November 2020 | Trial Protocol

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TRIAL PROTOCOL: HAPPIER HEALTHIER PROFESSIONALS - SOCIAL WORKERS INSPIRING NEXT GENERATION (SWING)

PROJECT TITLE	Happier Healthier Professionals - Social Workers Inspiring Next Generation (SWING)	
INTERVENTION DEVELOPER	What Works for Children's Social Care	
DELIVERY ORGANISATIONS	What Works for Children's Social Care, Frontline	
EVALUATOR	What Works for Children's Social Care	
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TYPE OF TRIAL	Two-armed randomised controlled trial	
CONFIRMED PARTNERS	Frontline	
PRIMARY OUTCOME	Social worker wellbeing	
SECONDARY OUTCOME(S)	Social worker sickness absence; Burnout; Sense of connection to profession	



Background

Due to the emotional nature of their work, frontline social workers experience high workloads, stress, and burnout. Consequently, social workers have high rates of employee turnover and sickness absence, creating disruption within services. Research suggests social worker absence and turnover has a direct impact on the experience of children and families they work with.

Emphasising the importance of one's work through anecdotes and narratives coming from senior-level colleagues (e.g. managers) can have a significant impact on employee performance and the extent to which they feel dedicated to their jobs.¹ This finding has been explained by these stories acting as resources that can help to change as well as make sense of employees' daily experiences.

Moreover, the experience of thriving and developing at work is thought to be embedded within the social environment, e.g. learning and knowledge-sharing typically takes place through our daily work social interactions.² For instance, individuals who learn about what their coworkers are doing are likely to learn from the various strategies and approaches used by coworkers.³ This suggests that the ability to thrive and ascribe meaning to one's work is related to the extent to which we gain access to opportunities for learning and advice from coworkers.

Lastly, assigning positive meaning to particular elements of one's work (particularly work elements that may be typically seen as more negative) can allow individuals to reappraise particular work events as opportunities for growth rather than loss, and can help them to address setbacks and work threats by prompting them to examine what is important to them.

Research Aims

This research programme aims to support the social work profession by addressing how to increase social worker overall wellbeing and simultaneously decrease turnover and sickness absence rates.

Specifically, we implement the Social Workers Inspiring Next Generation (SWING) email programme, involving a suite of 8 weekly text messages sent to social work participants from two different sources of social work training: year 2 participants at Frontline (who are

¹ Grant, A. M. (2008). The significance of task significance: Job performance effects, relational mechanisms, and boundary conditions. *Journal of applied psychology*, *93*(1), 108.

² Spreitzer, G., Sutcliffe, K., Dutton, J., Sonenshein, S., & Grant, A. M. (2005). A socially embedded model of thriving at work. *Organization science*, *16*(5), 537-549.

³ Bandura, A. 1977. Social Learning Theory. Prentice-Hall Inc., Englewood Cliffs, NJ.

⁴ Spreitzer, G., Sutcliffe, K., Dutton, J., Sonenshein, S., & Grant, A. M. (2005). A socially embedded model of thriving at work. *Organization science*, *16*(5), 537-549.



qualified social workers in their ASYE year at local authorities) and final-year social work students at other social work education providers (universities) on placements. The messages are written by Frontline alumni and other experienced social workers, and emphasise the shared experiences, challenges and rewarding nature of social work, promoting a sense of professional identity. We are seeking to establish the impact of the intervention on employees' rates of wellbeing and associated secondary outcomes including sickness absence, burnout, and a sense of feeling connected to one's profession.

Research Design

The trial design is an individual-level randomised controlled trial, with half of the social work participants assigned to the treatment (receiving the SWING programme) and the other half to the control group (who do not receive the programme).

We will administer surveys to participants placed within local authorities to measure subjective wellbeing, sickness absence and two other mechanisms, at pre-intervention and post-intervention.

We will recruit, analyse and report results in two stages. We will report interim results from the first stage (anticipated to be around 450 participants before attrition) in the summer of 2021, and the second stage (anticipated to be 900 participants before attrition, which includes the original 450) in early 2022.

Outcome Measures

- **Primary outcome:** Subjective wellbeing combining cognitive and affective components (measured via surveys)
- **Secondary outcomes:** Staff sickness absence, Burnout, and Sense of feeling connected to one's profession (measured via surveys).
- **Exploratory outcomes:** Turnover (measured via administrative data)

Analyses

We will use linear regression models to analyse primary and secondary outcome measures. We will also undertake an implementation and process evaluation, a fiscal cost-effectiveness ratio of the intervention, and further exploratory analysis on levels of staff turnover.

Correspondence

If you'd like to get in touch about the project, please email: research@whatworks-csc.org.uk



Contents

Introduction	
Outcomes and Data	
Model Specification	
Reporting	27
Risks	32
Timeline	33
Ethics	34
Data Protection	39



Background and Problem Statement

The demanding and emotional nature of frontline social work means that employees face particularly acute challenges relating to stress, burnout, and high workloads, resulting in time poverty. These are outcomes we have good reason to believe are antithetical to wellbeing. This in turn likely contributes to high levels of turnover in the social work profession (15.1% per year across England in 2018/19).^{5.6}

High incidences of sickness absences and turnover create disruption within these services, and increase the workload of other frontline employees, meaning they have less time to be available to each child/family or service user. Therefore, this risks decreasing the quality of the support that they can provide, with research suggesting that has a direct impact on the experience of the children and families they work with.

Frequent changes in social workers has been associated with a lack of trust amongst children in care. A study by Coram and the University of Bristol found a significant relationship between lack of trust amongst looked after children, and their having had three or more social workers in the past 12 months.⁷ If a child does not feel they have trust within the relationship, they are less likely to discuss issues openly with their social worker, potentially constraining the therapeutic relationship.⁸ Furthermore, within many studies, children state their need for fewer changes in their social worker.^{9,10,11,12,13}

In the years 2017/18, 1 in 4 children in care experienced two or more changes of social worker. In local authorities with higher rates of social worker turnover and agency staff, children are more likely to experience multiple changes of social worker in a year. Therefore, we can reason that the instability within the social work workforce is adversely affecting the experience of children in care.¹⁴

Interventions designed to improve wellbeing and reduce social workers' burnout could therefore be expected to lessen turnover and indirectly also improve the experience of the children and families they serve. Wellbeing is also important in and of itself - all workers, especially those doing a public good - deserve to be in environments that promote their

⁵ Department for Education (2019). Longitudinal study of local authority child and family social workers (Wave 1). Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/826965/LongCAF_Wave1_re port_IFF_DfE_August19.pdf

⁶ From the <u>Local Authority Interactive Tool</u> (LAIT).

 ⁷ Selwyn, J., Magnus, L., & Stuijfzan, B. (2018). Our lives our care: Looked after children's views on their well-being 2017.
 Retrieved
 11
 June
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 $[\]label{eq:http://www.bristol.ac.uk/media-library/sites/sps/documents/hadleydocs/our-lives-our-care-full-report.pdf$

⁸ Oliver, C. (2010). Children's views and experiences of their contact with social workers: a focused review of the evidence.

⁹ Barn, R., Andrew, L., & Mantovani, N. (2005). *Life after care: The experiences of young people from different ethnic groups.* Joseph Rowntree Foundation.

¹⁰ Biddulph, M. (2006). Failed by the System: The Views of Young Care Leavers on Their Educational Experiences, Barnardo's Policy and Research Unit, and Supporting Children in Public Care in Schools: A Resource for Trainers of Teachers, Carers and Social Workers. By John Holland and Catherine Randerson.

¹¹Commission for Social Care Inspection (2007) Children's Services: CSCI findings 2004-07, London: Commission for Social Care Inspection.

¹² OFSTED (2009) Children's Care Monitor 2009, London: OFSTED.

¹³ Mainey, A., Ellis, A., & Lewis, J. (2009). Children's views of services: A rapid review. London: National Children's Bureau.

¹⁴ *UK Social Workers: Working Conditions and Wellbeing.* The British Association of Social Workers. (2019). Retrieved 11 June 2020, from https://www.basw.co.uk/system/files/resources/basw_42443-3_1.pdf.



wellbeing. However, until recently there have been few rigorous evaluations of such interventions in the UK.

In response to these challenges, the Happier Healthier Professionals (HHP) research programme aims to address social worker sickness absence and wellbeing through light-touch, low-cost interventions informed by behavioural science. Identifying successful examples of such interventions, which can be easily adopted by local authorities, has the potential to have a meaningful positive impact on the UK workforce of 30,700 FTE social workers¹⁵ if rolled out widely. The evidence base on wellbeing interventions of this kind in social work settings is currently lacking.

 ¹⁵Department for Education (2019) Official statistics: Children and family social work workforce in England, year ending 30

 September
 2019.

 Available
 at:

 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/868384/CSWW_2018-19_Te

 xt.pdf



Intervention and Logic Model

Intervention: What will be implemented?

The intervention will involve sending a programme of eight weekly messages to social workers in their second year of the Frontline programme, and final-year students from other social work education providers (universities). We refer to these groups collectively as 'participants'. The messages are written by Frontline alumni (called 'Fellows') and experienced social workers, emphasising and celebrating the shared experiences of those in the profession. The messages will be delivered via text message or email, depending on the preference and context of the education organisation. Messages will be personalised with the participant's first name, and will be sent from the name of the programme (e.g. 'Frontline' or 'MSc Social Work Programme at X University').

Weekly topics include the importance of relationships with social work colleagues and of self-care and life-work balance. Participants will be invited to respond to the messages they receive each week, and a link will be included in the body of the weekly message to a page where they can share their own thoughts. Responses will be reviewed at the end of each week, and the following week's message will include a featured response from the week before (e.g. week 2 message will include a response from a participant who responded to the week 1 message). If no suitable responses are shared, a pre-prepared contribution from a qualified social worker will be included.

The eight weekly messages confirmed to be sent to intervention recipients are included in Appendix A. This messaging will also be used for the other partner organisations, with the possibility of changes to the content in 1-2 themes to reflect differences in the participant cohorts.

Rationale: What is the theory behind the intervention?

Quality connections with others are a core component of wellbeing,¹⁶ and evidence suggests that it is not just connections in our personal lives, but also those made at work which can have an impact on a range of positive outcomes. The SWING intervention is designed to emphasise the shared experiences, challenges and rewarding nature of social work, promoting a sense of professional identity, which we hypothesise will positively affect overall wellbeing. Research supporting this theory is outlined below:

In a study of over 650 employees and their supervisors at both a city government (public-sector) and for-profit company (private-sector), workplace loneliness was found to be related to lower levels of job performance.¹⁷ This suggests that one's sense of connection to others can have an impact on important work outcomes.

¹⁶ Ryff, C. D., & Singer, B. (1998). The contours of positive human health. *Psychological inquiry*, *9*(1), 1-28.

¹⁷ Ozcelik, H., & Barsade, S. G. (2018). No employee an island: Workplace loneliness and job performance. Academy of

Management Journal, 61(6), 2343-2366.



Moreover, there is evidence to suggest that newer employees could reap more benefits from social connection interventions than more experienced employees. In a study which involved randomising employees to either engage in a gratitude exercise, or engage in that task combined with a social connection intervention, newer employees experienced more benefits from the social connection intervention and more potential for growth and development in their work than employees who were at their jobs for longer.¹⁸

The Job Demands-Resources (JD-R) model is a well-established framework that defines job demands as psychological, physical, social or organisational elements of one's job, to which an employee needs to exert effort in order to manage them.¹⁹ The JD-R model suggests that excessive job demands (e.g. high workload), are key predictors of burnout, whereas other elements of one's job can help to buffer employees against burnout (e.g. having strong social support and relationships). Intervention-based studies formulated using the JD-R model have been found to support the model across different populations of employees, including police officers,²⁰ teachers, and hospital nurses.²¹ Moreover, there is evidence to suggest that employees are at risk earlier in their careers.²²

The current study aims to understand ways to increase new social workers' sense of connection to their profession, and explore whether this can improve wellbeing, and subsequently reduce burnout and sickness absence rates. We also collect turnover data as part of an exploratory analysis - previous research has shown that interventions that focus on increasing employees' sense of social belonging and support at work can subsequently reduce the likelihood of them leaving the organisation later on.²³

Recipients: Who is taking part?

