

## Project Title: LGBTQ+ Training Programme RCT

Intervention Developer	Stonewall
Delivery Organisations	The University of Birmingham What Works for Children's Social Care Stonewall
Evaluator	The University of Birmingham
Principal Investigator	Dr Jason Schaub
Protocol Author(s)	Dr Jason Schaub Prof Paul Montgomery Dr Willem Stander
Type of Trial	Randomised Controlled Trial with process evaluation
Age or Status of Participants	1,000 professionally registered and qualified social workers working for English local authorities, working with young people specifically
Number of Participating Local Authorities	30+ English local authorities
Number of Beneficiaries	1,000 social workers
Primary Outcome(s)	Heteronormative attitudes and beliefs Perceived knowledge
Secondary Outcome(s)	Previous LGBTQ+ knowledge training
Contextual Factors	Age Gender Religiosity Connection to the LGBTQ+ community
Date	Addendum added February 2023
Version history	Version 2.0 Changes to version 1.0 (May 2022)

The full evaluation plan has been added as an addendum as set out in the original protocol. The detailed evaluation plan was not provided in the previous version of this protocol

## Summary

There is a dearth of evidence on the effectiveness of UK educational and training programmes aimed at social workers about supporting LGBTQ+ young people. This paper presents the study protocol for a two-armed, pragmatic randomised controlled trial (pRCT) evaluating the effectiveness of an online training package for improving social workers' (1) attitudes and beliefs, and (2) perceived knowledge with regards to LGBTQ+ youth. The intervention, an e-learning module developed by Stonewall (UK LGBTQ+ charity) for children and young people's services staff, is already widely used nationally. The study aims to recruit 1,000 social workers who are currently employed by English local authorities and working in children's social services. Participants will be individually randomised to either the intervention or control group (business-as-usual training conditions provided by their employer or local authority). Participants from both groups will complete a pre-test (baseline) assessment and post-test assessment, with a possible 4-month post-study follow-up (outside current funding scope). Primary outcome measures are heteronormative attitudes and beliefs, measured using the Heteronormativity Attitudes and Beliefs Scale (HABS) (Habarth, 2015), and a perceived knowledge measure with items adapted from Queer Youth Cultural Competency (QYCC) Scale (Gandy-Guedes, 2018). The secondary objectives are to describe efficacy variation with regard to participants' characteristics (previous LGBTQ+ equality and diversity training). We will also conduct exploratory moderator analyses, examining whether the intervention effects varied as a function of age, gender, religiosity, and connection to the LGBTQ+ community. The study will be conducted between April 2022 and March 2023 (see table 1 for an overview of project timeline).

**Table 1. Overview of Project Timeline**

Phase	Timings
<b>Set-up</b>	Sept – Nov 2021
<b>Feasibility and Pilot</b>	Dec 2021 – Mar 2022
<b>RCT incl. process evaluation</b>	May – Dec 2022
<b>Implementation</b>	Jan – Mar 2023

This is the second study as part of the wider LGBTQ+ Young People in Social Care (LYPSA) research project. In line with our previous study (Schaub et al., 2021), we will work in close collaboration with key stakeholders throughout each phase of the project. Findings from this study will be disseminated through a report and peer-reviewed journal articles.

## Table of Contents

Background and Problem Statement	5
Intervention and Theory of Change	6
Impact Evaluation	9
Randomisation	13
Participants	14
Sample Size / Minimum Detectable Effect Size Calculations	14
Outcome Measures	15
Analysis plan	17
Contextual Factors Analysis	19
Implementation and Process Evaluation	20
Aims	20
Research Questions	20
Design	21
Methods	23
Analysis	23
Cost Evaluation	23
Risks	24
Ethics & Participation	25
Registration	25
Data Protection	26
Personnel	35
Timeline	36
References	38

## Background and Problem Statement

LGBTQ+ young people are both overrepresented within the child welfare system and less satisfied with their experience compared to their cisgender and heterosexual counterparts (Baams et al., 2019; Dettlaff & Washburn, 2018; Wilson & Kastanis, 2015). A recent US study examining the impact of LGBTQ+ training on the child welfare workforce described pervasive biased comments, beliefs, and behaviours demonstrated throughout the training by child welfare staff (Weeks et al., 2018). In the UK, social care practitioners report feeling ill-equipped and lacking necessary skills or competency to adequately meet LGBTQ+ young people's needs, often because of the provider not having received appropriate training (Schaub et al., 2017; Sherriff et al., 2011). Stonewall research found that a quarter of health and social care staff have never received any equality and diversity training, and those who have often report that the training did not include important issues in supporting LGBTQ+ people (Somerville, 2015). Transgender and nonbinary young people are particularly poorly served as trans issues and gender variance receive limited attention in social work training. Extant work found very little explicit reference regarding the inclusion of trans issues in social work education (Hudson-Sharp & National Institute of Economic and Social Research, 2018), and equality and diversity training (Somerville, 2015). Thus, the overrepresentation of LGBTQ+ youth in care is further exacerbated by the lack of training and policies for social workers which, in turn, suggests that social workers with anti-LGBTQ+ biases and/or low competency directly affect the health, mental health, and wellbeing of LGBTQ+ youth in their care (Greeno et al., 2021).

Although practitioners express a desire for more training about LGBTQ+ topics (Cossar et al., 2017; Sherriff et al., 2011), and research findings which suggest that building knowledge and understanding through training can be a positive step towards building a more affirming workforce (Greeno et al., 2021), there is dearth of evidence on the effectiveness of LGBTQ+ diversity training for social workers. Recent systematic review of UK educational and professional training programmes aimed at health and social care staff about delivering appropriate services to LGBTQ+ individuals conclude that extant programmes lack robust and rigorous large-scale evaluations (Baiocco et al., 2022; Hunt et al., 2019). Without robust evidence, it is difficult to determine how effective training programmes are in training social workers to actively and effectively address the needs of LGBTQ+ young people.

Our current study seeks to address this key gap by evaluating the efficacy of an online training package for improving social workers' attitudes and beliefs, and perceived knowledge towards LGBTQ+ youth. Given the absence of other data, the findings will be a key building block for further studies in the development and delivery of training for social workers in supporting LGBTQ+ young people in social care. This study will also examine moderators that may be associated with intervention or primary outcomes such as age, gender, religiosity and a connection to the LGBTQ+ community. First, the scant available evidence highlights the impact of intergenerational differences in understandings of sexuality and gender, and the need for practitioners to examine, and sometimes re-evaluate, their own attitudes towards LGBTQ+ youth (Cossar et al., 2017). For example, younger generations correlated with more positive attitudes towards LGBTQ+ youth in a survey with direct-care behavioural health workers (Gandy-Guedes, 2018). Second, there is inconsistent evidence about the impact of gender on engaging with LGBTQ+ social care service users, as some have found women more permissive (Berkman & Zinberg, 1997), and others have not found any difference between the scores of men and women (Schaub et al., 2017). Third,

religiosity also appears to impact social workers' interactions with LGBTQ+ people with survey findings demonstrating a relationship between religiosity and investment in heteronormative beliefs among UK social workers (Chonody et al., 2013; Schaub et al., 2017). Lastly, a connection with the LGBTQ+ community such as having a friend or family member who identifies as LGBTQ+ has also been linked to greater knowledge and potential to engage in supportive behaviours towards LGBTQ+ youth in a recent survey with US social workers (Greeno et al., 2021). Given the paucity of research in this topic area, this study will assess if these variables moderate treatment outcomes and shifts in attitudes, beliefs, perceived knowledge towards working with LGBTQ+ young people.

## Intervention and Theory of Change

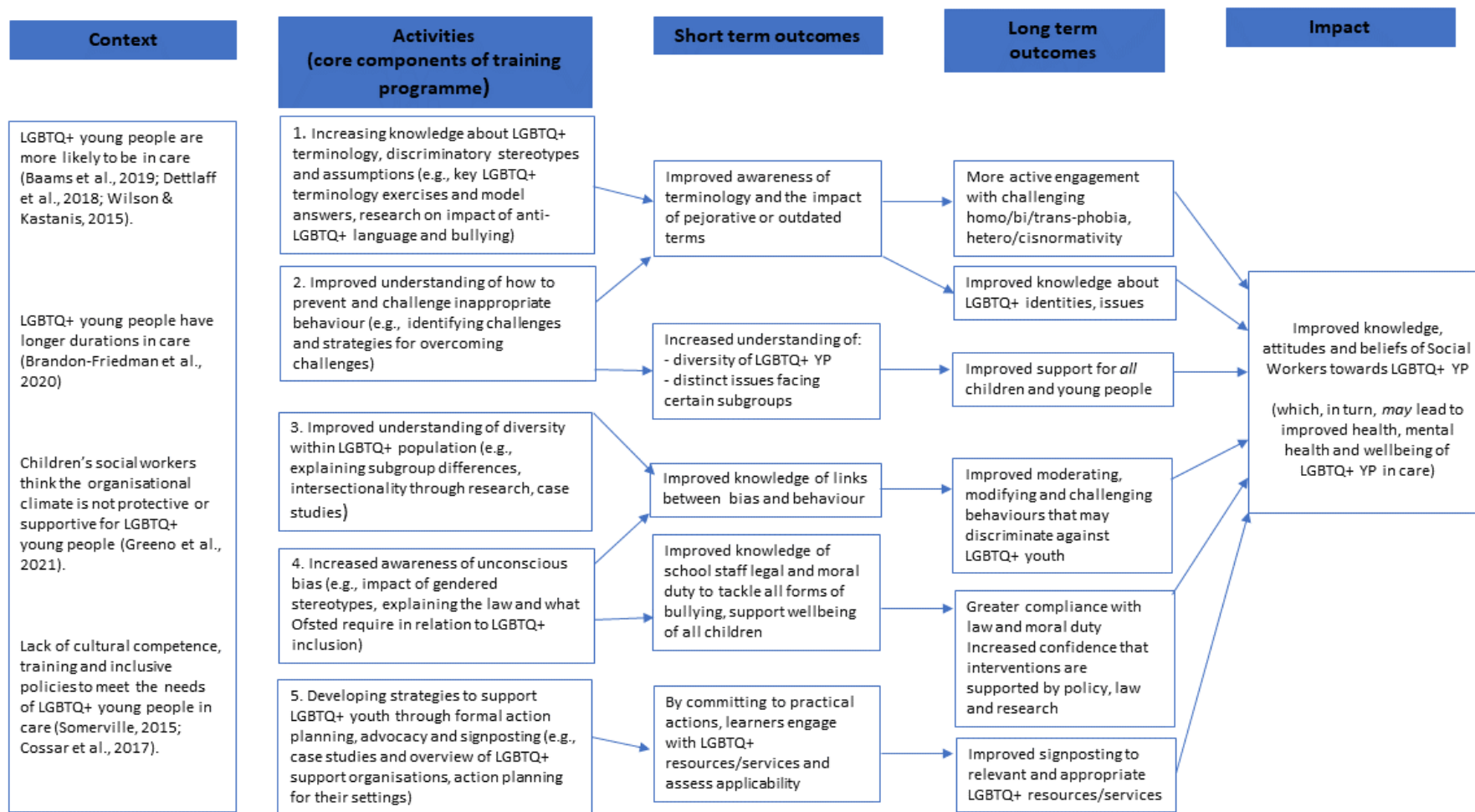
The intervention in this study consists of a single Stonewall e-learning module titled *Supporting LGBTQ+ Children and Young People*, and specifically tailored to local authorities in England. This CPD accredited e-module is designed to improve the attitudes, knowledge, skills and confidence of children and young people's service staff, as well as social workers, to support LGBTQ+ youth. This is accomplished by providing learners with essential information, practical advice, and interactive activities where learners can consider how LGBTQ+ inclusive practice can be embedded across their setting. This includes information about LGBTQ+ terminology, experiences, and intersecting identities; the law and practice obligations in relation to LGBTQ+ inclusion; strategies to prevent and tackle homo-, bi- and transphobic bullying and language; and appropriate and relevant signposting. Content for the e-module was drawn from the charity's long running experience in training staff who work with children and young people, as well as consultation with range of stakeholders including academics. The e-module is self-guided without personal contact and takes between 1.5 to 4-hours to complete (see table 2 for further details).

