Healthy Streets Programme

2018 Pilot

Prepared by Dr Annemarie Bennett of Trinity College Dublin

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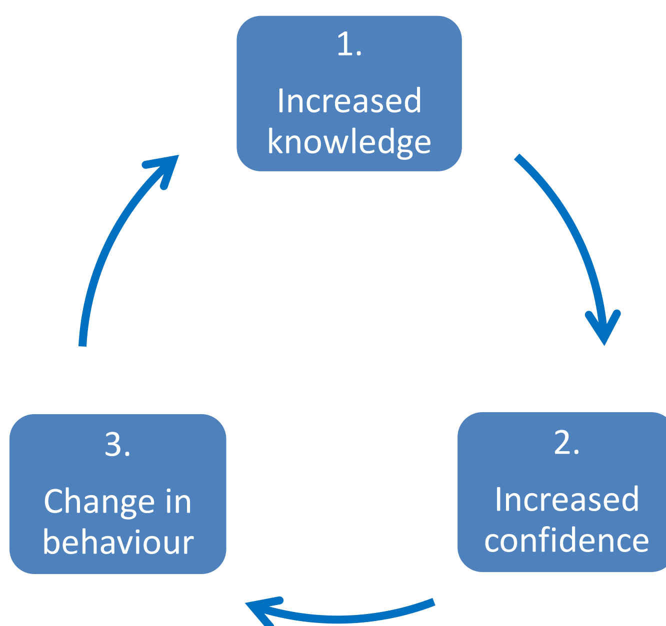
Key findings

Participation resulted in positive changes in knowledge and behaviour

Participation in the Healthy Streets Programme provided participants with knowledge and skills which could be easily transplanted into the home setting. Participants made positive changes to their diet and exercise habits over the course of the programme.

There was a clear 'cascade effect' in terms of how the positive changes occurred (see figure below). Increased maternal knowledge was linked with increased maternal confidence, which in turn helped mothers to introduce healthier food and exercise behaviours to their family.



The proportion of families cooking meals everyday increased from 63.6% to 73.9% between Week 1 and 10, respectively. Participating mothers reported that the quality of the meals they cooked improved, now that they had a better understanding of the types and amounts of foods that should be eaten to protect health. Mother also reported feeling a lot more confident with their cooking skills as the weeks passed.

The proportion of families exercising together also improved. Approximately 33% of the group were inactive in Week 1, and by Week 10, this had decreased to 6.7%. All families reported enjoying the exercise sessions, and particularly praised how practical and cost-effective the exercises suggested for home were.

Mothers felt more confident and competent during the programme

The increased knowledge and improved skill-set of participating mothers helped them to feel more confident and competent, which in turn helped them to initiate healthy change amongst their family.

The programme was an important source of peer support

Many mothers reported making friends over the course of the programme, which emphasises the value of a group approach. The interactive nature of the programme and peer support reassured some mothers on their parenting skills and reduced feelings of isolation and loneliness for others.

Grocery vouchers were wisely used

The grocery vouchers encouraged mothers to adhere to the programme, but more importantly, they helped mothers to act on the knowledge and skills taught during the sessions. Therefore, the grocery vouchers served as the bridge which allowed what was taught in the cookery sessions to be carried over to the home environment.

All mothers reported using the vouchers for healthy foods, with several stating that the voucher enabled them to buy foods they would not ordinarily have the funds to buy.

The vouchers also encouraged mothers to buy a greater variety of healthy foods, which in turn potentially benefitted the diets of family members.

High rates of attendance were observed

Although a very small number of families (*n*2) had to withdraw from the programme, the overall rates of attendance were high, with all Programme Facilitators reporting close to 100% attendance in all classes.

The programme is an entry point to long-term engagement with these families

Although mothers felt confident that they could sustain their new cookery habits beyond the programme, many requested follow-up sessions to avail of further meal ideas and peer support. A smaller proportion of mothers felt confident that they could sustain their new exercise habits. The exercise sessions were praised, but many mothers reported the desire to have follow-up sessions, indicating that ongoing support in this area would be valuable.

Given that many mothers were willing to avail of long-term support, this programme can be considered a safe and non-threatening entry point for families to engage with a broader range of support services offered by the Resource Centres in which the programme took place.