Our sample consists of recently qualified social workers in their ASYE year, and those who are in the process of qualifying as a social worker. In the first instance, we expect these to come from two cohorts:

• Social workers in the second year of their Frontline programme; these are qualified social workers, having completed a PGDip in social work, working within local authorities in their Assessed and Supported Year in Employment (ASYE) year.

¹⁸ Winslow, C. J., Kaplan, S. A., Bradley-Geist, J. C., Lindsey, A. P., Ahmad, A. S., & Hargrove, A. K. (2017). An examination of two positive organizational interventions: For whom do these interventions work?. *Journal of occupational health psychology*, 22(2), 129.

¹⁹ Bakker, A. B., Demerouti, E., & Euwema, M. C. (2005). Job resources buffer the impact of job demands on burnout. *Journal of occupational health psychology*, *10*(2), 170. ²⁰ Van den Heuvel, M., Demerouti, E., & Peeters, M. C. (2015). The job crafting intervention: Effects on job resources,

 ²⁰ Van den Heuvel, M., Demerouti, E., & Peeters, M. C. (2015). The job crafting intervention: Effects on job resources, self-efficacy, and affective well-being. *Journal of Occupational and Organizational Psychology*, *88*(3), 511-532.
 ²¹ Rickard, G., Lenthall, S., Dollard, M., Opie, T., Knight, S., Dunn, S., ... & Brewster-Webb, D. (2012). Organisational

²¹ Rickard, G., Lenthall, S., Dollard, M., Opie, T., Knight, S., Dunn, S., ... & Brewster-Webb, D. (2012). Organisational intervention to reduce occupational stress and turnover in hospital nurses in the Northern Territory, Australia. *Collegian*, *19*(4), 211-221.

²² Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. Annual review of psychology, 52(1), 397-422.

²³ Linos, E., Ruffini, K., & Wilcoxen, S. (2019). Reducing Burnout for 911 Dispatchers and Call Takers: A Field Experiment (No.

^{1158).} EasyChair.



• Final-year social work students from BA/BSc and MA/MSc university courses, who spend 100 days of the year on placement within local authorities or other organisations.

These cohorts were selected for initial recruitment as they have similarities with respect to the kinds of pressures and challenges they are likely to face over the course of their year. For the Frontline cohort, though qualified social workers after their first year on the programme, this will be their first time experiencing practicing as a qualified social worker, which will undoubtedly be daunting. Similarly, social work students in their final year of academic courses undergo a 100-day placement at a local authority or other organisations where they will conduct direct work with children and families. This marks a considerable increase in pressure from their academic work, and the challenges associated with frontline work of this kind are still likely to be substantial.

The step-up for Frontline participants is likely to be more intense given that they will be case-holding for the first time, but we expect that the social work students will experience many of the same challenges in the work they undergo on their placements. This is supported by discussions with social work professors at universities, who cited burnout as a challenge for students on their placements.

While we anticipate recruiting sufficient numbers of participants from Frontline second-years and universities as outlined below, we will consider extending the sample to other similar cohorts such as other newly qualified social workers, alternative social work education programmes and/or first-year Frontline participants in order to reach the desired sample size if required. Similarly, while there will be differences in the experiences of these cohorts (with newly qualified social workers potentially experiencing a bigger change than students or year 1 Frontline participants), the challenges are likely to be sufficiently similar for the intervention to be appropriate for each group.

Participants in the first stage of the research are:

- 280 Frontline participants who have recently transitioned from year 1 to year 2 of the programme in September 2020.
- An expected 170 further participants (final year undergraduate or postgraduate students) to be recruited through social work departments at universities.

There are 317 in the total stage 1 Frontline cohort going into their second year, but 37 participants who were already involved in a separate peer mentoring programme were removed from our sample at the request of Frontline.

At the time of publication (October 2020), recruitment is ongoing for other social work education providers to add final-year students from university social work courses to the stage one sample. Implications for sample size and power are discussed on page 17 below.

We anticipate that participants in the second stage of the research will be:

 280 Frontline Participants transitioning from year 1 to year 2 of the programme in September 2021.



• An expected 170 further participants (final year undergraduate or postgraduate students) to be recruited from social work departments at universities.

Procedures: How will it be implemented?

We will collect content for the eight messages from Frontline graduates - known as 'Frontline Fellows' - and experienced social workers prior to the launch of the programme. To do this, we will ask Frontline to reach out to Frontline Fellows and request messages. Messages from experienced social workers will be collected from social workers embedded within WWCSC and other contacts from the organisation's network (e.g. members of the Stakeholder Advisory Panel).

Each Frontline Fellow and experienced social worker will be asked to provide their thoughts around a set of themes chosen to be used in weeks 1-8 of the programme (see Appendix B for message request to Frontline Fellows).

The WWCSC research team will then review the responses alongside our academic partners. Messages will be chosen for inclusion according to which the research team believes will be the most impactful, and which best encapsulate a given week's theme.

The finalised messages will be sent to participants by Frontline via text message through a messaging service called SMS Broadcast. For participants recruited through universities, the method of delivery will be chosen in conjunction with the research partner (e.g. email may be the more appropriate method of delivery if they do not have access to participants' phone numbers or a text messaging system).

Location: Where will it be implemented?

Frontline participants will receive messages via text message to their personal phone numbers. Participants recruited in the future via other education providers may receive the messages by email or text message depending on the organisation's preferred method of delivery. Therefore the intervention may be received by participants in the office, during travel to or from a work commitment, or in a remote working environment.

Dosage: When, how often and for how long will it be implemented?

Each participant in the treatment group will receive 8 messages (via text or email) over 8 weeks. The endline wellbeing survey will be sent the week after the intervention ends and will run for three weeks, while administrative data collection (reporting turnover, for use in exploratory analysis) will take place at 3 and 6 month intervals after the launch of the intervention.

The intervention will be launched with Frontline in November 2020, and we anticipate launching with additional education providers from January 2021 onwards when the first phase of recruitment is complete.



Logic Model



Impact Evaluation

Research Questions

The research questions are:

Primary

• RQ1: What impact does the Social Workers Inspiring Next Generation (SWING) intervention have on the wellbeing of participants who respond to a wellbeing survey?

Secondary

- RQ2: What impact does the SWING email intervention have on the sickness absence of participants who respond to a wellbeing survey?
- RQ3: What impact does the SWING email intervention have on the burnout of participants who respond to a wellbeing survey?
- RQ4: What impact does the SWING email intervention have on the sense of connection to the profession of participants who respond to a wellbeing survey?
- RQ5: What is the fiscal cost-effectiveness ratio of the intervention?

Trial type and number of arms		Randomised controlled trial, two arms
Unit of randomisation		Individual
Stratification variables (if applicable)		N/A
Primary outcome	Variable	Participant subjective wellbeing (combining evaluative and affective components)
	Measure (instrument, scale)	Schedule for Positive and Negative Affect, Satisfaction with Life scale (survey data, scale from 0-10 and 1-5 respectively)
Secondary outcome	Variable(s)	Participant sickness absence
1	Measure(s) (instrument, scale)	Participant self-reported sickness absence in the past 2 months before receiving the survey (survey data, number of days)
Secondary outcome 2	Variable(s)	Mechanism 1: Burnout
	Measure(s)	Copenhagen Burnout Inventory (survey data,

Design

	(instrument, scale)	scale from 1-5)
Secondary outcome 3	Variable(s)	Mechanism 2: Sense of feeling connected to one's profession
	Measure(s) (instrument, scale)	Professional Identification Scale (survey data, scale from 1-7)
Exploratory outcome	Variable(s)	Turnover
	Measure(s) (instrument, scale)	Whether or not a participant has left the programme, measured at 3 months and 6 months post intervention launch

Our primary outcome measure is participants' subjective wellbeing, as measured by survey data recorded by a survey sent approximately one to two weeks after the final SWING message. This reflects the policy priority to identify workplace interventions which can, by positively impacting features of social workers' professional environment, have a downstream effect on their overall wellbeing.

The question of whether benefits are also seen in rates of sickness absence is also explored as a secondary outcome via the collection of participants' self-reported number of days of sickness absence taken in the past 2 months before they received the second survey. This will allow us to understand whether the intervention has any effects on sickness absence rates, reflecting another policy priority to reduce sickness absence and turnover rates amongst social workers.

Staged and Time-Bound Recruitment

To ensure that the trial is adequately powered to detect an effect on our outcomes, we utilise a two-staged approach to recruitment, analysis and reporting:

Stage One:

We anticipate that our sample, by January 2021, will include participants from one cohort of Frontline social workers and students from two university social work departments. Factoring in an expected 70% survey completion rate, we anticipate our stage one sample to be 315 participants. Implications for minimum detectable effect size are outlined on page 17 below. Though underpowered based on effect sizes found in trials of similar interventions, interim findings will be reported in the summer of 2021, for whatever sample we have available at this time point.



Stage Two:

We anticipate that in the second stage of implementation and analysis we will double our total sample (through additional cohorts from Frontline cohort and/or university departments), to give us a total sample of 900 and adequate statistical power to detect an effect size of that found in similar interventions.

To ensure we are time-bound and cannot recruit indefinitely, we will continue to recruit new cohorts from different education providers until either of the following conditions is met (whichever occurs first):

- Following the recruitment of a provider, our total sample is equal to or exceeds 900 (prior to anticipated 30% attrition). Factoring in an expected 70% survey completion rate, we anticipate our stage two sample to be 630 participants.
- We reach the end of February 2022.

If we do not manage to recruit the desired sample by the end of February 2022, we will not recruit any further participants, and will report results on the stage one and stage two sample in Spring 2022. Since we will work on recruiting cohorts from a given provider, our sample may exceed 900 (for example, if we had 780 from existing cohorts and providers, but a new provider then expanded the sample by 200).

Randomisation

Randomisation will be conducted at the individual-level, using baseline data provided by organisations before the baseline survey is sent. As we are undertaking rolling recruitment, randomisation will be conducted in stages:

- October 2020: Frontline cohort from stage one
- January 2021: Other education providers cohort from stage one
- October 2021: Frontline cohort, stage two
- January 2022: Other education providers cohort, stage two

We do not stratify within these randomisations, but the staged randomisation means that we are, in effect, stratifying by the four cohorts listed above. We will report balance on age and local authority. Randomisation code is included in appendix C.

We will ensure that we keep records of which social workers are assigned to which arm (pseudonymised, meaning they are stored by unique IDs with no variables that would allow instant identification). We, but not the project coordinators at the partner organisations, will be blind to the group allocation.

An individually-randomised design was chosen to maximise statistical power to detect effects on our outcome measures. This does, however, increase the possibility of spillover effects between participants embedded within the same local authorities. We discuss plans to mitigate this risk on page 43.



Participation

Frontline expressed interest in participating in this round of HHP trials in January 2020. Between October 2019 and January 2020, WWCSC designed a series of interventions following focus groups and interviews with social workers and consultation with academics and behavioural scientists from partner academic institutions, and suggested the SWING programme to Frontline as a suitable intervention for their cohort. In the later stages of the intervention development (August and September 2020), Frontline fellows provided input into the final content of the programme.

Additional social work education providers were contacted with details of the research programme in July 2020 and initial discussions were held in August and September (Appendix D). At the time of publication (October 2020), no participation of additional organisations in the trial has been confirmed but we aim to continue recruiting for the first and second phase of the trial to ensure the trial has adequate statistical power (see details on page 17).

As noted above, participants in the first stage of the research are:

- 280 Frontline participants transitioning from year 1 to year 2 of the programme in September 2020.
- An expected 170 further participants (final year undergraduate or postgraduate students) to be recruited through social work departments at universities.

We anticipate that participants in the second stage of the research will be:

- 280 Frontline Participants transitioning from year 1 to year 2 of the programme in September 2021.
- An expected 170 further participants (final year undergraduate or postgraduate students) to be recruited from social work departments at universities.



Participant Flow Diagram





MDES calculations

MDES (displayed in the table below) was calculated with Stata using the 'power' package. Code is provided in Appendix C.

