

STUDY PROTOCOL

A feasibility study to address the key uncertainties of conducting an efficacy trial of a School-based intervention TO Prevent (STOP) Dating and Relationship Violence and Gender-Based Violence in UK Secondary Schools

SHORT STUDY TITLE / ACRONYM: STOP Feasibility

PROTOCOL VERSION NUMBER AND DATE

Version 1.4 28/08/2024

Signature Page

The undersigned confirm that the following protocol has been agreed and accepted and that the Chief Investigator agrees to conduct the study in compliance with the approved protocol and will adhere to the principles outlined in the Declaration of Helsinki.

I also confirm that I will make the findings of the study publicly available through publication or other dissemination tools without any unnecessary delay and that an honest accurate and transparent account of the study will be given; and that any discrepancies from the study as planned in this protocol will be explained.

Chief Investigator:	
Signature:	Date:
	//
Name: Prof G.J. Melendez-Torres	

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1. Study Summary

Short title	STOP Feasibility
Full title	A feasibility study to address the key uncertainties of conducting an efficacy trial of a School-based intervention TO Prevent (STOP) Dating and Relationship Violence and Gender-Based Violence in UK Secondary Schools
Developer (Institution)	Sex Education Forum
Evaluator (Institution)	University of Exeter
Principal Investigator	Prof G.J. Melendez-Torres
Evaluation Plan Authors	G.J. Melendez-Torres, Vashti Berry, Chris Bonell, Lucy Emmerson, Rachel Hayes, Claire Hulme, Honor Young, Tom McBridge, Emma Rigby, Vicky Stubbs
Evaluation Setting	4 secondary schools in England
Funder and declaration of interests	The evaluation has been funded by The Ending Youth Violence Lab, with the support of/funding from the Youth Endowment Fund ("YEF"), Stuart Roden and the Behavioural Insights team. There are no known conflicts of interest associated with this publication, and there has been no significant financial support for this work that could have influenced its
Start End Dates	outcome. 1 st November 2023 – 31 st July 2025
Study Design and Objectives	This is a single-arm, pre-post intervention study with four schools to evaluate the feasibility of the optimised intervention. Previous research has confirmed the acceptability of randomisation and of data collection for an intervention trial for DRV and GBV; as a result, we do not propose to use a comparison group here, instead assessing the feasibility of data collection via mobile phone or web-based surveys over one year of follow-up.
	 1.1 Research Questions 1. Is the <i>Think Again!</i> intervention acceptable to school staff and pupils? 2. Are proposed secondary outcome measures (e.g. violence acceptance, school climate) reliable and what refinements are suggested?

	 What refinements to the intervention, programme theory and implementation plan are suggested by the process evaluation? Is an economic evaluation in a definitive trial feasible? Is progression to a definitive RCT justified?
Study participants / Target Group	Year 8 school pupils, age 12 or 13, at baseline. Intervention will be delivered in year 9 when pupils are age 13 or 14.
Planned number of participants	Approximately 600 pupils
Planned number of sites	4 schools
Inclusion criteria	 1.1.1.1 School Inclusion Criteria Secondary age, state-run schools in England Mixed-sex pupils 100 pupils or more in year 8 at baseline 1.1.1.2 Pupil Inclusion Criteria In year 8 at baseline (ages 12 to 13) Judged competent to provide own consent, as judged by school staff
Exclusion criteria	 1.1.1.3 School Exclusion Criteria Deliver education through a language other than English Cater solely for pupils with special educational needs (i.e., Special schools) Do not have leadership that can ensure school is able to commit to the project 1.1.1.4 Pupil Exclusion Criteria Children who are not competent to provide their own consent, as judged by school staff Children who do not have sufficient use of the English language to be able to complete the outcome measures, even with researcher support
Intervention duration	One academic year
Follow-up duration	One school academic year, September 2024 – July 2025
Planned study period	12 months spanning two academic years, July 2024 – July 2025
Study outcomes	Construct Data Collected

	Respondent Background	Background Questionnaire
		-
	Frequency of DRV Victimisation and Perpetration	Adapted Conflict and Adolescent Dating Relationships Inventory Short Version (S-CADRI) (Fernández-González et al., 2012)*
	Frequency of GBV Victimisation and Perpetration	Adapted Hostile Hallways (Bryant, 1993)*
	Mental Wellbeing	SWEMWBS (Ng Fat et al., 2017)
	Quality of Life	CHU-9D (Stevens, 2009)
	School Belonging and Commitment Violence Acceptance	Beyondblue School Climate Questionnaire (Sawyer et al., 2010)
		Adapted version of LoveBITEs measure (Flood & Kendrick, 2012)*
	Injunctive Social Norms;	Adapted version of Foshee measure (Foshee et al., 2001)*
	Protective behavioural strategies for DRV/GBV	Bespoke measure informed by the SANDI measure (Peterson et al., 2024)*
	Self-efficacy for Bystander Actions.	Bespoke measure informed by the Shifting Boundaries project (B. Taylor et al., 2011)*
	Intervention Acceptability	 Interviews with school staff Focus Groups with pupils
		Staff Survey
		• Pupil Survey
	Academic Engagement	 Student-level academic commitment subscale of Beyond Clue School Climate Questionnaire Attendance
	Intervention fidelity	Number of classroom lessons delivered
		• Number of action group meetings
		 Logbooks of school staff implementing classroom lessons and chairing action groups
		Structured researcher observations of one session per school of action
		group and two classroom lessons per school
	Resource Use	Hospital and community health and social care services including medication used by the student
		make them developmental and culturally appropriate for the age of respondents.
Intervention <i>Think Again!</i> is a manualised intervention which includes three core components delivery in secondary schools:		-
	1) Assessment of school	capacity and needs. The <i>Think Again!</i> intervention is
	-	bility in its delivery, thus enabling schools to choose the
	most appropriate conte	ent for their students considering their existing RSE
	curriculum. The ease v	vith which the intervention can be modified depending
	on local context is imp	ortant since this has been shown to impact how
	1	nplement a new DRV and GBV prevention program
	(Melendez-Torres et al., 2024). We will draw on baseline surveys, including	
	-	t needs for information and resources, and informational
		leaders to assess local school capacity and need.
	2) Student-staff action groups	oups (SSAG). Materials for Think Again! draw on our
	successful experience	of action groups in Learning Together. Using a manual
	and facilitated by inter	vention delivery staff (Sex Education Forum), the action
	group draws on the assessment of school capacity and needs to implement a school-level strategy for the prevention of DRV and GBV, including school policy review and awareness raising that is staff-led (e.g. in-service) or	
student-led (e.g. posters). The action group will also draw from a menu of		rs). The action group will also draw from a menu of
	intervention activities	(see below) to create a classroom-level programme.

3) <i>Classroom-level programme</i> . Drawing on a menu of intervention activities
developed in Shifting Boundaries and incorporating knowledge gained from
specialist Relationships and Sex Education teachers, 9 45-minute <i>Think Again!</i>
lessons have been developed. Lessons focus on guided practice of positive
skills and interpersonal components designed to 'denormalise' DRV and GBV
behaviours and promote prosocial relationship behaviours. Activities avoid any
aspects that our meta-analyses found were likely to be harmful (e.g. use of
'survivor stories') and are explicit in their consideration of gender as it relates
to DRV and GBV, including content on homophobic GBV; reflect UK-relevant
terms and concepts; and, informed by Learning Together, include more explicit
content on promoting prosocial behaviours and commitment to positive school
norms.

2 Plain English Summary

2.1 Background

Dating and relationship violence includes physical, sexual, and emotional violence (for example, hitting a partner, forcing a partner to have sex, or verbal abuse and controlling behaviour). Gender-based violence includes harassment and bullying based on gender or sexuality. Both of these are major public health problems, especially for young people. Young people affected by these types of violence and young people who are violent in this way are more likely to have mental health problems, use illegal drugs, and engage in risky sex in the long-term. Young people who have been affected also report poorer mental and physical health and are more likely to be affected by violence again.

Many young people affected by these types of violence are of school age, and a lot of these types of violence occur in schools. Therefore, interventions that take place within schools may be well placed to reach young people affected by these types of violence. However, we do not know the best ways to teach school age children about these types of violence. For example, there has only been one small-scale study in the UK that has looked at whether a school-based intervention for dating and relationship violence and gender-based violence is effective.

2.2 What we will do

In this research, we will look at existing school-based interventions for dating and relationship violence and gender-based violence that have worked for other health problems (like mental health) and in other places (like the USA). We will combine and refine them to produce an intervention that we believe can be used effectively in UK secondary schools. This process is called optimisation.

We will then carry out a feasibility study, first asking pupils in year 8 (ages 12 to 13) from four schools in England what their experiences of dating and relationship and gender-based violence are. The following academic year when they are in year 9 (ages 13 to 14) we will introduce the optimised intervention to the pupils. At the end of year 9, we will ask pupils the same questions about their experiences of dating and relationship and relationship and gender-based violence in their school.

We plan to test whether our new intervention improves experience of dating and relationship and/or gender-based violence, but first we need to find out whether the intervention and research methods are practical and acceptable. This will tell us whether a much larger study to test the effectiveness of our new intervention is worthwhile. This is important as we do not want to waste public resources if such a study is not promising. We will carry out interviews with pupils and teachers to find out if they think we need to make any changes to the intervention or the questionnaires we asked.