Recommendations

The programme was universally praised by all involved. The number and duration of sessions, incentives and group approach were all appropriate. Principal recommendations include:

Review the longer-term impact of the programme

To fully understand the impact of the programme on family health and wellbeing, review food and exercise habits approximately 3 months and 6 months after programme completion.

Review the possibility of longer-term support beyond the 10-week programme

Given the vulnerable nature of the families, longer-term (but possibly less intensive) support may ensure that the benefit of the investment made during the 10-week programme is fully realised. A review of cost-effective and sustainable long-term support would be helpful.

Consider including a session on parenting skills

Many mothers reported that they did not especially discuss participation in the programme with their family members. Given that 'buy-in' from partners and children was reported as a challenge by several mothers, but is key to the long-term success of the programme, it may be worthwhile to consider teaching mothers helpful strategies on family communication.

Triple P, the Positive Parenting Programme (www.triplep.net), runs 90-minute seminars. If a Triple P seminar on a common topic (e.g. Raising Resilient Children) was delivered, it would provide practical advice in a safe environment, and possibly encourage families to engage with parenting services once the 10-week Healthy Streets programme has ended.

Review the structure of the exercise sessions

The exercise sessions were valuable, but challenging to run, given the ranges of ages to be accommodated in a single session. Additional help may need to be budgeted for (e.g. 2 qualified instructors per session) in future iterations of the programme.

Allow longer planning time in advance of the programme

If at all possible, a longer planning period would allow for a more comprehensive and consistent approach to implementing and reviewing the programme.

Introduction

Chronic diseases such as heart disease, cancer, diabetes and respiratory disease cause over 60% of global deaths. Not only do these diseases greatly impact on quality of life once they develop, they diminish physical and mental health in the lead-up to their development. Fortunately, up to 80% of this disease burden is preventable if positive health behaviours are adopted and maintained over the life course. Positive health behaviours include eating healthily, developing appropriate food management behaviours, participating in regular physical activity and reducing screen time.

Health behaviours established in childhood often track into adolescence and adulthood. As such, helping children to develop positive health behaviours can reduce the burden of physical and psychological illness in the short- and long- term. However, to help children adopt healthy behaviours, parents and guardians must be provided with the knowledge and skills needed to create a healthful home environment for the whole family.

Barriers to creating a healthful home environment include: poor parental education and cooking skills; lack of access to affordable healthy food; unhealthy social norms; and, an obesogenic physical environment. Addressing these factors requires considerable expertise and resources, and programmes which address these factors using an interactive skills-based approach are more likely to be successful among vulnerable families.

This report describes the impact of the 10-week family-centred, health promotion programme, called the *Healthy Streets Programme*.

Programme outline

Locations

The *Healthy Streets Programme* was made available to approximately 30 families in County Carlow, with 10 families each recruited in Bagenalstown, Tullow and Carlow Town. The programme was run in a local resource centre in each area for 10 weeks:

- Bagenalstown Family Resource Centre, Bagenalstown
- Family Resource Centre, Oakley Heights, Tullow
- St. Catherine's Community Services Centre, Carlow Town

The pilot version of *Healthy Streets* was delivered twice weekly in each resource centre for 10 weeks between January and March 2018. The programme had 2 key components – healthy cooking and physical activity – which were facilitated using a group approach.

The cookery and exercises sessions each lasted 2 hours, so participants were asked to commit 4 hours of their time to the programme each week.

Healthy Cooking sessions

All cookery sessions were led by the Programme Facilitator, who was an employee of the resource centre. The cookery sessions were guided by the 'Cook It' Handbook and the dishes created each week in the 3 centres are listed on the next page.

Cookery sessions were attended by one parent from each household, and in all cases, it was the mother of the household who attended. The cookery was a hands-on group activity, where participating mothers helped to prepare and cook the dishes planned for that session. The participants sat together and ate the dishes made at the end of the session.

Families were also asked to send at least one photo per week of the meals they cooked at home to the Programme Facilitator. This facilitated sharing between participants and ensured that participants engaged with the programme outside of the resource centres.

Physical Activity sessions

The exercise sessions were facilitated by a qualified local instructor. The Programme Facilitator was also in attendance to assist during these sessions. All family members were encouraged to participate in these sessions. Exercise sessions were largely held indoors.