	Subjective wellbeing		I
		Stage One	Stage Two
MDES (Cohen's D)		0.31	0.22
Mean baseline		6.3	6.3
Baseline / endline correlation		-	-
Standard deviation		1.8	1.8
Alpha		0.05	0.05
Power		0.8	0.8
One-sided or two-sided		Two-sided	Two-sided
Total sample		450	900
Assumed attrition / inability to match data		30%	30%
Anticipated sample size after attrition (social workers)	Treatment	157	315
	Control	157	315
	Total	315	630

We now explain the assumptions that led to these numbers.

Primary Outcome: Wellbeing

Baseline wellbeing, standard deviation and baseline correlation

A baseline rate of subjective wellbeing of 6.3 and standard deviation of 1.8 was obtained from the pre-intervention survey data completed by social workers from who participated in the first round of Happier, Healthier Professionals trials in 2019, specifically including control participants only from the goal-setting and symbolic awards trials (n=69). Baseline endline correlations were 0.4 for those who had completed both T1 and T2 surveys. However, due to the high level of missingness in T1 wellbeing from those who complete T2, the association between baseline and endline for the analytical sample became quite low ($R^2 = 0.1$).



As such we do not include this correlation in our calculations, preferring to provide a conservative estimate. In the event that a significant proportion of our participants provide wellbeing at both T1 and T2, if other assumptions hold, the MDES will be lower. We also collect relatively few control variables (listed in the 'Analysis Plan' section on page 22) and do not anticipate them to add much explanatory power to the models. We have therefore excluded them from our MDES calculations.

Sample size

Our stage one total sample size was estimated from the numbers of Frontline participants entering the second year of the programme in 2020, plus the two other organisations we anticipate launching the intervention with in January 2021. Our anticipated survey response rate was based on discussions with Frontline, which was informed by their own experience of frequently surveying their participants. Sample size was held as a constant to calculate MDES for our primary outcome.

Our stage two sample was based on the assumption that we will recruit the same anticipated total number of participants again across social work education providers in summer 2021.

Attrition / inability to match data

Since our primary outcome - subjective wellbeing - is recorded via opt-in surveys, we anticipate substantial attrition in our outcome data. The first round of HHP trials, which averaged around 30% response rate, provides us with some information from which to estimate responses for this trial. However, as the participants are affiliated with education providers, we anticipate that they will be more engaged and therefore more likely to respond to communications sent by their educational institutions. Frontline have also indicated that they have experience in maximising survey responses and are willing to focus efforts on eliciting responses to the T2 survey, while discussions with other institutions also indicated they would anticipate a higher response rate. We also hope to increase the response rate with a new strategy for incentivising survey completions (outlined in 'Survey plan' section below). We therefore anticipate a completion rate of 70%.

It is also possible that our intervention, if it has an effect, might influence the likelihood of participants completing the survey, which may add another possible source of bias into the analysis. As we are reliant on participants' self-selection into surveys there is little we can do to mitigate this, though it should be noted as a limitation of our findings. We will however conduct and report balance checks to see whether there is a difference in attrition between treatment conditions.

Survey plan

To increase survey completion, we will use various incentivisation methods:

• We will work with the education providers to identify suitable survey launch dates when surveys will be distributed to participants via email.



- The initial email to participants containing the survey links will include short instructions (see appendix E for email language). We will also send two follow-up emails to participants to remind them to complete the survey one 7 days after the first survey email was sent, and one the day before the survey deadline (see appendix F for email language).
- To incentivise survey participation, we will make a charitable donation (£1 per response) to a charity chosen by the social work education provider.
- The charity chosen by Frontline was <u>Become</u>, a charity that aims to help children in care and young care leavers

Outcome measures

Data Collection

Survey data:

Survey data will be collected twice - shortly before the launch of the intervention (T1) and shortly after the final SWING message is received by participants (T2). Surveys will be live for two to three weeks. Full survey measures are included in appendix G, with the survey consent form included in appendix H. Survey instructions which will be sent via email with the survey link are included in appendix E. Participants recruited from different education providers will be provided with the surveys and intervention shared at later time-points, but they will all follow the same process as above.

Administrative data:

Partner organisations provide administrative data at three time-points:

- Pre-randomisation this includes a unique ID that can then be matched with the participants' survey data; age; and which local authority the participant is on placement with.
- Interim (12 weeks after the introduction of the intervention) specifically this includes whether or not the participant had left the course over the intervention period, for use in the exploratory analysis.
- Endline (24 weeks after the introduction of the intervention) again, collecting turnover information for exploratory analysis.

Primary Outcome

Subjective wellbeing (SWB)

To measure participants' SWB, we use two survey scales on evaluative and affective aspects of wellbeing, standardise them using z-scores, then sum the results to produce one



composite measure. These scales, validated by Whillans and Dunn,²⁴ are the 'satisfaction with life' scale (evaluative) and the 'Positive Affect and Negative Affect' scale (affective). SWB is defined as referring to the various types of subjective evaluations of one's life, and recent guidance states that measures of SWB should include both judgment-focused measures like life satisfaction and more affective measures - both which are included above. ²⁵ Providing the correlations between both above scales are above 0.50, we will standardise and combine these measures to create an overall Subjective Wellbeing (SWB) composite score. Otherwise, we will do separate regressions on each component.

Evaluative component: First, respondents will report their overall life satisfaction by answering the following question: *"Taking all things together, how happy would you say you are?" on a scale from 0 = Not at all to 10 = Extremely."*

Affective component: To capture the affective component of SWB, we will ask participants to rate their positive and negative affect in the last four weeks using the Schedule for Positive and Negative Affect: *"Please think about what you have been doing and experiencing DURING THE PAST FOUR WEEKS. Then report how much you experienced each of the following feelings, using the scale below."* Participants are then asked to rate the following items on a 5-point scale (1 = Very rarely/never to 5 = Very often/always): Positive, Bad, Negative, Unpleasant, Good, Pleasant.

Secondary Outcomes

Secondary outcome 1

Sickness absence:

Participants' sickness absence is also measured through the wellbeing survey described above. Participants are asked how many days of sickness absence they have had in the previous two months, "How many days have you been absent from work at your Local Authority due to sickness/illness during the past two months?". A baseline measure of participants' days of sickness absence in the previous 12 months will be collected in the T1 survey.

Mechanisms

We also included three validated measures to test the effectiveness of the intervention on mechanisms identified in the logic model.

²⁴ Whillans, A.V., & Dunn, E.W. (2018). Valuing Time Over Money Predicts Happiness After a Major Life Transition: A Pre-Registered Longitudinal Study of Graduating Students. Harvard Business School Working Paper 19-048. Available at: https://www.hbs.edu/faculty/Publication%20Files/19-048_a3814174-e598-46af-ae70-0c81cdffdb9e.pdf

²⁵ Diener, E., Lucas, R. E., & Oishi, S. (2018). Advances and open questions in the science of subjective well-being. *Collabra. Psychology*, *4*(1).

Secondary outcome 2

Burnout:

To measure burnout, we included the Copenhagen Burnout Inventory.²⁶ The scale contains 17 items in total and measures three separate facets of burnout through three subscales: personal burnout, work-related burnout, and client-related burnout:

- Personal burnout (6 items) is measured on a 5-point scale (1 = Never to 5 = Always).
- Work-related burnout (7 items) is measured on a 5-point scale for items 1-4 (1 = Never to 5 = Always), and on a 5-point scale for items 5-7 (1 = To a very low degree to 5 = To a very high degree), with item 4 being reverse-scored.
- Client-related burnout (6 items) is measured on a 5-point scale for items 1-4 (1 = To a very low degree to 5 = To a very high degree), and on a 5-point scale for items 5-6 (1 = Never/almost never to 5 = Always).

For each subscale, the participant's response to each item will be scored in the following way:

- Never/almost never = 0, Seldom = 25, Sometimes = 50, Often = 75, Always = 100. The total score on the subscale is the average of the scores on the items.
- To a very low degree = 0, To a low degree = 25, Somewhat = 50, To a high degree = 75, To a very high degree = 100. The total score on the subscale is the average of the scores on the items.

Scores of between 50-74 are considered 'moderate', 75–99 are high, and a score of 100 is considered severe burnout.

Secondary outcome 3

Sense of Connection to Profession:

To measure one's sense of connection to their profession, we included a Professional Identification sub-scale from Lammers et al. (2013).²⁷ The scale measures four items on a 7-point scale (1 = Strongly disagree to 7 = Strongly agree). Participants' responses to all four items will be averaged to provide an overall score for each participant.

Exploratory Analysis: Turnover

We will collect individual-data from Frontline on whether social workers included in the original administrative dataset have left their role over the course of the trial, as well as at three- and six-month follow-up points (three/six months after the launch of the intervention).

²⁶ Kristensen, T. S., Borritz, M., Villadsen, E., & Christensen, K. B. (2005). The Copenhagen Burnout Inventory: A new tool for the assessment of burnout. Work & Stress, 19(3), 192-207.

²⁷ Lammers, J. C., Atouba, Y. L., & Carlson, E. J. (2013). Which identities matter? A mixed-method study of group, organizational, and professional identities and their relationship to burnout. *Management Communication Quarterly*, 27(4), 503-536. Adapted from: Hoff, T. J. (2000). Professional commitment among US physician executives in managed care. *Social Science & Medicine*, *50*(10), 1433-1444.



This will be recorded as a binary variable, with 1 for having left the local authority and 0 otherwise.

For Frontline, we will also collect data to conduct exploratory analysis on the following outcomes (again three/six months after the launch of the intervention):

- Intention to pursue social work master's programmes
- Requests for extensions

Analysis plan

Intention-to-treat

For both primary and secondary outcome measures, we will employ an intention-to-treat (ITT) approach. This means that we analyse the effect of being randomised into a group (treatment or control), rather than actually complying with or receiving the intervention. This approach gives the truest account of the effect of the intervention when delivered in real world conditions, without the need for more onerous assumptions.

Missing data

Missing Primary Outcome data

Wellbeing outcome data is likely to be missing for a large proportion of participants (anticipated 30%) due to non-response to the endline (T2) survey. This is likely due to non-completion of the surveys by social workers who are in the trial, as well as for a minority who leave their education programme. This data is unlikely to be missing completely at random - those who leave or those who stay but do not take the survey may have lower wellbeing and perhaps be differentially responsive to the treatment. To check this, we will conduct and report balance checks between respondents and non-respondents on treatment.

Any cases with missing outcome data will be excluded for the analysis with that outcome. We will conduct and report balance checks for missingness on each outcome, by treatment group.

For any missing covariates (including baselines), we will conduct null imputation where, for any missing covariate, their values as 0, and create a new binary variable taking a value of 1 if that observation was missing T1 values for that variable, and 0 otherwise.

Multiple comparisons testing

As we have three secondary outcomes (not including the fiscal cost-effectiveness analysis), we will not correct for multiple hypothesis testing.



Participants who leave the programme over the course of the trial

We also anticipate that a small proportion of participants will leave their education programme over the course of the trial, resulting in incomplete outcome measures. Excluding these participants from the absence analysis risks underestimating the treatment effect, as we suspect that individuals' likelihood to leave is correlated with their wellbeing. However, as we are solely reliant on survey data for our outcome measures, and because participants who leave the programme will not be able to choose to fill in the T2 survey after they have left the programme, we cannot include them in our analysis. This has implications for the validity of our findings as our sample is effectively restricted to those individuals who were sufficiently satisfied with their roles to continue with them, and this is likely to be related to one's overall wellbeing.