2.3 Research Aims.

The research aims to answer the following questions:

- 1. Is an intervention to prevent dating and relationship violence and gender-based violence acceptable to school staff and pupils?
- 2. Are the proposed questionnaires an acceptable and reliable way to measure the outcomes we want (e.g. violence acceptance, school climate)
- 3. What changes to the intervention, programme theory and implementation plan are suggested by the interviews with pupils and teachers
- 4. Is it possible to carry out an economic evaluation?
- 5. Is it feasible to do this type of research with many more schools to find out how effective the new intervention might be at reducing dating and relationship violence and gender-based violence?

2.4 What will this research produce?

Using our learning from the feasibility study we will plan a cluster randomised controlled trial that can tell us if the optimised intervention works to reduce young people's experience of dating and relationship violence and gender-based violence.

2.5 Involvement of experts by experience:

Throughout our research, we will work with young people and other experts, listening carefully to their views about how we should do our research and make sense of our results. We will do this by setting up two advisory groups, one of young people and one of teachers and violence experts. We will meet with them both every six months to learn from their expertise and update them on the study progress. When we listen to pupils and teachers, we will seek a range of views by making sure we listen to pupils and teachers across different sexes, gender identities and ethnicities.

3 Study Management

3.1 Study Management Group

Prof G.J. Melendez-Torres as the Chief Investigator will assume responsibility for the financial management and delivery of the evaluation. They will be supported by members of the Study Management Group (Table 1) who will meet monthly via teleconference.

Intervention delivery is being coordinated by the Sex Education Forum (SEF), which is the leading charity working on promoting standards in sex education in UK schools. Led by Lucy Emmerson, the Sex Education Forum has accumulated five years of experience in the optimisation and delivery of interventions related to healthy relationships and sexual health.

The evaluation is being led by Prof G.J. Melendez-Torres, University of Exeter, with Dr Rachel Hayes leading recruitment and data collection, and Prof Chris Bonell, LSHTM leading the process evaluation.

The intervention has been funded by The Bridges Impact Foundation and the evaluation by The Ending Youth Violence Lab, with the support of/funding from the Youth Endowment Fund ("YEF"), Stuart Roden and the Behavioural Insights Team. Barbara Storch is the lead contact for intervention funding and Tom McBridge is EYVL's grant manager.

Name	Role	Institution
Vashti Berry	Supporting optimisation of	University of Exeter
	intervention	
Chris Bonell	Lead for process evaluation	London School of Hygiene &
		Tropical Medicine
Lucy Emmerson	Lead for intervention delivery	Sex Education Forum
Rachel Hayes	Research Manager	University of Exeter
Claire Hulme	Lead analysis of cost and resource	University of Exeter
	use data	
Tom McBridge	Lead for research funding	Ending Youth Violence Lab
G.J.	Chief Investigator	University of Exeter
Melendez-Torre		
S		
Emma Rigby	Co-ordinate public involvement	Association for Young
		People's Health
Barbara Storch	Lead for intervention funding	Bridges Impact Foundation
Vicky Stubbs	Intervention Delivery	Sex Education Forum

TABLE 1: MEMBERS OF THE STUDY MANAGEMENT GROUP

Name	Role	Institution
Honor Young	Supporting optimisation of	Cardiff University
	intervention	

3.2 Study Steering Committee

Our independent Steering Committee is chaired by Lynne Callagham and the committee's role will be to provide critical scrutiny to the conduct of the research. They will meet three times during the course of the study, once during optimisation (Spring 2024), again at the start of the feasibility study (Autumn 2024) and finally when we are reporting our results (Summer 2025).

Other members of the Study Steering Committee:

- Esther van Sluijs
- Tasha Mansley
- G.J. Melendez-Torres
- Emma Rigby
- Rachel Hayes

4 Patient and Participant Involvement and Engagement (PPIE)

Extensive Patient and Participant Involvement and Engagement (PPIE) contributed to the design of this research study, including five consultations with young people across England and Wales, encompassing lived experience of DRV and GBV; and consultations with third sector and educational experts, all of which emphasised the lack of actionable evidence for UK schools, the need to consider school capacity and school contexts, and the value of classroom-level components including guided practice.

At the project's start, we will recruit two involvement and engagement panels (8-10 people/panel) to support the research. The first panel will comprise young people aged 12-16, the target age range of our intervention participants. The second panel will comprise teachers and teaching assistants and specialist GBV sector staff, the target deliverers for our intervention. The involvement and engagement panels will meet on a termly basis (alternating panels) during the study and will assist with intervention optimisation; choice of outcome measures, advertising the study and selecting sites; data interpretation and dissemination of results; and preparation for main trial.

The convening of these groups will be supported by consultancy from Emma Rigby from the Association for Youth People's Health. We will follow the UK Standards for

Public Involvement in Research guidelines (*UK Standards for Public Involvement*, 2019) and ensure we meet each of the six standards (inclusive opportunities, working together, support and learning, governance and communications) to ensure involvement and engagement is meaningful and impactful.

5 Positioning of this Study

This project, focused on a school-based intervention to prevent dating and relationship violence (DRV) and gender-based violence (GBV), is an optimisation and feasibility trial of the intervention Think Again! that has been informed by three NIHR-funded projects led by the investigator team. Drawing on learning from an earlier pilot trial of a DRV and GBV prevention programme, Project Respect (Meiksin et al., 2020a); a definitive trial of a school restorative practice intervention. Learning Together (Bonell et al., 2018); a major review of DRV and GBV prevention in schools (Farmer et al., 2023); and a comprehensive Qualitative Comparative Analysis (Melendez-Torres et al., 2024), we have developed the Think Again! intervention. Before the feasibility study starts in the summer 2024 we will be working with two secondary schools and educators from the Sex Education Forum (SEF) who have expertise in Relationship and Sex Education (RSE) to further optimise Think Again! as an intervention suitable for year 9 pupils. This optimisation will draw on empirical learning from the Shifting Boundaries program (B. G. Taylor et al., 2013) regarding what makes successful classroom content and from the Learning Together program (Bonell et al., 2018) for school-wide action group content. Optimisation will principally include refining the intervention and testing the acceptability with pupils and staff of the refined intervention materials. Following optimisation, we will conduct a feasibility study in four schools with pre-post Think Again! intervention data collection (baseline and 12 months after) to establish the appropriateness of the intervention in the context of preparation for a full trial. We believe a feasibility study is important, even where interventions draw on previously established components, in order to prevent large-scale and costly evaluation of interventions that would never have 'gotten off the ground'; in addition, and consistent with EYVL's strategy, feasibility studies help to identify barriers to delivery and implementation that are either possible to address or that mean a definitive trial would be unwarranted (Violence & Team, 2023). This protocol details the feasibility study being conducted in four secondary schools.

6 Introduction

6.1 The Problem

Dating and relationship violence (DRV) is physical, sexual and emotional violence in relationships between young people. Gender-based violence (GBV) is physical, sexual or emotional violence rooted in gender and sexuality inequality. Both DRV and

GBV are highly prevalent in UK schools with multiple health consequences. DRV and GBV are classed under the Youth Endowment Foundation's outcomes framework as priority outcomes under 'sexually violent crime' and 'criminal victimisation' (Gaffney et al., 2022).

Adolescent perpetrators and victims report increased risky sexual behaviour, substance use and depressive symptoms (Barter & Stanley, 2016; Fellmeth et al., 2013; Johns et al., 2018; Shorey et al., 2015), and DRV and GBV are predictive of adult experiences of domestic violence (Costa et al., 2015; Vivolo-Kantor et al., 2016). DRV and GBV exacerbate gendered health inequalities (Reidy et al., 2016); impacts are disproportionately experienced by girls (Ofsted, 2021; Young et al., 2021), and compared to men, women's experiences of earlier onset of intimate partner violence are linked to greater impacts on mental and physical health in adulthood (Loxton et al., 2017). In addition, there are strong intersections with other inequalities, such as race/ethnicity and sexuality. Associations between DRV/GBV and both substance misuse and suicidal ideation are stronger in sexual and gender minority young people (Johns et al., 2018; Mueller et al., 2015). Annual costs for intimate partner violence and GBV within the UK have been estimated at £66 billion and £32.56 billion, respectively, with the majority of costs caused by the physical and mental health consequences for victims (Oliver et al., 2019).

DRV and GBV interventions are ideally placed in school settings since most young people attend education settings outside the home and YEF's toolkit references the strong evidence and low cost of relationship violence prevention lessons (Gaffney et al., 2022). This toolkit was informed by the study team's systematic review and meta-analysis (Farmer et al., 2023; Melendez-Torres et al., 2024) which identified promising models of effective interventions and suggested future directions for intervention development.

Because DRV and GBV are highly prevalent across subgroups (Young et al., 2021), universal approaches are more appropriate than targeted interventions. DRV and GBV strongly co-occur and have shared aetiological mechanisms in harmful gender norms and widespread acceptability; thus addressing them jointly is key. Despite urgent policy needs in England and Wales, little UK evidence on effective interventions exists. Department for Education statutory guidance requires all schools in England to deliver relationships education in primary schools and relationships and sex education (RSE) in secondary schools. Research into schools adopting the RSE curriculum before it became mandatory in summer 2021 reflects challenges in developing and delivering this (Department for Education, 2021). Both the recent Ofsted review of sexual abuse in schools in England (Ofsted, 2021) and the Estyn-led review in Wales (Estyn, 2021) noted children disliked RSE lessons; most felt RSE did not provide the information and advice they needed. These reviews also highlighted normalisation of GBV for children, including online sexual abuse, and recommended a whole-school approach. In light of this, and to fulfil statutory duties in relation to RSE, schools need to develop and implement programmes for DRV and GBV prevention. Following a comprehensive Qualitative Comparative Analysis (Melendez-Torres et al., 2024) and experience from three existing research projects (Bonell et al., 2018; Farmer et al., 2023; Meiksin et al., 2020a), we have developed the *Think Again!* intervention, and the aim of this research project is to establish if it is feasible to test the efficacy of *Think Again!* in a definitive randomised controlled trial.

