



A qualitative study of the experiences of participants in X-Fitt 2.0, a combined lifestyle intervention for citizens with a low socioeconomic status

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Abstract X-Fitt 2.0 is a two-year combined lifestyle intervention (CLI) for people with a low socioeconomic status (SES), which starts with 12 weeks of intensive guidance, followed by a follow-up trajectory. In the first 12 weeks, participants receive three weekly sports sessions (two in a group with a sports coach, one individually), dietary advice and monitoring by a dietician, and four hours of coaching by a lifestyle coach to work on personal goals. The follow-up trajectory consists of a total of six hours of lifestyle coaching to encourage behavioural maintenance. The aim of this study was to gain insight into the experiences of participants with X-Fitt 2.0. Therefore, 17 group discussions after 12 weeks ($n=71$) and individual interviews after 1–2 years ($n=68$) were held and thematically analysed. This resulted in five themes: ‘goals of the participant’, ‘programme content’, ‘accessibility of the programme’, ‘group dynamics’ and ‘guidance’. Most participants participated because of their health. They considered the programme accessible because the atmosphere in the sports centre was pleasant and X-Fitt 2.0 was offered free of charge. The majority of participants liked the fact that the programme was offered in a group ‘with people like

them’, referring to people who are overweight, because they did not have to be ashamed of themselves, which motivated them. The participants were especially satisfied with the guidance from the lifestyle coach and sports coach. However, they would have expected more guidance from the dietician. Overall, most participants were satisfied with the programme, but many also indicated that the first 12 weeks were too short to achieve sustainable behavioural change. Furthermore, quite a few participants indicated to have stopped sports after the first 12 weeks, because they could not afford to continue. The insights obtained can be used to better adapt (existing) CLIs to people with low SES.

Keywords Combined lifestyle intervention · Low socioeconomic status · Health promotion · Evaluation · Experiences

Introduction

Overweight and obesity are more prevalent among citizens with a low socioeconomic status (SES). 60.9% of people with a low SES are overweight, compared to 43% of people with a high SES [1]. For obesity, this is 20.9% compared to 8.5% [1]. To reduce overweight and obesity, the health care portion of the combined lifestyle intervention (CLI) has been included in the Dutch basic healthcare insurance scheme since January 2019 [2]. This includes programmes such as SLIMMER, BeweegKuur and Cool, and recently Samen Sportief in Beweging (SSiB). These CLIs have demonstrated a positive effect on health and quality of life [3–6]. However, fewer people than expected are using the CLIs, for example because the exercise portion of the CLI is not covered by health insurance [2]. This is especially problematic for citizens with a low SES, who are mostly likely to experience finan-

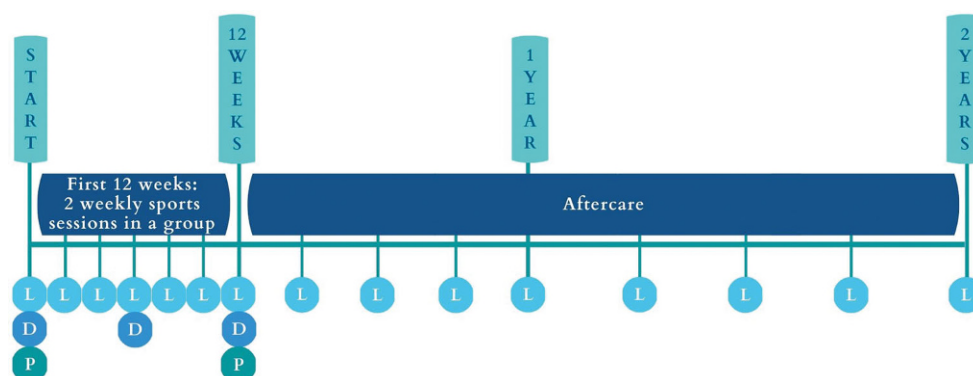
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Fig. 1 Overview of X-Fittt 2.0 (L: Session with a lifestyle coach, D: Session with a dietitian, P: Session with a physiotherapist)



cial barriers to exercise [7]. In addition, intensive, positive and stimulating support is important for people with a low SES, and the barriers they experience (e.g., stress, debts, physical symptoms) should be taken into account [7–12]. In other words, a CLI for citizens with a low SES requires its own approach.