Primary Analysis

Subjective Wellbeing

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

$$Y_{it2} = \alpha + \beta_1 T_i + \beta_2 Y_{it1} + \beta_3 Q_i + \beta_{G_i} + \beta_{I_i} + \beta_{R_i} + \beta_{P_i} + \beta_5 S_i + \varepsilon_i$$

where

- Y_{ii2} is the subjective wellbeing of participant i at T2 (endline)
- α is the regression constant
- β_1 is the coefficient of interest
- *T_i* is the treatment assignment of social work participant i (coded as a binary variable)
- *Y*_{*it1} the baseline wellbeing score of individual social work participant i at T1 (set to 0 if missing)</sub>*
- Q_i is a binary indicator of whether the participant is a qualified social worker already or not. Frontline Participants in year 2 are expected to already be qualified and practicing social workers, whereas others are expected to still be student social workers. This covariate will only be included in the event that there are both qualified and unqualified participants from the same education provider once the sample is complete
- β_G is a vector of dummy gender variables (if all participants are only male or female, then this will be a single binary variable)
- β_I is a vector of missingness dummies for all covariates, where, for each, they are coded to 1 if the covariate was missing, and 0 otherwise. This is known as null imputation or the missing indicator method
- β_R is a vector of dummy local authority variables, indicating which local authority the individual is placed in at baseline. If any participant is the only participant in their local

authority, we will create a dummy variable coded 1 for all participants that are the only participant in their local authority, and 0 otherwise

- β_P is a vector of dummy education provider variables
- *S_i* is a binary indicator of whether the participant receives the intervention in stage one or stage two of the research, which should take into account any time differences (when also combined with education provider fixed effects)
- ε_i are robust standard errors for social work participant i

Secondary Analysis

Sickness Absence

For this outcome, we will use the same regression specification as for the subjective wellbeing analysis, except using the number of days of sickness absence in the past two months at T2 as our Outcome (Y_i) and baseline sickness absence (for Y_i), recorded as the number of sickness absence days taken in the last 12 months at T1, instead of baseline wellbeing. We also include a control for number of days of annual leave take over the course of the intervention:

$$Y_{it2} = \alpha + \beta_1 T_i + \beta_2 Y_{it1} + \beta_3 Q_i + \beta_{G_i} + \beta_{I_i} + \beta_{R_i} + \beta_{P_i} + \beta_5 S_i + \beta_6 I_i + \varepsilon_i$$

- *Y*_{*it2*} is the number of days of sickness absence in the past two months for participant i at T2 (endline)
- α is the regression constant
- β_1 is the coefficient of interest
- *T_i* is the treatment assignment of social work participant i (coded as a binary variable),
- *Y*_{*it1} the baseline sickness absence of individual social work participant i at T1 (set to 0 if missing)</sub>*
- Q_i is a binary indicator of whether the participant is a qualified social worker already or not. Frontline Participants in year 2 are expected to already be qualified and practicing social workers, whereas others are expected to still be student social workers. This covariate will only be included in the event that there are both qualified and unqualified participants from the same education provider once the sample is complete.
- β_G is a vector of dummy gender variables (if all participants are only male or female, then this will be a single binary variable)
- β_I is a vector of missingness dummies for all covariates, where, for each, they are coded to 1 if the covariate was missing, and 0 otherwise. This is known as null imputation or the missing indicator method
- β_R is a vector of dummy local authority variables indicating which local authority the individual is placed in at baseline. If any participant is the only participant in their local authority, we will create a dummy variable coded 1 for all participants that are the only participant in their local authority, and 0 otherwise.



- *S_i* is a binary indicator of whether the participant receives the intervention in stage one or stage two of the research, which should take into account any time differences (when also combined with education provider fixed effects).
- I_i is the self-reported number of days of annual leave the participant has taken in the two months since the start of the intervention
- ε_i are robust standard errors for participant i.

Mechanisms

The following mechanism outcomes are also measured by the survey:

- Mechanism 1: Burnout
- Mechanism 2: Sense of feeling connected to profession

We will use the same regression specification as for the subjective wellbeing analysis, except that we will control for the baseline level of the mechanism outcome.

Exploratory Analysis

Turnover

As we expect turnover will be both a difficult outcome to impact (there are many reasons why participants would choose to leave their course / local authority), and we have low power to detect changes in it, we will also combine data on turnover from this intervention with data from all of our Phase 2 Happier Healthier Professionals (HHP) interventions to evaluate the overall effectiveness of our wellbeing interventions on social workers' rate of turnover from their local authorities or from the social work education programme.

This analysis will seek to determine what the average impact of our interventions is on turnover, and by combining data from multiple trials we will be well-powered to detect a smaller effect size than with our evaluations for each individual intervention. We will publish a separate trial protocol outlining the plan for this analysis before any analysis is conducted on HHP Phase 2 trial data.

Other

Frontline will also be able to provide data on the following outcomes during 3-month and 6-month follow-up points:

- Intention to pursue social work master's programmes
- Requests for extensions

These data points alongside turnover will provide indicative evidence of the programme's impact on other relevant outcomes for the cohort, which we will report in our final reporting.



We will also conduct subgroup analyses using these measures (e.g. showing whether those higher in subjective wellbeing are more likely to pursue a social work master's programme).

Implementation and Process Evaluation

This trial will test three objectives using the following research questions:

1. Evidence of feasibility

a. Was the intervention implemented as intended (i.e. as set out in the logic model) and in what way does implementation vary (if at all)?

b. What are the contextual barriers and facilitators for delivery of the intervention, and are these accurately captured in the logic model?

c. Is the intervention acceptable to key stakeholders including participants?

2. Evidence of promise

a. Is there evidence to support the intervention theory of change as set out in the logic model, including the mechanisms by which change is achieved and the facilitators and barriers to change?

b. What potential impacts of the intervention do stakeholders identify?

c. Do there appear to be any unintended consequences or negative effects of the intervention?

3. Suitability to scale

a. Is there a clear description of the intervention and the contextual facilitators and barriers that would allow it to be implemented and evaluated in other places?

b. Are any changes needed to the theory, materials or procedures before rollout?

Data Collection

Semi-structured individual interviews will be undertaken with recipients of the SWING programme.

These interviews will be carried out in person where possible. However, due to Covid-19, in-person meetings may not be possible or feasible, and in this case, we will use appropriate online conferencing tools (e.g. Zoom) to conduct interviews virtually.



The interviews will be carried out at one time-point, 3 months after the launch of the intervention. We will conduct 10 interviews in total: 6 interviews with participants from the Frontline cohort, and an additional 4 roughly split between university partners.

Participants in the IPE will be selected by partner organisations, and partners will be asked to select for a broad mix with respect to gender, age and local authority.

We also collect data in the form of bounce-backs from text messages, which will provide an indication of the success of the message distribution, and also from the participant responses to messages. Though these are intended to record participants' thoughts around the themes of the messages, we will monitor responses for any that reflect on the programme more broadly.

Outcomes

This implementation and process evaluation seeks to understand the experience of the participants who were recipients of the intervention. We hypothesise that, if successful, the intervention will result in participants feeling more supported in their work, which may as a result increase their feelings of connectedness to the profession, and consequently decrease sickness absence days and feelings of burnout.

The table below sets out in more detail the plan for answering the proposed research questions.

Research question	Indicator	
Evidence of feasibility	Implementation	
Can the intervention be delivered practically and as intended, is it acceptable to those delivering and receiving it, and	 Were the messages received as intended? How many (if any) bouncebacks were received? How many of the messages were actually opened/read? Are there any similar mechanisms already in place at the organisation, or did participants receive messages of support in other ways? 	
what are the contextual	Contextual barriers and facilitators	
facilitators and barriers?	 (If sent by email) - Did recipients read all of the emails? Did they read the emails on the day they were received, or later? (If sent by text message) - Did recipients read all of the emails? Did they read the emails on the day they were received, or later? 	

	Acceptability	
	• Were the participants able to respond to the messages to share their own thoughts or reflections?	
Evidence of promise	Impact	
What evidence is there that the intervention mechanism operates as expected and that	 What was recipients' experience of receiving the message from the experienced social work professionals? What was recipients' experience of receiving the message from experienced social work professionals? 	
<i>it can have a positive impact on outcomes?</i>	Mechanisms	
	 How did receiving a message of support from a recent social work graduate affect the recipients' perception of their education provider? 	
	 How did the SWING messages change how the recipients viewed their social work colleagues? 	
	 How did the SWING messages change how the recipients viewed their decision to begin a career in social work? 	
	 If they chose to share their own thoughts or experiences as prompted by one of the texts/emails, what was their experience of this? 	
	 Were any particular week's messages more effective than others? If so, which and for what reason? 	
	Unintended consequences	
	 Did recipients experience any negative reaction to receiving the text/email programme? If so, for what reason? 	
Readiness for trial	Device de la vie se de la comprision de contration effetter	
How consistently can the intervention be delivered and is the programme sufficiently codified to operate at scale?	 Revised logic model comprising clear description of the intervention and its mechanisms as well as contextual facilitators and barriers 	
	 Description of any changes to the theory, materials or procedures that would support rollout 	

Analysis

Responses from interviews will be recorded via a dictation tool for in-person meetings, or recorded via Zoom and stored securely on the laptop of a member of the research team for virtual meetings. These recordings will then be transcribed by members of the research team. We will conduct analysis via NVivo, and analysis will involve looking for patterns, consistencies and inconsistencies in the data provided that might be informative for the research questions.

As we have focused research questions, we will use a deductive approach to thematic analysis, though we will also attempt to identify and understand any unanticipated mechanisms or outcomes as a result of the intervention which emerge from interviews.

In order to increase our confidence that the qualitative analysis is an accurate reflection of participants' experiences, we will present examples of participant responses using quotes, and test the revised logic model with interviewees.

Cost-effectiveness analysis

A well-established method to help decision makers understand whether a wellbeing intervention is worth implementing is to calculate cost effectiveness, defined as the monetary cost per unit improvement in wellbeing. Cost-effectiveness analysis (CEA) is an effective tool that helps to convert various impacts (e.g. 5% reduction in sickness absence and 10% increase in wellbeing) into the same units - life satisfaction units (also defined as the "common currency") - so that decision-makers and policymakers have adequate information to make decisions regarding the allocation of resources to a particular intervention.²⁸ Using standardised methods to calculate the cost effectiveness of behavioural interventions provides us with the ability to communicate this information to employers, leaders and policymakers, which is important since should we find that the intervention has a positive impact on wellbeing, costs of implementation will be a key driver of intervention take-up for decision-makers.²⁹

The subjective wellbeing data being collected as part of this project can be used in order to run a cost-effectiveness analysis (CEA), which will allow us to capture the full range of the intervention's impacts, specifically by calculating the cost of improving one participant's life satisfaction by one point per year.³⁰ In order to run the CEA, we will follow <u>guidance issued</u>

²⁸ What Works Wellbeing (2016). Measuring wellbeing and cost-effectiveness analysis. Available at: https://whatworkswellbeing.files.wordpress.com/2016/08/common-currency-measuring-wellbeing-seri es-1-dec-2016v2.pdf

²⁹ Wilson, D. K., Christensen, A., Jacobsen, P. B., & Kaplan, R. M. (2019). Standards for economic analyses of interventions for the field of health psychology and behavioral medicine. *Health Psychology*, *38*(8), 669–671. http://dx.doi.org/10.1037/hea0000770

³⁰ HM Treasury (2013). The Green Book: appraisal and evaluation in central government. Available at:



by What Works Wellbeing (WWW) on how to quantify subjective wellbeing in a CEA,^{31,32} and we will use <u>the cost-effectiveness calculator</u> recently issued by WWW. The guidance issued by WWW heavily draws from the <u>National Institute of Care and Excellence guidelines</u> for conducting CEA.

The intervention has been designed to be cheap and light-touch, and as such, the intervention materials are inexpensive. The main cost which will be accounted for as part of the CEA will be staff time involved in implementing the intervention. Costs will be estimated based on the best resource information available. With small or negligible costs and benefits, these will briefly be discussed in the final analysis, but not accounted for in the CEA. We have outlined the potential costs and benefits (both direct and indirect) involved in running the intervention below, and the final ex-post CEA for the intervention will be included in final reporting for the intervention.

The intervention materials are either low-cost or free. For Frontline, messages will be sent via text message on the platform <u>SMS Broadcast</u>. The cost of sending text messages is £0.18 per weekly message per participant (each credit of 160 characters costs 1.8p, and each weekly message will require approximately 10 credits in total). Thus, the total cost for 280 participants for 8 weekly messages is approximately £403.20. For other partners, the method of delivery is to be determined, and messages may be sent via text message, or more likely via email, given the potential difficulty in getting access to participants' phone numbers for other social work education providers. If messages are sent via email, this will be free.

Measuring Costs

One of the minimum requirements to conduct CEA is to have data available on the total monetary costs of implementing the intervention at an organisation. The main costs for this intervention are staff time spent on implementation, and participants' time spent as part of the intervention.