6.2 The Think Again! Intervention

Think Again! is a manualised intervention with theory of change (see Figure 1) informed by the theory of planned behaviour (Ajzen, 1991) (which also informed development of Shifting Boundaries (B. G. Taylor et al., 2013) and social cognitive theory, which describe the importance of environmental influences, of modelling behaviours and of skill practice to achieve mastery. It is also led by the theory of human functioning and school organisation (Markham & Aveyard, 2003), which informed Learning Together (Bonell et al., 2018), and which emphasises the need for student involvement to increase commitment to school and adherence to prosocial norms and behaviours.

Think Again! includes defined components drawn from the Shifting Boundaries and Learning Together interventions for the prevention of DRV and GBV in schools, optimised for use in the UK context. The key rationale for combining these two interventions relates to the specific amenability of the Shifting Boundaries classroom programme, together with the requirement to deliver a structural intervention that meets the needs of UK schools; as well as recent learning about how to deliver such structural interventions via student-staff action groups from Learning Together.

The development and optimisation of *Think Again!* has been informed by three separate research projects as detailed below as well as a comprehensive Qualitative Comparative Analysis (Melendez-Torres et al., 2024).

6.2.1 Research Project 1 – Systematic Review

The STOP-DRV-GBV systematic review (Farmer et al., 2023) was the largest, most comprehensive international synthesis of evidence on school-based interventions for DRV and GBV. Meta-analyses indicated:

- stronger evidence for prevention of DRV than of GBV;
- almost no evidence for prevention of homophobic GBV;
- the importance of follow-up beyond >12 months post-baseline to capture effects;
- the value of focused, readily implementable classroom interventions;

- the role of interpersonal (providing opportunities for peers to interact) and guided practice (providing opportunities for students to practice new skills and knowledge) components;
- and, especially for GBV prevention, the value of components targeting school-level culture and norms.

Meta-analyses also highlighted the lack of evaluations of interventions incorporating explicit assessment of school capacity to implement, or of student-staff action groups to plan locally relevant intervention strategies. However, syntheses identified Shifting Boundaries (B. G. Taylor et al., 2013), originally trialled in the US, as a promising approach with evidence of effectiveness.

Shifting Boundaries includes both classroom and structural components, and was trialled in New York City, where the combined classroom and structural intervention reduced victimisation by GBV and by DRV at six-month follow-up. The classroom component includes lessons on DRV and GBV, including some bystander skills, but this requires enhancement; similarly, other intervention materials require updating to be relevant to a UK RSE context.

6.2.2 Research Project 2 – Learning Together Trial

Second, the definitive trial of Learning Together (Bonell et al., 2018) demonstrated that a school-wide approach incorporating restorative practices and student-staff action groups had meaningful long-term effects on student mental health, bullying victimisation, substance use outcomes and police contact in UK contexts. The *Think Again!* intervention does not include restorative practice elements since these are inappropriate for DRV/GBV. However, we include learning relating to action groups, as process evaluation data (Warren et al., 2020) revealed that these were central to student buy-in and intervention relevance.

6.2.3 Research Project 3 – Project Respect Trial

Third, the pilot cluster randomised controlled trial of Project Respect (Meiksin et al., 2020a) evaluated an intervention for DRV and GBV prevention in UK schools. This pilot trial did not meet progression criteria for a phase III randomised trial, primarily due to challenges relating to intervention fidelity. These lessons have informed the delivery of *Think Again!* in UK secondary schools and about the most appropriate ways to assess schools' capacity to implement interventions, and also confirmed that the Short Conflict in Adolescent Dating Relationships Inventory (S-CADRI) (Fernández-González et al., 2012) is the optimal measure for DRV.

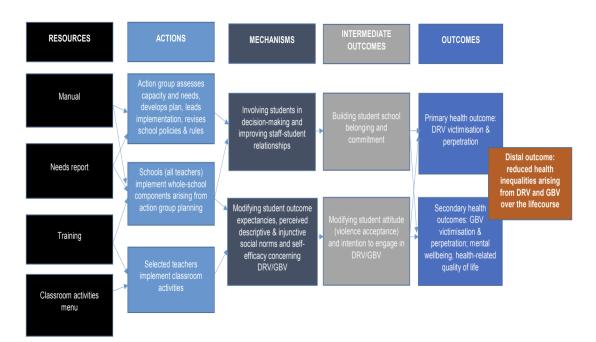


FIGURE 1: THEORY OF CHANGE OF THE THINK AGAIN! INTERVENTION

6.3 Intervention optimisation.

Optimisation will occur between January 2024 and June 2024. Optimisation will be an iterative process whereby existing intervention materials will be elaborated and tested in two optimisation schools, thus ensuring fit to the current UK secondary school context. As a starting point, we will draw on fully elaborated classroom lessons from Shifting Boundaries; needs assessment and student-staff action group manuals from Learning Together; and templates for action group strategies (e.g. school policy review, awareness raising) from Learning Together. These interventions as they currently exist offer a range of useful insights, but they are not a) focused on DRV/GBV prevention (Learning Together) or b) relate to different educational system contexts and are over 20 years old (Shifting Boundaries). The primary frameworks guiding our optimisation approach including normalisation process theory, to support acceptability, uptake and implementation of our intervention; and the 2021 MRC guidance for complex interventions (Skivington et al., 2021), focusing on resolving key uncertainties and ensuring stakeholder perspectives are represented in the intervention.

Initial review of materials indicates points requiring updating (e.g. content on gender, transphobic or homophobic bullying), 'joining up' (e.g. converting action group strategies to be relevant for DRV and GBV) or new content to be generated. We do not anticipate that there will be any specific components that are not amenable to

change, as to be implementable this intervention should prioritise fidelity of function (have we activated the change processes we believe are central to achieving the desired outcomes?) instead of fidelity of form (have we delivered all intervention activities in their prescribed order and intensity?). An initial updating process will produce draft materials suitable for engagement with staff and students.

Subsequently, stakeholders, students and staff will be engaged and materials refined, with concurrent involvement in two secondary schools. Involvement and engagement with students and staff will assess intervention acceptability and relevance, prioritising diversity in ethnicity, gender and economic status of schools and students. Work with school staff will also examine ease of delivery and institutional or student-level barriers to implementation. Refinements will be made based on feedback.

We will also pursue optimisation via involvement and engagement with young people beyond the two secondary schools. At the project's start, we will recruit two involvement and engagement panels (8-10 people/panel) to support the research. The first panel will comprise young people aged 12-16, the target age range of our intervention participants. The second panel will comprise teachers and teaching assistants and specialist GBV sector staff, the target deliverers for our intervention. The involvement and engagement panels will meet on a termly basis (alternating panels) during the study and will assist with intervention optimisation; advertising the study and selecting sites; data interpretation and dissemination of results; and preparation for main trial. The convening of these groups will be supported by consultancy from Emma Rigby from Association for Youth People's Health. We will follow the UK Standards for Public Involvement in Research guidelines (*UK Standards for Public Involvement*, 2019) and ensure we meet each of the six standards (inclusive opportunities, working together, support and learning, governance and communications) to ensure involvement and engagement is meaningful and impactful.

7 Research objectives

This is a single-arm, pre-post intervention study with four schools to evaluate the feasibility of the optimised intervention. Importantly, Project Respect (Meiksin et al., 2020a) confirmed the acceptability of randomisation and of data collection for an intervention trial for DRV and GBV; as a result, we do not propose to use a comparison group here, instead using data collection to assess the feasibility of data collection via mobile phone or web-based surveys over one year of follow-up.

7.1 Research Questions

- 1. Is the *Think Again!* intervention acceptable to school staff and pupils?
- 2. Are proposed secondary outcome measures (e.g. violence acceptance, school climate) reliable and what refinements are suggested?

- 3. What refinements to the intervention, programme theory and implementation plan are suggested by the process evaluation?
- 4. Is an economic evaluation in a definitive trial feasible?
- 5. Is progression to a definitive RCT justified?

8 Study Design & Methods

8.1 Design

This is a mixed-methods uncontrolled pre-post intervention feasibility study that will evaluate the completion of questionnaire measures and interviews with pupils and school staff. Participants in this study include pupils in England at the end of year 8 at baseline, age 12-13, their parent/carers, and secondary school staff. The outcomes for this study include the feasibility of recruitment and the intervention, and the acceptability of the chosen outcome measures which are collected at baseline (T0) in July 2024 before the school has begun to implement Think Again! when students are at the end of year 8, and again at follow-up 12 months after baseline (T1) in July 2025 when participants are at the end of year 9. Baseline data collection is planned during the Summer term for a number of reasons, firstly, the intervention is intended to start early in September and practically it would be challenging to collect all baseline data before the intervention starts. Secondly, since we are asking students to report about their experiences at school, we do not want the previous period of time to occur during a school holiday. Finally, we wish to test how feasible it is to collect follow-up data from a different academic year to when baseline data was collected since this is important to establish before embarking on a definitive randomised controlled trial.

Think Again! will be delivered to pupils whilst they are in year 9 between September 2024 and July 2025 and the intervention will be completed by July 2025. Interviews and focus groups will be held with a selection of participating pupils and teachers throughout the delivery year between September 2024 and July 2025.