Programme timetable

Week no.	*Cookery content*	*Exercise content*
1	Homemade brown bread and porridge bread Soups, to include vegetable, potato and leek, and tomato and lentil soup	Aerobic exercise Active family games
2	Chicken and vegetable curry with brown rice Apple pie Homemade low-fat and low-sugar custard	Aerobic exercise Active family games
3	Homemade beef burger on a high-fibre bun Low-fat Marie Rose sauce Oven-baked spicy wedges and fries with salad	Aerobic exercise Active family games
4	Tomato and vegetable pasta bake Homemade ragout sauce Brown and white pancakes with healthy fillings	Aerobic exercise Active family games
5	Information session on the sugar, caffeine and salt content of common foods *(slides and notes provided by the 'Cook It' programme used to guide session)*	Aerobic exercise Active family games
6	Oven-baked homemade chicken nuggets Oven-baked homemade fish goujons Homemade scones with dried fruit	Aerobic exercise Active family games
7	Homemade beef stew Dumplings Bread and butter pudding	Aerobic exercise Active family games
8	Macaroni and cheese Baked potatoes with multiple fillings Rice puddings and fruit smoothies	Aerobic exercise Active family games
9	Homemade pizza Garlic bread Tossed green salad	Aerobic exercise Active family games
10	Visit from the 'Cook It' dietitian to award certificates	Aerobic exercise Active family games

Incentives to help families to implement healthy changes

Incentives provided to families included:

€30 voucher for grocery shopping each week; 3 family passes to the local pool; and t-shirts embroidered with the *Healthy Ireland* and Resource Centre logos.

Information collection

Questionnaires

Information was collected on cooking and exercise behaviours in Weeks 1, 5 and 10 of the programme. Participants completed a short questionnaire at the end of cookery or exercise sessions during these weeks. The researcher was available to assist, where needed.

Focus groups and interviews

Participants were also asked to reflect on their experiences of participating in the programme. As a group, the participants shared their experiences, and these conversations were audio-taped. If the children of parents were present, they were encouraged to contribute. Informed written consent was obtained from participants at all stages of data collection.

Challenges

The families in this programme represented a wide number of nationalities. This made it difficult to get detailed information in some cases, as English was not always a participant's first language. Future reviews of the programme should allow for a longer planning time, to ensure that arrangements are made to accommodate each participant's full involvement in the research component of the programme.

Results

Participant characteristics

Thirty-five families engaged with this programme. Two families withdrew from the programme and 33 families participated in the programme, with 11 families in each centre.

The average age of participating mothers was 34.5 years, with the youngest aged 19 years and the oldest aged 47 years. Fourteen mothers provided details on their partner, who were aged 38.9 years on average, and who ranged in age from 21 to 47 years.

Mothers had an average of 2.5 children. The number of children in the participating families ranged from 1 to 6 children, who in turn ranged in age from 1 to 25 years.

The participating mothers represented 10 nationalities. Most (*n*22) were Irish, but a third (*n*11) were from African and Eastern European countries, to include Nigeria, Sudan, Latvia, Moldova, Poland, Tunisia, Romania, and Hungary.

Reasons for participating in the programme

All mothers reported that the desire to improve the overall health of their household was the principal reason for their interest in the programme. Several mentioned that specific family members had challenging food behaviours, and expressed a desire to obtain the knowledge and skills needed to address these food behaviours.

Cooking behaviours

Using a scale of 1-10, mothers were asked to rate their confidence in their own cooking skills at weeks 1, 5, and 10. In Week 1, mothers had an average rating of 6.5, which indicated that they were somewhat confident in their cooking abilities. By Week 10, this had increased to 8.3 out of 10, indicating that mothers had become significantly more confident with cooking. This change in *knowledge* was matched by changes in *behaviours* at home (**Table 1**).

As shown in **Table 1**, there was a shift towards an increased frequency of cooking family meals over the course of the 10-week programme, increasing from less than two-thirds (63.6%) cooking every day in Week 1 to almost three-quarters (73.9%) of mothers cooking every day by Week 10.

Table 1. Change in the proportion of women cooking family meals during Healthy Streets

	Week 1		Week 5		Week 10	
	%	*n*	%	*n*	%	*n*
Rarely	6.1	2	-	-	-	-
1-2 times per week	6.1	2	6.1	2	6.1	2
3-4 times per week	12.1	4	6.1	2	6.1	2
5-6 times per week	12.1	4	18.2	6	30.3	5
Everyday	**63.6**	21	**69.7**	23	**73.9**	24

Most mothers also reported feeling a lot more capable at healthy cooking since commencing the programme (**Figure 1**). Very few (4.3%) mothers had felt confident in their knowledge of healthy foods at the start of the programme, and this was where very significant gains were observed. Over 80% of mothers reported that they had acquired knowledge which enabled them to feel 'a lot more able' when choosing healthy foods for their household (**Figure 1**).

