

Southampton Change Project: Social workers in schools CASCADE, Cardiff University David Westlake, Victoria Silverwood, and Donald Forrester

Evaluation Summary

Recipients	Schools, children and families
Estimated number of recipients	Circa 100-150 children and their families across the sample schools
Number of pilot sites (schools, hubs)	3 school clusters; 3 secondary schools with 14 feeder primary schools and 1 Pupil Referral Unit.
Date	Addendum added April 2019
Version	2 Changes from Version 1 (March 2019): addition of section on Matching to explain identification of comparator schools.

Summary

This project is one of the 'Change Projects'¹, a programme of research into changes to services by CASCADE at Cardiff University on behalf of the What Works Centre for Children's Social Care. It aims to identify promising interventions and generate evidence to support decisions about larger scale trials in the future. This project in partnership with Southampton City Council bases social workers within schools with the aim to reduce referrals to children's social care, section 17 (s.17) involvement and section 47 (s.47) enquiries.

Southampton plan to embed a team of five social workers across 3 school 'clusters' which consist of 3 secondary schools and 15 feeder primaries, including one Pupil Referral Unit (PRU), to:

1. Undertake section 17 and section 47 assessments
2. Continue to work with the family throughout the time that a social work service is required, including, where necessary, legal proceedings

¹<https://whatworks-csc.org.uk/blog/apply-to-become-change-programme-partners-for-the-what-works-centre/>

All the Change Projects are at an early stage of development. We expect and encourage local authorities to vary the way that they are delivered over the course of the project. A key aim of the evaluation is to capture these changes.

We take a Realist approach to design, collection and analysis of data. The focus here is to understand the underlying mechanisms of the intervention (what makes it work) and the way that contextual factors can influence these. The Realist design involves a flexible and iterative approach to data collection in order to develop a deep understanding of how an intervention works and issues in implementing it. The evaluation will run from January 2019 to March 2020, when a final report will be published. An interim report will be published in July 2019.

Project Background

A high proportion of referrals to children's social care come from schools, and these often come predominantly from a relatively small number of schools. Most studies on social workers in schools have been qualitative and focussed on early intervention and prevention (Rose et al, 2006; Wilkin et al, 2008), rather than statutory social work. The aim of this Change Project is to fund and evaluate new ways of working in which social workers work in schools to prevent harm to children and deal more effectively with harm where it occurs. The evaluation will provide qualitative and quantitative evidence. Social workers will be based in schools and work closely with them, dealing with the full range of work of children's social care. They will be encouraged to explore creative ways of preventing the need for children's social care involvement. The projects intend to:

- Reduce the need for higher levels of statutory social work involvement (including allocation and child protection)
- Reduce the need for care entry or the commencement of the Public Law Outline
- Deal more swiftly and effectively with concerns about children
- Demonstrate cost-effectiveness in reduced demand for children's social care services overall.

Southampton is a unitary authority with varying amounts of need. Southampton has a high prevalence of children identified as having social, emotional and mental health (SEMH) difficulties and relatively high numbers of looked after children.

Southampton's project will base social workers within secondary schools and work with the children, families and staff within the school setting in order to achieve more positive outcomes for vulnerable children and families. They propose prevention interventions at all levels: primary (aimed at the general population), secondary (aimed at those families with risk factors), and tertiary (instances where maltreatment of a child has already occurred) to

address the needs of children in these school clusters and reduce the need for statutory services. Five social workers will be based in the secondary schools (2 in each cluster and 1 in the SEMH provision). One senior social work supervisor will support the five social workers across the three clusters.

The schools that will receive this intervention were selected due to their location in areas of higher deprivation and social care need. The two mainstream clusters have higher areas of social care referrals. The SEMH school cluster was selected due to the city's high rates of SEMH and it is anticipated that stronger links with the SEMH school and the statutory services will be beneficial. All three school clusters have good relationships with children's services and the head teachers were willing to engage in this project.

While there is already a strong link between these schools and social services, Southampton anticipate substantial reductions in the use of statutory services as a result of this project.

Research questions

The evaluation of the pilot study requires us to understand:

1. How and why the project was implemented as it was. This incorporates:
 - a) An understanding of how elements of implementation might be hypothesised to affect outcomes
 - b) Barriers and opportunities for rolling out this model more widely
2. Indicators of success – we define quantitatively and qualitatively our criteria for considering the project worthy of further evaluation on a larger scale.