**Table 2. TIDieR-PHP table**

Item	Item Description
1. Brief name	Supporting LGBTQ+ children and young people training programme – e-learning for children and young people's services staff (England)
2. Why	<ul style="list-style-type: none"> <li>◦ Designed to help develop knowledge, tools and confidence among children and young people's service staff to better support LGBTQ+ youth.</li> <li>◦ Stonewall e-learning modules already used by over 30 local authorities in England. There are no other comparable programmes on a national level as per consultation with stakeholders.</li> </ul>

3. What materials	<ul style="list-style-type: none"> <li>◦ The e-learning module includes essential information, practical advice, and interactive activities to equip trainees with the skills and knowledge to support LGBTQ+ young people. Course objectives include but are not limited to: (i) increasing knowledge of LGBTQ+ terminology, (ii) understanding how different aspects of a child's identity intersect to shape experiences, (iii) understanding the law and staff's obligations in relation to LGBTQ+ inclusion, (iv) understanding how to tackle LGBTQ+ related bullying, (v) developing strategies to support LGBTQ+ young people, and (vi) considering how LGBTQ+ inclusive practice can be embedded across settings.</li> <li>◦ Nature and value of any benefit provided: CPD accredited course</li> </ul>
4. What and how	<ul style="list-style-type: none"> <li>◦ Intervention will be provided free of charge to participants in the intervention group (i.e., qualified social workers employed by English local authorities and working with young people)</li> <li>◦ Intervention will be delivered online to intervention group along with post-tests and process evaluation (as part of a single survey)</li> </ul>
5. Who provided	Stonewall (UK LGBTQ+ charity; charity number 1101255)
6. Where	Online
7. When and how often	<ul style="list-style-type: none"> <li>◦ Intervention to be completed between April 2022 and December 2022. Participants will be able to learn at their own pace at a time that suits them (i.e., they will be able to pause and resume the e-module at a later date) so as to fit the training into their busy schedules.</li> <li>◦ Duration: 1.5-4 hours</li> </ul>
8. Planned variation	No variation planned at present.
9. How well	A census style process evaluation survey will be carried out to assess the training programme's acceptability, implementation, mechanism and context

In order to evaluate the intervention, we developed a theory of change (ToC) with stakeholder participation, programme observation, and reviews of programme documentation. The e-learning module involves five key activities: (1) increasing knowledge about LGBTQ+ terminology, discriminatory stereotypes and assumptions; (2) understanding how to prevent and challenge inappropriate behaviour (e.g., homo-, bi- and transphobic bullying and language); (3) understanding diversity within this population (e.g., LGBTQ+ subgroup differences, intersectionality); (4) increased awareness of unconscious bias; (5) knowing how to support LGBTQ+ youth through formal action, planning, advocacy, and signposting. The ToC argues that e-learning module activities will lead to key short- and long- term outcomes which, in turn, will lead to improved attitudes, knowledge and beliefs towards LGBTQ+ youth for social workers taking part (see Figure 1).



**Enablers**

- Engagement with – and display of – LGBTQ+ resources, services and materials (e.g., posters, rainbow lanyards, greater incorporation of LGBTQ+ issues in curriculum etc.)
- Ongoing coaching to put new knowledge into practice
- Clear policies on the expectations that school staff will challenge homo/bi/trans-phobic language and bullying, formal challenges for reporting homo/bi/trans-phobic behaviour

Figure 1. Training programme ToC diagram



# Impact Evaluation

## Research Questions

This study seeks to answer the following research questions:

### Primary:

- RQ1: How effective is the training course in changing social workers' heteronormative and cisnormative attitudes and beliefs about LGBTQ+ young people?
- RQ2: How effective is the training course in changing social workers' perceived knowledge about LGBTQ+ young people?

### Secondary:

- RQ3: Are the effects mediated by previous employer and external LGBTQ+ knowledge training?

### Exploratory:

- RQ4: Are the effects moderated by age?
- RQ5: Are the effects moderated by gender?
- RQ6: Are the effects moderated by religiosity?
- RQ7: Are the effects moderated by connection to the LGBTQ+ community?

## Design

The evaluation will be conducted as a two-armed, pre- and post-test, pRCT combined with census style process evaluation (see table 3 for an overview). pRCTs are designed to measure the effectiveness of interventions in "the real scenario"; that is whether an intervention works when used in usual conditions of care (Zwarenstein et al., 2008). This is contrasted with explanatory trials that aim to determine whether technology or interventions work in highly selected populations in tightly controlled study settings, making pRCTs more generalisable than standard RCTs (Gamerman et al., 2019). More specifically, a pRCT is an RCT with four key pragmatic design elements, and involves a trial: (1) enrolling a real-world population; (2) conducted in a real-world setting; (3) including an appropriate comparison arm; and, (4) capturing relevant outcomes (Gamerman et al., 2019). We will follow best practice standards and guidance for developing, evaluating and reporting complex interventions and pRCTs in particular (Gamerman et al., 2019; Montgomery et al., 2018; Skivington et al., 2021). The state of the existing evidence is such that an RCT can be justified for a few key reasons. Firstly, the intervention is in wide use across more than 30 local authorities and thus it is important to know how effective it might be by the most rigorous method. Secondly, a number of cohort trials of education programmes have been conducted with Social Workers and other related care workers indicating that this is a promising way to inform them (Inch, 2017; Schaub et al., 2017). Thirdly, we believe that we have sufficient recruitment power that we will be able to run pRCT that will provide meaningful, policy-relevant results (see sample size section). We aim to recruit approximately 1,000 qualified social workers employed by English local authorities working with young people. Both the intervention and control group will complete pre- and post-tests (i.e., 15-item HABS, 5-item perceived LGBTQ+ knowledge measure).

**Table 3. Trial overview**

Trial type and number of arms		Two-armed, individual-level randomised, parallel-group study
Unit of randomisation		Individual Social Worker
Minimisation variables (if applicable)		<ul style="list-style-type: none"> <li>- Previous employer or external LGBTQ+ knowledge training</li> <li>- Age</li> <li>- Gender</li> <li>- Religiosity</li> <li>- Connection to LGBTQ+ community</li> </ul>
Primary outcome	Variable	<ul style="list-style-type: none"> <li>- Heteronormative attitudes and beliefs</li> <li>- Perceived LGBTQ+ knowledge</li> </ul>
	Measure (instrument, scale)	<ul style="list-style-type: none"> <li>- Habarth's (2015) Heteronormativity Attitudes and Beliefs Scale (pre- and post-test)</li> <li>- 5-item adapted perceived LGBTQ+ knowledge survey (pre- and post-test) (Likert scale)</li> </ul>
Secondary and exploratory analyses	Variable(s)	<ul style="list-style-type: none"> <li>- Previous employer and external LGBTQ+ knowledge training</li> <li>- Age</li> <li>- Gender</li> <li>- Religiosity</li> <li>- Connection to LGBTQ+ community</li> </ul>
	Measure(s) (instrument, scale)	<ul style="list-style-type: none"> <li>- Previous employer and external LGBTQ+ training (categorical data)</li> <li>- Age (ratio level data)</li> <li>- Gender (categorical data)</li> <li>- Religiosity (CRSi-7 scale, ratio level data)</li> <li>- Connection to LGBTQ+ community (categorical data)</li> </ul>

*All participants (pre-randomisation):*

As this is a web-based study, data collection and assessment will take place online via our secure web platform (see Figure 2 for the procedure). Participants will be recruited as the project's webpage becomes operational and over 7 months (April – November 2022). Potential participants will log on to the study's secure webpage where they will find an information sheet and an online screening questionnaire to establish eligibility (see the 'participants' sub-section below for the study's inclusion/exclusion criteria). After completing the screening questionnaire, eligible participants will then provide informed consent by agreeing to the information and consent statement. Once consent is provided, participants will be directed to a webpage where they will enter their contact details, and complete demographic questionnaire and baseline (pre-test) assessments. Ineligible participants will receive automated feedback explaining that the study is not right for them, based on their answers. Participants will be individually randomised, using an automated web-based allocation process, after completing the baseline/pre-test assessments and assigned to one of the study arms: (1) the intervention group, in which participants will have access to Stonewall's e-learning module; or (2) the control group, in which participants will undergo

business-as-usual training conditions provided by their employer or local authority such as general staff Equality and Diversity training.

Adherence and dropout are likely to be significant methodological hurdles within this study, as with online intervention trials more generally (Cavanagh et al., 2018; De Jaegere et al., 2019). To reduce study attrition, and in the control group in particular, we will incentivise participation in line with current guidance (Wong, 2020). All eligible participants will be provided with a £10 e-gift voucher as an unconditional incentive to compensate them for their time.