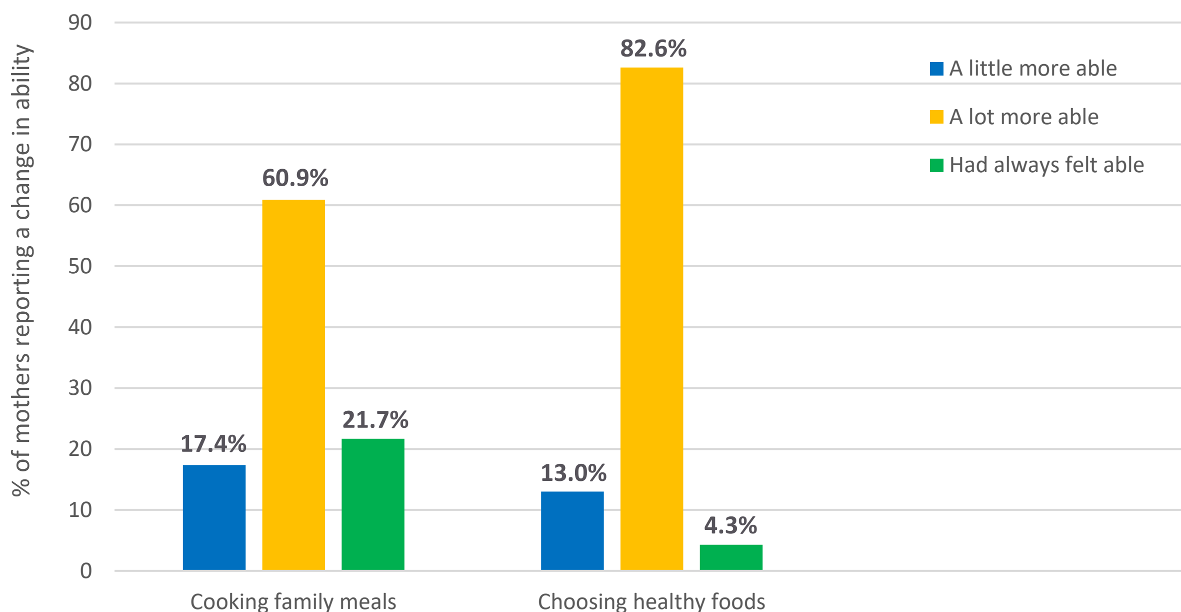


Figure 1. Changes in self-reported ability to provide healthy food at home between Weeks 1 and 10 of Healthy Streets

When asked about their confidence in maintaining these positive behaviours upon finishing the programme, almost all were 'mostly confident' (39.1%) or 'very confident' (56.5%) that they could maintain the healthy changes made.

Participant views on cookery and healthy eating

It was difficult to get family members to buy-in to the healthy changes

The main challenge to making the healthy changes encouraged was obtaining buy-in from all family members. Many mothers reported that they did not discuss participating in the programme with their family before signing up, and although participating mothers were motivated to make changes, this was not always the case with other family members.

"Homemade meals are no problem for my partner – he'll eat those – it's just that the sweets and snacks are impossible with him…that's the toughest bit, the snacks come in everywhere – and when my son sees the snacks, he wants the snacks."

"You can have your own guidelines inside, but outside, it just takes anyone who'll hand them crisps and sweets. That part is hard – getting other people to take on board what you are trying to do."

They developed a healthier approach to food shopping

The emphasis on planning meals was valued, as this helped participants to be more prepared for shopping and cooking, which in turn helped create a better household routine. The session on reading food labels also improved confidence about the foods bought each week.

"The planning part of it is what I find most helpful. I sit down and plan the routine – not the week ahead, I can't go there yet – but at least 2-3 days, and that way I know I'm organised."

"I didn't understand the labels on the sides of the packs at all, but now I look for the green on the label all the time."

They used the vouchers wisely

The focus on planning and reading labels helped participants to spend their grocery voucher wisely.