The feasibility study will also include developing an approach to economic evaluation. In order to explore and evaluate a range of potential outcome measures for the final trial protocol, the pilot will address research questions in four key domains:

1. Evidence of promise

- What potential benefits do stakeholders (e.g. social workers, teachers, head teachers, children, and families) identify?
- Do there appear to be unintended consequences or negative effects?
- Is there evidence to support the intervention logic model or theory of change?

2. Feasibility

- How is the intervention implemented?
- What types of work are undertaken by social workers, how does this differ (or

- not) from the work they do anyway?
- How does the project delivery vary between schools?
- What are the characteristics of project delivery, school, community and families that might influence delivery or impact?
- How acceptable is the intervention:
 - To parents / carers?
 - To children and young people?
 - To teachers and other school staff?
 - To senior leaders, managers and social work practitioners?
 - To other professionals working with the families?
- What are the barriers and facilitators for delivery?

3. Indicative Evidence of Impact

- Is there preliminary evidence that social workers in schools positively affect rates of contacts, referrals, s.17 requests, s.47 inquiries, and care plans?
- If so, what is the magnitude of these effects?
- For whom i.e. do intervention effects vary for different groups?

4. Readiness for trial

- Is there a clear description of the service that would allow it to be implemented and evaluated in other places?
- This would include the features of schools, the processes and resourcing of the project and any other factors that participants identify as crucial in delivering the Southampton project successfully

Methods

This work will be undertaken in three primary phases, with an additional stream of ongoing monthly data collection from administrative records that feeds into each of the phases:

- Phase 1: January-February 2019
 - Development of logic models for programme theory and implementation
- Phase 2: May-June 2019
 - Refinement of logic models and assessment of progress
- Phase 3: November 2019 – February 2020
 - Indicative outcomes
 - Further refinement of programme theory

Ongoing data collection [March 2019 – February 2020]

The local authority will provide monthly returns on the indicators specified below. These will be used as a light touch review of progress. Analysis will also be used to inform data collection in Phases 2 and 3. Data to be collected each month is:

- Number of families worked with, broken down by agreed types of work (e.g. consultations, direct work, assessment)
- Number of referrals to CSC broken down by:
 - Number of children worked with under s.17, 47, and days in care for each school.
- Staff time and additional spending during the month (e.g. additional costs to school / community in the form of teacher time commitment)

Phase 1: Initial theory development [January - February 2019]

An initial logic model has been developed (see Appendix 1). It outlines a programme theory about what needs to happen in order to achieve the intended outcomes for the project, and how those outcomes relate to the inputs of the programme. In developing and explicitly articulating the hypothesised causal relationship between inputs, outputs and outcomes within the project, it is the first step towards a programme theory.

The programme theory will include what needs to happen in order to implement the project. The logic model will be developed through meetings with key stakeholders in and across projects. Draft models will be shared with key informants in the local authorities and amended and refined considering comments and feedback. By the end of the project the programme theory will provide an 'ideal type' description of the project, and a detailed description of the actions that need to happen in order to achieve the ideal project delivery.

Phase 2 – Implementation [June 2019]

During this phase the progress of the project against the logic model developed in phase 1 will be explored. The aim is to refine the logic model using the Realist Context-Mechanism-Outcome (CMO) configuration. This data will be gathered by:

- Analysing monthly returns of administrative data
- Observing the school based social worker project
- Formal and informal interviews with those delivering the project, families and other professionals (particularly teachers)
- 2-4 focus groups to develop and elaborate the logic model.

Data will be collected during two 'site visit' weeks, each with a two week break for data analysis and theory development – which will shape the data to be collected for the second site visit week. Realist data collection and analysis is driven by the developing theory (in this case the logic model), and therefore it is possible that including other individuals or ways of collecting data may also be appropriate.

Phase 3 – Outcomes assessment [November 2019 - January 2020]

For the pilot stage, we are using a quasi-experimental comparative design to estimate the impact of the intervention on the outcomes of interest. From the set of all schools in Southampton, we will create two groups::

Group	Profile	Estimated sample
Intervention	3 school clusters – 3 secondary schools and 14 feeder primaries and one Pupil Referral Unit	100-150 children
Matched comparator	<p>2 school clusters matched to intervention school clusters based on key trends in outcome variables (see Matching section).</p> <p>The SEMH cluster is particularly for children with social, emotional and mental health difficulties and are mostly Looked After Children - it is unlikely that there will be a sufficiently close neighbour and so there will be no matched comparator for the SEMH cluster.</p>	TBC (at most equal to the number of school clusters available for matching)

The complex nature of the intervention and the fact that this is a pilot means great care needs to be taken in drawing conclusions in relation to outcomes. This is because:

- a. we expect and anticipate that the intervention may be developed and refined over the course of piloting – as one of the aims of the project is to develop our understanding of school-based social workers
- b. the understanding, expertise and networks required to deliver a new service tend to develop over time – and it is therefore common for new ways of working to become more effective over time
- c. there are usually challenges in implementing new interventions – understanding what these may be and how to overcome them is a key aim of the pilot.