To account for staff and participant time, we will use figures provided by the project partner on gross hourly wage (i.e. amount they are paid per hour before tax and other deductions), and calculate this using the formulas set out by WWW (p.5 onwards of guidance <u>here</u>): Cost of time spent = Number of participants/delivery personnel * Hours spent by participants/delivery personnel * Gross hourly wage * 1.25. This includes an estimated cost of an additional 25% beyond the hourly wage to the employer. We will then calculate the total net cost per participant by adding up all the partial costs estimated: Total costs = Total cost of participants + total cost of delivery personnel divided by the number of participants.

https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-gover nent

³¹ What Works Wellbeing (2017). A guide to WELLBEING ECONOMIC EVALUATION. Available at: https://whatworkswellbeing.org/wp-content/uploads/2020/02/WWCW-Economic-Evaluation-Cost-Effec tiveness_Version-1.2-For-website-1.pdf

³² What Works Wellbeing (2020). How cost effective is a workplace wellbeing activity? A how-to guide to cost effectiveness analysis. Available at:

https://whatworkswellbeing.org/resources/how-cost-effective-is-a-workplace-wellbeing-activity/

According to <u>WWW guidance</u> (p.13), 'costs related to developing the intervention should not be included unless these costs will be replicated were the intervention implemented more widely (for instance, if the intervention needs adapting to local context).' Thus, we will not include WWCSC staff time or project partner time spent on developing the intervention in the CEA, since this would not be replicated if the intervention were to be implemented by others.

Associated Costs		
Item	Details	
Staff time (e.g. coordinator) spent on implementing the intervention	 Project partner contacts - 15 hours total Time spent on outreach to content providers and updating messaging content (3 hours) Time spent handling participant responses and updating messages with responses each week, estimating .5 hours each week (4 hours) Time spent sending intervention materials (i.e. text messages) to participants, estimating 1 hour per week for 8 weeks (8 hours) 	
Participants' time spent being involved in the intervention	 Participants - 40 minutes total Participant time taken to open the messages each week for 8 weeks, with option to respond (5 minutes every week; 40 minutes total) 	

Measuring Productivity Benefits

Productivity can be measured through a variety of indicators, including sickness absence, which is being collected as part of the intervention via survey data. To account for this in the CEA, we will measure the total number of sickness days recorded, calculate the average hourly wage of participants (and if participants are not being paid, we will use their estimated future pay on entering the workforce as a newly qualified social worker), and follow these steps:

- 1. We will run a regression using our data on sickness absence rates for participants in the treatment group, regressing T1 on T2 sickness absence to get an accurate estimate of the treatment effect. Convert to percentage points.
- 2. Repeat step 1, but for participants in the control group only.
- 3. Lastly, calculate the net productivity benefits as the difference between the percentage productivity changes in treatment participants (Step 1), minus the percentage productivity changes in the control participants (Step 2), and then multiply by the number of treatment participants, their gross hourly wage, and the number of hours productivity benefit was sustained.
- 4. Recalculate the net cost per participant by including the net productivity benefits (from step 3) as negative costs.



Measuring Wellbeing Benefits

We will measure individual-level subjective wellbeing once at baseline (directly prior to the start of the intervention), and once at endline (approximately one week after the intervention ends). As per <u>WWW guidance</u> (p.9), while Life Satisfaction (LS) is considered a reliable measure of wellbeing, other measures can also be used as long as they are converted into life satisfaction units. We will follow these steps to calculate wellbeing benefits:

- 1. We will use our estimate of the treatment effect on subjective wellbeing from our primary analysis to get a more accurate estimate, and multiple this figure by 0.72 to convert our measure of wellbeing to LS, and convert to percentage points.
- 2. Repeat step 1, but for participants in the control group only.
- Calculate net LS effect per participant as the difference between the changes in treatment participants (Step 1), minus the changes in the control participants (Step 2) as indicated below: Total LS = LS change in treatment participants minus the LS change in control participants.

In accordance with <u>WWW guidance</u>, we will convert our measure of subjective wellbeing (which translates to overall life happiness), and convert into 'life satisfaction years' to capture any wellbeing benefits of the intervention. To convert our measure of subjective wellbeing ('overall life happiness' on a scale from 0-10) into LS, we will use the <u>guidance</u> (p.25) set out by Bryce et al. (2000), which will convert our measure into LS by means of an 'exchange rate' (derived from Layard, 2016). The exchange rate between Happiness and LS is 0.72. This means that a 1 point improvement in someone's Happiness score is equivalent to a 0.72 point improvement in their LS.

Additionally, because we will only be collecting follow-up wellbeing data for approximately two months after the launch of the intervention, any wellbeing benefits included in our CEA analysis will only be accounted for up to two months post the intervention launching. When we report the results of the CEA in reports of findings, we will make this assumption clear.

Determining Overall Cost-Effectiveness/Sign of success

Lastly, we will calculate the Cost-Effectiveness Ratio (CER), as the ratio between the net cost per participant and the net LS effect per participant: CER = Net cost per participant divided by the net life satisfaction per participant. To determine whether the intervention was indeed cost-effective, we will follow the threshold set out by the National Health and Care Excellence (NICE), which states that an intervention is cost-effective if, over a year, it can deliver an extra point in LS costing less than 2,500 GBP. In order to get the 2-month equivalent of this for the intervention, we will divide the 2,500 GBP figure by 6 - which is approximately 416.47 GBP.

By calculating the CER, this will help us determine whether this intervention should be rolled out to more participants and other organisations, and may also help us to compare the cost-effectiveness of different intervention options in future. Moreover, from a societal perspective, an increase in employees' LS may have positive spillover benefits to the wellbeing of the individuals they work with (i.e. children and families in the case of social



workers), thus the results of this CEA may be a conservative estimate of the true benefits of the intervention to society.

Ethics & Participation

The study has received ethical approval from the University of East Anglia ethics committee, see appendix I for approval letter.

The Social Workers Inspiring the Next Generation (SWING) programme is designed to be a light-touch intervention, requiring only approximately 5 minutes of social workers time each week for 8 weeks to open and read each message, and to write a response message (which will not be time intensive, consisting of around 2-3 lines and is completely optional). Participation is on a voluntary basis. Participants can opt out of the programme at any time, and are told how to do so in survey emails, as well as in weekly messages (a link to opt-out is included in text messages sent to Frontline participants, and a similar opt-out option will be added for participants recruited through social work education providers). It does not require the introduction of new processes within local authorities, and therefore there is very little likelihood of any disruption of services. There is also very little potential for the content of the intervention. Further details are provided in the 'Risks and Mitigation' section below.

No children will be directly impacted by the intervention, though it is possible that there will be potential improvements to social worker wellbeing, and subsequently reductions in social worker sickness absence, which could improve the quality of services being provided to children and families by the participating local authorities.

Registration

The trial protocol, minus sample size information, has been pre-registered the protocols on OSF (https://osf.io/hbrw9/).

Data Protection

We, What Works for Children's Social Care (WWCSC), have conducted a Data Protection Impact Assessment, published a privacy notice (see link <u>here</u>), and have relevant agreements in place with those sharing personal data with us.

We will process personal data from three sources:

Administrative data:

The project partner will be given instructions on how to populate a data spreadsheet that contains administrative data for all individuals included in the trial. This will include data on turnover (at 3-month and 6-month follow-up only), local authority, and age. The data will be pseudonymised, with education providers creating a meaningless identifier for each



individual in the trial, which will facilitate linkage between administrative data-sets collected at two time points, and the survey data.

Contact information for participants in order to send the weekly messages (i.e. phone numbers or email addresses depending on the method of delivery) will be held by the project partner, and will not be accessible by WWCSC. The project partner will contact the participants directly on our behalf.

The data spreadsheet provided by the project partner will form the basis of our initial sample size, and will be used by the WWCSC research team to conduct the correct randomisation and appropriate tests (e.g. balance checks) needed in order to launch and implement the trial. Administrative data will only be shared outside of WWCSC on an aggregated (i.e. non-individual, summary-level) basis.

Survey data:

Surveys will be completed by participants at two time points, before and after the intervention. Individual-level survey responses to which will be accessible only by WWCSC (not the project partner), and the pseudonymised ID (meaningless identifier) will facilitate linking of the individual's survey responses to their administrative data held by the project partner. Both the project partner and WWCSC will have access to the spreadsheet that links pseudonymised IDs of individuals to administrative data and unique survey links. Survey data will only be shared outside of WWCSC on an aggregated (i.e. non-individual, summary-level) basis.

Interview data:

Interviews will be conducted by WWCSC staff with participants. This will include data that will be stripped of any instant identifiers (e.g. names) but may be identifiable due to content contained within interview responses of participants. Steps will be taken to ensure that the individuals are not individually identifiable outside of WWCSC (e.g. in later reporting). WWCSC will not be conducting matching of interview data to survey or administrative data.

Principles of the GDPR

This section is structured according to the guidance given by the Information Commissioner's Office, which "covers the General Data Protection Regulation (GDPR) as it applies in the UK, tailored by the Data Protection Act (DPA) 2018".³³

Principle (a): Lawfulness, fairness and transparency

Lawfulness:

³³ Information Commissioner's Office, Guide to the General Data Protection Regulation (GDPR). <u>https://ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regul</u> <u>ation-gdpr/</u>



Both we (WWCSC) and the project partners (the education providers including Frontline) are Data Controllers in common for all administrative data processed for this project. WWCSC decided to process the data and decided the purpose of the processing, what data should be collected and which individuals to collect data about. The administrative data was collected by the education providers. WWCSC is the sole Data Controller for all survey and interview/focus group data collected. The legal basis for WWCSC processing the data is legitimate interest.

Legitimate interest is a three part test:

1) Purpose test: are you pursuing a legitimate interest?

We are a research centre, whose purpose is to improve the evidence base in children's social care. We consider the processing of the data to be in our legitimate interests because it will enable us to produce research in this area, which will benefit local authorities, in particular senior leaders who make decisions about ways to improve social worker wellbeing.

2) Necessity test: is the processing necessary for that purpose?

The processing is necessary for the purpose because processing individual-level data allows us to conduct analysis which is better powered to detect the impact of our interventions on wellbeing, and which allows us to better control for the circumstances of the individual which may affect our outcomes of interest. Both of these factors mean that we are more likely to be able to provide meaningful research which can be used to inform practice, with downstream effects for children and families involved in statutory social care. If this processing cannot occur, it will mean that it is more difficult to plan future interventions to improve social workers' wellbeing, therefore social workers are more likely to rely on approaches to improve workplace wellbeing without rigorous evidence.

3) Balancing test: do the individuals' interests override the legitimate interest?

We have published a privacy notice on our website to give general notice of this processing, and a link to the privacy notice will be included in an email to participants. While the data is quite sensitive and includes special category data (wellbeing and sick days which we count as health data), we will not be using identifiable IDs and the data will be stored securely. We believe this processing falls within generally socially acceptable uses of this kind of data - it is scientific research in the public interest by a charity and for the benefit of social workers. Alongside the privacy notice, participants can decide to opt in to the research voluntarily. We therefore believe that the individuals' interests do not override our legitimate interest in this processing.

The legal basis for processing special category data is that it is necessary for archiving, scientific, historical research or statistical purposes (point (e) of section 10 of the DPA which refers to (j) (archiving, research and statistics) of Article 9(2) of the GDPR). The project meets condition (4) in Part 1 of Schedule 1:


(a) is necessary for archiving purposes, scientific or historical research purposes or statistical purposes.

This processing constitutes scientific research as it will be used to create evidence on predefined, specific hypotheses around what works to improve the wellbeing of frontline social workers practicing within children's services, in order to increase the knowledge base in this area. The special category data we are using is data concerning gender, and health, specifically wellbeing and sickness absence. Not being able to assign rates of sickness absence to our data limits the scientific value of this research because it is an objective administrative outcome that provides unbiased data on how our wellbeing interventions impact on actual social worker behaviour, rather than simply relying on self-report outcomes (i.e. survey).

(b) is carried out in accordance with Article 89(1) of the GDPR (as supplemented by section 19)

Organisational and Technical Arrangements

"Those safeguards shall ensure that technical and organisational measures are in place in particular in order to ensure respect for the principle of data minimisation. Those measures may include pseudonymisation provided that those purposes can be fulfilled in that manner."