"When I get the voucher, I literally would spend an hour in there for the €30, just to take time to think about the healthier options, the best options."

"I absolutely make sure the voucher is only for healthy options, because, in a sense, it's a gift – you know, you use a gift like it's meant to be used. So, that €30 is completely and utterly for healthy options only."

Participants took photos of meals made at home and shared them with facilitators

The voucher enabled them to overcome cost as a barrier to healthy food shopping

The voucher also enabled participants to buy foods they otherwise could not afford.

"With the voucher, you can get healthier stuff that you couldn't afford to get normally."

Family meals became easier

As the weeks progressed, mothers reported that they developed a more confident approach to cooking, and that the homemade dishes were well-received during mealtimes.

"I try out more things. Like, we bring home a recipe from here, and you put this, this and this in it. And I say, well, maybe I'll put this different ingredient in it. And I'd never of done that before. Now, I'm doing…I'm like a Jamie Oliver!"

"Even, the kids at home are asking, "Mammy what are you making today?" "Mammy, what did you cook today?" The week before last, we made the stir-fry. Now, I had never made a stir-fry before. And I made it and the kids all LOVED it, so they did. And I've made it since then, and it was lovely."

"It's just brilliant to be able to make one thing for everyone, you know? And everyone will eat that one meal. Whereas before, it was "one will eat this, the other won't eat that," but now they are trying new things, eating the same things as one another, you know? It's made dinnertimes easier, it has!"

They noticed health benefits to changing the food in the house

As mothers made changes to the foods they introduced into their households, they noticed positive changes in their own health and that of family members.

"I've noticed a change of 4 kilos. It was 70kg at the start and now – 66kgs!"

"We would have been the kind of household that went through – now, not me, but the three lads at home – would probably eat seven packs of chocolate digestive biscuits – in a week. We bought a pack two weeks ago and it's still sitting in the press. Which I can't get over – that it's the same packet of biscuits still sitting there! Maybe because, now I've all the fruit out on the kitchen table, so when they come in looking for a snack, I point them to that and they get more fruit."

Mothers had the space to think of their own wellbeing

Since the cookery sessions largely involved only the participating mothers, those sessions became a valuable space for mothers to invest in their own health and wellbeing.

"I'm adjusting myself first. If I can make the first change, then I can get the rest of them on-board."

"If I can work on myself first, I think that's good, because when I know what I'm doing, I can slowly introduce changes for the rest of them."

The mothers offered support and friendship to one another

Many mothers reported that the group was a valuable source of support, which helped to reduce family-related stress and provided reassurance regarding their parenting skills.

"I think the most, coming here on Mondays and Thursdays, that there's a kind of community spirit, you know? Before, when you were on your own, you couldn't even talk about things, you know, you couldn't even vent to another person, like – 'my son is like that' or 'my daughter is like that'. Now, you can talk and come together, and I think that's very, very good."

"You don't feel you are on your own – everyone else is going through it too, you're not alone."

"You know, before, you'd be sitting at home all of the time, and now you have a place to talk and are not just stuck in the house all of the time – so I build friendships, you know?"

Engaging in the classes created a pathway for future positive engagement

Some mothers were invited to participate in other classes and activities being held in the Resource Centres as a result of their participation. Participating in other enjoyable activities motivated mothers to seek future opportunities to remain engaged with the centres.

"Sandra asked us all to come to the women's thing last week. And it was brilliant, I so enjoyed it. International Women's Day – there was a lady artist there, and we all had our own canvas, and there was hundreds of bottles of paint on the table. She showed us how to paint and then we had sandwiches and tea and coffee and it was lovely. And I would never have been invited to that. And I have my picture at home now, so I can say I painted this picture when I was in Women's Day."

"I'm just waiting for the next one to come up! Whatever it may be, I don't mind, you know? Even if, between now and the next one, it's to come in for a coffee morning, or, you know – something."

Participants took photos of meals made at home and shared them with facilitators

Exercise behaviours

Using a scale of 1-10, mothers were asked to rate their confidence in being able to independently engage their children in physical activity at weeks 1, 5, and 10. In Week 1, mothers had an average rating of 5.4, which indicated that they were slightly confident. By Week 10, this had increased to 6.8 out of 10, indicating that mothers had become more confident with exercising with their children. This change in *attitude* was matched by changes in *behaviours* at home (**Table 2**).

