

'Gaelic4Girls' for increased physical activity participation: A multi-component, pilot intervention: study design and protocol

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INTRODUCTION

- Research has shown that girls are **less physically active**, and experience a steeper age-related decline in sport participation, when compared to boys.^{1,2}
- Multi-component, organised youth sport (OYS) interventions** have the potential to increase physical activity (PA) participation, motor skills, and psychological well-being.^{3,4}
- The **'Gaelic4Girls' (G4G)** intervention is based on the **'self-determination theory' (SDT)**,^{5,6} and is concerned with how the psychological and socio-environmental conditions can support an **individual's participatory motivation**.⁷
- The **'socio-ecological model' (SEM)** highlights the important role of the social and physical environment in determining a child's behaviour within this **G4G exploratory study**.⁸
- This multi-component, 12-week, G4G intervention comprises of three main areas: **1) the children 2) coaches and 3) parents/guardians**.

OBJECTIVE

- This G4G research poster reports the **design protocol**, and **assesses the effectiveness** of a multi-component, community sports-based intervention seeking to **increase girls PA levels, motor skills, and psychological well-being**.

PARENT

- Knowledge-based PA support provision.
- Weekly information updates on social media page.
- Parents Evening

CHILD

- 6 x 10 minute rotatory motor skills & Ladies Football stations.
- Task Cards & Dance (improve motor skills).
- Presentation Performance Evening

COACH

- Coach Education
- Continuous Professional Development
- Weekly Session Plan Booklet, and regular Coach Workshops

Figure 2. The guiding G4G pilot intervention components

CONCLUSION

- Results from this exploratory G4G trial indicate that the intervention **lacked effectiveness** towards **increasing PA participation** and **motor skills** amongst 8-12 year girls in Ireland.
- The significant increases in girls' **PA attitudes, PA motivators and perceived PSC** suggest that the G4G intervention positively impacted the psychological domain of PA.
- Targeting girls PA levels and motor skills through **fun, non-competitive, autonomous environments, with social support** appears to be a sensible approach in 2018.
- This exploratory study may help inform the development of **theory-based interventions targeting PA promotion for pre-adolescent girls in Ireland**.

RESULTS

Overall PA and Motor Skills Proficiency:

- There were no significant increases in self-reported PA, or motor skills, from pre- to post- for those receiving the G4G intervention.

Psychological correlates of PA:

- Paired-sample t-tests found significant increases over time for positive PA attitudes, PA motivators, and perceived physical self-confidence (PSC) (see Table 1 below).

Focus Groups (key emergent themes for children):

PA Barriers	PA Motivators	Future Directions
1. Lack of time & too much homework	1. Fun & making new friends	1. Giving girls more choice when playing.
2. Football 'not cool enough'	2. Non-competitive programme	2. Actively recruit & upskill coaches in the club setting.
3. Friends drop out	3. The motor skills dance	

Figure 3. The emerging focus group themes for children

Psychological Variables	Mean	Standard Deviation	p-Value
PA Attitudes Pre	13.08 (16)	2.06	.000*
PA Attitudes Post	14.50 (16)	2.20	
PA Motivators Pre	35.63 (40)	2.76	.001*
PA Motivators Post	38.85 (40)	2.59	
Perceived PSC Pre	121.69 (150)	24.04	.001*
Perceived PSC Post	131.51 (150)	16.87	

Table 1. Significant mean differences in participants' scores pre- and post-intervention for psychological variables

G4G INTERVENTION IN PRACTICE



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Figure 1. Overview of the G4G pilot intervention: Components and theoretical framework

METHODS

- Two hundred and forty one participants** (M age = 10.44 ± 1.40 years) received the G4G intervention, with a sub-sample ($n=75$) completing all pre- to post- measurements.
- These measurements included the PA Questionnaire for Older Children (**PAQ-C**)⁹, the **FifeActive Survey**¹⁰, and the Test of Gross Motor Development-II (**TGMD-2**)¹¹.
- Three focus group interviews** were also conducted with the children, parents and coaches.

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