School-based interventions to prevent gambling and vaping harm in adolescents: PROGRAM-A and REVAMP

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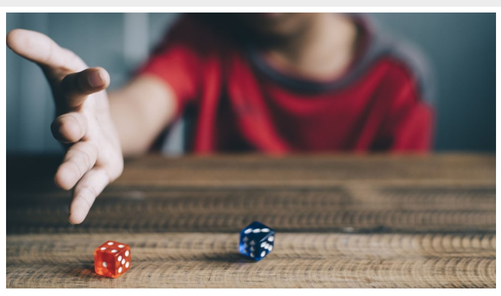
Background: Young people's engagement in gambling can be linked to gambling-related harm (GRH). This can cause stress, anxiety, relationship issues, debt, and lost opportunities(1). There is a lack of independently funded, and evidence-based school-based interventions that seek to prevent and reduce the harms associated with gambling. PRoGRAM-A is one of the first independently research funded interventions to prevent gambling related harm in adolescents (2). This paper presents results from the pilot cluster RCT and the embedded process evaluation of PRoGRAM-A, with a specific focus on intervention fidelity, feasibility and acceptability(3).

Aims and Research Questions:

- The overall aim of the pilot cRCT of a PRoGRAM-A was to determine the utility of conducting a Phase III RCT to assess effectiveness and cost-effectiveness.
- To test delivery of PRoGRAM-A in a real world setting.
- Unpacked via 13 RQs looking at:
  - *Recruitment and randomised trial delivery*
  - *Acceptability, feasibility and fidelity of intervention delivery.*

Methods:

- The pilot cluster Randomised Control Trial (RCT) of PRoGRAM-A commenced in March 2023. PRoGRAM-A was delivered in four secondary schools across the Scottish central belt, with two control schools.
- An embedded multi-modal process evaluation ran parallel to the delivery of PRoGRAM-A intervention.
- Embedded social network analysis
- The Trial was delivered over a 12 month period from November 2023 and November 2024



PRoGRAM-A

- A novel peer-led, social network intervention grounded in diffusion and network intervention theory.
- Secondary school students aged 13-15 were asked to nominate opinion leaders within their year group, to become a 'Peer Supporter'.
- Students across an entire year group (aged 13–15 year-olds) complete the following questions: 'who do you respect'; 'who are good leaders in sports and other group activities'; and 'who do you look up to'.
- Purpose of the nomination form was for students (not teaching staff) to identify students of influence.
- Students receiving the most nominations (18%) were invited to become Peer Supporters and take part in a two-day gambling education training programme.
- Training was delivered by youth workers to Peer Supporters using fun and engaging activities, centred on four key topics: what is gambling, gambling and gaming, gambling marketing, and gambling harm.
- Peer Supporters are then encouraged to initiate conversations about gambling harm with their peers, friends and family networks, using communication styles they judged to be most appropriate.

Results

Successfully met preset criteria for progression to Phase III Randomised Control Trial (RCT).

Acceptability

- High acceptability among all stakeholder groups in relation to:
  - Topic relevance
  - External trainer and peer trainer delivery model
  - Teacher willingness to embed PRoGRAM-A in future curriculum
- Acceptability of relevance and ease of integration of PRoGRAM-A into school curriculum.

Feasibility

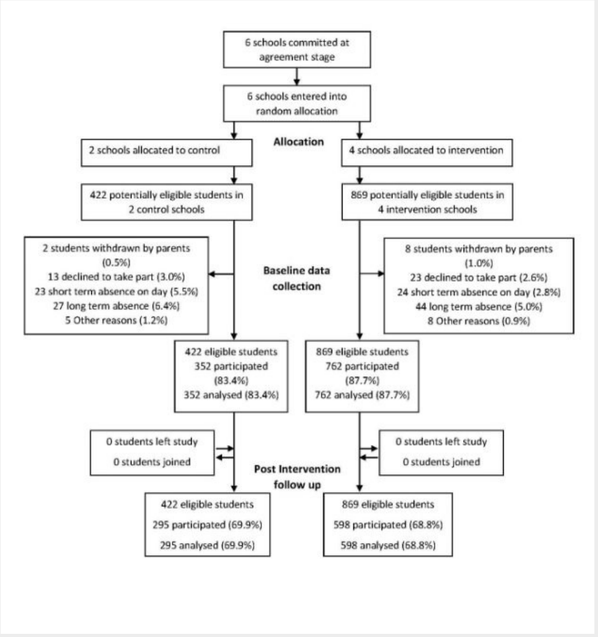
- High fidelity in pilot delivery (all topics and activities delivered).
- Positive reception to peer-led intervention model across all stakeholder groups.

