



Feasibility trial findings of a peer-led intervention to increase the physical activity of Year 8 girls.

About PLAN-A

The PLAN-A (Peer-Led Physical Activity iNtervention for Adolescent girls) study, funded by the National Institute for Health Research (NIHR), is a feasibility study of a school-based peer-led intervention to address the observed decline and persistent low levels of physical activity amongst adolescent girls.



The PLAN-A model was based on the ASSIST stop smoking trial. It operated on a whole school year level where all consenting Year 8 girls nominated influential girls in their year. The **18% of girls with the most nominations were invited to become peer-supporters** and attend a two-day training session to provide them with the skills, knowledge and confidence to return to school and informally encourage and support their peers to be more active. Five weeks after the initial training, the peer-supporters attended a top-up training day which re-energised the girls and helped them put their peer-supporting into practise. The training was led by peer-supporter trainers who had been trained to deliver the sessions.

The training used interactive activities to provide the peer-supporters with a mix of information about the importance of physical activity, inspiring and empowering girls to be active and how to diffuse these messages to peers using informal strategies.

The design was a feasibility study with a formative phase in which we refined the intervention. Six secondary schools were randomised (four intervention & two control) after baseline data collection and consenting participants provided accelerometer physical activity data and completed a psychosocial questionnaire at the beginning and end of Year 8, and the beginning of Year 9. Focus groups and interviews were conducted with trainers, peer-supporters, non-peer-supporters, school contacts and parents.

Key objectives were to investigate the **feasibility** and **acceptability** of recruitment, training and intervention implementation to stakeholders and whether the intervention showed promise to increase moderate-to-vigorous physical activity (MVPA).

The results

Recruitment and attendance

427 girls participated, of which 55 became peer-supporters. Five trainers were recruited to deliver the training. Attendance at the peer-supporter training was very high across all four intervention schools (Figure 1).

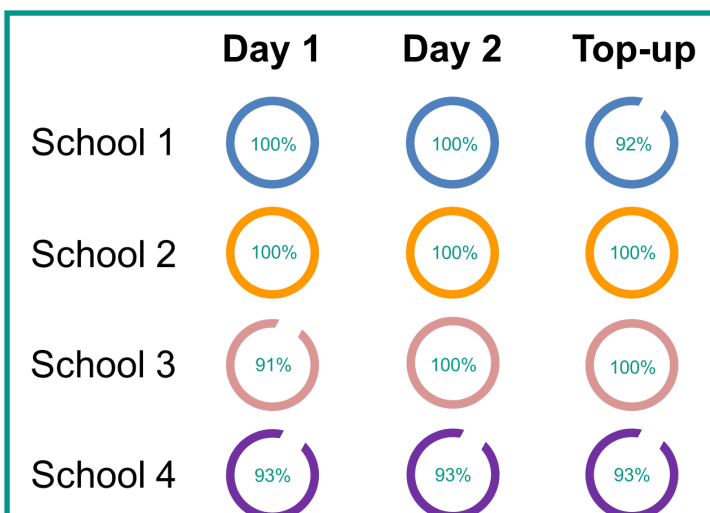


Figure 1. Training day attendance

Intervention implementation

Peer-supporters had a **positive attitude** towards the training, which they found interesting, engaging and pitched at the right level. Peer-supporters **enjoyed the training** (Figure 2), in particular activities that

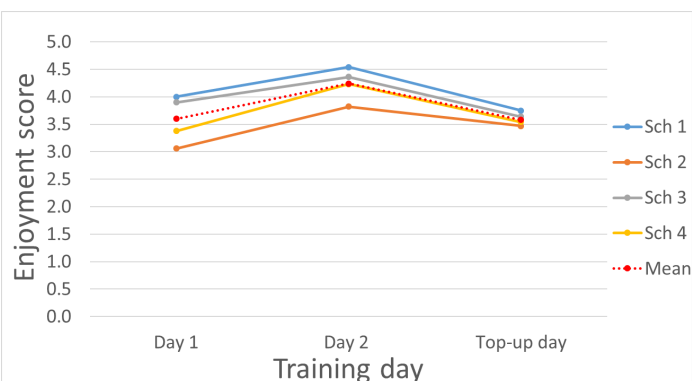


Figure 2. Peer-supporter enjoyment ratings for each day per school

involved debate/discussion, fun games and competition, and they felt that it helped them to prepare to go back to school and support their peers to be active.

"Like slipping it into a conversation was pretty easy after we learnt how to do it. Like before you'd be like 'urrrr' [...] learning it I think it actually helped."

Peer-supporter focus group

Level of engagement was challenged by lengthy activities at the end of the day and those that involved lots of sitting down/writing. Girls also reported wanting more help with how to start conversations and what to say. Three key strategies that peer-supporters reported using to support peers were; **sharing their knowledge** of physical activity, **co-participating** in activities with friends and taking a **subtle** approach in doing so.

She said ... she had encouraged her friends to be more active and explained why and if she was going to go out for a run or go and do a fitness programme in a room she'd say to her friends, "Oh come on let's go and do this together"

Parent of peer-supporter

This approach may have led non-peer supporters to feel that they were not overtly supported by peer-supporters. Peer-supporter success also depended on

how well the girls knew each other, how non-peer-supporters were approached and whether they found the topic interesting. The most notable impact of PLAN-A on peer-supporters was its positive effect on girls' **confidence** and **self-perception**.

I think it's done their confidence a world of good [...] they've taken quite a lot of pride in what they're doing because they've been chosen to do it.

School contact

Evidence of promise

PLAN-A showed evidence of promise to positively influence Year 8 girls' physical activity levels. The measurements taken at the third data collection (Year 9 - five months after the intervention) showed that girls in intervention schools performed **6.1 minutes (95% CI = 1.4 to 10.8) more MVPA** and **23.3 minutes less sedentary time (95% CI = -43.7 to -2.8) per weekday** than girls in the control schools. This demonstrates the promise of the informal peer-diffusion approach adopted in PLAN-A, and has potential for an important **population level impact if replicable at scale**.

Affordability and cost-effectiveness

All the information needed for a health economic analysis was able to be recorded. The project showed promise for cost-effective delivery; the average cost to deliver the intervention was **£37 per girl**, or £2685 per school. The incremental **cost-per-minute** improvement in mean weekday MVPA 12 months after baseline was **£6.06**.

What's next?

The study findings are currently being written up. The results of the feasibility study provides strong rationale to now test the PLAN-A intervention on a larger scale in a definitive trial.