As shown in **Table 2**, there was a shift towards an increased frequency of being physically active over the course of the 10-week programme. **Table 2** indicates the numbers of mothers who took time to exercise alone during the week. A significant change was observed, increasing from one in eight women exercising every day at the start of the programme to one in four women exercising daily by the end of the programme. Significant decreases were observed in levels of inactivity, with all participants exercising at least once a week outside of the group exercise session at Week 10.

Table 2. Change in the proportion of women exercising during Healthy Streets

	Week 1		Week 5		Week 10	
	%	*n*	%	*n*	%	*n*
Never	18.8	6	3.1	1	-	-
Rarely	21.9	7	-	-	-	-
1-2 times per week	25.0	8	42.9	14	42.5	14
3-4 times per week	18.8	6	17.9	6	21.2	7
5-6 times per week	3.1	1	10.7	4	9.1	3
Everyday	**12.5**	4	**25.0**	8	**27.3**	9

There was also a shift towards families being increasingly physically active. **Table 3** indicates the changes in the number of mothers exercising with their children each week. At Week 10, participants rated how challenging it had been to change their family exercise behaviour, and the average rating was 6.7 out of 10, indicating that changing exercise behaviour was quite challenging. However, despite the challenges, significant positive changes in behaviour were observed, particularly in terms of decreasing inactivity over the course of the 10-week programme (**Table 3**).

Table 3. Change in the proportion of women exercising with their children

	Week 1		Week 5		Week 10	
	%	*n*	%	*n*	%	*n*
Never	**17.1**	6	**-**	-	**-**	-
Rarely	**22.9**	8	**6.6**	2	**6.7**	2
1-2 times per week	31.4	11	26.7	8	26.7	8
3-4 times per week	5.7	2	43.3	13	40.0	12
5-6 times per week	2.9	1	10.0	3	13.3	4
Everyday	11.4	4	13.3	4	13.3	4

As shown in **Figure 2**, very few (8.7%) mothers had felt confident in independently exercising with their children at the start of the programme. By Week 10, over half (56.5%) of mothers reported feeling 'a lot more able' when exercising with their children. However, over a third (34.8%) of mothers felt 'a little more able' to independently exercise with their children, which may indicate challenges with long-term maintenance of the new exercise behaviours with some families in the programme.

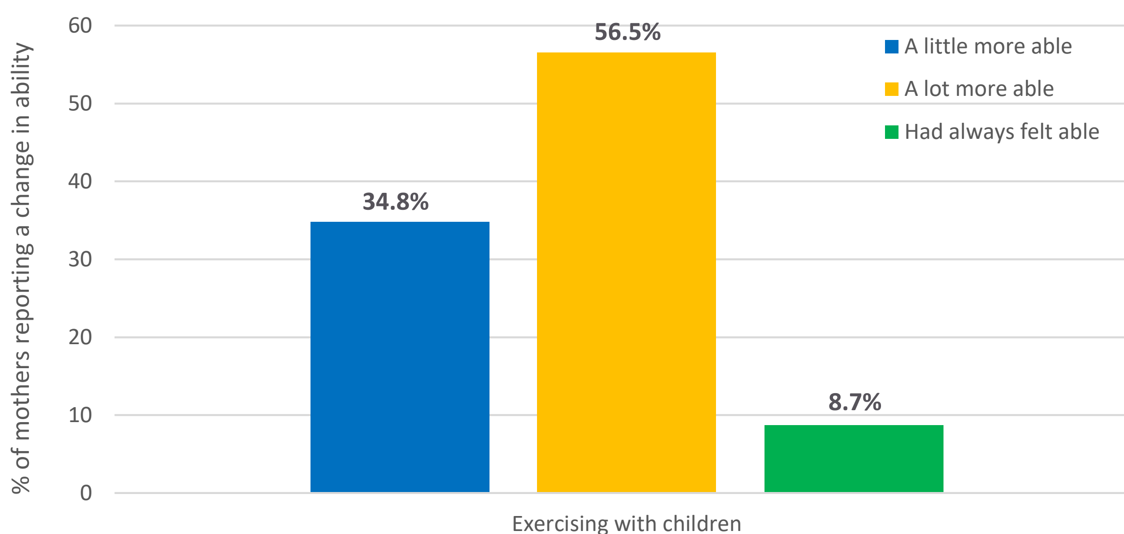


Figure 2. Changes in self-reported ability to independently exercise with children between Weeks 1 and 10 of Healthy Streets

When asked about their confidence in maintaining positive exercise behaviours upon finishing the programme, almost half were 'mostly confident' (47.8%) and 39.1% were 'very confident' that they could maintain the healthy changes made.