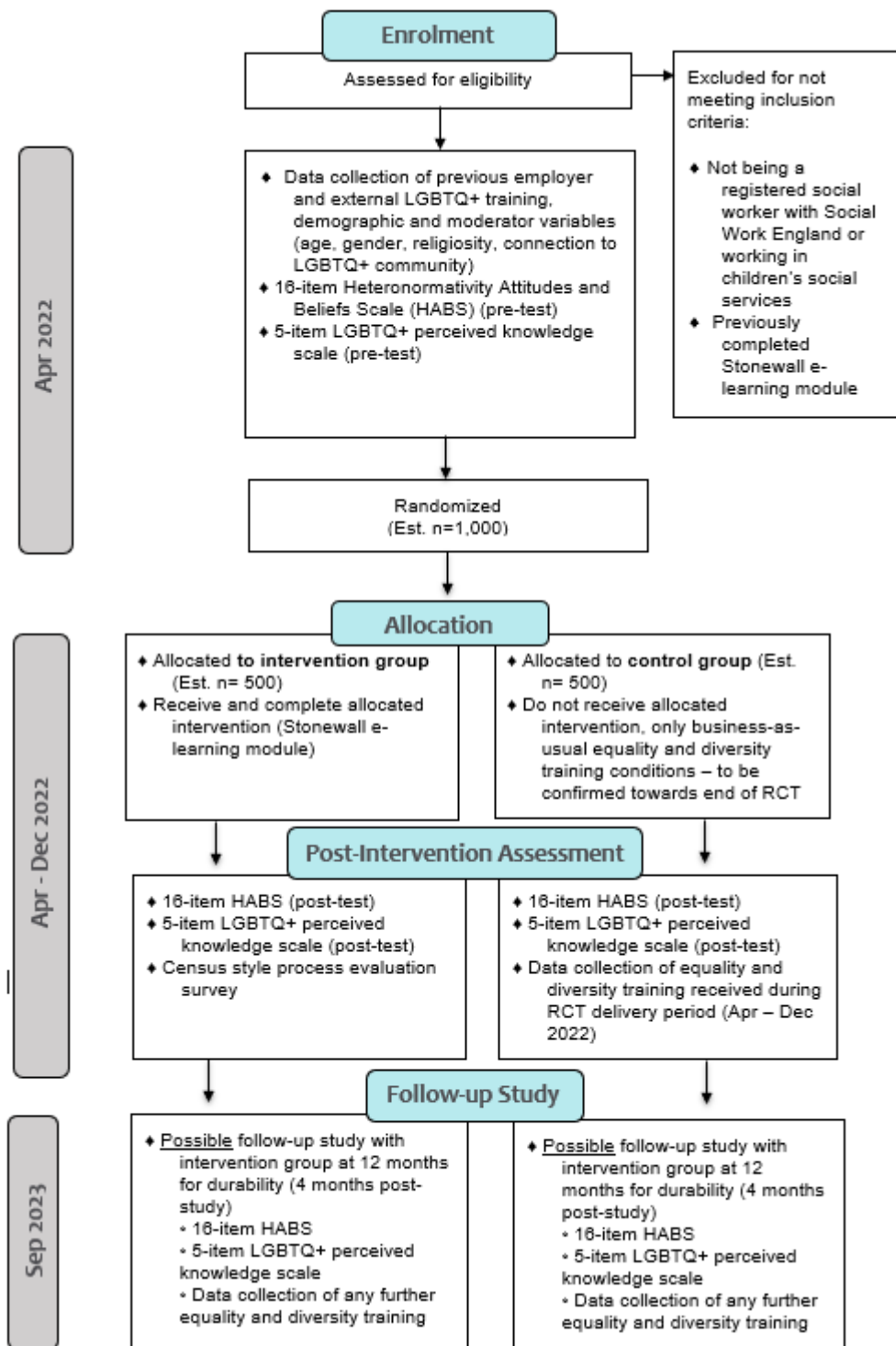


Figure 2. CONSORT Flow Diagram

*Intervention group:*

Participants in the intervention group will receive an email or text that contains a password so that they can log on to the e-learning module. To allow for participant fatigue given the time needed to complete the intervention (1.5 – 4 hours), the e-module can be paused and resumed at later date so as to fit it into their busy schedules. The research fellow's email address will be provided for technical difficulties only, beyond that the e-learning module is self-guided without personal contact. Once the training is completed, participants will be directed to the post-test assessment and process evaluation survey (these will be attached

to the end of e-module). Participants will then receive an email or text thanking them for participating and completing the study.

Theoretically, the pre-test, intervention and post-test could all be completed within a day by the intervention group; however, we expect this to be minimal given the busy schedule of social workers. While it is preferable to understand what the effects might be even a few weeks later, this may be a trade-off between same-day completion and attrition. Participants who haven't completed the intervention and post-test will receive automated monthly reminder emails or text messages to complete throughout the RCT period, all varying in content to appeal in different ways to respondents to and reduce the likelihood that email messages will be sorted by spam filters (Dillman et al., 2014). The optimal timing sequence for reminders varies considerably depending on the goals and needs of study, as well as the population being surveyed. Dillman and colleagues (2014) caution against the danger of sending multiple reminders too quickly as this approach will irritate respondents and increase attrition. This may be especially true for social workers who have a heavy workload. For this reason, monthly reminders will be sent until the final month, when weekly reminders will be used to encourage completion before losing access to the e-learning module.

#### *Control group:*

Those assigned to the control group will receive an email or text informing them that they will undergo business-as-usual training conditions provided by their employer or local authority (such as general staff Equality and Diversity training) and will be contacted towards the end of the pRCT to capture such training and complete the post-test (there will no further contact with them between the start of the study and the post-test). While there is a risk of differential attrition, this is to reflect the pragmatic nature of this trial and how 'real life' would operate (Gamerman et al., 2019; Zwarenstein et al., 2008). Many local authorities present their own equality and diversity training infrequently (e.g., once a year at an annual event). To capture that learning and any impact this will make, we will collect post-test data with this group after as long an interval as possible. Thus, participants in the control group will be contacted to provide detail of any equality and diversity training received during the pRCT delivery period and complete the post-test in November 2022. Participants will receive weekly email or text reminders during this time. Participants will receive a final email or text message thanking them for participating after completing the study.

#### *Possible post-trial follow-up :*

A possible post-trial follow-up study with intervention and control group may be conducted at 12-months post randomisation (4-months post study) to test for durability, funding permitted (this is outside the funding envelope of the current study). Participants who gave consent to the follow-up phase at the time of initial consent for study participation will be contacted by email or text to undertake the follow-up assessment. This assessment will be similar to the post-test assessment.

## **Randomisation**

Following the receipt of all necessary data and consent, web-based allocation will be used to randomly assign participants to either the intervention or control groups. The secure online platform will assess the eligibility of cases to participate in the pRCT, provide instantaneous baseline information for each case, and randomly allocate participants into intervention and control groups stratified according to previous LGBTQ+ knowledge training, age, gender, religiosity, and connection to LGBTQ+ community. Individual level randomisation will occur

continuously throughout the trial period. We will undertake 6 weekly balance checks to support stratification and identify imbalances across the relevant characteristics. This process and the reminders for participation will be operated by the research fellow. It is not possible to blind researchers to participant grouping, and this is acknowledged as a limitation in the present trial. However, the research team will be concealed from group allocation at the start of the trial due to the web-based randomisation process. Secondly, while participants will be aware which group they are allocated to (given the pragmatic nature of the intervention), they will be unaware of other participants in their group.

## Participants

This study will recruit qualified social workers employed by English local authorities working with children and young people. We are planning for a sample of near to 1,000 participants. Given that there are currently 31,854 children and family social workers in England (Department for Education, 2021), this number does not seem unrealistic. Participants will be excluded from participating in this study if they: (1) are not a registered social worker with Social Work England, and (2) if they have previously completed an e-learning training module delivered by Stonewall (specifically, the ‘Supporting LGBTQ+ children and young people’ e-module).

As this study relies on participants self-selecting to take part, our stakeholder group and wider contact list will be essential in recruiting a sample of sufficient size to test the online training programme. We have liaised with relevant social work bodies and professional representative groups such as the British Association of Social Workers (BASW), the Principal Children and Families Social Worker (PCFWS) Network, and the Association of Directors of Children’s Services (ADCS) and the Department for Education (DfE) who will share recruitment materials with their members. In addition to this, we will also disseminate recruitment materials at social work teaching partnerships programmes across England, which aim to strengthen collaborations between local authorities and universities to ensure a steady stream of high calibre of social workers to the frontline. Furthermore, we also use online and social media platforms of the research team and stakeholders to widen our recruitment calls.

## Sample Size / Minimum Detectable Effect Size Calculations

**Table 4. Sample size**

MDES (Proportion of a Standard Deviation)		.18
Proportion of Variance in Outcome Explained by Covariates <sup>1</sup> (R <sup>2</sup> )	Child	N/A
	Family	N/A
	Social Worker	N/A
	Family	N/A
	Social Worker	N/A

<sup>1</sup> This includes, and will most likely be most influenced by, a baseline measure of the outcome.

Intracluster Correlations Coefficient (ICCs)	Team	N/A
Alpha		0.05
Power		0.8
One-Sided or Two-Sided? <sup>2</sup>		Two-sided
Level of Intervention Clustering		N/A
Average Cluster Size (if Cluster-Randomised)		N/A
Sample Size	Intervention	Est. 500
	Control	Est. 500
	Total	Est. 1,000

While a lack of similar controlled trials in the literature makes estimation difficult, a meta-analysis of anti-bias, multicultural, and moral education trainings aimed to reduce prejudice found that, when large scale samples are used, a small to medium effect of  $d = .23$  is found (Paluck et al., 2021). For a two-tailed test to detect an effect size of  $d = .23$  in both of our outcome measures between groups (80% power, 5% significance), we estimate that we would require  $n = 298$  participants in each trial arm. Out of an abundance of caution and to ensure we can detect potentially smaller effects, we will collect a minimum of  $n = 486$  participants per arm, totalling  $n = 972$  participants and allowing for the detection of effects as low as  $d = .18$ .

