& Society

CHILDREN & SOCIETY (2020)
DOI:10.1111/chso.12368

# *'McDonald's Is Good for My Social Life'*. Developing Health Promotion Together with Adolescent Girls from Disadvantaged Neighbourhoods in Amsterdam

**Eva Lems*, Femke Hilverda†, Asia Sarti‡, Lisavan derVoort*, Amber Kegel*, Carina Pittens*, Jacqueline Broerse* and Christine Dedding§**
*Vrije Universiteit, Athena Institute, Amsterdam, The Netherlands
†Department of Socio-Medical Sciences, Erasmus University Rotterdam, Erasmus School of Health Policy and Management, Rotterdam, The Netherlands
‡Hogeschool van Amsterdam, Amsterdam University of Applied Science, Amsterdam, The Netherlands
§Amsterdam UMC, Vrije Universiteit Amsterdam, Medical Humanities, Amsterdam, The Netherlands

*There is limited knowledge about key factors that enable adolescent girls with a low socioeconomic position (SEP) to adopt a healthy lifestyle. This paper aims to better understand the complexity of addressing health behaviour of adolescent girls with a low SEP by gaining insights into (i) the perspectives of adolescent girls with a low SEP (n = 26) on a healthy lifestyle, (ii) how to develop health promotion that fits these girls' daily realities, by using participatory action research (PAR) in which girls developed health promotion materials. The study offers an understanding of girls' daily lives and how health promotion could be improved. © 2020 The Authors.* Children & Society *published by National Children's Bureau and John Wiley & Sons Ltd*

**Keywords:** health promotion, adolescents, disadvantaged groups, gender, participatory action–research, co-creation.

## Introduction

The increasing prevalence of overweight and obesity among adolescents — often referred to as 'the epidemic of childhood obesity' — leads to serious concerns in many countries worldwide (WHO, 2017). According to a review of Simmonds *et al.* (2016) many epidemiological studies show that obese adolescents are more likely to be obese in adulthood. Overweight and obesity are associated with several physical problems (e.g. diabetes type 2) and psychosocial problems and psychiatric disorders such as depression (e.g. Rankin *et al.*, 2016; Kelsey *et al.*, 2014). In addition, various studies conclude that obesity stigma and bullying can harm emotional and physical well-being of obese adolescents (Puhl and King, 2013; Rankin *et al.*, 2016; Reece, Bissell and Copeland, 2016).

Research has identified gender-related differences in health behaviour (physical activity and nutrition behaviour) of adolescents. Regarding physical exercise, many studies suggest that girls are less active than boys (Elinder *et al.*, 2014; WHO, 2017). Interventions to increase physical activity of adolescent girls have limited success according to a systematic review (Pearson, Braithwaite and Biddle, 2015). According to a scoping review of Spencer, Rehman and Kirk (2015) on adolescent girls' physical activity and nutrition, most studies regarding health behaviour of adolescent girls fit into current *neo-liberal public health*

*discourse* that problematises obesity of young people and overlooks the complexities girls face regarding physical activity and nutrition such as gender norms, socially constructed feminine ideals and other societal influences (Salam *et al.*, 2016; Spencer, Rehman and Kirk, 2015). For instance, one qualitative study indicates that embarrassment about body changes might be a barrier for girls to participate in physical activity (Moreno-Murcia *et al.*, 2011). In addition, several studies show that adolescent girls feel especially uncomfortable with exercising in the presence of boys (Spencer, Rehman and Kirk, 2015; Whitehead and Biddle, 2008).

Regarding nutrition, several studies show that adolescent girls eat more healthily than boys; for example, they eat more fruits and vegetables (WHO, 2017), less junk food (Ludvigsen and Sharma, 2004) and drink less soda (Park *et al.*, 2012) than boys. This might be explained by girls' wishes to be slim, in line with the dominant Western ideal of female beauty. Girls are less satisfied with their bodyweight compared to boys (Golan *et al.*, 2014; Stigler *et al.*, 2011), worry more often about their weight, and overestimate their weight (Vila-Lopez and Kuster-Boluda, 2016).

Besides the influence of gender, socioeconomic position (SEP) is an important factor (Knight, O'Connell and Brannen, 2018; Raphael *et al.*, 2003). A low SEP generally implies that a person has a (relatively) low income, a low educational level and/or unemployment, or poor housing (Galobardes, Lynch and Smith, 2007). Several studies show that being overweight is more prevalent among adolescents whose parents have a low SEP (Kornet-van der Aa *et al.*, 2017; Wang and Lim, 2012). A low SEP explains 27% of the prevalance of being overweight among European adolescents (WHO, 2017), perhaps because families with a low SEP have fewer resources to spend on healthy food and sport activities (Darmon and Drewnowski, 2008; Fahlman *et al.*, 2010). Unfortunately, current obesity interventions are more effective for adolescents with a high SEP (Plachta-Danielzik *et al.*, 2007). Effective strategies for adolescents from families with a lower SEP are lacking (Kornet-van der Aa *et al.*, 2017).

