

The Impact of a Self Determination Theory-Informed Football Club on Motivation in Girls Aged 8–12



Introduction

Physical activity (PA) is essential for both physical and mental well-being, yet global participation levels remain low, with 81% of adolescents failing to meet the World Health Organization’s PA guidelines (WHO, 2018). In Scotland, this issue is particularly pronounced among adolescent girls. According to the Scottish Health Survey (2023), only 43% of girls aged 13–15 years meet recommended PA levels, compared to 67% of boys. Girls’ enjoyment of physical education (PE) has also dropped significantly in the UK, with just 64% of girls reporting enjoyment in 2023 compared to 74% in 2016 (Youth Sport Trust, 2023). A key barrier to increased participation among girls is a decline in motivation and confidence as they grow older (Moreno-Vitoria et al., 2024). Positive PE experiences are critical for developing lifelong PA habits and improving health outcomes (Ladwig et al., 2018). **There is a critical need to identify effective pedagogical strategies or interventions that enhance girls’ motivation in PE, supporting the development of the knowledge, skills, and long-term motivation necessary for lifelong PA.** Self-Determination Theory (SDT) provides a useful framework for understanding and promoting motivation in PE. SDT highlights the importance of fulfilling three basic psychological needs: autonomy, competence, and relatedness (Ryan and Deci, 2017). When these needs are met, individuals are more likely to adopt intrinsic motivation, leading to sustained engagement. Evidence shows that SDT-informed teaching practices, such as offering choice, providing supportive feedback, and fostering a mastery climate, enhance enjoyment, motivation, and PA participation (Vasconcellos et al., 2019).

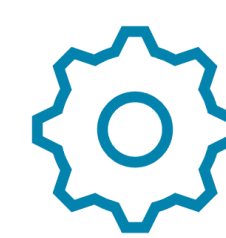


Aims and Hypothesis

The aim of this study was to determine if an SDT-informed intervention could increase girls’ motivation levels for PE.

H₁: An SDT informed girls’ only football club will increase motivation to participate in PA.

H₀: An SDT informed girls’ only football club has no impact on motivation to participate in PA.