The extant literature does not provide a robust estimate of the relationship between covariates and outcomes. We therefore assume no predictive power as a conservative estimate.

## Outcome Measures

### Primary outcome measures

The evaluation will rely on a pre- and post-tests research design. Primary outcome measures are heteronormative attitudes and beliefs, measured using HABS (Habarth, 2015), and a perceived knowledge measure with items adapted from QYCC Scale (Gandy-Guedes, 2018). The pre- and post-test measures are designed to gauge participants' preliminary internal heteronormative attitudes and beliefs, and perceived LGBTQ+ knowledge, and then how they change after the delivery of the intervention. As previously stated, we also plan to conduct a further post-test to determine durability at one-year post-intervention; however, this is beyond the current funding scope for this study.

#### *Heteronormative attitudes and beliefs*

This study will use the 16-item HABS (Habarth, 2015), a scale which measures respondent's heteronormative attitudes, as well as including elements of gender identity. The HABS comprises an overall score with excellent internal reliability ( $\alpha = .91$ ) and two subscales, Essential Sex and Gender, which has excellent reliability ( $\alpha = 0.92$ ) and Normative Behaviour which has acceptable reliability ( $\alpha = 0.78$ ). These reflect the two theorised components of heteronormativity (Habarth, 2015). This is the only scale to comprehensively measure heteronormative beliefs and attitudes (Scandurra et al., 2021), and it has been

<sup>2</sup> By default we would recommend two-sided tests.

shown to correlate with relevant variables including right-wing authoritarianism, openness to experience, attitudes towards sexual minorities and tolerance of ambiguity (Habarth, 2015). It has been previously used in research with UK social workers, demonstrating a relationship with religion (Schaub et al., 2017).

#### *Perceived LGBTQ+ knowledge*

In addition to the HABS scale, this study will also evaluate the perceived knowledge of social workers in working with LGBTQ+ populations, using questions adapted from a cultural competency scale relevant to those serving LGBTQ+ young people (Gandy-Guedes, 2018). This measure has extremely high internal reliability,  $\alpha = .94$  and correlates with similar measures, indicating validity. Crucially, this measure was developed to avoid influence of social desirability, the tendency for people to present themselves in a generally favourable fashion. Initial evidence suggests little or no correlation between this scale and a measure of social desirability, indicating little or no influence (Gandy-Guedes, 2018). Ours is a 5-item measure adapted according to the core components of the intervention (see ToC diagram and table below). This was done due to the limited time allotted for the survey and to measure increases in LGBTQ-specific knowledge. Items 1, 2 and 5 are scored on a Likert-type scale from 1 (strongly disagree) to 5 (strongly agree) and items 3 and 4 are reverse scored from 1 (strongly agree) to 5 (strongly disagree), yielding a maximum possible score of 25. Higher scores indicate greater knowledge about the LGBTQ+ community.

**Table 5. LGBTQ+ Knowledge Scale**

<b>Activities (core component of training programme)</b>	<b>Survey Items</b>
Language, stereotypes and assumptions	01: I feel knowledgeable about terms and stereotypes relating to LGBTQ+ young people's identities.
Challenging inappropriate behaviour	02: I know how to respond when I hear service users or co-workers use derogatory language or insinuations about LGBTQ+ people.
Diversity within (e.g., subgroup differences, intersectionality)	03: It is important to be aware that LGBTQ+ young people have similar and shared experiences across the group.
Unconscious bias	04: Children under the age of 13 are too young to know whether they are LGBTQ+ or not.
Formal action planning, advocacy and signposting	05: I know how to connect an LGBTQ+ young person to relevant LGBTQ+ resources in the community.

#### **Subgroup analyses**

The secondary objectives are to describe efficacy variation with regard to previous LGBTQ+ equality and diversity training and contextual factors or moderators such as age, gender,



religiosity, and connection to the LGBTQ+ community. Standardised questions about age and gender will be asked.

### *Religiosity*

The study includes the 7-item Interreligious Centrality of Religiosity Scale (CRSi-7) (Huber & Huber, 2012) measures five core dimensions of religiosity (intellect, ideology, public practice, private practice and experience), and is suitable for both Abrahamic and non-Abrahamic religions. It involves five-point Likert style items focussed either on the level of frequency (very often, often, occasionally, rarely, never) or level of importance (very much so, quite a bit, moderately, not very much, not at all).

### *Connection to the LGBTQ+ community*

For the LGBTQ+ experience variables, participants will be asked to indicate if they are closely connected to the LGBTQ+ community (i.e., do they identify as LGBTQ+, do they have close friends that identify as LGBTQ+, do they have close family members that identify as LGBTQ+?) through categorical level items (yes/no/prefer not to say).

## **Analysis plan**

The trial will be analysed and reported in line with the CONSORT-SPI reporting guidance (Montgomery et al., 2018). Quantitative data from online surveys will be analysed using IBM SPSS Statistics software, descriptive statistics for demographic data, and inferential analysis of test statistics of moderating variables. Qualitative data deriving from the online surveys relating to the Implementation and Process Evaluation (IPE) will be analysed using content analysis.

### **Intention-to-treat & per protocol analysis**

Initially, we will take an intention-to-treat approach for the primary outcome measures (HABS and Knowledge Scale). This approach includes all participants who were randomised in the statistical analysis, irrespective of what treatment (if any) they received, ensuring unbiased conclusions about the intervention effectiveness (McCoy, 2017). As outcome data for the treatment group can only be collected for those who completed the training, ITT analysis will require imputation of outcome data. Two imputation strategies and their implications are outlined below. To increase transparency of findings, we will additionally carry out a per protocol analysis, which was agreed in consultation with the What Works Centre for Children's Social Care. In the per protocol analysis, we will only include participants who completed the post-test.

### **Multiple comparisons testing**

To account for the issue of multiple comparisons in our exploratory analyses, we will use a Bonferroni correction.

### **Missing data**

#### **Surveys on attitudes, beliefs, and perceived knowledge (HABS & Knowledge Scale)**

Primary outcome data for the post-intervention survey are likely to be missing for a substantial proportion of participants due to attrition. These missing data are potentially

systematic, as it might be the case that those who do not complete the study have lower motivation to learn about the subject/population and may have shown a distinct response to the training. To examine this, we will carry out balance checks, based on demographics, between people who did and did not respond to the intervention.

We will carry out and report the analyses using two approaches to the imputation of missing data. Firstly, we will use the Last Observation Carried Forward approach (LOCF), in which missing data are imputed based on a participant's last observed score on the dependent variable(s). This method is used to maintain the sample size (and power), and to reduced bias by attrition. In this case, LOCF is identical to Baseline Observation Carried Forward, as we only have a pre- and post-test measure. This means that the participants for which we would impute outcome data based on their baseline observations automatically do not present with any change between pre- and post-test (regardless of condition). Therefore, this is a very conservative approach to missing data, since it assumes no change from baseline.

Additionally, we will carry out and report the analyses using the post-test mean for each condition as imputation, which is a more positive approach to missing data, since it assumes all participants would achieve a mean end point score. Each missing value on the post-test will be replaced by the mean of the available data for that condition.

These two approaches therefore present both conservative and optimistic view of the outcomes in light of missing data.

In the discussion section, we will reflect on the difference between the two and discuss the advantages and disadvantages of each method.

### **Covariates**

Balance checks will be conducted between respondents and non-respondents on the 4 covariates: age, gender, religiosity and connection to the LGBTQ+ community.

### **Average Treatment Effect**

#### **Outcome 1: Attitudes and beliefs about LGBTQ+ young people (HABS) (RQ1)**

For this outcome, we will use a multiple regression model, with the following model specification for individual  $i$ :

$$Y_{it2} = \alpha + \beta_1 T_i + \beta_{2-5} X_i + \beta_6 Y_{it1} + \epsilon_{ik}$$

Where:

- $Y_{it2}$  is the overall score on the HABS of individual social worker  $i$  at T2 (post-intervention),
- $\alpha$  is the regression constant (intercept),
- $\beta$  is the coefficient of interest,
- $T_i$  is the treatment assignment of individual  $i$  (coded as a binary variable - 1 if in the intervention group, 0 if in the control group),
- $X$  is a vector of participant-level characteristics (see 'Individual characteristics' below),
- $Y_{it1}$  is the overall score on the HABS of individual social worker  $i$  at T1 (pre-intervention), (set to 0 if missing),
- $\epsilon_{ik}$  are cluster-robust standard errors.

#### **Outcome 2: Perceived knowledge about LGBTQ+ young people (RQ2)**

For this outcome, we will use the same linear regression model as described above, but here  $Y_{it2}$  is the overall score on the perceived knowledge scale.

### **Individual Characteristics:**

The individual-level co-variates, represented by  $X_i$  in the equation above, include:

- Age (continuous)
- Gender (woman, man, transwoman, transman, nonbinary / genderqueer / agender / gender fluid, don't know, prefer not to say, other)
- Religiosity (Seven 5-point Likert style items added up to a total score).
- Connection to the LGBTQ+ community (1 item with 3 answer options yes/no/prefer not to say)
- Previous LGBTQ+ knowledge training (2 items with 2 answer options yes/no)

### **Analysis of Harms**

To specifically assess harms, we will analyse positive and negative feedback as part of the IPE survey. Participants were advised to approach their organisational supports to discuss as this is included as part of their employment package.

### **Contextual Factors Analysis**

This trial randomises individually, meaning that organisational- or team-level analysis will be impossible. However, moderating variables (e.g., age, gender, religiosity and connection to the LGBTQ+ community) have been included within this study as important considerations and to take account of contextual factors. These variables have been selected following consultations with our advisory groups, an interrogation of the literature, and by applying a PROGRESS-Plus lens to assess the effects of our selected intervention (O'Neill et al., 2014). As a result, selected variables include personal characteristics that attract discrimination (e.g., age, gender), features of relationships (religiosity) and time-dependant relationships (connection to LGBTQ+ community). Furthermore, in order to retain statistical power, we thought it prudent to focus on those moderators that appeared most meaningful in our search and discussions rather than include a broad range of variables that severely reduces power to detect mediation.

# Implementation and Process Evaluation

## Aims

The purpose of this implementation and process evaluation (IPE) is to assess the training programme's delivery. The aim of this is to understand and explain any identified intervention effects (or lack thereof) in the RCT, to identify the extent participants are satisfied with different aspects of the training programme, and identify which modifications are needed to improve the programme. This IPE will help attend to a significant gap within the literature which calls for further evaluation of the impact of LGBTQ+ diversity training on the learning of social workers working with young people (Sherriff et al., 2011). The IPE design includes feedback from our young advisors and stakeholder advisory group. Findings will be published in a final report at the end of the LGBTQ+ training programme RCT.