This paper aims to better understand the complexity of addressing the health behaviour of adolescent girls with a low SEP. To this end, this paper seeks to gain insights into (1) the perspectives of adolescent girls with a low SEP on a healthy lifestyle, and (2) how to develop health promotion that fits these girls' daily realities, by using participatory action research (PAR) in which girls develop their own health promotion materials. The making of these materials was not only meant as a research tool but was also intended as a form of health promotion by increasing knowledge and reflection on the girls' behaviour. The research was nested in a larger research project (2015-2018) aiming to improve health promotion among adolescents with a low SEP in Amsterdam, the Netherlands, commissioned by the City of Amsterdam (Amsterdam Healthy Weight Programme).

## Methods

To gain insight into the perspectives of girls with a low SEP and to develop tailored health promotion materials, a participatory action research (PAR) approach was used. Dutch adolescent girls (ages 12–16) were invited to join a project about 'healthy lifestyle' in which they advise policy-makers and (health) professionals on health promotion, help other girls to be healthy, learn about a healthy lifestyle, and have fun. Because we were interested in girls' perceptions of a healthy lifestyle, we did not define 'healthy lifestyle' beforehand. Research activities were carried out between November 2015 and June 2016 in two disadvantaged neighbourhoods ('North' and 'Southeast') in Amsterdam with, on average, lower incomes, more unemployment, poverty and lower education level compared to other neighbourhoods (Gemeente Amsterdam, 2014). In disadvantaged neighbourhoods in Amsterdam, 29% of adolescents with a low SEP are overweight or obese, compared to 14% of adolescents with a

 

higher SEP (Gemeente Amsterdam, 2014). The two neighbourhoods differed from each other in the residents' migration background. The North neighbourhood predominantly has inhabitants from Moroccan, Turkish or Dutch descent, in the Southeast neighbourhood inhabitants are mainly of African-Surinamese (from the former Dutch colony of Suriname), Ghanaian or Dutch-Antillean descent (Gemeente Amsterdam, 2018).

PAR is a flexible and change-oriented approach aimed at public improvement in close collaboration with the participants (Baum, 2016; Cornwall and Jewkes, 1995) by involving them in data collection, reflection and taking action (Ganann, 2013; Gosin *et al.*, 2003). Action is ideally realised through a cycle of reflection, planning, action and observing the effects of this action (Baum, 2016). PAR is increasingly used in the field of health research (Baum, MacDougall and Smith, 2006; Cargo and Mercer, 2008). It has shown to be particularly useful in studying and empowering hard-to-reach groups, such as individuals with a low SEP. PAR can lead to interventions better tailored to the needs and context of the target group, and triggers self-reflection and knowledge development (Anyon *et al.*, 2018; Baum, 2016; Cornwall and Jewkes, 1995; Dedding, 2009; Shamrova and Cummings, 2017).

Research activities involved group sessions with girls in which health promotion materials were discussed and developed, and a dialogue session with three policy-makers of the Amsterdam Healthy Weight Programme in which the ideas and products for health promotion were presented. In four small groups (4–10 girls), girls attended weekly group sessions at school (group 1) or at a welfare organisation after school (groups 2–4) over a three-month period. For each group, about 10 sessions took place (n = 41).

Diverse, creative, and generative methods were used (e.g. drawings, photo collages, making health promotion materials, cooking). These methods gave an opportunity for participants to share their own story and reflect on it. Often, stories participants tell during creative activities contain valuable information and provide deep insights (Kara, 2015; Visser, 2005). Moreover, participating in creative methods can inspire participants to take action (Kara, 2015). We paid attention to what was said and we observed the girls' behaviour to gain in-depth understanding of why they came up with certain ideas.

### *Participants and recruitment*

Adolescent girls (n = 26), aged 12–15 years participated. All girls were born in the Netherlands. Many girls had parent(s) with a non-Western nationality, that is, African Surinamese, Moroccan and Ghanaian (Table 1). Most girls attended secondary school at a relatively low educational level in the Dutch school system: 'Practical training level' or 'Vocational Education Secondary School level' (Table 1). On average, adolescents at these school levels suffer more from overweight than their peers at higher school levels (Gemeente Amsterdam, 2018). As a non-stigmatising proxy for low SEP (Sarti, Schalkers and Dedding, 2015), participants had to live in one of the two disadvantaged neighbourhoods (Table 1).