Participant views on exercise sessions

Participants learned how to exercise as a family

All participants praised the exercise instructor's sensible approach to enjoyable exercises which could be used indoors and outdoors, and which do not incur any cost.

"I know a lot more now about different exercises that we can do together as a family, and, I suppose I know now that it's not hard to make exercise fun for the whole family, you know?"

The exercise was difficult due to self-consciousness

Many also reported that they or their children felt self-conscious at the start of the sessions, but they slowly got used to exercising with a group.

"I didn't feel confident exercising in the group – that was hard at the start."

"The little one, she's older, and she'd be a bit more worried about who's there and who might see her. Now she'll come along and she enjoys it when she's here – but she would be a little bit self-conscious, you know?"

"The instructor was very encouraging and it meant that you learned not to be afraid of looking like an eijit when exercising, so long as you had fun."

Participants noticed health benefits as a result of the exercise

Participants did notice that they became fitter as the weeks progressed, and they reported changes in elements of their children's behaviour, which they linked to the exercise classes.

"It has become easier as the weeks go by, so I know that we're better and fitter with it all."

"When I bring the kids home after it they all sleep better."

The exercise posed logistical challenges

The participants and Programme Facilitators did observe that space was limited for indoor exercise, and that this sometimes made it challenging to keep adults and all children fully occupied. Some suggested that putting the children into groups by age (e.g. 'under 8 years' and '8 years and older') would help to keep everyone occupied for the duration of the session, but additional instructors may be required to facilitate this if the programme was delivered again. A few adult-only exercise sessions were suggested, but this may not be necessary if the exercise sessions have some adult-only and child-only group activities.

Perspectives of the Programme Facilitators

The Programme Facilitators highlighted many of the benefits reported by participants.

Participants were committed to the programme

All facilitators observed that there was close to 100% attendance at all classes.

"The whole group has been amazing in coming to the sessions, being on time, staying for the full sessions, and showing that they are using what's being done here, at home. They have pictures of the foods they make at home, they talk about their healthier choices, it's wonderful to hear, you know?"

"We've had full attendance, really, amazing attendance – there were a couple of occasions where family members were sick and they couldn't make it, but really, it's been excellent. I mean, some of those people have never finished anything in their lives and they've got a lot out of it, an awful lot."

The programme was time-intensive to prepare and deliver

All facilitators acknowledged that a longer planning time in advance of the programme would be helpful. They also reported that there was considerable preparation time each week and that space proved to be the principal challenge in delivering the programme.

"Logistically, the difficulty has been the space. It is small here, so I have to divide them into groups to take turns as we work through the cookery, and when we have twenty-eight people here for the exercise, we have to get very creative, but it works, we make it work."

Group diversity led to some communication challenges

The different cultural backgrounds of participants sometimes made communication difficult, but over time, the group activities promoted inclusion and a positive sense of teamwork.

"It was small, but there were some mutters under the breath between a few of them about some of the others. It wasn't overt, but I knew it was there and I didn't like it. And I addressed it – they know I am all about equality. I made it clear that that sort of talk is unacceptable to me and moved on. And, by the end of the programme – like, yesterday I asked "Who's not here?" and they were able to tell me. They had learned each other's names, and I thought, "This is huge." It seems tiny, but it's big."

Participants often became positive supports for one another

The facilitators observed that participants often supported one another and that the groups ultimately became a safe space in which mothers could share their experiences.

"It's liberating for the mothers – because so many of them are single mothers – to be able to have this outlet to meet and share stories and chat to one another during the sessions."

Conclusion

In conclusion, the Healthy Streets pilot programme was shown to have an important positive impact on the health behaviours of its participants. In particular, participating mothers benefitted greatly from a safe learning environment in which they were helped to acquire new knowledge and skills. By acquiring new knowledge and skills, mothers reported that they had greater confidence in themselves, and that this confidence helped them to make healthy changes within their household.

With support, the positive changes initiated during this 10-week programme can become further embedded, resulting in long-term changes in the health behaviours of parents and children in these vulnerable families.

Participants used planners each week to keep track of their goals and to record successes