The data will be pseudo-anonymised, i.e. it can no longer be attributed to a specific data subject without the use of additional information. We are not requesting any 'instant identifiers' (e.g. name or address) or 'meaningful identifiers' (identifiers that allow linking to other datasets).

See "Organisational and technical arrangements".

Safeguards (DPA 2018 Section 19)

In the UK, the requirements of Article 89(1) GDPR will not be met unless the provisions of Section 19 DPA 2018 are also complied with. We have no reason to believe that the research will cause damage or distress (and certainly not substantial damage or distress) to participating social workers. This analysis requires minimal participant time, and interventions are designed to improve the wellbeing of social workers. The processing and presentation of evidence is unlikely to have distressing effects because we protect against identification of the individual and also against statistical disclosure in reporting our findings (following the ONS standard rules outlined in the Approved Researcher training). The research is not being carried out for the purposes of measures or decisions with respect to a particular data subject but looks at the effects of the Happier, Healthier Professionals interventions on the workforce as a whole.

(c) is in the public interest.

The work is intended to contribute towards a research base in supporting the wellbeing of children and family social workers, which involves a substantial section of the public.

Fairness:

ICO's guidance says fairness means "you should only handle personal data in ways that people would reasonably expect and not use it in ways that have unjustified adverse effects on them"³⁴. This data is being used for statistical research to understand whether various workplace wellbeing interventions improve social workers' wellbeing and contribute towards improvements in public services. We believe that "the reasonable person" would find the use of data in this way acceptable.

Transparency:

This will be covered below in the section on 'the right to be informed' (below). We will ensure that privacy notices are written in clear and plain language.

Principle b): Purpose Limitation

This data will only be used to answer the research questions in this document, as part of a general purpose to increase the evidence base about how to improve social workers wellbeing (and associated measures) within the workplace. They will not be used for any other purpose, other than usual statistical checks to ensure the accuracy of the data.

Principle c): Data Minimisation

We will only collect or request data that is adequate, relevant and limited to what is necessary to fulfil the purpose of this project i.e. to deliver the intervention and to build the evidence base on social worker's workplace wellbeing and turnover. The data requested or collected will be individual-level data. The individual-level data are sourced from the project partner's administrative datasets, survey data we collect from participants, and interview data we collect from participants.

Individual-level variables:

- Outcome measures which are necessary to measure whether the Healthier Happier Professionals intervention was successful;
- Other individual-level variables which we expect to influence the outcomes (e.g. prior sickness absence rates), or are necessary for the delivery of the intervention. Not being able to include these variables limits the scientific value of this research because they are likely moderators of social workers' wellbeing.

Principle d): Accuracy

³⁴ 1 Information Commissioner's Office. Principle (a): Lawfulness, fairness and transparency. https://ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protectionregula tion-gdpr/principles/lawfulness-fairness-and-transparency/



The project partner will spend time cleaning the administrative data so that it is suitable for data return to WWCSC, and we are requesting only data that is in such a format.

The survey data we collect will be via surveys which are carefully designed and administered to participants, using existing valid and reliable measures where possible, checked carefully and quality assured for face validity. Interviews similarly will follow a set developed schedule. Data subjects will then be trusted to provide accurate data.

To validate data quality, we will conduct checks on the following: data-type constraints (words instead of numbers where we expect them), range constraints for numeric data; set-membership constraints for categorical data (are the categories limited to what we expect?); and regular expression / formatting patterns (e.g. dates). Please see the "Handling missing data" for our approach to missing data.

Principle e): Storage limitation

All individual-level data will be stored by WWCSC for 24 months post publication of the findings in a research report, after which WWCSC will delete all individual-level data. The aggregate-level data will continue to be stored after this point in external reports. All individual-level quantitative data will also be transferred to a Data Archive hosted by the Office of National Statistics, where it will be stored indefinitely.

Principle f): Integrity and confidentiality (Security)

See "Data security arrangements".

Principle g): Accountability principle

The Executive Director of the What Works Centre and Principal Investigator for this research (Dr. Michael Sanders) will be ultimately responsible for the conduct of the research. Other details are below in the accountability and governance section.

Individuals' rights under the GDPR

The right to be informed

The Centre has published a privacy notice on its website <u>here</u> detailing how the processing will be done. All data subjects will be notified of the data processing via the first survey they receive for the project, which will contain a link to the privacy notice published on our website.

The right to access, rectification, erasure, restriction of processing and to object

Individuals have the right to access their individual data and supplementary information. The right of access allows individuals to be aware of and verify the lawfulness of the processing. Individuals are entitled to obtain:

- confirmation that their data is being processed;
- access to their individual data; and



• other supplementary information

If an individual wishes to access this information, we cannot comply directly because we do not have identifiers in the dataset. We would point the individual towards the trial protocols to indicate the type of information that we hold on them for the purpose of this analysis. If, as we expect would be the case, we are unable to identify the individual's data to fulfill their request, we will explain that they would need to make their request through their education provider, who can then ask us to uphold those rights through passing on the relevant meaningless identifier along with the request.

The right to data portability

The right to data portability allows individuals to obtain and reuse their individual data for their own purposes across different services. It allows them to move, copy or transfer individual data easily from one IT environment to another in a safe and secure way, without hindrance to usability. This is not particularly relevant in the context of statistical analysis as the value of processing the data is to the public and comes from the aggregation of the data, rather than from the processing of the individual's data, and so it is difficult to imagine the purpose of porting the data to an alternative system.

Individual's rights in relation to automated decision-making and profiling

Nothing in this analysis is related to either automated decision-making or profiling of any individuals.

Accountability and Governance

WWCSC has a Data Protection Officer and a Data Protection Working Group which has the responsibility for the management of Data Protection on behalf of the Organisation. The Data Protection Team includes the Director of Operations, ensuring compliance with GDPR at the highest level of management. The Centre takes and documents the appropriate technical and organisational measures in place to comply with GDPR. The approach of WWCSC to information security is outlined in its IT Usage Policy.

Checks on staff

The data will only be accessed by project team members. Research staff at WWCSC have undergone data protection training and have substantial experience in handling data. The research team continues to review the training needs of the team to ensure the Centre's approach remains up-to-date

Data security arrangements

Data is stored in a secure manner and only authorised individuals will be granted access. Access will only be granted to research team members named as protocol authors.

The privacy notice for the project can be found on our website here.

Personnel

Delivery team:

- Michael Sanders, Chief Executive of the What Works Centre for Children's Social Care
- Shibeal O'Flaherty, Researcher at the What Works Centre for Children's Social Care: overall project management, intervention development and design
- Chris Mitchell, Researcher at the What Works Centre for Children's Social Care: intervention development and co-design
- Clare Clancy, Research Assistant the What Works Centre for Children's Social Care: intervention development and co-design
- Ella Whelan, Research Assistant the What Works Centre for Children's Social Care: intervention development and co-design
- Patrick Sholl, Research and Programmes Manager at What Works for Children's Social Care
- Ashley Whillans, Assistant Professor at Harvard Business School
- Kevin Daniels, Professor of Organisational Behaviour at University of East Anglia
- Dana Unger, Associate Professor in Organisational Behaviour at University of East Anglia

Evaluation team:

- Michael Sanders, Chief Executive at the What Works Centre for Children's Social Care
- Shibeal O'Flaherty, Researcher at the What Works Centre for Children's Social Care
- Chris Mitchell, Researcher at the What Works Centre for Children's Social Care
- Clare Clancy, Research Assistant the What Works Centre for Children's Social Care
- Patrick Sholl, Research and Programmes Manager at What Works for Children's Social Care
- Ashley Whillans, Assistant Professor at Harvard Business School

Timeline

The table below provides key dates for the first phase of the SWING evaluation. We anticipate that the dates for phase two will be approximately the same, but 12 months later.

Date	Activity	Staff responsible
October 2020	Participant administrative and demographic data	Shibeal O' Flaherty Chris Mitchell



	shared by Frontline	Clare Clancy
October 2020	T1 wellbeing survey launched with Frontline cohort	Shibeal O' Flaherty Chris Mitchell Clare Clancy
October 2020	Randomisation of Frontline cohort	Shibeal O' Flaherty Chris Mitchell Clare Clancy
November 2020	SWING programme launched with Frontline cohort	Shibeal O' Flaherty Chris Mitchell Clare Clancy
January 2021	SWING programme ends with Frontline cohort	Shibeal O' Flaherty Chris Mitchell Clare Clancy
January 2021	T2 wellbeing survey launched with Frontline cohort	Shibeal O' Flaherty Chris Mitchell Clare Clancy
January 2021	Implementation and Process Evaluation data collection for Frontline cohort	Shibeal O' Flaherty Chris Mitchell Clare Clancy
January 2021	Participant administrative and demographic data shared by other phase one education providers	Shibeal O' Flaherty Chris Mitchell Clare Clancy
January 2021	T1 wellbeing survey launched with remaining phase one cohort	Shibeal O' Flaherty Chris Mitchell Clare Clancy
January 2021	Randomisation of remaining phase one cohort	Shibeal O' Flaherty Chris Mitchell Clare Clancy
February 2021	ebruary 2021 SWING programme launched with remaining phase one cohort	
March 2021	rch 2021 SWING programme ends with remaining phase one cohort	
March 2021	T2 wellbeing survey launched with remaining phase one cohort	Shibeal O' Flaherty Chris Mitchell Clare Clancy

April 2021	Implementation and Process Evaluation data collection with remaining phase one cohort	Shibeal O' Flaherty Chris Mitchell Clare Clancy
July 2021	Data analysis	Shibeal O' Flaherty Chris Mitchell Clare Clancy
August 2021	Results published	Shibeal O' Flaherty Chris Mitchell Clare Clancy

Risks and Mitigation

Risk	Mitigation
Wellbeing survey is not filled out, reducing our power and risking biasing our results	Incentives provided to motivate survey completion. A charitable donation will be made for completed survey responses (e.g. £1 per response to a charity relevant to children's social care, chosen to increase the likelihood that recipients would want to complete the survey). We will conduct and report balance checks on completion by the treatment group and acknowledge this limitation in our findings in reporting.
Participants in the control rather than treatment group receive intervention causing us to underestimate the treatment effect	Partner organisations will be given clear information in order to assign individuals to the treatment and control groups, with guidance and instructions on how to match these individuals to administrative and wellbeing data throughout the intervention period. We will not collect data required to send a message to those in the control group (e.g. mobile numbers or email addressed). There is however a risk participants may forward on the message to those in the control group. To mitigate against this risk we will be asking participants to refrain from forwarding messages on to other Frontline colleagues.
Data is not returned in time by partner organisations	We will follow up with partner organisations via email and phone calls to ensure that they return the data by the assigned deadline.



	still currently full-time employed by a local
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Dissemination Policy

The Centre publicly commits to publishing the full results of this research on its website, and to explain any deviations from the methods fully (which may need to occur if the trial does not run as intended).



Appendices

The Centre will publish protocol amendments as Appendices if they contain additional information, or as new versions on its website with a full explanation of changes.



Appendix A: Messages to be sent to Frontline Participants

WEEK 1: Personal Development / journey

Hi! Frontline are working with What Works for Children's Social Care on a project to share stories and words of wisdom from qualified social workers (some of whom are Frontline Fellows themselves) to the next generation. Each week for 8 weeks you will receive a short message with something one of your colleagues wanted to pass on to you as you continue your placements.

The first message comes from a Frontline Fellow and describes their journey through the programme.

At the opening speeches of the Summer Institute, a Frontline Fellow told us that we would be different people at the end of the two year Frontline programme. I didn't believe them, not me. But it was true! I've changed in ways I didn't even imagine. The course has given me the ability to step into the world of others, understand their experience, live their stories and walk alongside them in some of the hardest times of their lives. These skills have translated to my personal life too. My relationships have changed. Some relationships are stronger, richer. Others have faded, as I've realised what is important to me.

Thanks for reading! If you would like to respond with your own comment or story about your journey since starting Frontline, you can by **clicking here**. We'll be selecting one each week to include in the following week's message!

If you want to opt out of these messages, just click here.