The girls were recruited from a secondary girls-only school (n = 9) and from two welfare organisations (n = 17). Recruitment of group 1 (n = 9) was done at a school in the North neighbourhood via a short presentation about the project by the researcher for all (six) first and second grade classes (12–14 years). Girls could sign up afterwards for a non-committal first meeting. The second group (n = 5) in the North neighbourhood was recruited by social workers of a welfare organisation for life coaching of teenaged girls. Girls who struggled to obtain a healthy lifestyle (e.g. eating a lot of junk food, little exercise, social/emotional problems) and/or with interest in the topic were asked to join. The two groups (group 3, n = 9; group 4, n = 3) in the Southeast neighbourhood existed before the start of the project and consisted mainly of friends who met each other weekly at the welfare centre to dance and do other activities. The girls were asked by their youth workers to join.

 

**Table 1:** Characteristics of participants (n = 26)

| Neighbourhood | North n = 14 | Southeast n = 12 |
|---|---|---|
| Age | | |
| 12 | 3 | 3 |
| 13 | 5 | 1 |
| 14 | 4 | 7 |
| 15 | 2 | 1 |
| **Parental descent** | | |
| Suriname | 2 | 7 |
| The Netherlands | 7 | - |
| Morocco | 3 | - |
| Ghana | - | 1 |
| Ghana/Nigeria | - | 1 |
| Suriname/Dominican Republic | - | 1 |
| Suriname/Spain | - | 1 |
| Suriname/Portugal | 1 | - |
| The Netherlands/Portugal | 1 | - |
| The Netherlands/Scotland | - | 1 |
| **School level** | | |
| Elementary school | - | 3 |
| Practical training school level | 3 | - |
| Lower Vocational Education Secondary Level | 11 | 9 |

To ensure inclusiveness and avoid stigmatisation, body size was not a selection criterion. Body size was estimated by at least two researchers in consultation with girls' teacher or youth worker. Some girls made statements, for example, about being under supervision of a medical professional to lose weight, which helped to estimate their body size. Most girls seemed to have a healthy weight, while five girls (out of 26) seemed to be overweight.

### *Data collection*

In total, 41 group sessions over a three-month period aimed to acquire insights into the perspectives on health and health promotion of girls with a low SEP and how to develop health promotion that fits these girls' daily realities, by using PAR in which girls developed their own health promotion materials. To better align with the girls, sessions were facilitated by an experienced *female* researcher (EL or AS) and a *young* female research assistant (AK or LV) who lived in, or were familiar with, the neighbourhood. The first two meetings involved a brainstorm session to explore girls' preferred activities and themes. For the following sessions, researchers prepared questions and exercises based on suggestions of the girls to encourage discussion and explore the research themes. During meetings, there was always room for the girls to provide input on new themes or activities. Table 2 provides an overview of the (final) themes, activities and sample questions of the sessions.

The researchers challenged the girls to think about how they wanted to communicate to peers and policy-makers. Groups from the North neighbourhood chose to make a magazine (Box 1); groups from the Southeast neighbourhood made two short videos (Box 2). At the end of the project, a dialogue session with three policy-makers of the Amsterdam Healthy Weight Programme was organised. During this session, the girls from the different neighbourhoods met each other, exchanged experiences and presented their ideas to the policy-makers.

### *Data analysis*

Three data sources were used: group sessions, health promotion materials and the dialogue with policy-makers. Field notes were made during every group session and the dialogue

 

**Table 2:** Themes, activities, and example questions during group sessions

| Themes | Activities | Example questions |
|---|---|---|
| Sports and knowledge | Going to gym and make videos about sport motivation, group discussions | How would you motivate friend to do sports? |
| Food and knowledge | Cooking workshops, quiz, group discussion | What do you eat? What do you consider healthy? |
| | Sugar lumps exercise | How many lumps of sugar does a glass of cola contain? |
| Reflecting on own environment | Photographing and filming in neighbourhood | What do you consider healthy/unhealthy? Why? |
| Health, weight and beauty ideal | Group discussion, fill in exercises, make-up workshop | What does healthy living mean to you? What do you consider 'beautiful'? Why? |
| Peer pressure | Problem statement letters, group discussion | What would you do if your friends want to go to McDonalds and you don't? |
| Health information and communication | Creating videos or magazine<br>Discussing health communication leaflets | What would motivate your peers? |
| Social support | Group discussions, individual conversations | Who can help you to make healthy choices? How? |
| Reflecting on own identity | Informal and formal interviews | What is most important in your life? |
| | Describing role models | Who is your role model and why? |
| | Self-perception exercise | |

Box 1: Co-creation of a healthy lifestyle magazine

Aim

The main goal of the magazine 'Turn up your body' was to inform peers and advise professionals and policymakers.