## Research Questions

The IPE is designed to assess the online training programme's implementation, mechanism and context. Programme differentiation and contextual data are important to this study but is collected elsewhere in its design and not part of the IPE. For example, programme differentiation data is collected separately by asking what training the control group has received during the intervention towards the end of the RCT. Similarly, contextual data is collected as part of PROGRESS-Plus, demographic and mediator variable data after enrolment.

The IPE seeks to answer the following research questions:

1. Fidelity and adaptation
  - a. Was the training undertaken as expected?
2. Acceptability
  - a. Is the content of the training consistent with the participants' own experiences and values?
3. Programme differentiation
  - a. What does existing LGBTQ+ diversity training delivery for social workers look like in participating authorities?
4. Mechanism
  - a. Does implementing the intervention lead to perceived changes in the interim and ultimate outcomes identified in the ToC?
  - b. To what extent do participants feel able to translate skills learned during the intervention into practice?
  - c. Is the level of effectiveness of the intervention perceived to differ for different groups?
  - d. Are there any perceived unintended or negative consequences as a result of introducing the intervention?

## Design

Table 5. IPE Table

IPE Design Table	
Indicators	Method and Time Point
<b>1. Fidelity and adaptation</b>	
a. Was the training undertaken as expected? <ul style="list-style-type: none"> <li>- Did you complete the training in a single session? (Yes/No)</li> <li>- How much time was required for you to complete the training? (slider with a number of hours)</li> </ul>	IPE survey, post-intervention
<b>2. Acceptability</b>	
a. What is the experience of social workers who have been involved with the intervention? <ul style="list-style-type: none"> <li>- How easy was it to enrol in the course? (Likert)</li> <li>- Was the course structure manageable? (Yes/No)</li> <li>- Was the course content easy to understand? (Yes/No)</li> <li>- Did the course content align with your expectations? (Yes/No)</li> <li>- Did you feel equally engaged in every section of the course? (Yes/No)</li> <li>- Did you experience any difficulties engaging with the material? (Yes/No)</li> <li>- How so? (Free text)</li> <li>- Was the course easy to complete? (Yes/No)</li> </ul>	IPE survey, post-intervention
<b>3. Programme differentiation</b>	
a. What does existing LGBTQ+ diversity training delivery for social workers look like in participating authorities?	Control group survey, towards end of RCT
<b>4. Mechanism</b>	

<p>a. Does implementing the intervention lead to perceived changes in the interim and ultimate outcomes identified in the ToC?</p> <ul style="list-style-type: none"> <li>- Was the course content detailed enough for your needs as a social worker working with young people, some of whom are LGBTQ+? (Yes/No)</li> <li>- Thinking specifically about gender identity, was the course content detailed enough for your practice area? (Yes/No)</li> <li>- Did you find the course content/delivery engaging? (Yes/No).</li> <li>- Was the course content varied enough to maintain your engagement? (Likert)</li> <li>- Which sections of the course worked best? (Categorical)</li> <li>- What content did you find particularly helpful? (Categorical). Why? (Free text)</li> </ul>	<p>IPE survey, post-intervention</p> <p>Demographic survey, baseline assessment</p> <p>IPE survey, post-intervention</p> <p>IPE survey, post-intervention</p>
<p>b. To what extent do participants feel able to translate skills learned during intervention into practice?</p> <ul style="list-style-type: none"> <li>- Do you think you are better able to support LGBTQ+ young people after completing the training? (Yes/No)</li> <li>- In what ways? (Free text)</li> <li>- Are there specific aspects of the course/content you feel more able to put into practice than others aspects? (Yes/No)</li> <li>- Can you outline which aspects you feel more able to put into practice? (Categorical)</li> <li>- If you feel more able for some aspects, could you please outline why that is? (Free text)</li> </ul>	
<p>c. Does the perceived level of effectiveness of the intervention differ for different groups?</p> <ul style="list-style-type: none"> <li>- To what extent do outcomes differ according to demographics</li> </ul>	
<p>d. Are there any perceived unintended or negative consequences as a result of introducing the intervention?</p> <ul style="list-style-type: none"> <li>- Was there any content that you found particularly challenging or difficult? (Yes/No)</li> <li>- Why do you think that is? (Free text)</li> <li>- Can you think of anything that was missing from the course? (Free text)</li> </ul>	

- Would you have any suggestions for how the course could be improved? (Free text)

## Methods

### Sample and Recruitment

The IPE will be conducted with all members of the intervention group upon completing the intervention and will focus on methodological uncertainties for evaluation design and the acceptability of the intervention. We want to examine the quantity and quality of what is delivered. The sample will include those in the intervention group who will complete a census style process evaluation as part of the online survey immediately post-delivery. The decision behind a census style process evaluation comes down to sample size and expected response rate. Given that there is no extra cost to recruiting all members of the target population (i.e., intervention group) and the risk that the response rate will likely not be very high, it makes sense to maximise the number of respondents and recruit the largest sample possible.

### Data Collection

Data will be collected directly after completing the intervention through a short census style process evaluation survey which will be conducted online (with the intervention group) and created using Qualtrics (online survey platform). This data will be collected immediately after the completion of the intervention and post-test. Sample sizes are available in the table below.

Method	Sample size	Time point
Online census style process evaluation survey	Intervention group (Est. n = 500):	May – Dec 2022

## Analysis

Survey based indicators will be presented descriptively to evaluate the experience of the intervention, whether it was delivered as intended, whether participants are able to identify how the intervention has affected their practice, and what sort of ongoing training is provided to the workforce.

## Cost Evaluation

In this section, we provide a financial analysis detailing the known or prerequisite costs to local authorities implementing the intervention per recipient. These include:

- (i) Staff time undertaking the intervention: 1.5 – 4-hours
- (ii) Cost of access to training: £23.70 per participant (VAT included)

We don't foresee any other recurring costs for local authorities, but any additional costs will be included in final reporting.

If successful, the intervention might have downstream benefits to the public purse such as improved health, mental health, and wellbeing outcomes for LGBTQ+ young people in care. Systematic reviews and longitudinal evidence demonstrate that LGBTQ+ young people experience adverse education, health and wellbeing outcomes, including significant physical health and mental health difficulties, greater homelessness (Abreu et al., 2022; Birkett et al., 2015; McCann & Brown, 2019; Plöderl & Tremblay, 2015); all of which have significant long-term effects for downstream public health and criminal justice costs. However, it is important to note, that these outcomes are not recorded or quantified as part of this study and is therefore outside of the scope of the current proposed analysis.

## Risks

Adherence and dropout are likely to be significant methodological hurdles within this study. Although high dropout rates seem to be characteristic of online intervention trials generally (Cavanagh et al., 2018; De Jaegere et al., 2019), we predict study attrition may be particularly likely within our control group at post-test, who have the least to gain from participating in this study. To reduce study attrition, we will incentivise participation in line with our funding remit. A recent review of the literature strongly points to offering cash-like incentives, such as vouchers, over lottery formats, and unconditional or pre-paid incentives for enrolment compared to conditional or promised incentives (Wong, 2020). We therefore offer a £10 e-gift voucher at enrolment as an unconditional incentive to all participants within this study to increase participation, and follow-up rates at post-test with the control group in particular. A summary of study risks are provided in the table below.

Risk	Mitigation
Study attrition, and attrition from the comparison group in particularly, likely to be high <ul style="list-style-type: none"> <li>● Likelihood: High</li> <li>● Impact: High</li> </ul>	To reduce attrition, all participants will be offered a £10 e-gift voucher as an unconditional incentive at enrolment following best practice evidence. Participants in the intervention group will receive automated monthly reminders to complete the intervention and post-test (these will increase to weekly reminders in Nov 2022). Participants in the control group will receive automated weekly reminders towards the end of the RCT in Nov 2022 to provide post-test data.
Low numbers of participants recruited for the study <ul style="list-style-type: none"> <li>● Likelihood: Medium</li> <li>● Impact: High</li> </ul>	An extensive recruitment drive be implemented, including: <ul style="list-style-type: none"> <li>● social media campaigns</li> <li>● widespread communications utilising already established networks via relevant social work bodies and professional</li> </ul>



	representative groups (e.g., BASW, ADCS, PCFWS) <ul style="list-style-type: none"> <li>presentations to social work teaching partnerships across England</li> </ul>
Sudden increase in knowledge of intervention group <ul style="list-style-type: none"> <li>Likelihood: Low</li> <li>Impact: Low</li> </ul>	Unlikely to result in significant challenges for a large children and family social workforce (over 31,000 social workers in England)
Identification of poor social work practice in process evaluation survey <ul style="list-style-type: none"> <li>Likelihood: Low</li> <li>Impact: Low</li> </ul>	Participants will be advised to approach their organisational supports to discuss (this is included as part of their employment package)
Risk of control group receiving the intervention. <ul style="list-style-type: none"> <li>Likelihood: Low</li> <li>Impact: Low</li> </ul>	An email address and password code will be required to access the intervention (e-learning module).

## Ethics & Participation

Participants must give their informed consent to participate in this study. Participants will log or express their interest to participate via the study's landing webpage. Here they will find an information sheet along with a section where the subject can give their informed consent. They will be informed that they can refuse and drop out of the study at any time, and how the study was designed with respect to a high level of security and confidentiality to comply with regulatory requirements. This research proposal appears to create minimal ethical risk for both participants and researchers given the distance-provision of the training programme and data collection, all of which will be undertaken online, as well as the professional stature of participants. There are some minimal risks to the workforce from a sudden increase in the knowledge of the intervention group, but this is unlikely to result in significant challenges for a large workforce of over 31,000 children and family social workers in England (Department for Education, 2021).

This study has received ethics approval from the University of Birmingham's general ethics committee on 13/04/2022 (ERN\_ 21-1629). Given the method of recruitment and study population, this study does not require approval from the national Social Care Research Ethics Committee (REC) or from any of the governing bodies. However, as a matter of professional courtesy, the research team has liaised with relevant regulators, and they are aware of the study. Furthermore, the research fellow, principal investigator and co-investigator all have Enhanced Disclosure and Barring Service (DBS) screens in place to carry out the research.