8.2 Setting

The setting for this research is four secondary schools in England. We have chosen to test the feasibility of intervention delivery and data collection from four schools since we believe anything less than four schools would not be a fair test of feasibility in different contexts, whilst still being mindful of what is practical to achieve given the available funding.

8.3 Participants

8.3.1 Identification of schools

We will utilise several different forms of communication to advertise the study to schools, including attendance at education conferences, direct communication with headteachers and advertising in local school newsletters. Whilst we are not restricting the inclusion of schools geographically, we will be prioritising the inclusion of schools within a two-hour travel radius of Guildford to ensure it is feasible for the SEF training lead to visit the school.

Whilst recognising that this is a feasibility study, we will maximise our efforts to ensure that our sample of schools is as diverse as possible sending direct communication initially to the headteachers of all secondary school within a 60-mile radius of Guildford that are in areas with high levels of violence (e.g. within a Violence Reduction Unit) or have a higher percentage of children eligible for free school meals than the national average reported in 2023 (23.8%) (Department of Education, 2023). We will only widen our recruitment strategy to other secondary schools within a 60-mile radius of Guildford if we do not recruit all four schools within a month. If after two months we do not have four schools recruited, then we would widen the catchment area beyond a 60-mile radius of Guildford.

At our initial contact with schools, we will send a member of the senior leadership team a short summary of the research and invite them to contact the research team if they would like to obtain more information. Unless a school contacts the research team to accept or decline the invitation to participate, we will follow-up this initial commination weekly with emails and phone calls to ensure that schools have received and processed the information.

8.3.2 School Recruitment and Consent

8.3.2.1 School Inclusion Criteria

- Secondary age, state-funded schools in England
- Mixed-sex pupils
- 100 pupils or more in year 8 at baseline

8.3.2.2 School Exclusion Criteria

- Deliver education through a language other than English
- Cater solely for pupils with special educational needs (i.e., Special schools)
- Do not have leadership that can ensure school is able to commit to the project

Schools that have expressed an interest in finding out more about this research will be given an information leaflet that details what is involved in taking part in the research including the time commitment for both the intervention and the data collection, any associated costs, benefits and information on pupil privacy and safety. If the headteacher wishes for their school to take part in the research, they will be required to agree to the terms stipulated in a memorandum of understanding and provide their written consent.

Schools who complete the trial will receive a monetary incentive of £1,000 to enhance retention, they will also be advised that taking part in the trial may help Ofsted inspections, particularly in the areas of 'Personal Development' and 'Leadership and Management'.

8.3.3 Pupil Recruitment and Consent

8.3.3.1 Pupil Inclusion Criteria

- In year 8 at baseline (ages 12 to 13)
- Judged competent to provide own consent, as judged by school staff

8.3.3.2 Pupil Exclusion Criteria

- Children who are not competent to provide their own consent, as judged by school staff
- Children who do not have sufficient use of the English language to be able to complete the outcome measures, even with researcher support.

Permission for students to take part in the *Think Again!* intervention will be provided by the headteacher in line with a school's usual practice of implementing new teaching. Permission for students to take part in the *STOP research* study will be directly provided by the participants. It has recently become accepted that most secondary school students are competent enough to provide their own consent to take part in a research study (Bonell et al., 2023) and we will adopt this approach to ensure we respect the rights of adolescents to have autonomy to consent for their own involvement, rather than requiring consent from parents or carers. We will ask that schools distribute the student information sheet to all students in year 8 via the school's usual communication methods. We will also ask that these student's parent/carers are provided with a copy of their child's information sheet as well. Given the sensitivity of the questions being asked, we feel it is appropriate to also give parent/carers the opportunity to withdraw their child from the research should they wish. This approach gives proper primacy to student autonomy while also respecting parent/carer autonomy. To protect students' privacy, the school will be asked to collate a list of students withdrawn by their parent/carer and to ensure that these students are not present in the room during the baseline and follow-up data collection visits made by the research team.

In situations where a student wishes to take part but their parent/carer has expressed to the school that they do not want their child to take part, in order to maintain parent/carer and school relations we would not collect data from the student alongside their peers. Instead, we would encourage the student to talk to their parent/carer expressing their desire to take part and to remind the parent/carer that they can contact the research team to ask any specific questions they may have. If the parent/carer changes their mind and allows their child to take part in the study, then we could send a direct link to the Qualtrics survey to the student and ask them to complete this at home.

The student information sheet will provide the student with sufficient age-appropriate information to help them make an informed choice about whether to participate in the research. This information will be age-appropriate and will include: what is involved in data collection; why they are being approached for participation; how data will be managed and used; how their confidentiality and anonymity will be protected and the situations in which anonymity will be removed (eg, in response to safeguarding concerns); and any benefits and risks. The information sheet will also detail that students have the right to withdraw at any time and they will be reminded of their option to not take part before recruitment and then before each assessment point.

Information leaflets will be distributed to all students in year 8 using the schools' preferred communication system, for instance, some schools will use an MS Teams account to give information to students, whilst others may use direct emails. We will also provide printed copies of the information leaflet should the school prefer this option.

Students will be provided with details of who to contact if they require further information about the research. The right of the student to refuse to participate without giving reasons will be respected. Prior to any data collection researchers will verbally remind students about the research, why they have been asked to participate, what they will be asked to do, how much time it will take and what to do if they become upset. Students will be given time to ask questions and it will be made clear that they do not have to participate if they do not want to, and that they do not need to give a reason.

Written consent will be collected prior to the data collection via an online consent form. Signs of hesitation, distress or disruptive behaviour will be taken to indicate that the pupil withdraws their consent. For those pupils who do not complete questionnaires, the school will provide an alternative activity for them to complete.

8.3.4 School Staff Recruitment and Consent

Permission for the school to implement the Think Again! intervention will be provided by the headteacher in line with a school's usual practice of implementing new teaching. Permission for school staff to take part in the STOP research study will be directly provided by the members of staff. School staff will be given an information leaflet that details what is involved for them in taking part in the research activities of the study. This information leaflet will contain information about data collection; why they are being approached for participation; how data will be managed and used; how their confidentiality and anonymity will be protected and the situations in which anonymity will be removed (eg, in response to safeguarding concerns); and any benefits and risks. The information sheet will also inform staff that they have the right to withdraw at any time and they will be reminded of their option to not take part before recruitment and then before any period of data collection. The only inclusion criteria for school staff is that they are currently employed by the school at the time of data collection, there are not exclusion criteria. School staff will also be sent a link to participant in an online survey, the first question will provide information about the survey and ask staff to indicate if they consent to taking part in the survey.

8.3.5 Parent/Carer Recruitment and Consent

Permission for the school to implement the Think Again! intervention will be provided by the headteacher in line with a school's usual practice of implementing new teaching. Permission for parent/carers to take part in the STOP research study will be directly provided by the parent/carer who will be given an information leaflet that details what is involved for them in taking part in the research activities of the study. We will ask that schools distribute parent/carer information sheets using the method they commonly use to communicate with parent/carers. For example, they may send information via email or via a home-school communication app. We will also provide printed copies of the information leaflet should the school prefer this option. This information leaflet will contain information about data collection; why they are being approached for participation; how data will be managed and used; how their confidentiality and anonymity will be protected and the situations in which anonymity will be removed (eg, in response to safeguarding concerns); and any benefits and risks. The information sheet will also inform parents/carers that they have the right to withdraw at any time and they will be reminded of their option to not take part before recruitment and then before any period of data collection. The only inclusion criteria for parents or carers is that their child is eligible for participation in the study, there are no exclusion criteria. Parent/carers will also be sent a link to participant in an online survey, the first question will provide information about the survey and ask them to indicate if they consent to taking part in the survey.

9 Intervention

9.1.1 Structure and content

The *Think Again!* intervention is a manualised, multi-component school-based universal prevention intervention that consists of three main activities as detailed in Table 2, the intervention's theory of change is presented in Figure 1.

 TABLE 2: THE THINK AGAIN! INTERVENTION TEMPLATE FOR INTERVENTION DESCRIPTION AND REPLICATION (TIDIER)

 CHECKLIST(HOFFMANN ET AL., 2014)

Item No	Item	
1 Brief name	Think Again!	
2 Why	<i>Think Again!</i> is a manualised intervention with theory of change (Figure 1) informed by the theory of planned behaviour (Ajzen, 1991) (which also informed development of Shifting Boundaries) and social cognitive theory, which describe the importance of environmental influences, of modelling behaviours and of skill practice to achieve mastery. It is also led by the theory of human functioning and school organisation (Markham & Aveyard, 2003), which informed Learning Together, and which emphasises the need for student involvement to increase commitment to school and adherence to prosocial norms and behaviours.	
3 What Materials	Materials: Schools will be provided with various resources. Schools will receive a manual to guide delivery of the intervention. School staff will be offered training (see below) and participants will receive slides to guide delivery of an all-staff training they deliver. Schools will be provided with written lesson plans and slides to guide delivery of the Assessment of School Capacity and Needs, the Student-Staff Action Groups and the Classroom-level programme activities.	
4 What Procedures / Activities	 Procedures: 1) Assessment of school capacity and needs. The <i>Think Again!</i> intervention is designed to allow flexibility in its delivery, thus enabling schools to choose the most appropriate content for their students considering their existing RSE curriculum. The ease with which the intervention can be modified depending on local context is important since this has been shown to impact how successfully schools implement a new DRV and GBV prevention program (Melendez-Torres et al., 2024). We will draw on baseline surveys, including questions about student needs for information and resources, and informational interviews with school leaders to assess local school capacity and need. 	