Process

The process of making the magazine started with brainstorming about the title and contents. What should be included in the magazine, what is interesting for other girls to read? Topics mentioned by girls (i.e. beauty ideal and tips about exercise) became the central topics to discuss in next sessions. Content and layout of the magazine were discussed with the girls every week and adjusted afterwards. Some content was made by the researchers in close collaboration with girls and some by girls themselves.

Outcome

The final magazine included, among others, a quiz, famous idols, diets found on the internet, funny facts, healthy recipes, tips for food and exercising and problem page letters. A small part of the magazine included advice for professionals and policymakers.

session, and were directly written up in detailed reports afterwards. Audio recordings were made if the setting allowed it (i.e. not during cooking activities) and transcribed verbatim. Two researchers were involved in data coding using ATLAS.ti qualitative data analysis software. We used an ethnographic content analysis approach (Altheide, 1987). Analyses started at the beginning of the study, ensuring that insights were used directly to shape and deepen understanding.

We started with open coding and worked iteratively, going back and forward through the data. After open coding, we used the themes of the group sessions (but not as a fixed coding scheme) such as 'body image' for axial and selective coding. Finally, we clustered the themes

 

Box 2: Co-creation of healthy lifestyle videos

Aim

The aim of the videos 'Ff Bims' (video 1) and 'Holy squad' (video 2) was twofold. While the girls showed their lives and needs to policymakers, they also wanted to motivate peers to adopt a healthier lifestyle.

Process

Girls brainstormed about the content of the videos, such as what places they wanted to show and what tips they wanted to give to peers to (become and) stay healthy. To get used to the camera and practice filming, researchers brought a camera to most meetings and activities. Girls could choose if they wanted to film or be filmed. One of the researchers did the editing in close cooperation with the girls.

Outcome

The final videos of about 7 minutes show, among others, places in their neighbourhood, interviews with people on the street, a talk show about healthy lifestyle, food advice, dancing, funny mistakes during the making process.

in more overarching themes, barriers and facilitators, and ideas for health promotion by looking for emergent patterns, emphases and topics. Regular meetings with the project team (composed of researchers with various ethnic backgrounds) were organised to discuss and reflect on results and interpretations, reducing researcher bias. Making the magazine and videos facilitated analysis and reflection with the participants on whether the researchers had interpreted statements correctly.

### *Ethical considerations*

The Code of Ethics for the Social and Behavioural Sciences involving human participants as accepted by the deans of social sciences in the Netherlands was followed. As this research did not fall under the Dutch Medical Research Involving Human Subjects Act, there was no need for ethical approval from an accredited medical ethical committee. All participants and their parents or guardians received verbal and written information about the study. It was emphasised that participation was voluntary, anonymous and that withdrawal from the study was always possible without giving reason. During the project, girls were often reminded of their rights and that there were no consequences for not showing up. To maintain anonymity, identifiable information in this article is removed and pseudonyms are used.

## Results

Having fun together, attending amusing activities and learning new things in order to live healthily were commonly mentioned motivators to participate. Almost all the girls finished the three-month project. Four dropped out a few weeks early because they wanted to 'do other things' in their spare time.

First, we present the girls' perspectives, main barriers and motives in relation to health and health promotion. Next, we reflect on how the group sessions contributed to the generation of ideas for health promotion and creation of health promotion materials: a healthy lifestyle magazine and two videos (Box 1 and Box 2). Results from the different groups from the two neighbourhoods often overlapped, therefore, only the differences between the groups are noted. Quotes were translated from Dutch to English.

 

Most girls live in **disadvantaged environments**. Although the girls did not mention poverty directly, it seemed that many parents were struggling to get by; Shanita: '*The Wi-Fi is broken at my mother's place, money is limited now'*. Some girls faced other complicated circumstances. For example, one girl spoke about her father being in prison and another said her mother was missing. Although most girls seemed happy and proud to live in their neighbourhood, girls regularly spoke about unpleasant experiences with men on the street and unsafe places in their neighbourhood. Pricilla: '*Sometimes boys really bother me, down the street they are yelling: "You are hot, babe"'*.

### *Perspectives on a healthy lifestyle*

Girls generally associated a 'healthy lifestyle' with not being overweight, eating healthily and exercising regularly. In addition, they mentioned that having fun with friends, and feeling and looking good (slim with 'curves', nice hair and make-up) are also part of a healthy lifestyle. Their broad definition of healthy lifestyle was also visible in girls' health promotion materials. Besides tips on healthy food and sport, the magazine contained celebrities, local places to go and funny facts. The videos included dancing and jokes.