## Registration

This study is registered at <https://osf.io> [osf.io/25d8z].

# Data Protection

## 1. Purpose for processing

The purpose for processing personal data is to evaluate the effectiveness of a training package for improving social workers knowledge, attitudes and beliefs about LGBTQ+ young people by providing quantitative evidence regarding the characteristics and outcomes for social workers undergoing the training (“Purpose 1”).

Another purpose (“Purpose 2”) will be to share the findings with the relevant stakeholders so that the results can contribute towards research of Children’s Social Care and inform future policy decisions in this sector.

Through the processing of data, the research is designed to be part of an evidence base to be used for the improvement of LGBTQ+ children’s lives in care and for the ability to make informed decisions on how children should be treated in the future.

Data captured and subsequent findings, within legislative boundaries, will be archived in a manner which will aid secondary analysis of the data to inform further research conducted for the benefit of society and, in particular, societal practices in the children’s social care sector (“Purpose 3”).

## 2. Relationships of parties

The University of Birmingham and What Works Centre for Children’s Social Care are joint Data Controllers and Data Processors for the purposes of GDPR on this research project.

## 3. Categories of Data Subject(s) and Personal Data

Category	Number per Category
<input type="checkbox"/> Children (aged under 13)	= 0
<input type="checkbox"/> Children (aged 13 and over)	= 0
<input type="checkbox"/> Teachers	= 0
<input type="checkbox"/> Parents / Legal Guardian(s)	= 0
<input type="checkbox"/> Carers	= 0
<input checked="" type="checkbox"/> Social Workers	= est. 1,000
<input type="checkbox"/> Allied Professionals	= 0
<input type="checkbox"/> Other - Please specify/add:	

## Data Categories

- Name
- Home address
- Email address
- Phone number
- Date of birth
- Age
- Passport information
- Photographs
- Social Worker Case Files
- Social Worker ID
- Interview Answers
- Interview Recordings
- Unspecified Disclosures
- Emotional Difficulties
- Behavioural Difficulties
- English Additional Language
- CIN, CPP or CLA Status
- Social Worker's Name
- Borough / Council
- Pseudonymised Data
- Driver's license number
- National insurance number
- Information about dependents
- Records of correspondence
- Job title
- Employee ID number
- Compensation / salary information
- Occupational health information
- CCTV surveillance footage
- Online or offline monitoring or tracking
- Name of Local Authority/jurisdiction location worked
- Call recordings
- Log-in details / passwords
- Other - Please specify/add:

#### 4. Method of collection and transfer

### Method of Collection

- Live in-person interview(s)
- Live virtual interview(s)

## GDPR Special Categories

- Medical or health information
- Racial or ethnic origin
- Sexual orientation
- Sex life
- Biometric Data (e.g., fingerprints, facial recognition)
- Genetic Data
- Religion / Beliefs
- Political opinion
- Trade Union Membership

## Equality Act - Protected Characteristics

- Sex
- Age
- Disability
- Special Educational Needs
- Instances of harm
- Sex life
- Gender reassignment
- Pregnancy and maternity

## Sensitive Category Data

- Criminal record or offence information
- Proceedings for any offence committed or alleged
- Bank, payment card or tax information
- Other - Please specify/add:

- (Interview(s) Recorded)
- Online survey (completed by child)
- Online survey (completed by adult on behalf of child)
- Online survey (completed by adult)
- Paper-based survey
- Written notes
- Sharing of Case Files/Notes
- Sharing of Administrative Data file(s) by one party to another
- Live in-person observation
- Live virtual observation
- Recorded observation(s)
- Observation document(s)
- Accessed via another party's Internet-based Information Management Tool/System
- Other - Please specify/add:

#### 5. Type(s) of dataset

##### **Survey(s)**

- Baseline
- Interim
- Longitudinal
- Endline

##### **Administrative Data**

- Baseline
- Interim
- Longitudinal
- Endline

#### 6. List of processing activities

The following is a list of all processing activities involving personal data for the research to be conducted:

- To assess the effectiveness of a training package for improving social workers attitudes, knowledge and beliefs in working with LGBTQ+ young people in care
- For participants to gain access to the e-learning module
- To evaluate the implementation, mechanisms of effect and context of the e-learning module
- To use special category personal data (racial or ethnic origin, sexual orientation, religion/beliefs) to inform the research being conducted
- To request your informed consent for participation as part of ethical practises (you do not have to participate in the research and can withdraw at any time). Please note: should the analysis of your data begin we would not be able to remove your data

from being analysed as part of the research despite you withdrawing your consent for participation.

- For University of Birmingham to archive all personal data captured within the Research and re-use the data for future research. This would be a secondary use of the data which is compatible to the original reason for capturing your data and University of Birmingham will be acting separate and independently of WWCS. For this purpose of use University of Birmingham will be the Independent Data controller. The location of the data for this purpose will be in the RDS and held for 10 years in an de-identified format.
- To identify your data, which would be deleted where possible, should you no longer agree to have your data processed for the purpose of conducting the evaluation.
- To contact participants with reminders to complete the training programme / surveys, as well as invite participants to take part in a possible follow-up study.

## 7. Data Protection Lawful basis for processing

### GDPR [Article 6.1](#)

(Choose all that apply)

- (a) Consent
- (b) Contract
- (c) Legal obligation
- (d) Vital interests
- (e) Public task
- (f) Legitimate interests

### GDPR [Article 9.2](#)

(Processing of Special Categories of Personal Data and Protected Characteristics - choose all that apply)

- (a) Explicit Consent
- (b) Employment, social security and social protection (if authorised by law)
- (c) Vital interests
- (d) Not-for-profit bodies
- (e) Made public by the data subject
- (f) Legal claims or judicial acts
- (g) Reasons of substantial public interest (with a basis in law)
- (h) Health or social care (with a basis in law)
- (i) Public health (with a basis in law)
- (j) Archiving, research and statistics (with a basis in law)

(if choosing (b), (h), (i) or (j) this shall be in accordance with the conditions of the UK [Data Protection Act 2018 Schedule 1 Part 1](#))

(If choosing (g) this must be in accordance with the conditions of the [Data Protection Act 2018 Schedule 1 Part 2](#) and outlined in section 7)

## Explanation of Lawful Basis

Ethical practices within research require informed consent to be gathered for the data subject's participation in the evaluation of the effectiveness of the Intervention and for research to be conducted using their personal data.

For the avoidance of doubt, informed ethical consent shall be regarded as a sufficient safeguard for the processing of personal data including the capture and storage of personal data up to the point analysis of the data is being conducted. Once analysis is being conducted, depending on the dataset in use, a data subject is unable to withdraw consent inasmuch as this would detrimentally affect the analysis process intrinsic to the research being conducted.

Where ethical consent has been withdrawn by a data subject, where possible and dependent on the stage of the research process, each party agrees to discontinue the processing of the data subject's personal data and either fully delete, partially delete, pseudonymise or anonymise all identifiers associated to the data.

The point at which analysis for the purposes of research has begun the lawful basis for processing shall be in accordance with GDPR Article 6.1(e), and GDPR Article 9.2(j) and DPA18 Schedule 1 Part 1.4(a),(b)&(c) for special category data including data considered to be a protected characteristic under the UK Equality Act 2010.

What Works for Children's Social Care (WWCSC) is acting upon the instructions from the DfE in accordance with Annex K of the Grant Offer Letter to WWCSC, where it is stated that WWCSC acting as a Processor on behalf of the DfE as Data Controller, and the subject matter of the processing "is needed in order that the Processor [WWCSC] can effectively deliver the grant to provide a service to the Children's Social Care sector".

WWCSC is therefore acting under the authority vested upon it by the DfE as its funder which appropriately corresponds to WWCSC conducting its research under Article 6.1(e) of the UK GDPR: "Processing is necessary for the performance of a task carried out in the public interest."

Upon completion of the evaluation and associated research the lawful basis the University of Birmingham, as sole independent controller, shall rely on, for the purpose of archiving in the RDS and any subsequent secondary analysis of the data, GDPR Article 6.1(f), and GDPR Article 9.2(e) and DPA18 Schedule 1 Part 1.4(a),(b)&(c) for special category data including data considered to be a protected characteristic under the UK Equality Act 2010. This is because the University is classified as a public authority.

## 8. Handling of Data Subject Rights

- If a Data Subject makes a request to exercise rights under the Data Protection Laws ("**Rights Request**") to either WWCSC and/or University of Birmingham, the organisation that receives that Rights Request ("**Receiving Party**") shall notify the other within 5 Business Days of receiving the Rights Request.

- Each organisation agrees to carry out any searches and investigations in relation to those systems and records under its control, which may be required in order to enable the organisations to comply with the Rights Request.
- The other organisation provides the Receiving Party with a copy of all personal data arising from the searches undertaken at least 10 Business Days prior to the deadline for responding to the data subject.
- The Receiving Party reviews the information arising from its own searches and the information provided to it by the other organisation(s) and determines how to comply with the Rights Request and shall draft a response to the requesting data subject (“**Draft Response**”).
- The Receiving Party notifies the other organisation(s) of any steps or actions it needs to take in order to comply with the Rights Request and sends a Draft Response to the other organisations prior to the deadline for responding to the data subject.
- The other organisation(s) provide comments on the Draft Response and confirm agreement to the Draft Response prior to the deadline for responding to the data subject.
- The Receiving Party shall send the Draft Response to the requesting Data Subject on or in advance of the deadline for responding to the Data Subject.

#### 9. Data protection contact(s) for data subjects

**Organisation:** WWCSC

**Job title:** Data Protection Officer

**Name:** James Robson

**Email Address:** [dpo@whatworks-csc.org.uk](mailto:dpo@whatworks-csc.org.uk)

#### **Organisational Contact**

**Organisation:** University of Birmingham

**Job title:** Data Protection Officer

**Name:** Carolyn Pike

**Email Address:** [dataprotection@contacts.bham.ac.uk](mailto:dataprotection@contacts.bham.ac.uk)

#### 10. Accuracy

University of Birmingham shall be responsible for ensuring that the Personal Data collected is accurate and appropriately kept up to date.

#### 11. Security Provisions

WWCSC and/or University of Birmingham implement appropriate technical and organisational measures to ensure a level of security appropriate to the risk, taking into account the state of the art, the costs of implementation and the nature, scope, context and purposes of processing as well as the risk and varying likelihood and severity for the rights and freedoms of natural persons.