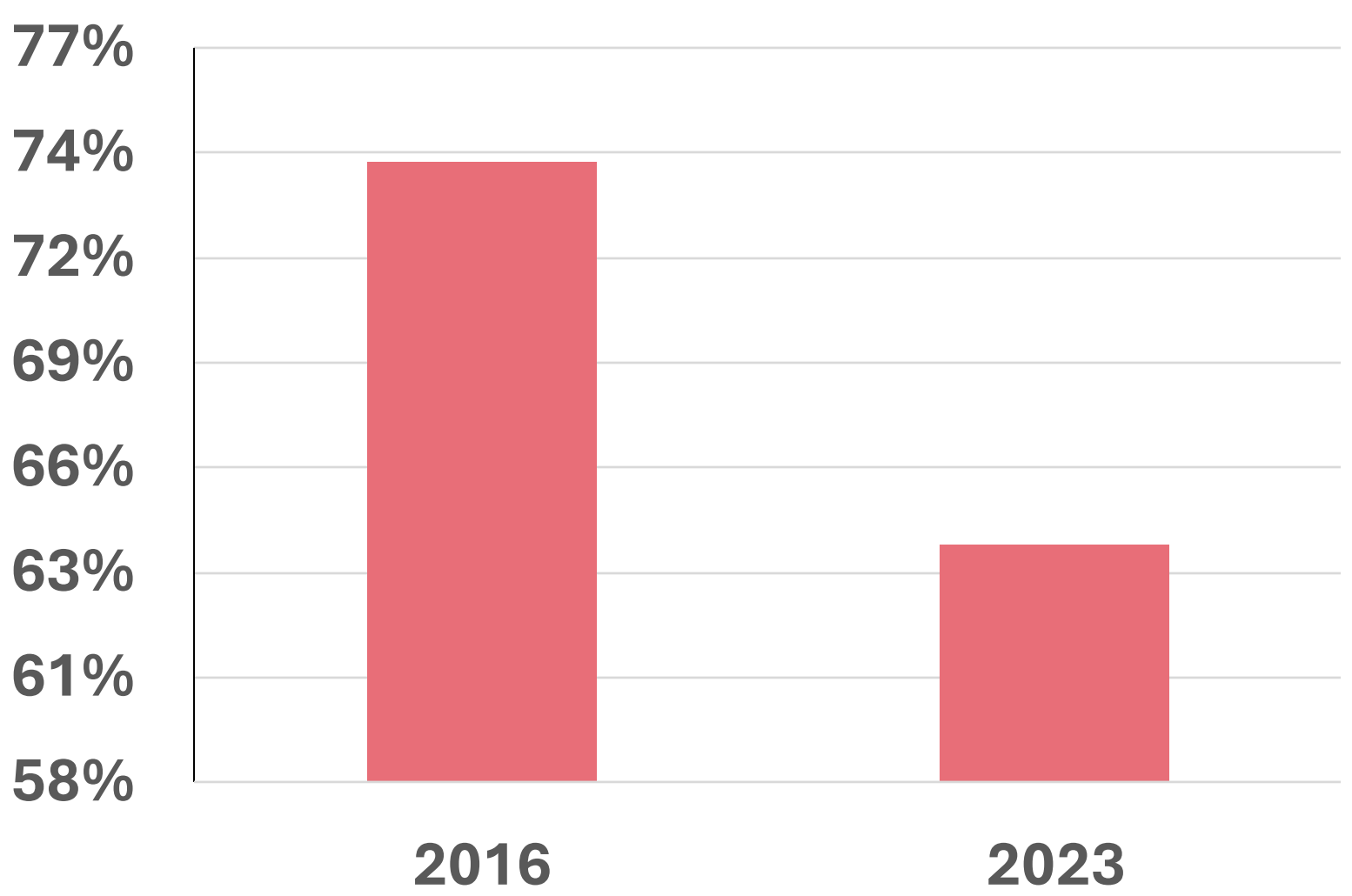
Method

Design: One group, pre- and post- test

Participants and Setting: This study involved 16 girls aged 8–12 years old (M= 9.78 SD= 0.92) participating in a girls only after school football club, which was delivered using SDT-informed practices.

Data Collection: The Motivation to Exercise and Diet Questionnaire—Adapted for Children. Raw scores from 0–32 were recorded.

Percentage of girls reporting enjoyment of PE



Youth Sport Trust (2023) reported decline in number of girls who enjoy PE



Girl playing football (Lawrenson, n.d)

PLANNING TO ENHANCE AUTONOMOUS MOTIVATION IN PE

AUTONOMY

The need to feel that you are the origin of your own actions

What could you do to support autonomy?



MAKE LEARNING MEANINGFUL

Give a rationale for the tasks and suggest relevance to learners' lives. Learners value improved skills, performance, friendships and community

USE NON CONTROLLING LANGUAGE

✓ 'you could do it like this' 'you might like to try it this way' ✗ 'you need to do it like this' 'you must do it this way'

TAKE SUGGESTIONS AND PROVIDE CHOICE

What do the learners want to try? Ask before class. Try a free play warm up or equipment exploratory time

PROVIDE CHANCES FOR INITIATIVE

Could some children create cue cards for techniques? With parameters, could some design a warm up, a station or a mini-game?

CLEAR EXPECTATIONS

Collaboratively clarify the success criteria - modelling, visuals and cues

PRACTICAL SKILLS AND OPTIMAL CHALLENGE

• Provide lots of opportunities for repeated practice and success

• Consider physical skills level - not too hard, not too easy, just right.

• Gamify tasks - with a mix of abilities, you could provide a variety of challenge levels. A bigger/smaller ball? A lower/higher target?

• Give choice of partaking in a competitive game or a no-score game

INFORMATIONAL TASK FEEDBACK

That was successful because... you followed through with your throwing arm! You could try swinging harder at the ball!

COMPETENCE

The need to feel to feel effective and successful in your interactions with the environment

What could you do to support competence?