The girls were aware that healthy food and physical exercise are beneficial for long-term health but this does not motivate any of them. It is not worth eating healthy food that is not tasty, because you should *'Live your life now'*, concluded a couple of girls after a group discussion. The girls mentioned buying snacks and sweets from the supermarket and visiting fast-food outlets several times a week. *Kapsalon* (Dutch food item with chips, shawarma meat, cheese and a lot of sauce) and (fried) chicken are especially popular: *'Chicken is life'* was a recurring statement made by some girls from the Southeast neighbourhood. Enjoying junk food together is very important according to the girls because, as Noelle explained: *'McDonald's is good for my social life'*. She and her girlfriends always get the same table, where the Wi-Fi signal is the strongest, you can charge your mobile, and see new people coming in. Girls proudly showed '*their Maccie'* in the video.

In contrast to these unhealthy habits in girls' social lives, girls regularly showed interest in a healthy lifestyle, mainly related to appearance and body weight. They have questions such as *'How many times a week can you eat unhealthy?'* And *'Do you have to feel guilty after eating unhealthy?'*. Most of the girls of the North groups mentioned they have been dieting, although this was not the case for most girls of the Southeast group.

### *Main barriers to a healthy lifestyle*

According to many girls, making healthy choices have mainly to do with self-discipline. As Noelle said: *'If you chose not to eat something, then you just don't do that'*. In contrast, girls also mentioned barriers outside of their own influence preventing them from making healthy choices related to food and exercise.

First of all, girls said **healthy food is not tasty, too expensive** and **hardly available in their neighbourhood**. Chelsea said: *'A chilli chicken is €1 – and a salad €4!'*. According to the girls, the large number of cheap fast-food outlets makes it hard to choose healthy food options. According to Kelly: '*Why would you put effort* [to choose healthy food] *if you can easily get something warm and ready to eat at a snack bar?'*. Girls mentioned their school canteen offers many unhealthy products as well. Deborah said: *'. . .On certain days they sell unhealthy snack rolls and then you just choose that'*.

Second, girls explained that eating junk food is a valuable **social event**. Although the reasons to visit food outlets are mainly social, some girls perceived pressure to eat something. Shanita said: '*When you go to the Mac all together, you don't want to be the only one who is not gonna take something'*.

 

Finally, unhealthy eating seems to be a way for some girls to cope with **negative emotions and stress**. Vanessa explained: *'I want to binge when I am unhappy. Then I am eating chips when chilling on the couch and I eat candies and a lot of unhealthy food while watching a video'*.

Girls also mentioned barriers related to physical exercise. Some girls referred to **costs** for sport activities as a barrier, such as Mounia: *'Many parents cannot afford that [sports]'*. Differences were found between the North and the Southeast neighbourhoods regarding sports. Many girls from the North neighbourhood explained that they feel uncomfortable when they have to **do sports together with boys**. Mounia again: *'I don't dare to make a head roll, if boys are around during PE'*. The attendance of boys prevented some girls from going to the fitness centre alone, for instance. Girls from the Southeast groups did not mention boys as a barrier to being physically active; they talk more about **laziness**. Debby: '*I'm lazy and I'm proud of it'* and a **non-active local culture**, Sofia: *'Hardly anybody does sports in the Southeast* [her neighbourhood]*'*. In both groups most girls preferred public transport (with a public transport card paid by their parents) over cycling or walking because '*it is just more convenient'*.

### *Main motives for a healthy lifestyle*

Although a healthy lifestyle is not a high priority for these girls, they explained what motivates them to live more healthily. Getting an **attractive body** is the most important motive to make healthy food choices and take exercise. They regularly explained that they want to look like international pop stars, such as Beyoncé and Nicki Minaj, as they believe boys find them attractive. Girls in the Southeast neighbourhood often mentioned that boys like voluptuous bodies and emphasised the ideal of having a slim body but with curves, as Chelsea (Southeast) explains: *'You don't want to be a skinny bitch'*. In contrast, girls from the North regularly expressed they want to be slimmer. Chantal: *'I have to lose 5 kg [from her school nurse], but I want to lose 10 kg'*. Sherley explained why being slender is important: '*To be comfortable wearing my bikini, for example. Girls want to be slender to be part of a group and get more confidence*'. Moreover, girls made ambivalent statements about how much they care about their appearance. Sometimes, they stated that it does not matter what people think of their bodies, for example Noelle (Southeast): '*It doesn't matter to me that I'm bigger than others, as long as I am happy with my body*'. At other times, they make statements about wanting to look good for boys.