WWCSC and/or University of Birmingham, where possible, reduce or eliminate the identifiability of Personal Data including but not limited to the deletion, pseudonymisation and anonymisation of such data throughout the research.

WWCSC has conducted a Data Protection Impact Assessment (DPIA) for the research being conducted. The outcome of this is the risk to the rights and freedoms of data subjects due to the processing of their data for the research is low.

#### **12. Handling of data incidents and data breaches**

- If WWCSC and/or University of Birmingham become aware of a Personal Data Breach they notify each other within 24 hours of becoming aware of the Personal Data Breach and share relevant information with each other to mitigate the breach.
- The organisation that suffered the Personal Data Breach, whether itself or via a processor that it engaged, immediately uses its best endeavours to end the Personal Data Breach and to mitigate the impact of the Personal Data Breach on data subjects.
- WWCSC and/or University of Birmingham will then work together to establish the level of risk to data subjects which also determines if the Personal data Breach must be reported to the UK Information Commissioner's Office, and if the level of risk is high, report the Personal Data Breach to the affected data subjects.
- Any data incident or Personal data Breach is logged in a breach register which will be held by all organisations as required by the GDPR.

#### **13. Supervisory authority for project**

The supervisory authority/Data Protection Authority for the processing of personal data as part of this research is the Information Commissioner's Office (ICO) in the UK.

#### **14. Who has access to the data**

University of Birmingham researchers working on this evaluation will have access to the data. During the collection of personal data and subsequent research, access to the anonymous Personal Data is managed by the aforementioned parties.

#### **15. Provision of data privacy notice(s)**

The organisation that collects Personal Data and any Personal Data that will be shared with any other organisation for the purposes of the research project is known as the "Collecting Party". An organisation is a Collecting Party when they are collecting personal data directly from a data subject or data subjects, or from a third party who is supplying the personal data to that organisation specifically for the research project.

The Collecting Party is responsible for making sure data subjects are provided a Data Protection Notice (DPN) setting out all of the information required under Article 13 or 14 of the GDPR. Article 13 requires a DPN to be provided to data subjects when the data is collected directly from a data subject(s) and Article 14 requires that a DPN is provided to data subjects when the data is not collected directly from data subjects.

A copy of the Data Privacy Notice is available upon request.

#### **Explanation of provision of a Data Privacy Notice:**



For Purpose 1, 2 & 3 the University of Birmingham shall be the Collecting Party. Data Subjects shall receive access to a copy of the data protection notice via direct email. For data subjects where there is no direct relationship the Privacy Notice shall be accessible on the WWCS website next to the link to the project Trial Protocol document as well as on the University of Birmingham's project website.

## **16. Retention Period**

All data will be processed for the duration of the research project and each organisation minimises Personal Data where it is no longer required. Each organisation only holds Personal Data for a defined retention period outlined in an agreement with them and is responsible for their own secure destruction of the Personal Data they hold. Each organisation requires the other(s) give at least 30 days' prior written notice if they intend to delete any Personal Data before a defined retention period. Each organisation has agreed to notify WWCS in writing of the confirmation of destruction/deletion of Personal Data processed for the project and has agreed to evidence destruction/deletion to other Parties upon request at the end of the defined retention period. Data subjects will be notified of the relevant retention period(s) for their personal data within the Data Protection Notice they will be provided with.

### **Defined Retention Period and Destruction**

All data will either be deleted or archived after the research has completed. Completion of the research is from the date the final research report will be published. The delivery of the final report is scheduled for March 2023.

WWCS/All organisations recognise there is a possibility for the scheduled date of final report delivery to change. Should this happen this will be reflected in a Grant Variation Letter between WWCS and the relevant organisation(s). The new agreed date of delivery of the final report will be the point at which the timeframe for when deletion begins.

WWCS will not retain Personal Data or Shared Personal Data used for the research during the evaluation period. Any data it acquires during any assistance WWCS is providing to University of Birmingham shall be deleted within a reasonable period after assistance has been provided and no later than the delivery of the final report.

Data, including personal data will be archived on the University of Birmingham's OneDrive for Business and BearShare (RDS) platforms for ten years after the delivery of the final report, as per the University's policy. The platform's security and encryption features comply with the University's security standards. Therefore, the retained data by University of Birmingham will be deleted by the University of Birmingham by March 2033.

## **17. Data Processors**

Where an organisation engages a third-party to process any personal data for the project, that third party is known as a "Data Processor" and each organisation has agreed to enter into a Data Processing Agreement (DPA) with each third-party. The DPA incorporates all the provisions required under [Article 28](#) of the GDPR. Each organisation remains fully liable for

the acts and omissions of the third-party processor(s). Each organisation is also responsible for being able to provide copies of DPAs upon request to any other organisation involved in the project.

#### 18. Data Location

##### Data Location(s)

- United Kingdom (UK)
- European Economic Area (EEA)
- [Name country outside UK/EEA]

##### Data Access Location(s)

- United Kingdom (UK)
- European Economic Area (EEA)
- [Name country outside UK/EEA]

#### 19. Data Protection ID (internal reference)

#2182

#### 20. Definitions:

**Data Controller** means the natural or legal person, public authority, agency or other body which, alone or jointly with others, determines the purposes and means of the processing of personal data.

**Joint Controller** means where two or more controllers jointly determine the purposes and means of processing. They shall in a transparent manner determine their respective responsibilities for compliance with the obligations of the GDPR.

**Independent Controller** means each controller shall determine the purposes and means of processing of the personal data being processed independent of each other and each have their own data controller responsibilities for the processing of that data.

**Data Processor** means the natural or a legal person, public authority, agency or other body which processes personal data on behalf of a Data Controller.

**Personal Data** means any information relating to an identified or identifiable natural person ('data subject').

**Shared Personal Data** means any Personal Data captured that shall be shared with other parties named in this agreement. Shared Personal Data may not, in all circumstances, mean all Personal Data collected for the Agreed Purpose.

**Data Subject** means a natural person who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person.

**Processing** means any operation or set of operations which is performed on personal data or on sets of personal data.

**Recipient** means a natural or legal person, public authority, agency or another body, to which the personal data are disclosed, whether a third party or not.

**Data Protection Laws** means all applicable data protection and privacy legislation, regulations and guidance including the UK General Data Protection Regulation ("GDPR") and the Data Protection Act 2018 and the Privacy and Electronic Communications (EC Directive) Regulations 2003; and any guidance or codes of practice issued by the ICO from time to time (all as amended, updated or re-enacted).

**Joint Controller Arrangement ("JCA"):** means an arrangement between two or more controllers who jointly determine the purposes and means of processing. The JCA shall in a transparent manner determine each controller's respective responsibilities for compliance with the obligations of the GDPR.

**Personal Data Breach** means a breach of security leading to the accidental or unlawful destruction, loss, alteration, unauthorised disclosure of, or access to, Personal Data transmitted, stored or otherwise processed.

**Receiving Party or Parties** means the party or parties who receive data shared for a specific purpose by another Party, the Sharing Party. The Receiving Party or Parties become the Controller or joint Controllers of the data.

**Sharing Party** means the Party sharing data they are the Controller of with one or more parties, the Receiving Party or Parties.

**Data Archive:** means the storage location used by WWCS to retain de-identified, pseudonymised and/or anonymised evaluation data for use in subsequent research projects by WWCS and/or external researchers. The WWCS Data Archive location is the Office for National Statistics (ONS) Secure Research Service (SRS) based in the UK accredited under the Digital Economy Act 2017 (further information can be found on our website).

**Trial/Research Protocol** means a document that describes the objectives, design, methodology, statistical considerations and aspects related to the evaluation.

## Personnel

### **Dr Jason Schaub – Principal Investigator, University of Birmingham**

Dr Jason Schaub will be leading on the design and analysis.

### **Prof Paul Montgomery – Co-investigator, University of Birmingham**

Prof Paul Montgomery will support the design, analysis, and write-up.

### **Dr Willem Stander – Research Fellow, University of Birmingham**

Dr Willem Stander will be supporting data collection, analysis and write up, as well as provide ongoing administrative support.

## Timeline

The RCT length will be over a period of 11 months, from May 2022 to December 2023, with reporting concluded by the end of March 2023.

**Table 1. Project Timeline**

Phase	Timings
<p><b>Set-up</b></p> <ul style="list-style-type: none"> <li>Identify and validate suitable training programme using a theory of change (ToC) approach/model</li> <li>Identify and map core components, short- and long-term outcomes as well as of what training programme includes</li> <li>Identify most practice-relevant moderators to inform analysis choice</li> </ul>	Sept – Nov 2021
<p><b>Feasibility and Pilot</b></p> <ul style="list-style-type: none"> <li>Discussion to assess participant attrition, using data from training providers</li> <li>Determine sample size</li> <li>Refine research tools and confirm with stakeholder group</li> <li>Pilot survey to assess feasibility of measures</li> </ul>	Dec – Feb 2022
<p><b>Training programme RCT</b></p> <p>Ongoing recruitment activities via relevant social work bodies and professional representative groups (e.g., BASW, ADCS, PCFWS), social work teaching partnership programmes, and social media.</p> <p><i>All participants (pre-randomisation)</i></p> <ul style="list-style-type: none"> <li>Data collection of demographic and anticipated moderator variables (age, gender, religiosity, connection to LGBTQ+ community), and previous LGBTQ+ equality and diversity training</li> <li>16-item HABS scale (pre-test)</li> <li>5-item perceived knowledge scale (pre-test)</li> </ul> <p><i>Intervention group</i></p> <ul style="list-style-type: none"> <li>Receive allocated intervention (Stonewall e-learning module)</li> <li>16-item HABS (post-test)</li> <li>5-item perceived knowledge scale (post-test)</li> <li>Census style process evaluation survey to assess implementation, mechanism, and context of training programme</li> </ul> <p><i>Control group</i></p>	May – Dec 2022

<ul style="list-style-type: none"> <li>● Do not receive allocated intervention (business-as-usual equality and diversity training conditions)</li> <li>● 16-item HABS (post-test)</li> <li>● 5-item perceived knowledge scale (post-test)</li> <li>● Contact towards the end of the RCT to ascertain what equality and diversity training received during RCT delivery period between Apr-Dec 2022, if any.</li> </ul>	
<p><b>Implementation</b></p> <ul style="list-style-type: none"> <li>● Engage with stakeholder group to discuss outcomes, challenges, and limitations</li> <li>● Dissemination activities to include stakeholder presentation, research report, publications and conference presentations</li> <li>● Possible follow up with intervention group at 12 months for durability (4 months post-study)</li> </ul>	Jan – Mar 2023