WEEK 2: Acknowledgments of difficulty of course:

Hi! This week's messages come from two Frontline Fellows who reflect on the challenges of stepping into frontline social work and offer some words of encouragement.

One Frontline Fellow said:

The second year of the Frontline programme can feel like a sudden change, and a drop in support because the unit splits up. However, I became more confident in accepting that it was OK not to have all the answers – after all I had only been doing social work for a year and this is a job where you are likely to face something new even 5 to 10 years down the line in your career.

Another Fellow said this:

Some weeks will be busier than others and you won't be able to do everything as well as you want to. Some essays will be easier to write than others. Some experiences will make you more emotional than you expected them too. When you feel guilty or inadequate, think about how much you're juggling and how well you're doing.



Last week we heard from a Frontline Fellow on their reflections of the programme - here is one of the responses another Frontline Trainee sent us:

[Insert message here]

Thanks for reading! If you would like to respond with your own reflections on starting your placements, you can by **clicking here**.

WEEK 3: Pro-social impact

Hi! This week our message comes from a Frontline Fellow talking about recognising the good that you do as a social worker.

It's a steep learning curve and you will be challenged in ways you haven't ever before. This experience is going to allow you to meet some amazing people and do some amazing things for people. Hold on to the thank yous you will get from doing some of that good social work but learn to recognise that some of the biggest differences you make people will not be thankful for until long after you are gone from their lives.

Last week we heard from two Frontline Fellows who discussed some challenges of the programme and how they dealt with them - here is one of the responses from another Frontline Trainee:

[Insert message here]

Thanks for reading! If you would like to respond with your own comment or story about recognising the positive impact Social Workers have on society, you can by clicking here.

WEEK 4: Challenging situations:

Hi! Your third message comes from an experienced Social Worker, with some words of wisdom about overcoming a challenging new situation - giving evidence in court.

The first time I took to the stand to give evidence for care proceedings where a care order was the outcome to be sought I was incredibly nervous, and I mean incredibly nervous. As I stood panicking that I had forgotten everything I knew about the family I focussed on some words of wisdom that had been given to me previously by an experienced social worker and which I now share with you.

Always sit if you can as it stops the shaky legs.



Make sure you have water. This helps with the dry mouth obviously but also when a question is asked that you are not sure of the answer, take a sip, give yourself time and then answer.

Focus on the judge, do not make eye contact with members in the courtroom other than when being asked a question by an advocate. Otherwise you will get distracted.

Breathe.

Last week we heard from a Frontline Fellow on recognising the good work you do as Social Workers - here is one of the responses from another Frontline Trainee:

[Insert message here]

Thanks for reading! If you would like to respond with your own reflections or story about dealing with challenging situations, you can by **clicking here**.

WEEK 5: Importance of colleagues / relationships within social work

Hi! This week's message of advice is about the importance of your colleagues and building relationships with them. It comes from a Frontline Fellow.

There were many times when I thought I could not do everything – or that I was not doing justice to all my responsibilities. The year started to shift when I realised it was still OK to ask for help and support. I started reaching out to my fellow participants more and began arranging regular catch-ups – this was helpful particularly in knowing that others had similar experiences and worries, and I was not alone. It also created this sense of 'we can get through this together'.

Last week we heard from an experienced Social Worker about their experience of dealing with challenging situations - here is one of the responses from another Frontline Trainee:

[Insert message here]

Thanks for reading! If you would like to respond with your own reflections or story about the importance of your relationships with your colleagues, you can by **clicking here**.

WEEK 6: Good social worker traits/Identifying strengths:

Hi! Your message for week 5 comes from an experienced Social Worker who tells us what they think makes a good Social Worker.

So, to be a good social worker you have to be able to survive so that you can help those that need you. On my journey to visit a family I would suspend all thoughts of the work I needed



to do back at the office and focus on what I needed to achieve on that visit. As I walked into the home I lived right there in that moment and captured the sense of where the family was. I enjoyed them and believed they could achieve what was needed and I laughed with them because humour breaks down all barriers. I aimed to be the best I could at that time. That's how I survived and they are the memories that are important and used at times when it can be difficult.

Last week we heard from a Frontline Fellow on the importance of colleagues - here is one of the responses from another Frontline Trainee:

[Insert message here]

Thanks for reading! If you would like to respond with your own comment or reflection about the qualities of a good social worker, you can by **clicking here**.

WEEK 7: Self-care and work-life balance:

Hi! It's week six of the Social Workers Inspiring Next Generation programme, and this week's messages come from two Frontline Fellows who discuss the importance of remembering to look after yourself to help others:

One Frontline Fellow said:

Remember to Look. After. Yourself. It's said time and time again, because it's true. It's an incredible job, but it's only a job. If you don't look after the best of you, you can only give what's left of you.

Another added:

Talk about your feelings with your colleagues. When you've left a hard visit and you're on the train home, mulling it over and feeling fearful, text your colleague and check in -9/10 times they'll be feeling exactly the same.

Last week we heard from an experienced Social Worker with their thoughts on what makes a good Social Worker - here is one of the responses from another Frontline Trainee:

[Insert message here]

Thanks for reading! If you would like to respond with your own reflections or thoughts on the importance of self-care, you can by **clicking here**.

WEEK 8: COVID-19

Creative ways of working during Covid



Hi! This week the messages come from experienced Social Workers and give an insight into how the profession has adapted during the COVID-19 pandemic, and some words of advice for joining the workforce during these unprecedented times.

Going through the pandemic has been a rollercoaster ride for everyone, social workers included! But there have been some amazing moments as well. Over the past few months I've had really open conversations with families because we are all in the same boat. I've been able to help them get support locally because mutual support groups have been really active and have been amazed at how IT savvy some of my young people are! Remember, it's about taking things one step at a time, looking after yourself by putting away your laptop on top of your wardrobe at five or stuffing it in a drawer. And remind yourself that at this time of need, you and your work will be even more important and make even more of a difference. Welcome to our profession!

Last week we heard from two Frontline Fellows on the importance of looking after yourself - here is one of the responses from another Frontline Trainee:

[Insert message here]

Thanks for reading! This is the last week of messages, we really hope that you have found them enjoyable or even helpful. If you would like to respond with your own comment or story, about working during Covid-19, you can by **clicking here**. For more information on this project, click here.

Appendix B: Message Request Sent to Frontline Fellows

Background to project:

We are collaborating with What Works for Children's Social Care on a research trial titled **'Social Workers Inspiring the Next Generation' (SWING)**, which aims to improve the wellbeing of our Frontline participants, particularly as they transition from year 1 to year 2 after which dropout is higher and we see a reduction in wellbeing.

This intervention will involve having **social support messages coming from Frontline fellows containing words of encouragement, advice and motivation** - which would then be sent to Frontline participants over the course of the 8-week trial. We are interested in exploring whether participants who receive these messages experience any increase in subjective wellbeing as a result of feeling more connected to and supported by more experienced members of their profession/the Frontline programme. Your messages will possibly be included in the research, and could contribute to improving the sense of connectedness and social support felt by our Frontline participants.

Here is what we want from you:

- 1) Part 1: Review the **Sample Social Support Messages**
- 2) Part 2: **Come up with your own message(s) that you** think should be included in text messages to Frontline participants this is on page 5.

Sample Social Support Messages



Please read through the below messages. Message prompts are to prompt Frontline participants to submit their own stories based on the messages they have received, and these prompts may also help you to come up with your own messages.

Theme	Message Content
Prosocial impact, Purpose and Meaning	This week, we hear from a social worker about a time they were able to make a difference in someone's life because of their actions at work. OR
	This week, we hear from a social worker about the ways in which they are able to find purpose and meaning in their role but achieving a desired outcome for a family or young person.
	Message prompt: Please tell us about a time when you (or someone else) made a difference in someone's life because of your actions at work by clicking here: (insert link). Please let us know what worked well, and any advice on how to implement any strategies within practice. Stories like this can help newly qualified social workers understand how important the role of a social worker can be.
	OR
	Message prompt: Please tell us about a time when you (or someone else) were able to find purpose and meaning in your role as a social worker by achieving a positive outcome or goal for a family or young person. Please let us know what worked well, and any advice on how to implement any strategies within practice. Stories like this can help newly qualified social workers understand how important the role of a social worker can be.
Dealing with challenging situations/ Problem- solving	This week, we hear from a social worker about a time they worked on a case that involved multiple challenges at work. OR
	This week, we hear from a social worker about a time they felt they used their skills and knowledge to problem-solve successfully at work, and share key practice tips they used to overcome difficult situations.
	Message prompt: Please tell us about a time when you (or someone else) used their practical skills and knowledge to effectively problem-solve within their role as a social worker. Please let us know what worked well, and any advice on how to implement any strategies within practice. Stories like this can help newly qualified social workers understand how important the role of a social worker can be.

	OR
	Message prompt: Please tell us about a time when you (or someone else) worked closely with a family that faced multiple challenges or were difficult to engage: (insert link). Please let us know what worked well, and any advice on how to implement any practical strategies within practice. Stories like this can help newly qualified social workers understand how important the role of a social worker can be.
Stepping up to role/ Multi- tasking	This week, we hear from a social worker about how they advise newcomers to prepare for the incredible variety of tasks they are going to do.
tasking	Managing academic work alongside practice can be challenging, this week we hear from past Frontline participants how they balanced their workload
	E.g. "Balancing writing assignments and practice was very challenging. I found setting aside 30 minutes in the morning to plan my time and prioritise my tasks helped me to stay on top of my work. One tip I would recommend for new participants is making time in the week to do something you enjoy to help de-stress, and making that a priority"
	E.g. "Families respond really well to Sarah. She is engaging, patient, and goes above and beyond to meet the needs of families, often in very challenging circumstances. She is professional and shows care for every family. She has a lot of knowledge that she always imparts in a positive way, although we deal with so much negativity in our line of work." -Jenna
	Message prompt: please tell us about a time when you found it challenging to balance the competing demands of social work practice, academic study, and everyday life. Please let us know what worked well and any advice on how to implement any practical strategies.
Traits consistent with being a good social worker/ Identifying unique strengths	This week, we hear from a social worker about the types of traits that they think makes a good social worker including the importance of acknowledging and learning from your mistakes.
	OR
	This week, we hear from a social worker about the ways in which they are able built resilience and identify and use their unique strengths in their role.
	E.g. "Doesn't take things personally, is unphased by people shouting[] follows policy and procedure, remains calm and patient with challenging clients, can think critically [] knows that when a situation doesn't make sense, it's important to ask "Why?"" and realise that everyone makes mistakes, and no one gets it right all the time- Nicole

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	Message prompt: Please tell us about a time when you (or someone else) had a challenging experience with a family or young person and were able to build resilience and to identify and use your strengths in your role as a social worker. Please let us know what worked well, and any advice on how to implement any strategies within practice. Stories like this can help newly qualified social workers understand how important the role of a social worker can be.
	OR
	Message prompt: Please tell us about a time when you (or someone else) exhibited traits that you thought make a good social worker and were able to learn from a mistake or challenging situation. Please let us know what worked well, and any advice on how to implement any practical strategies within practice. Stories like this can help newly qualified social workers understand how important the role of a social worker can be.
Reflecting	This week, we hear from a social worker who reflects on their experience of using supervision to reflect upon their practice to develop within their role
	Message prompt: Please tell us about a time when you (or someone else) used reflecting and supervision as a tool to develop in your role as a social worker. Please let us know what worked well, and any advice on how to implement any strategies within practice. Stories like this can help newly qualified social workers understand how important the role of a social worker can be.
Self-care and work-life	This week, we hear from a social worker on how to maintain a good work-life balance.
balance	Message prompt: Please tell us about a time when you (or someone else) engaged in a healthy work-life balance and/or self-care during their role as a social worker. Please let us know what worked well, and any insights around specific things you/someone else did to egnage. Stories like this can help newly qualified social workers understand how to engage in self-care practices during their role.
Acknowled gments of difficulty of course	This week, we hear from a social worker who has gone through Frontline who recognises the difficulty of the programme, and how it is okay to find it challenging.
is/it's okay to find it difficult	Message prompt: Please tell us about a time when you (or someone else) found the programme particularly challenging. Please let us know how you worked through this difficult period, and any insights around what worked



Now, create your own social support messages. We would like these to be fairly lengthy (e.g. 6-7 sentences each) and written in the first person. Note that you can use existing themes contained in the sample messages, or come up with your own.

