children, manage their family's daily
622 routines with fewer conflicts regarding food, and regulate their children's eating through
623 encouraging and motivating them. Notably, parents also said the ML parent program
624 empowered them to communicate about their children's dietary needs with relatives, friends,
625 and teachers, such that the program's influence extended beyond the home to encompass
626 other settings where children eat and develop attitudes to food. Based on these results, we
627 suggest that training in parenting skills and support in managing socially and emotionally
628 challenging situations should be offered in childhood obesity intervention programs.

629

630 **Conflict of interest statement**

631 The authors declare no conflicts of interest.

632

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647

648 **Authors' contributions**

649 PN conceived the idea of this study in collaboration with AE. KN drafted the paper together
650 with CDN, AE, KE, PS and PN. All authors made substantial contributions to conception and
651 design, data collection and to interpretation of the data. All authors contributed to reviewing
652 and approving the final manuscript.

653

654

655 **References**

- 656 Andreassen, P., Gron, L., & Roessler, K. K. (2013). Hiding the plot: parents' moral dilemmas and
657 strategies when helping their overweight children lose weight. *Qualitative Health Research,*
658 *23, 1333-1343.*
- 659 Bekelman, T. A., Bellows, L. L., Clark, L., Thompson, D. A., Kemper, G., McCloskey, M. L., & Johnson, S.
660 L. (2018). An Ecocultural Perspective on Eating-Related Routines Among Low-Income Families
661 With Preschool-Aged Children. *Qualitative Health Research, 1049732318814540.*
- 662 Bentley, F., Swift, J. A., Cook, R., & Redsell, S. A. (2017). "I would rather be told than not know" - A
663 qualitative study exploring parental views on identifying the future risk of childhood
664 overweight and obesity during infancy. *BMC Public Health, 17, 684.*
- 665 Boots, S. B., Tiggemann, M., & Corsini, N. (2018). Eating in the absence of hunger in young children:
666 The role of maternal feeding strategies. *Appetite, 130, 45-49.*
- 667 Boutelle, K. N., Rhee, K. E., Liang, J., Braden, A., Douglas, J., Strong, D., Rock, C. L., Wilfley, D. E.,
668 Epstein, L. H., & Crow, S. J. (2017). Effect of Attendance of the Child on Body Weight, Energy
669 Intake, and Physical Activity in Childhood Obesity Treatment: A Randomized Clinical Trial.
670 *JAMA Pediatr, 171, 622-628.*
- 671 Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qual Res Psychol, 3, 77-101.*
- 672 Collaboration, N. C. D. R. F. (2017). Worldwide trends in body-mass index, underweight, overweight,
673 and obesity from 1975 to 2016: a pooled analysis of 2416 population-based measurement
674 studies in 128.9 million children, adolescents, and adults. *Lancet, 390, 2627-2642.*
- 675 Corsini, N., Kettler, L., Danthiir, V., & Wilson, C. (2018). Parental feeding practices to manage snack
676 food intake: Associations with energy intake regulation in young children. *Appetite, 123, 233-*
677 *240.*
- 678 Danielsson, P., Svensson, V., Kowalski, J., Nyberg, G., Ekblom, O., & Marcus, C. (2012). Importance of
679 age for 3-year continuous behavioral obesity treatment success and dropout rate. *Obes*
680 *Facts, 5, 34-44.*
- 681 Dhaliwal, J., Perez, A. J., Holt, N. L., Gokiert, R., Chanoine, J. P., Morrison, K. M., Legault, L., Sharma,
682 A. M., & Ball, G. D. C. (2017). Why do parents discontinue health services for managing
683 paediatric obesity? A multi-centre, qualitative study. *Obes Res Clin Pract, 11, 335-343.*
- 684 Edmunds, L. D. (2005). Parents' perceptions of health professionals' responses when seeking help for
685 their overweight children. *Family Practice, 22, 287-292.*
- 686 Edmunds, L. D., Rennie, K. L., King, S., & Mayhew, H. (2014). Experiences of those taking part in the
687 BeeZee Bodies family-based weight management intervention: A qualitative evaluation.
688 *International Journal of Child Health and Nutrition, 3, 163-169.*
- 689 Ek, A., Chamberlain, K. L., Ejderhamn, J., Fisher, P. A., Marcus, C., Chamberlain, P., & Nowicka, P.
690 (2015). The More and Less Study: a randomized controlled trial testing different approaches
691 to treat obesity in preschoolers. *BMC Public Health, 15, 735.*
- 692 Ek, A., Chamberlain, K. L., Sorjonen, K., Hammar, U., Malek, M. E., Sandvik, P., Somaraki, M., Nyman,
693 J., Lindberg, L., Nordin, K., Ejderhamn, J., Fisher, P. A., Chamberlain, P., Marcus, C., &
694 Nowicka, P. (2019). A Parent Treatment Program for Preschoolers with Obesity: A
695 Randomized Controlled Trial. *Pediatrics, In Press.*
- 696 Eli, K., Howell, K., Fisher, P. A., & Nowicka, P. (2014a). "A little on the heavy side": a qualitative
697 analysis of parents' and grandparents' perceptions of preschoolers' body weights. *BMJ Open,*
698 *4, e006609.*
- 699 Eli, K., Howell, K., Fisher, P. A., & Nowicka, P. (2014b). "Those comments last forever": parents and
700 grandparents of preschoolers recount how they became aware of their own body weights as
701 children. *PLoS One, 9, e111974.*
- 702 Eli, K., Howell, K., Fisher, P. A., & Nowicka, P. (2016). A question of balance: Explaining differences
703 between parental and grandparental perspectives on preschoolers' feeding and physical
704 activity. *Social Science and Medicine, 154, 28-35.*