## References

Baams, L., Wilson, B. D. M., & Russell, S. T. (2019). LGBTQ Youth in Unstable Housing and Foster Care. *Pediatrics*, *143*(3), e20174211. <https://doi.org/10.1542/peds.2017-4211>

Baiocco, R., Pezzella, A., Pistella, J., Kouta, C., Rousou, E., Rocamora-Perez, P., López-Liria, R., Dudau, V., Doru, A. M., Kuckert-Wöstheinrich, A., Ziegler, S., Nielsen, D., Bay, L. T., & Papadopoulos, I. (2022). LGBT+ Training Needs for Health and Social Care Professionals: A Cross-cultural Comparison Among Seven European Countries. *Sexuality Research and Social Policy*, *19*(1), 22–36. <https://doi.org/10.1007/s13178-020-00521-2>

Brandon-Friedman, R. A., Pierce, B., Wahler, E., Thigpen, J., & Fortenberry, J. D. (2020). Sexual identity development and sexual well-being: Differences between sexual minority and non-sexual minority former foster youth. *Children and Youth Services Review*, *117*, 105294. <https://doi.org/10.1016/j.childyouth.2020.10529>

Berkman, C. S., & Zinberg, G. (1997). Homophobia and heterosexism in social workers. *Social Work*, *42*(4), 319–332. <https://doi.org/10.1093/sw/42.4.319>

Cavanagh, K., Churchard, A., O'Hanlon, P., Mundy, T., Votolato, P., Jones, F., Gu, J., & Strauss, C. (2018). A Randomised Controlled Trial of a Brief Online Mindfulness-Based Intervention in a Non-clinical Population: Replication and Extension. *Mindfulness*, *9*(4), 1191–1205. <https://doi.org/10.1007/s12671-017-0856-1>

Chonody, J., Woodford, M. R., Smith, S., & Silverschanz, P. (2013). Christian Social Work Students' Attitudes Toward Lesbians and Gay Men: Religious Teachings, Religiosity, and Contact. *Journal of Religion & Spirituality in Social Work: Social Thought*, *32*(3), 211–226. <https://doi.org/10.1080/15426432.2013.801730>

Cossar, J., Schofield, G., Belderson, P., Ward, E., Keenan, J., Larsson, B., Dodsworth, J., & Cocker, C. (2017). *SpeakOut: A study of the experiences and identity development of lesbian, gay, bisexual, transgender and questioning young people in care - and the support they receive* [Research Briefing]. Norwich: Centre for Research on Children and Families, University of East Anglia.

De Jaegere, E., van Landschoot, R., van Heeringen, K., van Spijker, B. A. J., Kerkhof, A. J. F. M., Mokkenstorm, J. K., & Portzky, G. (2019). The online treatment of suicidal ideation: A randomised controlled trial of an unguided web-based intervention. *Behaviour Research and Therapy*, *119*, 103406. <https://doi.org/10.1016/j.brat.2019.05.003>

Department for Education. (2021). *Reporting year 2020: Children's social work workforce*. <https://explore-education-statistics.service.gov.uk/find-statistics/children-s-social-work-workforce/2020>

Dettlaff, A. J., & Washburn, M. (2018). *Outcomes of sexual minority youth in child welfare: Prevalence, risk, and outcomes* (Report). University of Houston, Graduate School of Social Work.

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). *Internet, phone, mail, and mixed mode surveys: The tailored design method, 4th ed* (pp. xvii, 509). John Wiley & Sons Inc.

Gamerman, V., Cai, T., & Elsässer, A. (2019). Pragmatic randomized clinical trials: Best practices and statistical guidance. *Health Services and Outcomes Research Methodology*, 19(1), 23–35. <https://doi.org/10.1007/s10742-018-0192-5>

Gandy-Guedes, M. E. (2018). The queer youth cultural competency (QYCC) scale: Measuring competency in direct-care behavioral health workers. *Journal of Gay & Lesbian Social Services*, 30(4), 356–373. <https://doi.org/10.1080/10538720.2018.1516171>

Greeno, E., Matarese, M., & Weeks, A. (2021). Attitudes, beliefs, and behaviors of child welfare workers toward LGBTQ youth. *Journal of Public Child Welfare*, 0(0), 1–20. <https://doi.org/10.1080/15548732.2021.1940415>

Habarth, J. M. (2015). Development of the Heteronormative Attitudes and Beliefs Scale. *Psychology & Sexuality*, 6(2), 166–188. <https://doi.org/10.1080/19419899.2013.876444>

Huber, S., & Huber, O. W. (2012). The Centrality of Religiosity Scale (CRS). *Religions*, 3, 710–724. <https://doi.org/10.3390/REL3030710>

Hudson-Sharp, N., & National Institute of Economic and Social Research. (2018). *Transgender awareness in child and family social work education* [Research Report]. London: Government Social Research, Department for Education.

Hunt, R., Bates, C., Walker, S., Grierson, J., Redsell, S., & Meads, C. (2019). A Systematic Review of UK Educational and Training Materials Aimed at Health and Social Care Staff about Providing Appropriate Services for LGBT+ People. *International Journal of Environmental Research and Public Health*, 16(24), E4976. <https://doi.org/10.3390/ijerph16244976>

Inch, E. (2017). Are you ready? Qualifying social work students' perception of their preparedness to work competently with service users from sexual and gender minority communities. *Social Work Education*, 36(5), 557–574. <https://doi.org/10.1080/02615479.2016.1237628>

McCoy, C. E. (2017). Understanding the Intention-to-treat Principle in Randomized Controlled Trials. *Western Journal of Emergency Medicine*, 18(6), 1075–1078. <https://doi.org/10.5811/westjem.2017.8.35985>

Montgomery, P., Grant, S., Mayo-Wilson, E., Macdonald, G., Michie, S., Hopewell, S., Moher, D., Lawrence Aber, J., Altman, D., Bhui, K., Booth, A., Clark, D., Craig, P., Eisner, M., Fraser, M. W., Gardner, F., Grant, S., Hedges, L., Hollon, S., ... on behalf of the CONSORT-SPI Group. (2018). Reporting randomised trials of social and psychological

interventions: The CONSORT-SPI 2018 Extension. *Trials*, 19(1), 407.  
<https://doi.org/10.1186/s13063-018-2733-1>

O'Neill, J., Tabish, H., Welch, V., Petticrew, M., Pottie, K., Clarke, M., Evans, T., Pardo Pardo, J., Waters, E., White, H., & Tugwell, P. (2014). Applying an equity lens to interventions: Using PROGRESS ensures consideration of socially stratifying factors to illuminate inequities in health. *Journal of Clinical Epidemiology*, 67(1), 56–64.  
<https://doi.org/10.1016/j.jclinepi.2013.08.005>

Paluck, E. L., Porat, R., Clark, C. S., & Green, D. P. (2021). Prejudice Reduction: Progress and Challenges. *Annual Review of Psychology*, 72(1), 533–560.  
<https://doi.org/10.1146/annurev-psych-071620-030619>

Scandurra, C., Monaco, S., Dolce, P., & Nothdurfter, U. (2021). Heteronormativity in Italy: Psychometric Characteristics of the Italian Version of the Heteronormative Attitudes and Beliefs Scale. *Sexuality Research and Social Policy*, 18(3), 637–652.  
<https://doi.org/10.1007/s13178-020-00487-1>

Schaub, J., Montgomery, P., & Stander, W. J. (2021). *LGBTQ+ Young People in Residential Care: Study Protocol*. What Works for Children's Social Care. <https://whatworks-csc.org.uk/research-project/lgbtq-young-people-in-residential-care/>

Schaub, J., Willis, P., & Dunk-West, P. (2017). Accounting for Self, Sex and Sexuality in UK Social Workers' Knowledge Base: Findings from an Exploratory Study. *The British Journal of Social Work*, 47(2), 427–446. <https://doi.org/10.1093/bjsw/bcw015>

Sherriff, N. S., Hamilton, W. E., Wigmore, S., & Giambone, B. L. B. (2011). "What do you say to them?" investigating and supporting the needs of lesbian, gay, bisexual, trans, and questioning (LGBTQ) young people. *Journal of Community Psychology*, 39(8), 939–955.  
<https://doi.org/10.1002/jcop.20479>

Skivington, K., Matthews, L., Simpson, S. A., Craig, P., Baird, J., Blazeby, J. M., Boyd, K. A., Craig, N., French, D. P., McIntosh, E., Petticrew, M., Rycroft-Malone, J., White, M., & Moore, L. (2021). A new framework for developing and evaluating complex interventions: Update of Medical Research Council guidance. *BMJ*, 374, n2061. <http://dx.doi.org/10.1136/bmj.n2061>

Somerville, C. (2015). *Unhealthy attitudes: The treatment of LGBT people within health and social care services*. Stonewall.

Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics, 6th edn* Boston. Ma: Pearson.

Weeks, A., Altman, D., Stevens, A., Lorthridge, J., & Heaton, L. (2018). Strengthening the Workforce to Support Youth in Foster Care who Identify as LGBTQ+ through Increasing LGBTQ+ Competency: Trainers' Experience with Bias. *Child Welfare*, 96(2), 125–150.

Wilson, B. D. M., & Kastanis, A. A. (2015). Sexual and gender minority disproportionality and disparities in child welfare: A population-based study. *Children and Youth Services Review*, 58, 11–17. <https://doi.org/10.1016/j.childyouth.2015.08.016>



Wong, E. R. (2020). *Incentives in longitudinal studies*, CLS working paper number 2020/1 (p. 20). UCL Centre for Longitudinal Studies. <https://cls.ucl.ac.uk/wp-content/uploads/2020/04/CLS-working-paper-2020-1-Incentives-in-longitudinal-studies.pdf>

Zwarenstein, M., Treweek, S., Gagnier, J. J., Altman, D. G., Tunis, S., Haynes, B., Oxman, A. D., & Moher, D. (2008). Improving the reporting of pragmatic trials: An extension of the CONSORT statement. *BMJ (Clinical Research Ed.)*, 337, a2390. <https://doi.org/10.1136/bmj.a2390>