Intervention refinements

- Incorporate lived experiences in training.
- Enhance engagement with female students.

Consort Diagram

(baseline n=1114, follow-up n=893)



Next Steps: Prepare funding application to National Institute for Health Care Research (NIHR) for a Phase III Randomised Control Trial that will involve 58 secondary schools across Scotland, England and Wales.

Background: The rise of vaping among young people, especially girls and young people from socioeconomically disadvantaged areas, is a public health concern(4). While the long-term health effects of adolescent vaping are still emerging, early evidence links vaping with developmental, neurological, respiratory and cardiovascular health impacts(5). There are currently no evidence-based vaping prevention intervention tailored to the UK secondary school setting. This study aims to develop a contextually-relevant intervention to protect young people in Scotland from experimentation with vaping, smoking, and emerging nicotine products.

Aims:

- To co-create programme theory and activities for a vaping and nicotine prevention programme for Scottish secondary schools.

Methods:

- Literature review to map existing adolescent vaping prevention interventions globally and locally
- Qualitative consultation to identify key prevention messages and delivery considerations, with:
  - Pupils aged 11-13 (n=24)
  - Teachers (n=8),
  - Parents/carers (n=10)
  - Health and education stakeholders (n=10)
- Co-creation workshops with stakeholders to develop programme theory and refine intervention manual.

Two schools are participating in qualitative fieldwork, including one each from areas of high and low deprivation.

REVAMP
Reducing Experimentation of Vaping and tobacco use AMong young People

REVAMP aims to be one of the first evidence-based vaping, tobacco and nicotine prevention programme for Scottish secondary schools.

Programme theory is currently being developed in consultation with pupils, staff, and parents.

Preliminary Findings

Literature Review

- Evaluations of international interventions suggest effectiveness of peer-based approaches, skills programming, and interventions delivered over multiple sessions

Qualitative Consultation

- Widespread support for school-based intervention
- Intervention should be adaptable to address emerging nicotine products and a rapidly changing regulatory environment.

Next Steps:

- Qualitative interviews and focus groups with key stakeholders are ongoing
- Analysis will be used to generate a preliminary theory of change which will be refined and further developed during stakeholders workshops in Autumn 2025.

Contact Details: Dr Fiona Dobbie fiona.dobbie@ed.ac.uk **References**: 1 Ipsos Mori. Young People and Gambling 2024: Official statistics. Gambling Commission; 2024; 2 Dobbie F MM, Wardle H, Dahlby L, Weir C, Niven A, Stoddart, A, Griffiths, D, Lee, A, Good, S, Noble and White, J. Protocol for a pilot cluster randomised controlled trial of PRoGRAM-A (preventing gambling-related harm in adolescents): a secondary school-based social network intervention. Pilot and Feasibility Studies. 2024;10; 3 Martine Miller, Freya Howell, James White, Dave Griffiths, Leon Noble, Christopher J Weir, Angela Niven, Andrew Stoddart, Hanna Ensor, Heather Wardle, Richard Purves, Fiona Dobbie (2025) Preventing Gambling-Related Harm Among Adolescents (PRoGRAM-A): An embedded multi-modal process evaluation in a pilot cluster random control trial., BMC Public Health; 4. ASH 2024: Use of vapes (e-cigarettes) among young people in Great Britain. 5. Lyzwinski LN, *et al.* (2022) Global youth vaping and respiratory health: epidemiology, interventions, and policies, npj Prim. Care Respir. Med. 32, 14. **Acknowledgements:** We are indebted to our PROGRAM-A Trial Steering Committee, REVAMP Advisory Group, PROGRAM-A young person's PPI group, and participating schools, teaching staff and students who have supported the development of these interventions.

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