• Avoid peer comparison of performance

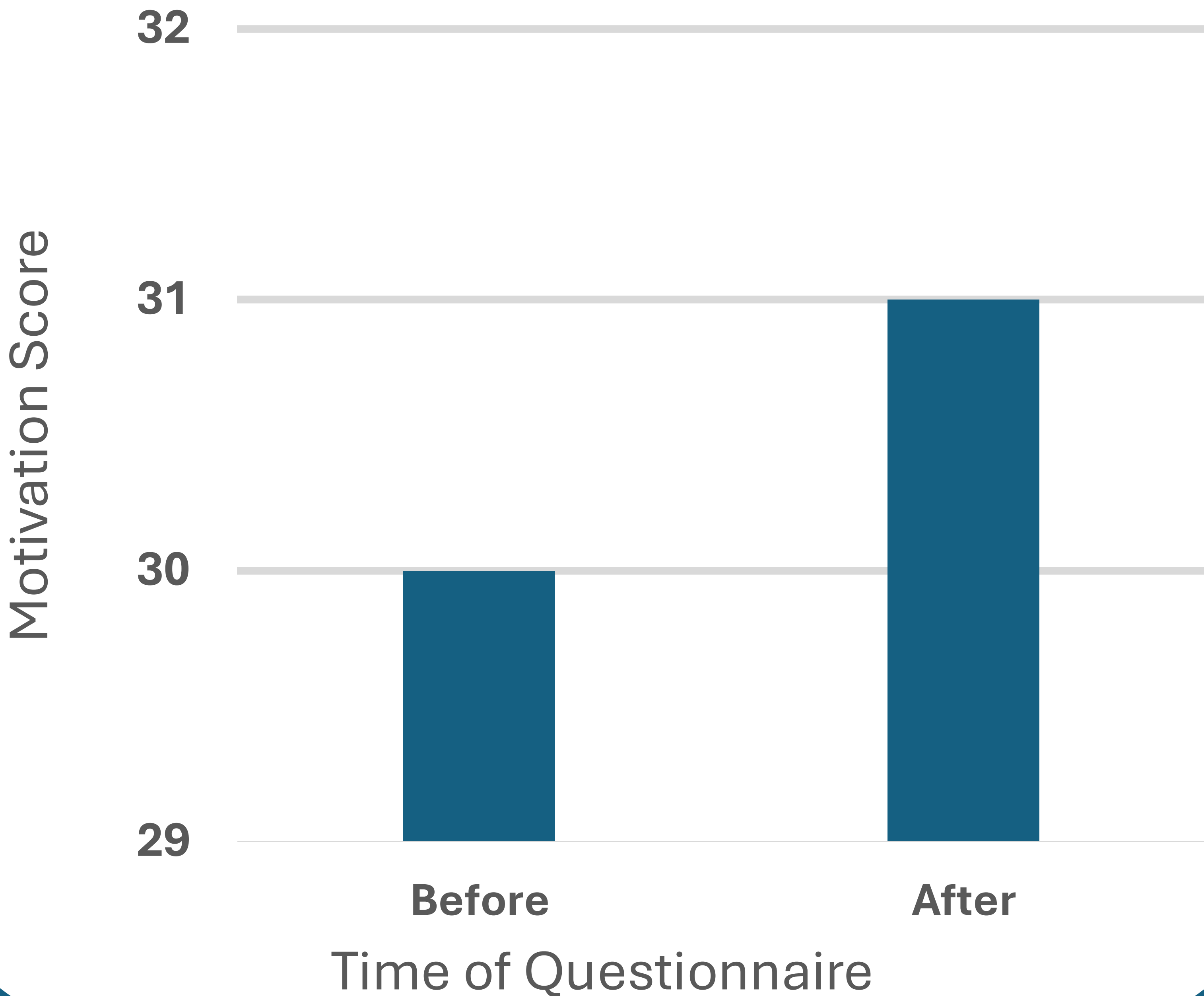
• Pair work and group work - model effective language for communication and feedback

• The instructional models on the next page offer teaching methods that emphasise communication skills and teamwork

Next page - info, QR codes, further reading

Teachers' quick guide for using SDT to enhance motivation in PE

Median Motivation Scores Before and After Intervention



Findings

On average, participants’ **motivation increased** ($Mdn = 31.00$) after the sessions compared to before ($Mdn = 30.00$). A Wilcoxon Signed Ranks Test indicated this improvement was statistically significant, $W = 4$, $z = 2.31$, $p = .021$. Therefore, the null hypothesis can be rejected.



Conclusion

Findings suggest that an SDT-informed, girls-only football club can positively influence motivation for PA in girls aged 8–12. **The findings highlight the potential of autonomy-supportive, gender-specific environments to promote engagement in PE.** However, due to the small sample size and high baseline motivation levels, larger-scale studies with more diversely motivated participants are needed to confirm and extend these results.

Reference List

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