Item No	No Item	
	 Student-staff action groups (SSAG). Materials for Think Again! draw on our successful experience of action groups in Learning Together. Using a manual and facilitated by intervention delivery staff (Sex Education Forum), the action group draws on the assessment of school capacity and needs to implement a school-level strategy for the prevention of DRV and GBV, including school policy review and awareness raising that is staff-led (e.g. in-service) or student-led (e.g. posters). The action group will also draw from a menu of intervention activities (see below) to create a classroom-level programme. Classroom-level programme. Drawing on a menu of intervention activities developed in Shifting Boundaries and incorporating knowledge gained from specialist Relationships and Sex Education teachers, 9 45-minute Think Again! lessons have been developed. Lessons focus on guided practice of positive skills and interpersonal components designed to 'denormalise' DRV and GBV behaviours and promote prosocial relationship behaviours. Activities avoid any aspects that our meta-analyses found were likely to be harmful (e.g. use of 'survivor stories') and are explicit in their consideration of gender as it relates to DRV and GBV, including content on homophobic GBV; reflect UK-relevant terms and concepts; and, informed by Learning Together, include more explicit content on promoting prosocial behaviours and commitment to positive school norms. 	
5 Who provides	School staff will implement the intervention with support and training from the SEF training lead. The SEF training lead will work with senior leaders from the school to enable them to plan and deliver the intervention in their schools and review school rules and policies to help prevent and respond to DRV and GBV. The SEF training lead will also set up the action groups and provide facilitation at several points during the study.	
6 How	All intervention components will be delivered face-to-face and at the group level.	
7 Where	All components will be delivered on school premises.	
8 When and How Much	Training will be provided by the SEF training lead. The timing and frequency of this training will be variable depending on the outcome of the Assessment of school capacity and needs activity. It is likely to	

Item No	Item
	involve a minimum of half a day staff training with school staff responsible for the delivery of RSE as well as identified classroom specific components.
	Considering local need, their existing RSE curriculum and the discussions held in the SSAG, schools will be supported to teach a minimum of 5 lessons, however, schools can teach all 9 lessons if they wish to. The SEF training lead will work with schools to ensure that they cover all relevant content for their context.
	The intervention curriculum will be delivered to students in year 9.
9 Tailoring	The intervention is intended to be flexible to the individual school's needs.
Modifications	s N/A
	Delivery of the intervention will be coordinated by the Sex Education Forum (SEF), a specialist charity with previous experience of optimisation and delivery of interventions. The intervention will be principally delivered by Vicky Stubbs, a senior educational specialist, supervised internally by Lucy Emmerson, and with the support of the academic team, principally Vashti Berry and Chris Bonell, who have extensive experience of intervention delivery in school-based contexts.
11 How well	Intervention fidelity and quality will be captured via a combination of resource logs, teaching logs and process evaluation. In particular, the process evaluation will include:
(planned fidelity assessment)	 Observation of action groups (one per school) and of classroom-level delivery (two per school) Telephone or video call interviews with members of the senior leadership team and class teachers, 4 in total per school Two student focus groups per school Time and resource logbooks for intervention delivery staff School staff survey relating to acceptability and relevance Student surveys relating to reach and acceptability All of these methods will be used to consider quality and fidelity of the intervention. If the definitive trial reflects that <i>Think Again!</i> is an effective intervention, we will work with SEF to create an open toolkit to support intervention scale-up at national level.

10 Outcome Measures

The outcomes for this study include the feasibility of recruitment and the intervention, and the acceptability of the chosen outcome measures which are collected at baseline (T0) before the school has begun to implement *Think Again!* when participants are at the end of year 8, and again 12 months later (T1) after *Think Again!* has been in use for an academic year and participants are at the end of year 9. To reach the final selection of outcome assessments included in this study, the researchers first searched the literature for previous trials of DRV and GBV interventions delivered in secondary schools to identify relevant constructs and potential questionnaires.

Since the aim of the *Think Again!* intervention is to reduce both dating and relationship violence and gender-based violence it is necessary to ask participants to report the frequency of how often they encounter these types of violence. This necessitates questions that ask specifically about being in an abusive relationship. We are also interested in understanding how often participants may have been violent or abusive to their partner. We have therefore considered very carefully how these questions can be asked sensitively without causing undue distress to the participants. Given that all participants are under the age of 18 we have also had to carefully consider how we can ensure that participants are appropriately safeguarded and, where appropriate, are provided with signpost information about where they can seek support should they need it.

We have considered how important it is to match baseline data with follow-up data at the level of the student, further details of this linking and anonymisation are provided in section 14 Confidentiality/Data Management, but we mention it here due to its relevance to the selection of outcome measures. We have a duty to ensure that any known safeguarding concerns are reported promptly to the school's safeguarding lead, with linked data it would be possible to break the anonymisation code and report which student has reported which concern. We would also have a duty to ensure that students understand that if they report certain things, for example being forced to have sex with their partner when they didn't want to, the research team would have to inform their school's safeguarding lead that they had reported this. As a research team we have concerns that this may lead to underreporting of any questions that would raise a self-guarding concern, particularly when the questions relate to perpetration as opposed to victimisation. Previous research (Meiksin et al., 2020b) overcame this concern by only reporting school-level impacts and not recording any information that could link data back to respondents. This does restrict the form of analysis that is possible, since we would be unable to determine if any impact was different for certain sub-groups or examine any mediation effects.

This has led us to consider the best way to balance data accuracy and integrity with ensuring that participants are adequately safeguarded. The research team are experienced researchers in this field, we have consulted with additional experts, including members of our advisory group, and consulted with our involvement and engagement panels.

We have reviewed the most widely used measures of DRV and GBV and considered both how common certain behaviours are and how appropriate the wording of the questions are for year 8 students. We have made the decision that since intimate sexual encounters are less common in year 8 students, it would be more appropriate to remove some items from established measures and still maintain the ability to individually link baseline and follow-up date at the student level. We will ensure that we signpost participants to relevant support and offer the opportunity for the research team to directly contact them should they wish to have a further conversation.

In respect of health and social care use we will adapt a questionnaire that was developed for an economic evaluation alongside a randomised controlled trial (RCT) of a school-based mindfulness intervention (Kuyken et al., 2022). It has also been adapted for use in a RCT of the psychological therapy intervention for children with epilepsy (Bennett et al., 2024).

Table *3* summarises the chosen outcomes which are described in detail below. We will also use this feasibility study as a chance to validate the adapted measures.

Construct	Data Collected	Respond	Timepoint	
		ent	Т0	T1
Respondent	Background Questionnaire	Student	Х	
Background				
Frequency of	Adapted Conflict and Adolescent Dating	Student	Х	Х
DRV	Relationships Inventory Short Version			
Victimisation and	(S-CADRI) (Fernández-González et al.,			
Perpetration	2012)*			
Frequency of	Adapted Hostile Hallways (Bryant, 1993)*	Student	Х	Х
GBV				
Victimisation and				
Perpetration				
Mental Wellbeing	SWEMWBS (Ng Fat et al., 2017)	Student	Х	Х
Quality of Life	CHU-9D (Stevens, 2009)	Student	Х	Х
School Belonging	Beyondblue School Climate Questionnaire	Student	Х	Х
and Commitment	(Sawyer et al., 2010)			
Violence	Adapted version of LoveBITEs measure	Student	Х	Х
Acceptance	(Flood & Kendrick, 2012) [*]			
Injunctive Social	Adapted version of Foshee measure (Foshee	Student	Х	Х
Norms;	et al., 2001)*			

TABLE 3: OUTCOMES BEING MEASURED

Construct	Data Collected	Respond	Timepoint	
		ent	Т0	T1
Protective behavioural strategies for DRV/GBV	Bespoke measure informed by the SANDI measure (Peterson et al., 2024)*	Student	Х	Х
Self-efficacy for Bystander Actions.	Bespoke measure informed Shifting Boundaries project (B. Taylor et al., 2011) [*]	Student	Х	X
Intervention Acceptability	 Interviews with school staff Focus Groups with pupils Staff Survey Pupil Survey 	School Staff Student		X X
Academic Engagement	 Student-level academic commitment subscale of Beyond Clue School Climate Questionnaire Attendance 	Student Routine data collected by school		X
Intervention fidelity	 Number of classroom lessons delivered Number of action group meetings Logbooks of school staff implementing classroom lessons and chairing action groups Structured researcher observations of one session per school of action group and two classroom lessons per school 	Routine data collected by SEF		Х
Resource Use	Hospital and community health and social care services including medication used by the student	Parent /carer	Х	Х

T0: Baseline, student participants are at the end of year 8

T1: 12 months after T0, student participants are at the end of year 9

* Adaptations have been made to measures to make them developmental and culturally appropriate for the age of respondents.