A second motive for a healthy lifestyle according to the girls is **having a good time (together)**. Deborah: '*Sports is not about becoming thin; it is about enjoying it'*. In general, girls indicated that it is more fun to do sports together. *'Running with friends is less boring'* (Tips for peers to get moving, magazine).

Third, although girls reported consuming a lot of food outside their home, they are motivated by the **support of parents**. Some girls expressed that it motivates them when their mothers make tasty, healthy meals or snacks. Lilian: *'My mother makes smoothies for herself and for me with banana, strawberry and pineapple and mango*'. Girls created one page of the magazine about parents' support. The tips were: (i) establish goals together, (ii) take time to have lunch together, (iii) make lunch together to take to school and (iv) do not put too much food on plates.

Fourth, girls regularly explained that they are motivated by **peers**. In video 2, girls advise: *'Instead of chilling with your friends, you could go swimming for a day or play soccer'*. Girls advised to involve friends when struggling with body weight. Vaissa explained that she enjoys motivating her friend Keicha, who struggles with overweight. It gave her *'feelings of satisfaction'*. Some girls explained that asking for help, however, can be

 

difficult. Vanessa: *'Most girls keep such things* [struggling with weight] *to themselves, but they should not'*.

### *Ideas for health promotion*

The co-creation process led to multiple ideas for health promotion. Girls created a magazine and two videos and proudly presented their materials to policy-makers of the Amsterdam Healthy Weight Program during a dialogue session. Their main ideas about health promotion are presented below, as well as how they were established during the group sessions.

Girls' general view of common health promotion was that it is boring and patronising. During a group meeting, we discussed a health communication booklet published by the Dutch food authority aimed at teenagers. Chantal reacted: *'I would not read it, it is not attractive – too much text, more pictures should be in'*. Girls often said that banning unhealthy products is a bad idea, and girls reacted fiercely against the idea of schools offering only healthy food, Naomi: *'It* [school] *is not a prison'*. They had many ideas for health promotion that increases opportunities for girls to **make their own decisions**.

First, the sender of health messages should show **respect and understand girls' lifeworld**. During a discussion on who can help girls to live more healthily, Natasja said she feels disrespected by the school nurse: '*Who is she to tell me not to drink apple juice and eat chocolate, while I am not even fat?!'* Some girls preferred to receive information especially from women they can relate to, like youth workers from their neighbourhood. Chelsea: *'It doesn't necessarily have to be someone of your own culture, but it is helpful if somebody knows what you can do or not* [because of your culture]*'*. Besides local role models, famous artists or vloggers are influential **role models** for many of the girls too. Therefore, Beyoncé (famous singer) is on the front of the cover of their magazine.

Second, girls emphasised the need for **relevant and practical tips**. For example, some tips 'To get moving' in the magazine are: '*No Money? Play soccer or go for a run'* and *'Find clips on YouTube and go dancing!'*. Especially the **wish for an attractive body should be addressed**, as reflected in the title of the magazine: *Turn up [shape] your body'*. However, according to most girls, health promotion should not only focus on appearance or health/losing weight, as shown in the magazine: '*It is important tips are about healthy lifestyle, because not all of us want to lose weight and we also want to have a good time'*.

Third, girls regularly expressed that health activities should be **fun, active and social,** Mounia: *'There should be a* [healthy lifestyle] *club for girls'*. In addition, some girls from the North neighbourhood plead for **girls-only** activities. Natasja: *'[talking about] body weight is different for girls, you don't want to talk about it with boys.'* All girls expressed that they enjoyed **cooking** (intervention) activities during the project. Viassa: *'I want to take care of my own, but also of someone else. Cooking is a really good way to do that!'*. Astra: '*I want to take one [smoothie] home, so I can say: "look mum, this is what I made"'*. The magazine shows recipes of girls' own healthy smoothies and a healthy version of their favourite junk food dish.

Fourth, girls underlined the need for **access to cheap healthy options** in their environment. They called for free and ready-to-eat healthy food, for example, a *'Fruit Friday'* at school, healthy food outlets and for free sports places in their neighbourhood.

Finally, girls showed that **locality/their neighbourhood** is key in health promotion. Girls found it important to show places to go in their *own* neighbourhood in their health promotion materials. Girls proudly showed local places like a popular cheap local fitness centre, favourite fast-food outlet and youth centre in the video. And, they promoted favourite 'healthy' products in their local street language: *'Wasa* [pre-fab toast] *is the bomb'* [girl showing the product].