In 2016, local parties in Arnhem developed a CLI for people with a low SES: X-Fittt 2.0 [13]. This is a 2-year CLI that starts with a 12-week intensive programme consisting of: two weekly group exercise sessions with a sports coach focusing on fitness, strength, flexibility and balance, and one independent sports session; dietary advice from a dietitian focusing on the dietary pattern; and coaching by a lifestyle coach to work on personal goals and self-management (Fig. 1). After these 12 weeks, the exercise programme and the dietary advice stop, and participants start exercising and being physically active on their own. However, participants still receive six hours of lifestyle coaching at fixed times over the rest of the 2-year period.

Due to a collaboration with the municipality, the cost of the exercise portion in the first 12 weeks is paid. To participate in X-Fittt 2.0, a person must have an income at or below the minimum wage level (i.e., our definition of low SES in this study) and receive benefits from the municipality. The municipality sends these citizens a letter with information about X-Fittt 2.0 that invites interested people to call the lifestyle coach to register.

In addition to an effect evaluation [14], it would be desirable to study the experiences of X-Fittt 2.0 participants. Not only to explain the effects or lack thereof, but also to improve existing CLIs and better align them with the needs of low SES participants. Therefore, our research question was: ‘What are the experiences of participants in the combined lifestyle intervention X-Fittt 2.0?’

Method

To gain insight into the experiences of X-Fittt 2.0 participants, group discussions were held 12 weeks after the programme began and individual semi-structured interviews were held after 1 and 2 years. The individual interviewees were (mostly) the same as the

participants in the group discussions. The study was conducted between 2016 and 2021 and involved all six groups (divided over three sports centres) that started the programme in that period. Only the first four groups were included in the individual interviews because data saturation was reached thereafter.

The study was approved by the Social Ethics Committee of Wageningen University & Research (WUR).

Group discussions

In total, 17 group discussions were held after the last sports session of the first 12 weeks (t_1). The discussions lasted an average of 27 minutes. Participants received an email from the lifestyle coaches in advance announcing the group discussions and emphasising that participation was voluntary. All participants present participated in the group discussions ($n=71$). We used the APEF tool, which presented participants with six statements to facilitate the conversation (table 1, [15]). For each statement, participants could use coloured voting cards to indicate whether they agreed or disagreed with the statement: green for agree, yellow for neither agree nor disagree, and red for disagree. Afterwards, the voting results were discussed and participants could clarify their opinions. The statements used were formulated in cooperation with Pharos (Centre of expertise on health inequalities) to increase comprehensibility. During the interview, participants also filled in evaluation forms on which they could rate X-Fittt 2.0 (1–10) and give a brief explanation.

Table 1 Statements used in the group discussions

Statements	
1.	‘I would advise others to participate in X-Fittt 2.0 as well.’
2.	‘I enjoy exercising because I work out in a group.’
3.	‘I feel safe when I exercise in this group.’
4.	‘The trainer motivates and encourages me to exercise.’
5.	‘I am doing more in my daily life since I joined X-Fittt 2.0.’
6.	‘I will continue to exercise after X-Fittt 2.0 has ended.’

Individual interviews

The individual interviews took 17 minutes on average and were conducted one (t_2 , $n=31$) and two (t_3 , $n=37$) years after the start of X-Fittt 2.0. The lifestyle coaches sent an email to the participants still in the programme inviting them to participate in the interviews and emphasising that participation was voluntary. Of invited participants, 65% took part in an interview. Interviews took place after the participants' appointments with the lifestyle coach. Interview questions were formulated in understandable language in cooperation with Pharos.

Objectivity and consent

All discussions and interviews were conducted by researchers from WUR without the presence of lifestyle coaches, sports coaches or dietitians to ensure the objectivity of the evaluation and allow participants to speak freely. All participants consented to audio recording and to using the data for research purposes.