To help minimise the impact of these challenges, we have opted to conduct analysis only on outcomes during the Autumn term of 2019/2020 academic year, allowing a window for interventions to ‘bed in’.

The qualitative research accompanying the quasi-experimental analysis will help us understand the extent to which these factors influence implementation of the school-based social workers in Southampton. Nevertheless, we would still be cautious to draw any conclusions of impact due to these factors and findings will be considered ‘indicative evidence’ only.

Outcomes

Research question	Indicator	Method
Evidence of feasibility <i>Can the intervention be delivered practically and are the systems in process to enable the intervention to be easily scaled?</i>	Implementation: The extent to which schools are included as planned <ul style="list-style-type: none"> Number of school clusters (n=3) successfully engaged in the intervention– i.e. did the anticipated number of clusters take part and to what extent? 	Interviews
	75% of local authority staff (at SW, team manager and senior leader level) consider the intervention acceptable by Phase 2 data collection <ul style="list-style-type: none"> Likert scale negative – positive (5-point scale) 	Survey
	75% of school staff (at leadership and teaching staff level) consider the intervention acceptable by Phase 3 data collection <ul style="list-style-type: none"> Likert scale negative – positive (5-point scale) 	Survey
Evidence of promise <i>What evidence is there that the intervention can have a positive impact on outcomes?</i>	Perspectives of children / families / professionals on the role of SWs in schools <ul style="list-style-type: none"> Likert scale negative – positive (5-point scale) 	Interviews/ questionnaire/ focus groups
	<ul style="list-style-type: none"> 80% key school staff / practitioners (head teachers and DSLs) report engagement with school-based social workers 	Interviews/ questionnaire/ focus groups
	Head teachers’ recommendation <ul style="list-style-type: none"> Target of 10/18 would recommend 	Survey/ interviews

<p>Readiness for trial</p> <p><i>To what extent is the intervention used as anticipated and is the programme sufficiently codified to operate at scale?</i></p>	<p>To what extent is the intervention well defined?</p> <ul style="list-style-type: none"> • How does it differ across schools? E.g. in terms of the role of the school social worker, the tasks they undertake, the extent to which they are part of the school's pastoral team (and attend meetings), and balance of work between secondaries and feeder primaries. 	<p>Interviews/ Observation</p>
<p>Indicative Evidence of Impact</p>	<p>Reductions in Autumn 2019 term in:</p> <ul style="list-style-type: none"> • S.17 referrals to CSC • S.47 referrals to CSC • Days spent in care in each school <p>The effect on referrals and days spent in care will be estimated through a difference-in-difference with school clusters that have similar trends in section 17 assessments, section 47 investigations and days spent in care as comparator school clusters.</p>	<p>Administrative data</p>

Recruitment

Different forms of recruitment apply to participants depending on their role:

Social workers

Social workers in all participating teams will be approached to take part in the study. Victoria Silverwood (CASCADE link researcher for Southampton) will work with administrative and management staff in Southampton to identify and contact social workers. We will endeavour to ensure participation is not onerous and only collect data that is necessary for the evaluation.

School staff

School staff will be approached initially by social workers in the schools team, who will explain the study and ask if they would like to meet with a researcher. The researcher will give further details, answer questions, and proceed with informed consent procedures.

Children and families

Children and families will be recruited for qualitative interviews and observations. Those who have contact with the school social workers will be approached initially by social workers, who will explain the study and ask if they would like to meet with a researcher.

The researcher will give further details, answer questions, and proceed with informed consent procedures.