10.1.1 Frequency of DRV Victimisation and Perpetration

The frequency of dating and relationship violence from both a victimisation and perpetration point of view is being measured by an adapted version of the Conflict and Adolescent Dating Relationships Inventory Short Version (S-CADRI) (Fernández-González et al., 2012). The S-CADRI contains 10 questions that relate to victimisation (e.g. behaviours that a partner has exhibited to the respondent, 'They kicked, hit, or punched me') and 10 questions that relate to perpetration (e.g. I threated to hurt my partner). Respondents are asked to endorse how frequently certain behaviours have occurred during the last 12 months with options of 'Never', 'Rarely', 'Sometimes' and 'Often'. This measure has been validated for use in older adolescents in the US. Following PPIE involvement and in order to make it suitable for a UK study with younger children, we have made the following adaptions to the measure:

- 1. Altered some language to make it culturally more appropriate
 - a. Original item: 'I insulted my partner with put-downs'
 - b. Adapted item: 'I said insulting things to them'
- 2. Removed two items asking about sexual violence
 - a. Removed item: 'They touched me sexually when I didn't want them to'
 - b. Removed item: 'They forced me to have sex when I didn't want to'

10.1.2 Frequency of GBV Victimisation and Perpetration

The frequency of gender-based violence are being measured using the Hostile Hallways questionnaire (Bryant, 1993) with the addition of some items used in a recent study of sexual harassment in Scottish secondary schools (Sweeting et al., 2022) that address behaviour that might be online (e.g. 'Forwarded a naked or sexual picture of you to others, without your agreement'). Following PPIE involvement and in order to make it suitable for a UK study with younger children, we removed the following items from the questionnaire:

- 1. Made you do something sexual other than kissing (like touching their private parts)
- 2. Pulled off or down your clothing

Participants are asked to indicate how often (Never; Rarely; Sometimes; Often) behaviours have occurred with someone from school over the last three months with 15 questions asking about victimisation (happened to the participant) and 15 asking about perpetration (participant has done something to someone else).

10.1.3 Mental Wellbeing

Mental wellbeing is being measured using the Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS) (Ng Fat et al., 2017) which contains seven statements which are positively worded with five response categories from 'none of the time' to 'all of the time'. The SWEMWBS has been validated for populations of young people aged 15 -21 (McKay & Andretta, 2017; Ringdal et al., 2018) and the general population (Ng Fat et al., 2017). The SWEMWBS is scored by first summing the scores for each of the seven items, which are scored from 1 to 5. The total raw scores are then transformed into metric scores using the SWEMWBS conversion table which can be found here (*Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMWS)*, n.d.), with higher scores indicating higher levels of mental wellbeing. Benchmarked against other validated measures of depression and anxiety in a clinical population, SWEMWBS scores of between 18-20 on SWEMWBS correspond to possible depression or anxiety; scores

of 18 or less correspond to probable depression or anxiety; and scores of >20 correspond to scores in well groups (Shah et al., 2018, 2021).

10.1.4Quality of Life

The CHU9D is a preference-based measure of health-related quality of life designed for use with 7 to 17 year olds (Stevens, 2009). The questionnaire has 9 questions with 5 response levels per question and is designed to be self-completed by the child. Use of preference weights for valuation of health states within the CHU9D facilitates estimation of quality adjusted life years (QALYs) directly for use in economic evaluation, specifically cost utility analysis (Stevens, 2012).

10.1.5 School Belonging and Commitment

School belonging and commitment are being measured using The Beyondblue School Climate Questionnaire (BBSCQ) which was designed to measure adolescents' perception of school climate during a randomised controlled trial of the Beyondblue school programme (Sawyer et al., 2010). The BBSCQ was developed by combining the most appropriate measures from other established outcome measures (Arthur et al., 2002; Bond et al., 2004; Earl & Lee, 1998; Epstein & Mcpartland, 1976; Goodenow, 1993; Roeser et al., 1996), it has been extensively piloted used in many other studies (Bonell et al., 2018; Sawyer et al., 2010; Shinde et al., 2018). BBSCQ contains 28 items which assess the extent to which adolescents perceive teacher relationships to be supportive, their sense of school belonging, their level of participation in school activities and their academic commitment. Items are scored on a 4 point Likert scale (4:Yes, totally agree; 3:Yes, I agree a bit; 2:No, I don't really agree; 1:No, totally disagree) and scores are summed to generate a 'Total School Experience' with higher scores indicating a more positive experience of school climate.

10.1.6 Violence Acceptance

Violence acceptance will be measured using four items that have been slightly adapted from a longer survey used in the LoveBITEs evaluation (Flood & Kendrick, 2012). Participants will be given four statements that describe a violent act and participants are asked to report their agreement with this statement, for example 'If a boy hits a girl he loves because he is jealous, it show how much he feels for her' with possible responses of : "I Definitely Agree"; "I Generally Agree"; "I Generally Disagree"; and "I definitely Disagree".

10.1.7 Injunctive Social Norms

In order to understand what students perceive as socially appropriate behaviour, we will use an adapted version of a measure developed by Foshee to measure perceived dating violence norms (Foshee et al., 2001). In order to explore injunctive social norms, this measure was adapted in the Project Respect RCT (Meiksin et al., 2020a) to ask participants to indicate how strongly they felt *their peers* would endorse the social norms. Participants are shown five statements (e.g. It is OK for a boy to hit a girl if

she hit him first) and asked to report if their friends would 'agree', 'neither agree nor disagree, or 'disagree', followed by a final question that asks participants to indicate how likely they feel a negative sanction is in response to 'If I hit a partner, they would break up with me'.

10.1.8 Protective behavioural strategies for DRV/GBV

Given the age of the participants in this study there are no existing validated measures to assess protective factors that participants may use when engaging in dating. Whilst acknowledging that many 12 and 13 year olds are not meeting up with a partner to go to a restaurant or cinema alone, we still felt it was important to find some way to capture the importance participants place on considering ways they could keep themselves safe from DRV and GBV. Therefore, we have created a bespoke measure that was informed by the Sexual and Negative Dating Inventory (SANDI) measure (Peterson et al., 2024) that has been successfully used with college students. This bespoke measure focusses on attitudes to certain behaviour, rather than asking how often the participant acts in a certain way, for example;

- a. SANDI item: 'I share my transportation information (e.g., Uber, trains, subway) with a friend when going on a date'
- b. Bespoke item: 'It's important to tell a friend where you will be and at what times before you on a first date'
- c. SANDI item: 'I do not kiss on the first date'
- d. Bespoke item: 'I think it's OK to kiss someone you've only just met'

We have created a short 9 item measure to assess the importance participants place on protective behaviours, each item is phrased as a statement and participants are asked to say how strongly they agree with each statement (Strong Agree; Agree; Disagree; Strongly Disagree).

10.1.9Self-efficacy for Bystander Actions

Self-efficacy for bystander actions will be measured with 11 bespoke questions that ask participants to consider how likely they are to certain situations involving a form of DRV or GBV, these questions were informed by considering similar items asked during the Shifting Boundaries project (B. Taylor et al., 2011). For example, participants are asked;

How strongly do you agree or disagree with these statements" (options being Strongly Agree; Agree; Disagree; or Strongly Disagree)

- I would tell my friends to stop using homophobic or anti-LGBTQ language if I heard them use it
- I would not feel confident to stop a boy I didn't know very well from hitting a girl he is dating

10.1.10 Routine data collected by the schools

We will request that the school provides individual attendance records for each participant.

10.1.11 Background/Demographics

In order that we can describe our sample, students will be asked to self-report their age, gender to which they identify, sexuality and ethnicity. We will also ask 6 questions from the Family Affluence Survey (Currie et al., 1997; Torsheim et al., 2016) as used in the Positive Choices Pilot (Ponsford et al., 2021) to estimate participants' socio-economic status (SES). The score from this survey is calculated by scoring item responses numerically, with the least affluent options being scored 0, and the item scores being summed to give a total scale score.

10.2Intervention Acceptability and Fidelity Data

Integral process evaluation informed by existing frameworks (May, 2013; Moore et al., 2015; Pawson & Tilley, 1997; Steckler & Linnan, 2002) will examine intervention fidelity, reach and acceptability and how this varies by school and student, and implementation processes/intervention mechanisms and how these vary between schools and students.

Intervention fidelity, reach, acceptability and context: Fidelity and resource use of implementation of all intervention components by schools will be assessed quantitatively using bespoke measures once the intervention is optimised. Data will be collected via: logbooks of school staff implementing classroom lessons and chairing action groups; and structured researcher observations of one sessions per school of action group and two classroom lessons per school. Observations will act as a check on the reliability of data from log-books. We will primarily assess fidelity of form (i.e. of activities) but where local adaptations are made we will assess whether these are consistent or not with intervention theory of change in order to provide a qualitative assessment of fidelity of function (i.e. to theory of change) (Hawe et al., 2004). We will examine reach and acceptability to students (overall and by student gender, sexual orientation, ethnicity and SES, and by school-level GCSE attainment and local deprivation) quantitatively via questionnaire survey items at follow-up. We will survey those staff involved in intervention delivery on the acceptability and relevance of the intervention. The items that will be asked during the survey of both staff and students will be developed over the course of the optimisation phase and a new version of the protocol will be generated that includes the full details of these surveys.

Implementation processes/intervention mechanisms and context: Informed by May's implementation theory and realist evaluation (May, 2013; Pawson & Tilley, 1997), we will collect qualitative data and analyse these in order to explore implementation processes and intervention mechanisms (beneficial or harmful) and how these vary between schools and students. We will use Normalisation Process Theory (NTP) to better understand how the intervention can be successfully implemented within schools. NTP is is widely used in school implementation research (Herlitz et al., 2020) and is part of the General Theory of Implementation (May, 2013) and is particularly useful for framing qualitative research in process evaluations because of its focus on meaning and process. Data will be collected via telephone or video call interviews with four staff-members and two face-to-face focus group with 4-8 year-9 students (purposive by involvement and gender) per school. It will not be feasible in schools to purposively sample students by sexual orientation or socio-economic status but we will strive to be inclusive of a diversity of students.

10.3Data collection procedure and timeline

Research survey data collected from pupils, parents/carers and school staff will be collected online using the Qualtrics platform. Completion of all questionnaire measures is anticipated to take 40 minutes in total for students, 10 minutes for parent/carers and 20 minutes for school staff. Each participant in the study will be given a Unique Identifier (UID) and research data will be saved using this number only. School attendance data for all participating pupils will be requested from the school.