Data analysis

Averages were calculated for the ratings on the evaluation forms ($n=71$) and reasons for high and low ratings were examined. The recordings of the group discussions and interviews were transcribed and analysed via a thematic analysis [16]. After we became familiar with the data (step 1), we inductively developed initial codes by reading the data (step 2). About 50% of the data was coded by two (interviews) or three (group discussions) researchers. The codes largely overlapped. Consensus was reached on the code list and one researcher coded the remaining data.

Next, the codes were sorted into potential themes (step 3), which we then revised by carefully reading the data in each theme (step 4). We analysed the content of the themes and named the five developed themes: 'participants' goals', 'programme content', 'accessibility', 'group dynamics' and 'guidance' (step 5). Finally, we selected quotes and recorded the results (step 6). All analyses were performed using ATLAS.ti, version 9.

Results

The five themes we developed are elaborated on below. Table 2 shows the frequency with which each theme appeared in the group discussions (GD) and interviews (I).

Participants' goals

Participants expressed various reasons or goals for their participation. Improving health (e.g., losing weight or increasing endurance) was mentioned often, as well as exercising more, being less socially isolated or taking advantage of a free programme.

Table 2 Number of group discussions (GD) or individual interviews (I) in which the themes and related topics were discussed

	GD- t_1 ^a (17)	I- t_2 ($n=31$)	I- t_3 ($n=37$)
<i>Participants' goals</i>	8	18	29
Improve health	7	16	27
Get more exercise	1	8	2
Escape social isolation	2	1	1
Free of charge	1	0	0
<i>Accessibility</i>	7	13	7
Invitation	3	0	0
Positive atmosphere	6	7	3
Financial barriers	7	8	5
<i>Group dynamics</i>	13	16	12
Positive: atmosphere	10	12	2
Positive: motivation	13	9	11
Negative	4	2	1
<i>Guidance</i>	14	22	20
Lifestyle coach: positive	4	17	13
Lifestyle coach: negative	2	4	1
Sports coach: positive	13	14	6
Sports coach: negative	5	1	1
Dietitian: positive	7	1	0
Dietitian: negative	8	2	0
Other: positive	0	0	2
Other: negative	3	2	0
<i>Programme content</i>	14	25	12
Programme: positive	10	12	4
Programme: negative	9	15	9
Sports sessions: positive	7	10	0
Sports sessions: negative	6	4	2

^aThe number of group discussions in which this was mentioned. The number of different people who mentioned this within these group discussions may be higher

"Because I felt like I was sitting more, I wanted to have more energy. Physical fitness was more important to me than weight loss. I've always been overweight, so I'm kind of used to that. But it's nice to have a certain level of fitness." [I24- t_2].

Programme content

After 12 weeks, the participants generally rated X-Fittt 2.0 positively, with an average rating of 8.3, 95%-confidence interval [8.0-8.6]. Two participants decided the programme did not suit them because of physical complaints or because they thought that too little nutritional guidance was provided, and they rated the programme a 4 (lowest mark among respondents). Fourteen participants gave the programme the highest possible rating (10), mainly because they lost weight and enjoyed the programme.

Participants said that they had received sufficient information about a healthy lifestyle. They appreci-

ated the structure of X-Fitt 2.0 and the broad scope of the programme (e.g., fitness, nutrition advice). Participants liked that the municipality paid for X-Fitt 2.0. They also liked the support they received from the lifestyle coach after the first 12 weeks. “The after-care phase is very good; you still have someone you can lean on.” [I2–t₂].

Regarding the sports sessions, most participants were happy with the build-up of intensity and the variety of sessions. “I thought it was feasible and I understand that it was difficult for people who already had injuries. But personally, I had only positive experiences.” [GD3–t₁]. Participants liked that they did not have to think about exercises themselves because they were guided by a sports coach, and they liked that they could do the exercises at their own pace. However, some participants thought the sports sessions were too strenuous or too repetitive. “The exercises need to be much more adapted to the complaints that people come in with and not like ‘come on, keep going’, you know, and set your own limit.” [GD14–t₁]. Finally, participants indicated that the materials could be improved.