Data Method	Collection	Sample Size	Collection Timeline
Administrative data		<p>Monthly returns detailing numbers of:</p> <ul style="list-style-type: none"> ● Pupils in the schools ● Contacts/ referrals ● s.17 involvement ● s.47 enquiries ● PLO starts ● Care entry <p>Whole sample, broken down by school and year group:</p> <ul style="list-style-type: none"> ● Intervention (n=3) ● Matched comparator (at most equal to the number of intervention schools) 	April 2019 – March 2020 (submitted on 1 st of the month to cover preceding month – so first submission date is 01/04/19)
Interviews (social workers)	(social)	8-12 (SWs and senior staff)	May – June 2019
Interviews (social workers)	(social)	8-12 (SWs and senior staff)	Nov 2019 – Jan 2020
Interviews (other professionals)	(other)	10-20 (minimum of 2 per school cluster)	May – June 2019
Interviews (other professionals)	(other)	10-20 (minimum of 2 per school cluster)	Nov 2019 – Jan 2020
Survey (school staff)		50-100	Nov 2019 – Jan 2020
Questionnaires (social workers)	(social)	8-12	May – June 2019
Questionnaires (social workers)	(social)	8-12	Nov 2019 – Jan 2020
Focus groups (social workers and other professionals)	(social and other)	2-4 (to include social workers, school staff, and team around school practitioners)	May – June 2019

Observations and interviews (families, children and young people)	N= 15-20	Nov 2019 – Jan 2020
---	----------	---------------------

Matching

For the Difference in Difference analysis it is necessary to match intervention school clusters to comparator school clusters that most closely resemble them. The identifying assumption in a Difference in Difference (DiD) analysis is parallel trends in outcomes variables prior to the intervention. We will match on trends in section 17 assessments, section 47 investigations and the children looked after rate for each academic year group (Reception - Year 6 for primary, Year 7 - Year 13 for secondary schools) for 3 years prior to the intervention (2016-18).

For the most recent change in outcome pair, we will match on a least difference. This will be achieved by, for each change in outcome of each plausible treatment/comparator school cluster pair, taking the modulus of each difference and averaging these differences across the treatment/comparator school cluster pair. For each treatment school cluster, the lowest scoring pair will be first preference for matching. Matching will be done with replacement, such that a single comparator school cluster could be used as a match for multiple treatment school clusters. The robustness of the match will be tested using a Mann-Whitney U test on the hold-out (prior outcome change) differences.

The SEMH cluster is particularly for children with social, emotional and mental health difficulties and are mostly Looked After Children - it is unlikely that there will be a sufficiently close neighbour and so there will be no matched comparator for the SEMH cluster and no indicative evidence of impact analysis for the SEMH cluster.

Analysis

Our main statistical analysis will be a Difference in Differences (DiD) approach. This is a quasi-experimental approach which allows us to estimate the impact of the intervention by comparing trends with a comparator. DiD offers a robust alternative where randomisation is not possible, as in the case of this pilot study. It has been chosen here over other, similar, approaches because it uses a flexible regression framework that will make comparisons across multiple studies easier (such as those which may be undertaken in future).

In summary, to allow for the fact that this is a pilot study the comparative analyses will be:

Primary Analysis 1: Comparison of Autumn term 2019 outcomes

Using the combined outcome measure based on the outcome variables stated above, the DiD analysis will be compare means for the Autumn term in each of the last 3 years. The Autumn term has been chosen because we envisage the set-up impacts being greatest in the

period earlier in 2019. This provides a whole term – which should be enough to compare impact.

Secondary Analysis 1.: Theory informed analysis

It is possible that the qualitative research will identify that the Autumn Term comparison requires some variation. For instance, factors such as staff changes or inspection might mean that Autumn does not provide a valid comparison. Prior to analysis being undertaken qualitative data will inform variations in the primary comparison. The most likely variation being that ineffective implementation in a school suggests it should be excluded from the analysis.

Statistical techniques

For our primary quantitative analysis we will use a difference in differences approach. Prior to analysis, each school/cluster will be matched with one or more other schools/ clusters in Southampton who do not receive social workers in their schools, based on trends in our outcomes of interest². This matching having been completed, we will estimate the effect of the intervention, β_3 ;

$$Y_{ist} = \alpha + \beta_1 SW_s + \beta_2 T_t + \beta_3 (SW_s \cdot T_t) + \beta_4 X_i + \beta_5 \Gamma_s + \varepsilon_s$$

Where;

- α is a regression constant
- SW_s is a binary indicator of whether the school is a intervention school
- T_t is a vector of indicators of time, indicating the month/year in which the observation takes place after the implementation of the intervention
- X_i is a vector of participant level characteristics
- Γ_s is a vector of school level characteristics
- ε_s is an error term, denoting standard errors clustered at the level of the school (the level at which assignment takes place)

Inclusion criteria

For the main analysis an ‘intention to treat’ approach will be used, whereby all schools who were identified as recipients for the intervention at the outset will be included. This would include schools which were supposed to but did not in fact receive the intervention due to a failure of implementation.