Student Data Collection

Researchers will visit the school in person to facilitate student data collection. Students will enter questionnaire data directly into a Qualtrics database, either using school computers, trial owned electronic tablets or students' personal devices such as mobile telephones. When data is entered via school or student owned equipment it will be necessary for this equipment to maintain a secure internet connection. When trial owned electronic tablets are used, the Qualtrics survey can be accessed in 'off-line' mode and data will be securely saved on the tablet until a secure internet connection has been restored and the data is securely uploaded. It is not possible for anyone to access the data stored on the tablet, this includes the student, research team or any member of staff at Qualtrics.

We will arrange the details of data collection with each school but it is likely to occur during lesson time in a school classroom. A researcher will remind students of the aims of the study, what will happen to their data and their right to not take part or withdrew consent at any point up until data analysis. A researcher will iterate to students that the questions being asked are about a serious topic and the students are being trusted to provide mature and factually correct answers. Students will be reassured that they do not have to take part and that they can stop at any point, without giving any reason. Students will indicate their consent to take part as the first activity on the Qualtrics survey, they do not have to leave the classroom or indicate to the researchers that they do not want to continue with the questionnaires, therefore it is unlikely that they will feel social pressure to continue since other students will not be aware of the choice they have made. Students who are not taking part will be asked to complete some silent school work.

There will be no 'I'd rather not say' option presented on any of the Qualtrics forms, however, it will not be necessary for a student to answer every question on one page to move onto the next page. Instead, should they miss a question, but they attempt to move onto the next page a pop-up box will appear indicating that they have missed a question and asking them to confirm if this was deliberate. They can either return to the question and answer it or confirm that they did intend to miss this question and move onto the next questions. There will also be a 'back' button so that students can go back and change any answers they made previously. There will also be a 'stop survey' button that students can click if they want to stop the survey. They will be asked if they would like to delete the responses they have made so far or if the research team can keep these responses.

Students will be told to complete the questionnaires silently and under 'exam conditions', meaning that they should not consult with other students or look at other students' answers. They will be told that it is fine to hold their tablets up against their body to prevent anyone else seeing their responses. The researchers will remain in the classroom during data collection to ensure that confidentiality is maintained and answer any queries. Students will be instructed to work quietly until everyone in the classroom has completed the questionnaires. Researchers will then collect back the study electronic tablets and ask if the students have any questions before leaving.

Parent/Carer Data Collection

Both the initial outline letter and the full information sheet that parent/carers receive will contain a direct web link or QR code to the parent/carer Qualtrics survey. In this way, parent/carers can access the questionnaires directly without researcher intervention. Since the research team do not have any direct access to parent/carers, it will be imperative that parent/carers provide both their child's name, so that data linkage can be made, and their email address, in case we should need to contact them. Therefore, both the parent email and child name will be a required field on the Qualtrics form.

At baseline we will not send any further reminders to parent/carers after the initial invite to prevent them feeling under any pressure to respond and also to reduce the amount of work required from schools to administer these links. At follow-up, we will invite all parent/carers, including those who did not respond at baseline, to complete the questionnaires. If a parent who provided baseline data, including their direct contact details, has not provided follow-up data two weeks after it is requested, we will send up to two direct reminders, one week apart, to them. We will not ask the school to send any follow-up reminder messages.

11 Reporting of Outcomes/Analysis

The primary purpose of this study is to explore the key areas of uncertainty listed below.

11.1Feasibility of recruitment to a research trial

In order to establish the feasibility of recruiting schools, we will report the number of schools contacted about the study, how many responded, how many showed initial interest and how many ultimately consented to take part. We will report how many students were withdrawn from the study by their parent/carer, and how many opted themselves out by choosing not to consent. We will report the percentage of schools who remained in the study, noting any reasons for withdrawal. At follow-up we will report the percentage of recruited students still on roll at the school and the percentage that outcome data was collected from.

11.2Feasibility of Data Collection

We will assess the feasibility of data collection via mobile phone or web-based surveys over one year of follow-up by examining the following data:

- At baseline and follow-up
 - o Percentage of eligible students who started survey
 - o Percentage of eligible student who completed survey
 - o Percentage of eligible students who reported problems accessing the survey
 - o Percentage of eligible students who reported having completed the survey but for whom the data is missing from the Qualtrics database

We will consider remote electronic data collection as feasible if this method achieves response rates of $\ge 80\%$ in ≥ 3 schools at both baseline and follow-up. We will also scrutinise item-level missingness to identify scales where missingness would be likely to threaten the validity of inference, by comparing the number of 'complete case' surveys to the total number of surveys for each scale.

The current study will enable us to test whether the outcomes are sensitive to assess change in the context of this intervention and explore the potential for floor/ceiling effects. To test this, we will summarise the data descriptively, focusing on how well we are capturing change over time. We will explore pre- post-intervention differences descriptively, confidence intervals, but not p-values, this data will be used to inform future power calculations and confirm the appropriate primary outcome for further studies. We will pilot methods for micro-costing the intervention and measuring resource use, adopting a broad perspective including third sector and educational sector. Delivery staff will record all work, including action groups, activity time, attendance of training and expenses. We will examine response rates and data quality and estimate a unit cost of the intervention. Student surveys will include a measure of health-related quality of life (CHU-9D).

11.3Feasibility of Intervention

Our monitoring and success criteria for assessing the acceptability of the intervention are as follows:

- All schools continue in the study
- The intervention is implemented with fidelity in \geq 3 intervention schools
- Process evaluation indicates intervention is acceptable to ≥70% of year 9 students
- Process evaluation indicates intervention is acceptable to ≥ 70% of staff involved in implementation

Descriptive statistics will describe fidelity, reach and acceptability using Chi-square tests to examine differences between schools and students. These will examine whether fidelity differs by school-level GCSE attainment and local deprivation, and whether student-level reach and acceptability differ by student-level gender, sexual orientation, ethnicity and SES.

Qualitative data will also be used to develop hypotheses about implementation processes and intervention mechanisms and how these might vary between schools or students. We will draw on all data to refine the intervention theory of change.

Qualitative data will be subject to thematic content analysis using in vivo/axial codes and constant comparison (Green & Thorogood, 2004) informed by realist approaches to evaluation (Pawson & Tilley, 1997) and May's implementation theory (May, 2013): examine implementation processes, potential intervention mechanisms and how these vary between schools and students. Realist analyses of qualitative data will inform refinements to our theory of change and, where possible, inform additional hypotheses about how context interacts with intervention mechanisms to generate outcomes. In the light of these analyses, we will refine our intervention theory of change, defining what contextual factors might promote or impede implementation and mechanisms.

12 Ethics

The study team will ensure that the study is conducted within appropriate and professional ethical guidelines, ensuring that Good Clinical Practice guidelines are observed at all times. Ethical approval will be sought from the University of Exeter, Medical School whose ethical approval processes are accredited and gold-standard, including internal review, independent evaluation and robust monitoring. Finally, our inclusion of a study steering committee will ensure 'critical friend' review of our processes and methods over the life cycle of the study.

13 Risk Management for Participants

This study will inevitably involve participants who are vulnerable by virtue of their age. It is therefore essential that we have strong standardised operational procedures to ensure participant safety should risk of harm to self or others become evident, or if safe-guarding concerns emerge. The responsibility for safeguarding pupils will remain with the school safeguarding team.

The outcomes we are collecting ask participants to consider sensitive and difficult issues surrounding physical, sexual and emotional abuse, it is therefore possible that participants may wish to discuss these issues further with an adult, either to disclose information or to debrief. Participants will be advised at the point of consent and prior to each assessment that if they would like to discuss anything further they can speak privately to the researcher present, any teacher or member of staff at their school, or by calling the NSPCC Childline on 0800 1111. Participants will also be given the opportunity to provide their personal contact details should they wish a member of the research team to contact them to discuss the nature of the questionnaires or something else that may be worrying them. During any such call, participants will be reminded that the research team will inform the participant's school safeguarding lead if they say something to indicate a risk of harm to themselves or others.

There are various other points during the study where students may disclose a risk of harm to themselves or to others:

- 1. Directly to a researcher during data collection
- 2. Directly to a researcher whilst they are visiting the school
- 3. Writing in the free text box at the end of the questionnaire
- 4. During a focus group or interview
- 5. Making contact with the research team via email or telephone

The Participant Information Sheet will inform young people that if they disclose information of potential harm to themselves or someone else, researchers will need to break confidentiality. Should young people disclose risk of harm to self or others a designated risk protocol will be actioned which will involve reporting to the school's safeguarding team, as well as completion of a standardised form singed by the chief investigator. When researchers visit the school to collect questionnaires or conduct interviews with students, they will be signed as verified visitors into the school upon presenting their DBS Enhanced check certificates. Interviews and focus groups with students will only be conducted face-to-face on school premises in a non-locked room adjoining a room where a member of school staff will be present throughout the duration of the interview or focus group. Students will be reminded that they can leave at any time and that the door will remain unlocked.

Considering child protection and safety issues, we will follow the below guidance to help ensure both the safety of children and researchers;

- Interviewing children/young people in pairs or groups is preferable to individual interviews from a child protection point of view.
- The ideal situation is a quiet, semi-public space, such as a library or a room with a large window so that others can see in but cannot hear what is being said.
- For group interviews, two interviewers, or an interviewer plus an assistant, is preferable to one interviewer.
- For school settings, it is advisable to have a list of students' names and check that they are all in school. The researcher should ask if there is anything they need to be aware of about any of the students and who they should contact if there are any problems (e.g. if a student does not present themselves for interview or if the interview ends before the appointed time).