The most important disadvantage mentioned is that the intensive programme is too short (12 weeks). Participants would prefer a programme of at least 24 weeks to give them time to get more familiar with their new lifestyle for the long term. “And I think it’s too short: 12 weeks and then you’re basically on your own. And now it’s up to you ... But life is not only about those lists ... If I look at myself and my life cycle with diets, it becomes very difficult once you’re on your own.” [GD8–t₁]. “That’s why I think three months is fine to make a first start to turn your life around, but I don’t think it’s [embedded] in your life after three months, so I think it’s very easy not to go to a group class ... Especially after those three months, losing weight takes longer, you have to make more effort, and it’s very difficult to keep going.” [I7–t₂]. Furthermore, some participants felt like the scales measured very differently and felt that the timing of when X-Fitt 2.0 was offered was not convenient (for that group, the intensive programme stopped right before Christmas). In addition, some participants experienced organisational problems (e.g., with communication from the coach).

Another suggestion was to add group discussions about lifestyle-related topics in the first weeks. “Actually, that is exactly what I missed. I think that if we had had this kind of conversation more often in between, then perhaps the programme could have been adjusted ... I think we would have been able to encourage each other more.” [GD8–t₁]. Participants also wanted group sessions in which they could exchange experiences after the first 12 weeks. “It was very intense for 3 months and then ‘Goodbye’. And after so many months, you get a call asking ‘What are you doing?’ I think it would have been nice to have some more follow-up moments.” [I5–t₃]. Participants also

felt that X-Fitt 2.0 could have offered more flexibility, such as offering sports sessions at various times.

Accessibility

The municipality invited people to participate in X-Fitt 2.0, and that was the final push some participants needed. “For me, that [letter] came at exactly the right time. Because I was just thinking about starting to exercise again and then suddenly a letter like that arrived. Then I thought, ‘Hey.’” [GD7–t₁].

Participants said that X-Fitt 2.0 was accessible because of the atmosphere in the sports centres where it was offered. “Here, you aren’t the loser, like ‘You don’t know it all’ or ‘Look, you’re fat, you’ve eaten too much’. Here, you are appreciated as you are. That’s very important for your self-confidence.” [GD1–t₁]. At t₃, many participants stated that they still work out at the same sport centre, primarily because they feel comfortable there. “Well, I’ve seen enough sports centres from the inside, and I’m still happy with [name sports centre]. You’re guided there, they keep an eye on you, and if there is something wrong with you, they see it ... Everything is explained to you and you receive good guidance. And for me, that’s definitely a plus.” [I11–t₃].

Although participants experienced X-Fitt 2.0 as accessible, some indicated that they do not have the financial means to continue exercising. “May I give another reason why I’m sad that it’s ending? The reason is that financially I will probably not be able to continue ... But for me this was also kind of a thing to ... it probably sounds very terrible, but a means to get out of a kind of social isolation. And then you fall back into it very quickly ... because you don’t have the means to continue with it.” [GD8–t₁]. Some participants also felt that information should be available in multiple languages.

Group dynamics

The vast majority of participants enjoyed being part of a group for the first three months because the atmosphere was good and they were surrounded by people like themselves. “Yes, and it’s also not embarrassing when everyone has fat rolls everywhere. Then you’re all standing around with fat rolls. That’s very different from being in a sports centre with all those very slim people. That alone is very stressful” [I7–t₂].

The participants said that in a group they could motivate each other well during the sports sessions, which helped them stick with it. “I didn’t expect in advance that I would want to continue, but now I do ... On my own I wouldn’t stick with it, but I enjoy it in the group.” [GD6–t₁]. They also mentioned that a group makes you try that little bit harder, even though you are already tired. “Not so much in terms of getting there, but if you were there you’d think, ‘If

she can do it, so can I. You don't want to be worse than another person." [I24–t₂].