However, as noted above, if qualitative analysis suggests that recipients of the intervention in schools where it was successfully implemented benefited from it, secondary analysis will include only these schools. In keeping with the exploratory nature of this pilot, this will help to clarify the potential effectiveness in sites where the programme was rolled out as

²

planned, through removing the potentially diluting effect of other schools where this was not the case. In order to evaluate the treatment effect on treated (ATET), we will use a matched exclusion approach, whereby the intervention schools where implementation failed will be excluded from the analysis, as well as their comparator schools based on the initial matching.

Cost Evaluation

An economic analysis will be incorporated within the study to test processes for the collection of costs and outcomes data associated with the intervention and its comparator/s. The main aim of the analysis is to understand which costs and outcomes are most relevant for the future trial of schools based social workers and develop an underlying framework of a future economic evaluation.

A cost-consequence analysis (CCA) will be carried out to achieve this. A list of disaggregated costs and a range of outcomes appropriate to the intervention will be identified, measured and valued. The CCA will be carried out from a public sector perspective, capturing the direct costs of implementing the intervention, other school-based costs, cost to social care services and the cost of resource use within the public sector. Data on more than one outcome measure will be collected and reported separately; these will include number of referrals, s.47 investigations, CP plans and PLO outlines.

Mean costs and outcomes for each group will be estimated together with appropriate measures of uncertainty such as standard errors and confidence intervals. We will also calculate the raw costs of setting up the intervention.

Ethics

Ethical approval will be obtained from Cardiff University Research Ethics Committee prior to data collection.

Data Handling

All data will be handled in accordance with GDPR regulations.

Personnel

David Westlake will lead the project, with Victoria Silverwood providing day-to-day management of the relationship between the evaluation team and the research site. Other members of CASCADE research team will be involved during periods of data collection and analysis.

Risks

This section outlines the risks to the anticipated risks that may arise and steps that will be taken to mitigate against these.

Risk	Mitigation
Southampton colleagues are unable to support research administration or data collection	This is built into the contract between Cardiff and Southampton, to aid the effective evaluation of the project
School staff are unwilling to participate in the evaluation	The primary analysis would still take place, as it uses other data, however this could weaken the qualitative aspect. We have already planned presentations and meetings with senior school staff to introduce the project and build relationships with them. This aims to ensure engagement at an early stage, which we hope to continue throughout.
Families are unwilling to participate	We have extensive experience of recruiting families to research projects in Children’s Social Care, achieving rates of up to 65% in previous studies through a model that is similar to this – involving social workers who introduce the study to families. We are therefore confident that a sufficient number of families will participate, but we will work with Southampton to boost participation if difficulties arise.
Delays caused by changes in leadership, OFSTED inspections, other external events	We will work closely with colleagues in Southampton to manage and minimise any disruption caused by these factors.

Timeline

Phase	Timing	Lead
Refine evaluation design	February 2019	CASCADE
Project launch	March 2019	Southampton
Phase I data collection	May – June 2019	CASCADE

Interim reporting	July 2019	CASCADE
Phase 2 data collection	November 2019 – January 2020	CASCADE
Pilot report	March 2020	CASCADE

References

Bengtsson, M. (2016) How to plan and perform a qualitative study using content analysis, *NursingPlus Open*, V2, 8-14

Burnard, P. (1991) Interpreting text: an alternative to some current forms of textual analysis in qualitative research, *Social Sciences in Health*, VI, 236-245

Rose, R., Smith, A., Ali, S. and Gray, T. 2006. *Extended services in and around schools in Derbyshire*. Northampton: University of Northampton School of Education, Centre for Special Needs Education and Research.

Wilkin, A., Murfield, J., Lamont, E., Kinder, K. and Dyson, P. 2008. *The value of social care professionals working in extended schools*. [Online]. Slough: National Foundation for Educational Research (NFER). Available at <https://www.nfer.ac.uk/publications/SCX01/SCX01.pdf> [Accessed: 18 February 2019].

Appendix I – Draft Logic Model

Southampton Logic Model - School-based Social Workers