All researchers will receive basic training about child safeguarding, and any concerns will be discussed within the same working day with the project lead, or a nominated deputy, who will contact the school's designated safeguarding officer and/or children's services if appropriate. The type and duration of follow-up will be decided by the external agencies involved with supporting the child, parent or teacher as appropriate, with the full cooperation of the research team.

14 Confidentiality/Data Management

All data will be held in accordance with GDPR. Research data will be held on a Secure Data Research Hub only accessible to members of the STOP study team, hosted by the University of Exeter. Access to data will be restricted to the research team.

Research survey data collected from pupils and school staff will be collected online using the Qualtrics platform. Each participant in the study will be given a Unique Identifier (UID) and research data will be saved using this number only. A linking excel file will be created that links the UID to the participant's name. This excel file will be encrypted and password protected and saved in a study specific Secure Data Research Hub hosted by the University of Exeter. Only members of the research team that need access to distribute follow-up surveys will have access to this linking file. The linking document will be double deleted 6 months after study end when all other personal data is confidentially destroyed.

School attendance data for all participating pupils will be requested from the school. This will be requested via standardised electronic pro-forma with the student's name on so that it's possible for these organisations outside of the research team to provide the correct data for the participant. The completed pro-forma will be encrypted and securely transferred to the research team who will use the linking document to add the research UID to the pro-forma and remove the participant's name. The pro-forma will then be double deleted.

Audio-recordings will use secure password-protected recorders. These will be transcribed in full by approved contractors with secure data transfer and management processes. Transcripts will be anonymised and stored in secure files and drives by the fieldwork team. All reporting will be fully anonymised to prevent explicit or implied identification.

Personal data such as participant's name and contact details will be collected to ensure that participants can be invited to complete surveys and or attend interviews, however, these will not be stored together with the research data.

Contact and bank details for the schools will be collected on paper, these copies will be stored in locked cases until they can be securely scanned and uploaded onto the study's Secure Data Research Hub hosted by the University of Exeter. The original paper copies will then be confidentially shredded. The electronic copies of contact details will be deleted 6 months after the study is complete.

15 Withdrawal

As it is the school's decision to take part in the trial, the Headteacher will provide their consent. Parents/carers have the right to request that their child be withdrawn from some or all of sex education delivered as part of statutory RSE. Before granting any such request it would be good practice for the Headteacher to discuss the request with parents/carers and, as appropriate, with the child to ensure that their wishes are understood and to clarify the nature and purpose of the curriculum. Schools will have the right to withdraw consent for participation in the study at any time. Individuals (students, parent/carers and school staff) will have the right to withdraw their consent for the collection and use of their data in any aspect of the study up until the data is analysed. Participants will be informed that once data is analysed, it cannot be withdrawn from the trial. Distress or reluctance during student data collection will be assumed to indicate that the student wishes to withdraw consent to provide data at that time point. Participants' care from any services will not be affected at any time by declining to participate or withdrawing from the trial.

16 Project Risk Register

TABLE 4: RISK REGISTER

Risk	Rating (Likelihood & Impact)	Mitigation strategies
Schools do not recruit to the trial in time	Likelihood: Low Impact: Medium	We will consider a staggered start to data collection to ensure that four schools are included in the feasibility phase. Our expertise in school-based trials is an important part of mitigation.
Staff turnover or illness delays intervention delivery	Likelihood: Low Impact: Medium	Though all staff have distinct roles in the project, there is sufficient overlap in expertise that other staff members could support specific tasks until the time when a staff member could be replaced or return from leave. In addition, the range of academic centres involved in this project provides a pool of expertise to draw on in this situation.
Optimisation does not culminate in an appropriate intervention in time	Likelihood: Low Impact: High	We have sought to mitigate this by drawing on our previous experience of effective interventions, appropriately resourcing intervention optimisation and ensuring that we have a standard amount of time to undertake optimisation.
		If necessary, we will identify which intervention components are most challenging and continue optimising them while delivering aspects of the intervention that have met the progression criteria. We will also delay baseline data collection if necessary to ensure the intervention is ready for testing.
<i>Think Again!</i> intervention is not implemented well	Likelihood: Low Impact: High	Early training and support from the SEF training lead will ensure that schools understand what is required to implement the intervention. We have a strong embedded process evaluation that

Risk	Rating (Likelihood & Impact)	Mitigation strategies
		incorporates regular data collection periods so that non-compliance should be identified early. Since this feasibility study is not testing intervention efficacy, it should be possible to use non-compliance as an opportunity to adapt and further optimise <i>Think Again!</i> before moving to an RCT.
Low participation in research activities by students	Likelihood: Low Impact: High	We will have researchers visiting the school in person to collect research data, therefore we do not anticipate low levels of participation. This is a feasibility study that aims to ensure data collection is feasible, therefore, even with low participation we will still be able to answer our research aims.
Data linkage is not possible	Likelihood: Low Impact: Low	We intend to collect data via surveys sent to students' school email addresses, therefore, it is very unlikely that there will be any problems linking baseline and follow-up data since school emails are not going to change during this time. If for any reason this linkage does not work as anticipated, we would still be able to report aggregative data at the school level, and we would still have enough data to answer our research aims about feasibility.
Safeguarding concern raised by participant in the study	Likelihood: High Impact: Low	The Participant Information Sheet will inform young people and parents/carers that if they disclose information of potential harm to themselves or someone else, researchers will need to break confidentiality. Should young people or carers disclose risk of harm to self or others a designated risk protocol will be actioned which will involve reporting to the school's safeguarding team, as well as completion of a standardised form singed by the chief investigator.

17 Racial diversity & inclusion

Youth violence disproportionately impacts minority ethnic communities. While our previous research has found that DRV and GBV in school contexts are not unevenly distributed by socio-economic status, we maintain that it is critical that interventions and their associated resources have broad applicability to a range of schools by socio-economic status and ethnicity. To address this, we will ensure a diverse sample of schools in a range of contexts are recruited to optimisation and feasibility trial phases. This is important because as part of our analysis, we will compare intervention functioning and acceptability across a range of school contexts to identify ways that *Think Again!* can be optimised. SEF as delivery partners have extensive experience working in schools that represent the full diversity of the UK, including from their work training hundreds of teachers a year in RSE. This credibility and expertise will be essential in capitalising on diversity in school recruitment to optimise an intervention that works for all. This is supported by considerable expertise in the investigator team (particularly Bonell, Berry) in working across diverse school contexts for intervention optimisation.

However, because this is a feasibility trial, our ability to capture a wide range of schools is limited. This is a key reason for the inclusion of a robust involvement and engagement strategy, including young people. We will use this public involvement to ensure that the produced intervention is broadly applicable and relevant and avoids creating inequities by leaving some students behind. Part of our involvement and engagement strategy will include recruiting a diverse sample of young people to provide advice, including through our specialist networks across the UK. Our work with young people will provide an additional way for diverse voices to be represented in the intervention's optimisation. They will serve as both 'critical friends' and as valued stakeholders and will be part of the process of 'signing off' the intervention for the feasibility study, and then for supporting preparation of the intervention for the definitive trial.

18 Publication policy

A publications policy will be drafted and approved by the Study Management Group. It will state principles for publication, describe a process for developing output, contain a map of intended outputs and specify a timeline for delivery. The publication policy will respect the rights of all contributors to be adequately represented in outputs (e.g. authorship and acknowledgments) and the research to be appropriately acknowledged.

19 Project timeline

The project will take place over 21 months from November 2023, see Table 5.

TABLE 5: PROJECT TIMELINE

	20	23		2024										2025							
Phases/Tasks	No v	De c	Ja n	Fe b	Ma r	Ap r	Ma y	Ju n	Ju l	Au g	Se p	Oc t	No v	De c	Ja n	Fe b	Ma r	Ap r	Ma y	Ju n	Ju l
Phase: Involvement, engagement, governance																					
Trial steering committee																					
Involvement and Engagement Panels																					
Study Management Group Meeting																					
Writing Protocol																					
Ethics application																					
Phase: Optimisation process/feasibility set-up																					
Academic oversight of optimisation process																					
Optimisation data collection																					

	20	2023 2024											2025								
Phases/Tasks	No v	De c	Ja n	Fe b	Ma r	Ap r	Ma y	Ju n	Ju l	Au g	Se p	Oc t	No v	De c	Ja n	Fe b	Ma r	Ap r	Ma y	Ju n	Ju l
Academic oversight of preparation for feasibility study delivery																					
School recruitment																					
Phase: Feasibility study delivery and data collection																					
Coordinate with intervention delivery partner																					
Academic oversight of intervention delivery																					
Coordinate fieldworkers and data collection																					
Prepare data tools for process evaluation																					
Undertake data collection for process evaluation																					

	23		2024											2025							
Phases/Tasks	No v	De c	Ja n	Fe b	Ma r	Ap r	Ma y	Ju n	Ju l	Au g	Se p	Oc t	No v	De c	Ja n	Fe b	Ma r	Ap r	Ma y	Ju n	Ju l
Phase: Analysis, reporting, dissemination																					
Statistical analysis																					
Analysis of cost and resource use data																					
Analyse and report process evaluation data																					
Reporting and dissemination																					
Preparation of intervention for pivotal trial																					

TABLE 6: AMENDMENT HISTORY

The following amendments and/or administrative changes have been made to this protocol since the implementation of the first approved version.

Amendment No.	Protocol version No.	Date issued	Summary of changes made
1	1.4	28/8/24	Updated the name of the intervention to <i>Think Again!</i>

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