But some participants said that exercising in a group was not suitable for everyone (e.g., for people with (mental) health problems). A few participants preferred to do individual workouts in the sports centre.

Guidance

In general, participants were satisfied with the lifestyle coach, sports coach and dietitian. Participants felt they worked well together and that they helped them to develop and maintain a healthy lifestyle.

The vast majority of participants appreciated the lifestyle coach's involvement, which they found sincere and helpful. This helped them avoid going back to their old lifestyle, especially after the first 12 weeks. "If there had been no sessions with the lifestyle coach after the first 12 weeks, nothing would have come of [exercising]. Then I would have postponed it or stopped." [I22–t₂]. Participants felt listened to by the lifestyle coach, without being judged. "I really enjoyed the conversations with [the lifestyle coach] because you could say anything and I felt that she really listened to me. And she also expressed a certain empathy." [I40–t₃]. The lifestyle coach also helped with the choice of a follow-up exercise programme after the first 12 weeks of X-Fittt 2.0. However, a few participants indicated that they had expected more guidance from the lifestyle coach and felt that there should be more contacts with the lifestyle coach in the last year.

Participants were happy with the sports coaches who guided them in the first 12 weeks. They particularly mentioned the trainers' enthusiasm and how they helped them to exercise without getting injured. "It's encouraging when you're working out and you hear 'Hey, you're doing well!' while you had been thinking 'Am I doing this right?' And then you hear it again." [GD7–t₁]. "He shows the exercises in such a way that I really get super motivated." [GD8–t₁]. However, some participants said they had had too many different sports coaches.

Although some participants were satisfied with the dietitian, others said that they would have preferred more sessions, that they would have liked more emphasis on nutrition in X-Fittt 2.0, and that the nutritional needs of the individual participants should be listened to more. "I myself was very much struck by the fact that ... it's not tailored to the individual. It's a bit of a one-size-fits-all." [GD8–t₁]. "I would recommend the exercising, but I would modify the dieting. Make it more personal. The rest I would recommend as-is." [GD6–t₁]. Participants also felt that there should be clearer guidelines for the period after the first 12 weeks. "You get a diet and then that programme stops ... But where is the normal eating schedule? I would add that ... How should you eat if you eat normally? That's hard to figure out by your-

self." [I7–t₂]. Participants suggested that group sessions with the dietitian should be organised in X-Fittt 2.0 and that the dietitian should ensure that everyone gets sufficient feedback on their eating behaviour. "In the beginning we had to ... write everything down for three days. And the first three times I think it was assessed, and then I heard nothing more about it." [GD11–t₁].

Some participants would have liked a physiotherapist and a psychologist to be part of X-Fittt 2.0. Some participants also said that they know what they can and cannot do, or that they do not want rules imposed on them, particularly with regard to nutrition. "I have already had a gastric bypass and six different dietitians. I know what I can and cannot eat." [GD1–t₁]. "Yes, but I'm not interested in obligations. I always had that time with my work and now no longer." [GD1–t₁].

Discussion

The purpose of this study was to gain insight into how participants with a low SES experience X-Fittt 2.0. This programme differs from CLIs for which the health care-related costs are covered by the basic health-care insurance scheme [3–6] in two ways: the exercise component is paid for by the municipality and the guidance provided by the lifestyle coach is more intensive and specifically addresses the barriers experienced by citizens with a low SES. Using a thematic analysis of group discussions and individual interviews, five themes were developed that summarise the results: 'participants' goals', 'programme content', 'accessibility', 'group dynamics' and 'guidance'.

In general, the participants in this study were satisfied with X-Fittt 2.0 because the programme helped them improve their health and lifestyle. They mentioned several aspects that were specifically included in the development of X-Fittt 2.0 because of the target group (citizens with a low SES), such as the intensive free (exercise) guidance in the first 12 weeks. Participants felt that X-Fittt 2.0 was accessible because of the pleasant atmosphere in the sports centre, which made them feel at ease. They also liked being in an exercise group with 'people like themselves' (i.e., people with overweight), which encouraged them to persevere. They also praised the lifestyle coaches and sports coaches for their guidance, enthusiasm and commitment. These results are consistent with the effective elements of CLIs and the approach to obesity for citizens with a low SES found in previous studies [12, 17].