 

## Discussion

The methodological approach of this study made it possible to gain in-depth understanding of the complex sociocultural context of adolescent girls with a low SEP. Most girls enjoyed the weekly group meetings and enthusiastically created their own magazine or videos. These materials provide several leads for better tailored health promotion practices for this specific group. Moreover, the making of the materials served as a health promotion intervention in itself.

In this study, we addressed health and healthy behaviour from a holistic perspective, thereby justifying the complexity girls face regarding physical activity and nutrition. In line with the commonly used definition of health of the WHO (2006): *'Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity*', a 'healthy lifestyle' according to the girls includes not only eating healthy and exercising regularly (physical health), but also having fun, friends and looking good (social health). Less directly, but still observable they addressed mental health issues in relation to health; they talked about, for example, stress and the importance of self-confidence.

This holistic perspective, however, brings along several dilemmas for the girls. The results show that healthy living is complex for adolescent girls with a low SEP. For instance, eating junk food together is very important to girls' social lives, as was also found in several other studies (e.g. Knight, O'Connell and Brannen, 2018; Wills, Danesi and Kapetanaki, 2016). Although girls enjoy eating junk food together, most girls also showed worries about their body weight/shape.

All girls struggled to some extent with gaining a 'perfect' body, which is in line with many studies about body image and bodyweight among adolescent girls (Megalakaki *et al.*, 2013; Stevenson *et al.*, 2007; Stigler *et al.*, 2011). The need for unhealthy food for social belonging on the one hand while worrying about unhealthy choices on the other hand was also found by Timotijevic *et al.* (2018). This worrying about bodyweight can be explained by the current *obesity discourse* which tends to medicalise obesity and includes neo-liberal views on health, including a focus on self-regulation, own responsibility and autonomy (Lawrence, 2004; Lupton, 2013; Rich and Evans, 2005).

Currently, a shift is visible from framing obesity as an individual problem ('individual/behavioural frame') towards a collective problem influenced by environmental factors ('environmental frame') (Lawrence, 2004). Both individual and environmental causes of obesity were found in our results. Girls blamed themselves (laziness, taste preference) as well as their social environment (parents, peer pressure) and physical environment (too many cheap unhealthy food options) for making unhealthy choices. Girls in this study want acquiring an attractive body to be addressed in health promotion, although, in contrast, they also say health promotion should not only focus on appearance/weight because: *'You are good as you are'*. In line with our findings, the challenge for health promotors is to inspire girls without a single focus on body weight or appearance (Aubrey, Speno and Gamble, 2019; Golden *et al.*, 2016). It is important to make girls aware of socially constructed ideals about health, weight and appearance, especially in the light of the endless depicture of perfect shaped bodies ('fit-girls') on social media and growing weight stigma online (Jeon *et al.*, 2018).

In addition, especially for adolescents with a low SEP, addressing multiple individual and environmental factors by using a socio-ecological approach may be helpful to improve health of this target group (Golden *et al.*, 2015; Kornet-van der Aa *et al.*, 2018).

An example of the need for addressing environmental factors related to poverty. Although girls did not often discuss poverty directly, they regularly indicated significant financial limitations at home. Inexpensive food and free of charge activities are important to the girls. As

 

mentioned before, results show that being at local food outlets is an important part of girls' daily life. Besides eating here, these are places where they meet friends and use free Wi-Fi. These social meeting points might be particularly relevant for adolescents with low SEP (Wills *et al.*, 2018). Meeting friends at home is more unusual, due to a lack of space because of cramped housing, not having access to a reliable Internet connection or possibly shame as a consequence of poverty as was found by Ridge (2011). To improve health practices of adolescent girls living in disadvantaged neighbourhoods, it is important to invest in a safe physical environment with meeting points, cheap healthy food options and free Wi-Fi.

This study showed not only many similarities but also relevant differences, in relation to the cultural lifeworld between girls from two neighbourhoods (Southeast with predominantly inhibitants with African-Surinamese and Ghanaian backgrounds and North with mainly inhibitants with Dutch and Moroccan backgrounds) in the same city. The most important differences involve the presence of boys and the desire for slenderness. Many girls from the North group preferred girls-only activities, which might be explained by Moroccan girls' religious/cultural background wherein women-only activities are more common and encouraged (Langøien *et al.*, 2017) than in the African-Surinamese culture. The topic of losing weight was more important to the girls living in the North neighbourhood than to the girls living in the Southeast neighbourhood. This could be explained by differences in the cultural ideal of beauty; a voluptuous body is preferred in Surinamese culture (Beune *et al.*, 2010), while a slim body is preferred in Dutch and Moroccan-Dutch culture (Movisie, 2009; Rutgers Nisso Groep, 2009). Although the Dutch context differs from other countries, the culture-related differences indicate it is relevant to take the cultural background of the targeted group into account in health promotion efforts (Langøien *et al.*, 2017; Muturi *et al.*, 2016).