705 Farpour-Lambert, N. J., Baker, J. L., Hassapidou, M., Holm, J. C., Nowicka, P., O'Malley, G., & Weiss, R.
706 (2015). Childhood Obesity Is a Chronic Disease Demanding Specific Health Care--a Position
707 Statement from the Childhood Obesity Task Force (COTF) of the European Association for the
708 Study of Obesity (EASO). *Obes Facts*, *8*, 342-349.

709 Fildes, A., van Jaarsveld, C. H., Llewellyn, C. H., Fisher, A., Cooke, L., & Wardle, J. (2014). Nature and
710 nurture in children's food preferences. *American Journal of Clinical Nutrition*, *99*, 911-917.

711 Fisher, J. O., & Birch, L. L. (1999). Restricting access to foods and children's eating. *Appetite*, *32*, 405-
712 419.

713 Foster, B. A., Farragher, J., Parker, P., & Sosa, E. T. (2015). Treatment Interventions for Early
714 Childhood Obesity: A Systematic Review. *Acad Pediatr*, *15*, 353-361.

715 Gerards, S. M., Dagnelie, P. C., Gubbels, J. S., van Buuren, S., Hamers, F. J., Jansen, M. W., van der
716 Goot, O. H., de Vries, N. K., Sanders, M. R., & Kremers, S. P. (2015). The effectiveness of
717 lifestyle triple P in the Netherlands: a randomized controlled trial. *PLoS One*, *10*, e0122240.

718 Gram, M. (2015). Buying Food for the Family: Negotiations in Parent/Child Supermarket Shopping: An
719 Observational Study from Denmark and the United States. *Journal of Contemporary*
720 *Ethnography*, *44*, 169-195.

721 Gram, M., & Gronhoj, A. (2016). Meet the good child. 'Childing' practices in family food co-shopping.
722 *International Journal of Consumer Studies*, *40*, 511-518.

723 Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with
724 data saturation and variability. *Field Methods*, *18*, 59-82.

725 Haugstvedt, K. T., Graff-Iversen, S., Bechensteen, B., & Hallberg, U. (2011). Parenting an overweight
726 or obese child: a process of ambivalence. *J Child Health Care*, *15*, 71-80.

727 Isma, G. E., Bramhagen, A. C., Ahlstrom, G., Ostman, M., & Dykes, A. K. (2012). Swedish Child Health
728 Care nurses conceptions of overweight in children: a qualitative study. *BMC Fam Pract*, *13*,
729 57.

730 Lansigan, R. K., Emond, J. A., & Gilbert-Diamond, D. (2015). Understanding eating in the absence of
731 hunger among young children: a systematic review of existing studies. *Appetite*, *85*, 36-47.

732 Ling, J., Robbins, L. B., & Wen, F. (2016). Interventions to prevent and manage overweight or obesity
733 in preschool children: A systematic review. *International Journal of Nursing Studies*, *53*, 270-
734 289.

735 Loveman, E., Al-Khudairy, L., Johnson, R. E., Robertson, W., Colquitt, J. L., Mead, E. L., Ells, L. J.,
736 Metzendorf, M. I., & Rees, K. (2015). Parent-only interventions for childhood overweight or
737 obesity in children aged 5 to 11 years. *Cochrane Database Syst Rev*, *12*, CD012008.

738 Magarey, A. M., Perry, R. A., Baur, L. A., Steinbeck, K. S., Sawyer, M., Hills, A. P., Wilson, G., Lee, A., &
739 Daniels, L. A. (2011). A parent-led family-focused treatment program for overweight children
740 aged 5 to 9 years: the PEACH RCT. *Pediatrics*, *127*, 214-222.

741 McPherson, A. C., Hamilton, J., Kingsnorth, S., Knibbe, T. J., Peters, M., Swift, J. A., Krog, K., Chen, L.,
742 Steinberg, A., & Ball, G. D. (2017). Communicating with children and families about obesity
743 and weight-related topics: a scoping review of best practices. *Obes Rev*, *18*, 164-182.