Although the participants were generally satisfied with X-Fittt 2.0, there were also aspects with which they were less satisfied. Not everyone liked exercising in a group. Furthermore, some participants would have liked to continue exercising after the first 12 free weeks but had to stop because they could not afford to pay to continue. Although X-Fittt 2.0 provides

more intensive coaching in the first 12 weeks than the standard CLI, some participants expected more frequent contact with the coaches, especially the dietitian. They also thought that nutrition was an insufficiently discussed theme. The biggest drawback they mentioned was that the intensive 12-week start was too short. Areas for improvement were the content of X-Fitt 2.0, such as including group discussions, and the extent to which the programme can be tailored to individuals. These results show that it is important for the CLI to correspond to personal wishes and needs, as previous studies into effective elements have also shown [12, 17].

The ratings for X-Fitt 2.0 are about the same as for SSiB (8.3 versus 8.1), another CLI for citizens with a low SES [6]. However, there is no detailed insight into participants' experiences with that CLI. No evaluation of the other CLIs in the basic healthcare insurance scheme has been done with people with a low SES. However, the evaluations that have been done indicate that the nutritional component of those CLIs is generally rated more positively than that of X-Fitt 2.0 [18, 19]. The evaluation of CooL also showed that its participants, like those in X-Fitt 2.0, would have liked to have follow-up meetings [20]. In addition, BeweegKuur participants, like those in X-Fitt 2.0, wanted the exercise coaching to last longer than just the first 12 weeks and they reported that it can be difficult to maintain healthy behaviours after intensive coaching [18]. Although our study focuses on citizens with a low SES, it seems that (some of) our results do not apply specifically to citizens with a low SES, but also to other CLI participants. Therefore, we recommend extending the exercise coaching beyond the initial 12-week period.

Some participants mentioned that they would have liked to have had group discussions with other participants to reflect, exchange experiences and learn from each other. Previous studies have also shown that these types of open group discussions are motivating and support group processes, which helps to change behaviour related to lifestyle [21, 22]. It is therefore advisable to make this type of discussion with group peers part of the CLI.

Based on these results, the small number of participants in the CLI can be explained by participants' having to pay for the exercise component themselves. Citizens with a low SES, the group in which overweight and obesity are more common, often have less money to spend, and the participants in our study indicated that working out is often too expensive. Having to pay for the exercise component of a CLI can be a barrier for people with a low SES, so we suggest that the exercise component should be included in the basic healthcare insurance scheme.

A strength of our study is the large amount of data we collected through group discussions and interviews. This allowed us to form a clear idea of how participants experienced X-Fitt 2.0. Another strength

is the objective character of the researchers (they were not involved in implementing X-Fitt 2.0), as this allowed participants to speak freely.

One limitation of the study is the possible selection bias because the researchers did not talk to the people who dropped out of the programme (34%), but only with participants who were still taking part in X-Fitt 2.0. People who dropped out were not approached for the study because the lifestyle coaches no longer had contact with them. Of the participants who were still in the programme, 65% participated in an interview at t_2 or t_3 . Future research should include dropouts to investigate whether they experienced X-Fitt 2.0 differently than the participants in this study.

Conclusions

In conclusion, X-Fitt 2.0 received a mostly positive evaluation. Participants appreciated the guidance and the atmosphere in the sports centre, and they were grateful that the programme was paid for. Yet participants also have suggestions, such as increasing the focus on nutrition in the programme and extending the intensive counselling beyond the first 12 weeks to promote the maintenance of healthy behaviour. It has also become clear that making exercise free for citizens with a low SES could ensure lifestyle changes in the long term. Other (future) CLIs can use this knowledge to make CLIs more suitable for citizens with a low SES.

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