As described above, the PAR approach offered additional insights in how to tailor health promotion strategies to girls with a low SEP, while at the same time, the approach turned out to be an intervention in itself. Girls in our study enjoyed participatory research activities, such as cooking workshops, the sociable meetings and making the health promotion materials. Using experiential activities is a promising strategy to reach adolescents with a low SEP (Kornet-van der Aa *et al.*, 2017). There is, however, a contradiction in that girls want to learn something and change behaviour, but do not want to put much effort in it. It is challenging to develop health promotion that is enjoyable and informative at the same time (Singhal and Rogers, 2012). Giving adolescent girls a say in its development might be one possible solution. It does justice to their need for autonomy. Moreover, involvement could lead to higher acceptability of interventions, increased empowerment and a sense of ownership (Ozer, 2017; Shamrova and Cummings, 2017). Giving adolescents a say requires openness and flexibility from researchers and health promotors. In this study, we regularly changed research activities, time and locations depending on girls' motivation and agendas.

Finally, in this study we invited girls to take the lead in the development of their own health promotion materials — they decided about the form and content. Through the co-creation of health promotion materials, the participating girls learned about healthy lifestyles, discussed issues openly and reflected on their own lifestyle. In this way, the co-creation became a form of health promotion intervention. The creation process possibly improved skills such as expressing their own opinion and working together as a group (Ozer, 2017). The products empowered the girls; it made them proud (increased self-esteem) and acted as a starting point for discussion with policy-makers. Therefore, the participatory action approach is promising for girls to reflect on their own body and life, and at the same time to develop their competences and make policy-makers and health promotors aware of their holistic perspectives and complex needs.

 

## Strengths and limitations

Although this study provides an in-depth understanding about the perspective of adolescent girls with low SEP and the complexity to address health promotion holistically, we did not measure health behaviour. More research is needed to gain insight into the effect of co-creation/PAR as intervention. To further develop the health promotion materials as transmittable health promotion tools, further research is required, balancing experiential knowledge of a broader group of adolescent girls and scientific knowledge.

Nevertheless, this study succeeded in involving almost all girls over a three-month period. Recruiting and maintaining adolescents is usually difficult, especially with a low SEP for interventions and research (Moroshko, Brennan and O'Brien, 2011). Reasons for the low drop out rate might be the use of fun activities and young female researchers who could connect with the girls, this was especially the case in the Southeast neighbourhood. Potentially it was helpful that the young researcher involved in data collection in the Southeast neighbourhood was raised and lived in this neighbourhood and had a migration background.

Another explanation may be that, due to self-selection, we specifically attracted girls with a certain interest in lifestyle. The occurrence of overweight among our participants seemed, based on our estimation, lower than the average incidence of overweight among adolescents in disadvantaged neighbourhoods in Amsterdam (19% versus 29%).

Lastly, a potential limitation of this study is potential researcher bias due to the main researchers' age (adult), middle class and white Dutch background which might have influenced responses of the participating girls and interpretation of the results. Researchers from different ethnic backgrounds were involved in data collection, this may have reduced this bias. Moreover continued reflection was pursued with the participating girls as well as the shared-analysis with the multi-ethnic research group.

## Conclusion

This research shows the importance of contextualised knowledge for health promotion. Although the girls attributed an unhealthy lifestyle to themselves, it appeared that poverty, family problems and an unsafe and unhealthy (social and physical) environment hinder healthy living. Tailored health promotion should meet the girls' autonomy needs and requires flexibility and openness for the perspectives and lifeworld of adolescents living in disadvantaged neighbourhoods. Moreover, a shift is needed in the public health domain away from labelling overweight of adolescents as a medical deficiency towards a holistic approach of health and bodyweight, which requires systemic and holistic solutions.

## Acknowledgements

We thank all the adolescent girls for sharing their thoughts and opinions. We also thank the involved school and youth welfare organisations for their support. The contents of this manuscript are the responsibility of the authors and do not necessarily reflect the view of the funding body.

## Funding

This research project was funded by the City of Amsterdam (Amsterdam Healthy Weight Programme).

## Data availability statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

 

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Correspondence to: Eva Lems, Vrije Universiteit, Athena Institute, De Boelelaan 1081, 1081 HV Amsterdam, Tel.: +31 205982450. E-mail: e.lems@vu.nl

Accepted for publication 10 November 2019

 