744 Moens, E., & Braet, C. (2012). Training parents of overweight children in parenting skills: a 12-month
745 evaluation. *Behav Cogn Psychother*, *40*, 1-18.

746 Nowicka, P., Savoye, M., & Fisher, P. A. (2011). Which psychological method is most effective for
747 group treatment? *Int J Pediatr Obes*, *6 Suppl 1*, 70-73.

748 Patterson, J., Mockford, C., & Stewart-Brown, S. (2005). Parents' perceptions of the value of the
749 Webster-Stratton Parenting Programme: a qualitative study of a general practice based
750 initiative. *Child: Care, Health and Development*, *31*, 53-64.

751 Perez, A. J., Kebbe, M., Holt, N. L., Gokiart, R., Chanoine, J. P., Legault, L., Morrison, K. M., Sharma, A.
752 M., & Ball, G. D. C. (2018). Parent Recommendations to Enhance Enrollment in
753 Multidisciplinary Clinical Care for Pediatric Weight Management. *Journal of Pediatrics*, *192*,
754 122-129.

755 Pierce, J. W., & Wardle, J. (1997). Cause and effect beliefs and self-esteem of overweight children.
756 *Journal of Child Psychology and Psychiatry and Allied Disciplines*, *38*, 645-650.

- 757 Pont, S. J., Puhl, R., Cook, S. R., Slusser, W., Section On, O., & Obesity, S. (2017). Stigma Experienced
758 by Children and Adolescents With Obesity. *Pediatrics, 140*.
- 759 Puhl, R., & Suh, Y. (2015). Health Consequences of Weight Stigma: Implications for Obesity
760 Prevention and Treatment. *Curr Obes Rep, 4*, 182-190.
- 761 Sanders, R. H., Han, A., Baker, J. S., & Cobley, S. (2015). Childhood obesity and its physical and
762 psychological co-morbidities: a systematic review of Australian children and adolescents.
763 *European Journal of Pediatrics, 174*, 715-746.
- 764 Simmonds, M., Llewellyn, A., Owen, C. G., & Woolacott, N. (2015). Predicting adult obesity from
765 childhood obesity: a systematic review and meta-analysis. *Obes Rev*.
- 766 Skinner, A. C., Ravanbakht, S. N., Skelton, J. A., Perrin, E. M., & Armstrong, S. C. (2018). Prevalence of
767 Obesity and Severe Obesity in US Children, 1999-2016. *Pediatrics*.
- 768 Stark, L. J., Spear Filigno, S., Bolling, C., Ratcliff, M. B., Kichler, J. C., Robson, S. M., Simon, S. L.,
769 McCullough, M. B., Clifford, L. M., Odar Stough, C., Zion, C., & Ittenbach, R. F. (2018). Clinic
770 and Home-Based Behavioral Intervention for Obesity in Preschoolers: A Randomized Trial.
771 *Journal of Pediatrics, 192*, 115-121 e111.
- 772 Stewart, L., Chapple, J., Hughes, A. R., Poustie, V., & Reilly, J. J. (2008). Parents' journey through
773 treatment for their child's obesity: a qualitative study. *Archives of Disease in Childhood, 93*,
774 35-39.
- 775 Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research
776 (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for*
777 *Quality in Health Care, 19*, 349-357.
- 778 Tremblay, M., Perez, A. J., Rasquinha, A. M., Avis, J. L., Morrison, K. M., Chanoine, J. P., Legault, L.,
779 Holt, N. L., Gokiert, R., Sharma, A. M., & Ball, G. D. (2016). Recommendations From Parents
780 to Improve Health Services for Managing Pediatric Obesity in Canada. *Acad Pediatr, 16*, 587-
781 593.
- 782 Turner, K. M., Salisbury, C., & Shield, J. P. (2012). Parents' views and experiences of childhood obesity
783 management in primary care: a qualitative study. *Family Practice, 29*, 476-481.
- 784 Waters, E., de Silva-Sanigorski, A., Hall, B. J., Brown, T., Campbell, K. J., Gao, Y., Armstrong, R.,
785 Prosser, L., & Summerbell, C. D. (2011). Interventions for preventing obesity in children.
786 *Cochrane Database Syst Rev*, CD001871.
- 787 West, F., Sanders, M. R., Cleghorn, G. J., & Davies, P. S. (2010). Randomised clinical trial of a family-
788 based lifestyle intervention for childhood obesity involving parents as the exclusive agents of
789 change. *Behaviour Research and Therapy, 48*, 1170-1179.
- 790 Wilson, S. M., & Sato, A. F. (2014). Stress and paediatric obesity: what we know and where to go.
791 *Stress and Health, 30*, 91-102.
- 792 Yalom, I. (1995). *The theory and practice of group psychotherapy*. New York: Basic Books.

793