Theme	Message Content

Finally, please complete the following information which will be included alongside the messages. If you would like to remain anonymous, please keep these blank.

First name	
Role	
Local Authority	
How long you have been a social worker (e.g. 2 years)	
When you went through the Frontline programme (e.g. 2012-2014)	



Appendix C: Stata Randomisation code - Frontline cohort

*** SWING trial - Frontline cohort randomisation ***

*Set your directory path clear global root "G:\Shared drives\Data\HHP\HHP2"

*** Cleaning code ***

import excel using "\$root\SWING\Frontline\FL_baseadmin.xlsx", cellrange(A1:D282) firstrow clear

* renaming variables

rename UniqueCandidateID StaffID rename LocalAuthority LA rename DateofBirth DOB

* cleaning variables

* DOB gen DOB2 = date(DOB, "MDY") format DOB2 %td

codebook DOB2

codebook DOB2 // some very high values for DOBs, e.g. - 2014-2018

```
tab DOB2 if DOB2 > date("01jan2002","DMY") //displays values that seem inplausible.
tab StaffID if DOB2 > date("01jan2002","DMY") //show staff IDs
replace DOB2 = . if DOB2> date("01jan2002","DMY") // treating these as missing for
purposes of randomisation
```

drop DOB rename DOB2 DOB format DOB %td // added to keep formatting.

codebook StaffID // all unique values, none missing

gen org="Frontline" // creating new variable to indicate all participants are from Frontline



drop if Turnover==1 // 7 individuals left the Frontline programme in between baseline data sharing and randomisation

*** Randomisation ****

set seed 28042012

*generate random numbers distributed uniformly between 0 and 1 gen double random1 = runiform(0,1) gen double random2 = runiform(0,1)

*sort random numbers in ascending order sort random1 random2

*assign top half of list into Control, *bottom half into Treatment gen assignment = [ceil(2 * _n/_N)]-1

*let 0 = Control, 1 = Treatment 1 label define assignment 0"Control" 1"Treatment" label value assignment assign

*check the assignment variable tab assignment

* creating new variable for easy interpretation by Frontline gen emails = assignment

tostring emails, replace replace emails="Receive the SWING emails" if emails=="1" replace emails="Do not receive the SWING emails" if emails=="0"

keep StaffID assignment emails

* Saving export excel "\$root\Randomisation\SWING\Frontline\FL_assignment.xlsx", replace

Appendix D: Recruitment Email for Universities

Hello X,



We are getting in touch from <u>What Works for Children's Social Care</u> (WWCSC), as an organisation we aim to build a robust evidence base to determine what works in the sector.

We are seeking research partners (social work university departments) who would be interested in collaborating with us on a research project titled the Social Workers Inspiring Next Generation (SWING). SWING would involve sending social support messages to social work students who are entering the sector for the first time, with these messages coming from social work alumni and other experienced social workers. The project is aimed at increasing new social workers' sense of connectedness to their profession and workplace, as well as positively impact wellbeing and burnout, with the rationale that this would subsequently reduce turnover and sickness absence rates.

This research project is part of our wider <u>Happier Healthier Professionals programme</u> which looks at ways to improve employee wellbeing. Employee wellbeing is increasingly recognised as a core ingredient in achieving any organisation's goals, given an emerging body of evidence linking employee happiness with overall productivity, engagement and turnover. To build evidence in this area, we are collaborating with researchers from the Harvard Business School, King's College London, University of East Anglia and What Works for Wellbeing.

If you are interested in this project and want to discuss further, please respond to this email with your availability for a 30-minute introduction call in the next 2-3 weeks.

We look forward to hearing from you.

Appendix E: Final version of initial email sent to Frontline participants containing survey link (to be adapted for other participants)

Dear all,



Frontline are participating in some exciting research into participant wellbeing with What Works Centre for Children's Social Care (WWCSC). In the coming months, we'll be testing a new wellbeing intervention with Frontline Participants. As part of this project, we're asking you to complete **two 3-minute surveys** - one now, and one in a couple of months time. This is the first of those surveys. Additionally, as part of this research, some of you will receive a series of text messages from Frontline over the next couple of months.

The survey (link below) will take around **3 minutes to fill out**, and for every completed survey we will donate **£1 per survey response completed to** <u>Become</u>, a charity that aims to help children in care and young care leavers to believe in themselves and to heal, grow and unleash their potential.

Just to note too that your survey responses cannot and will not be individually traced back to you - your responses will be stored anonymously by WWCSC.

We're asking for all responses by Friday, 30th October

Please find your unique link to the survey here:

«Unique_Survey_Link»

NB: Please ensure that you complete the survey using your individual link above - do not share this link with colleagues.

Best, The Fellowship team.

Appendix F: Survey Reminder Emails to Frontline participants (to be adapted for other participants)

Reminder Email 1: To be sent 5 days prior to survey deadline

Subject: Reminder: Complete 3-minute survey by Friday 30 October for £1 donation to Become charity

Hi,

Just a reminder to those of you who haven't already to please complete the 'Frontline: Experiences at Work' survey you received on **Monday 19 October**.

It only takes around **3 minutes** to fill out, and as a reminder, for every completed survey the What Works Centre will donate **£1 per survey response completed to <u>Become</u>**, a charity that aims to help children in care and young care leavers to believe in themselves and to heal, grow and unleash their potential.



As additional context, this survey is part of a research project we are conducting with What Works for Children's Social Care to improve the wellbeing of our programme participants. By participating, you'll be contributing to research that is aimed at creating a better experience for Year 2 Frontline participants.

Your link to complete the survey can be found in the initial email, which was sent on Monday 19 October - please use the unique link you received to complete the survey. The deadline to complete the survey is this Friday 30 October.

Best, Mary

Mary Jackson (she/her) Chief Programmes Officer

Reminder email 2: To be sent 1 day prior to survey deadline

Subject: Final Reminder: Complete 3-minute wellbeing survey by Sunday! Over £100 raised so far for Become charity

Hi,

This is a final reminder to please complete the 'Frontline: Experiences at Work' survey. Your link to complete the survey can be found in the initial email you received on Monday 19 October.

We're extending the deadline to the end of **Monday**, **2 November** for you to complete the survey.

The majority of your peers have already completed the survey, with over £100 raised for <u>Become</u>, a charity that aims to help children in care and young care leavers to believe in themselves and to heal, grow and unleash their potential.

Your survey response will make a difference as it will allow us to develop research aimed at improving the wellbeing of future cohorts of Frontline participants.

The survey has taken on average **3 minutes of participants' time**.

Best, Mary

*Note: If you would like to opt out of this, please email Kelly.Lagou@thefrontline.org.uk.

Mary Jackson (she/her) Chief Programmes Officer



Appendix G: Survey Measures

T1 survey

Q1. Overall life happiness³⁵

Taking all things together, how happy would you say you are?

Response categories: 0 = not at all to 10 = Extremely

Q2. Schedule for Positive and Negative Affect³⁶

Please think about what you have been doing and experiencing at work DURING THE PAST FOUR WEEKS. Then report how much you experienced each of the following feelings, using the scale below.

- Positive
- Bad
- Negative
- Unpleasant
- Good
- Pleasant

Response categories: 1 = Very rarely/never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Very often/always

Q3. Copenhagen Burnout Inventory (CBI)³⁷

Personal burnout

- 1. How often do you feel tired?
- 2. How often are you physically exhausted?
- 3. How often are you emotionally exhausted?
- 4. How often do you think: "I can't take it anymore"?
- 5. How often do you feel worn out?
- 6. How often do you feel weak and susceptible to illness?

³⁵ Jowell, R. (2007). European Social Survey 2006/2007. Round 3: Technical Report. City University, Centre for Comparative Social Surveys, London.

³⁶ Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D. W., Oishi, S., & Biswas-Diener, R. (2009). New well-being measures: Short scales to assess flourishing and positive and negative feelings. Social Indicators Research, 97(2), 143-156.

³⁷ Kristensen, T. S., Borritz, M., Villadsen, E., & Christensen, K. B. (2005). The Copenhagen Burnout Inventory: A new tool for the assessment of burnout. *Work & Stress*, *19*(3), 192-207.



Response categories: 1 = Never/almost never, 2 = Seldom, 3 = Sometimes, 4 = Often, 5 = Always

Work-related burnout

Please think about your experience at work during the PAST FOUR WEEKS. Then, indicate your agreement with each of the following statements, using the scale below.

- 1. Do you feel worn out at the end of the working day?
- 2. Are you exhausted in the morning at the thought of another day at work?
- 3. Do you feel that every working hour is tiring for you?
- 4. Do you have enough energy for family and friends during leisure time?
- 5. Is your work emotionally exhausting?
- 6. Does your work frustrate you?
- 7. Do you feel burnt out because of your work?

Response categories:

- Q1-4: 1 = Never/almost never, 2 = Seldom, 3 = Sometimes, 4 = Often, 5 = Always. Reversed score for Q4.
- Q5-7: 1 = To a very low degree, 2 = To a low degree, 3 = Somewhat, 4 = To a high degree, 5 = To a very high degree.

Client-related burnout

- 1. Do you find it hard to work with clients?
- 2. Does it drain your energy to work with clients?
- 3. Do you find it frustrating to work with clients?
- 4. Do you feel that you give more than you get back when you work with clients?
- 5. Are you tired of working with clients?
- 6. Do you sometimes wonder how long you will be able to continue working with clients?
- Q1-4: 1 = To a very low degree, 2 = To a low degree, 3 = Somewhat, 4 = To a high degree, 5 = To a very high degree.
- Q5-6: 1 = Never/almost never, 2 = Seldom, 3 = Sometimes, 4 = Often, 5 = Always.

Q4. Professional Identification³⁸

- 1. I feel I have a lot in common with others in my profession or occupation
- 2. I find it easy to identify with my profession/occupation
- 3. I view the problems of my profession as my problems
- 4. My values and the values of my profession are very similar

Response categories: Seven point from 1 = Strongly disagree to 7 = Strongly agree.

³⁸ Lammers, J. C., Atouba, Y. L., & Carlson, E. J. (2013). Which identities matter? A mixed-method study of group, organizational, and professional identities and their relationship to burnout. *Management Communication Quarterly*, 27(4), 503-536. Adapted from: Hoff, T. J. (2000). Professional commitment among US physician executives in managed care. *Social Science & Medicine*, *50*(10), 1433-1444.



Q5. Self-Reported Sickness Absence

How many days have you been absent from work at your Local Authority due to sickness/illness during the past year?

For example, please enter the number "5" if you have had five sickness absence days in total during the past twelve months.

Finally, just a few questions about you.

Q6. Gender

Which gender do you most closely identify with?

- Female
- Male
- Transgender female
- Transgender male
- Gender variant/Non-conforming
- Not listed: _____
- Prefer not to answer

T2 survey:

Same as T1 survey measures (appendix D) with the following changes:

- Exclude question 6 on gender.
- Include question on annual leave days taken during intervention period:
 - "How many days of annual leave (holiday days) have you taken during the past two months?"

Appendix H: Survey Consent Form



Thank you for taking part in this survey! This contributes to exciting research led by What Works for Children's Social Care (WWCSC) in collaboration with Frontline to help us improve wellbeing amongst social workers.

The purpose of the survey is to understand more about your unique experience as a social worker and to evaluate an intervention designed to improve wellbeing. The survey will take approximately 3 minutes, and we ask that you please complete all of the questions.

We are only requesting data that is necessary for the purposes of this research. We will not capture any information that let's us easily identify you. Your response will be matched via a unique code so that we can match your responses before and after the programme. Your unique code will also allow us to match your responses to administrative data, and any other surveys we have asked you to complete. WWCSC will not take any steps to identify you from your answers. Your answers will be analysed by the research team at the WWCSC, and all data will be deleted 24 months after final reporting is complete.

The privacy notice for this study can be found here.

If you have any questions after you have completed the survey, and/or later decide that you do not want to participate in this research, and/or you would like your responses to be deleted or rectified, please contact the research team by emailing Shibeal O' Flaherty, Researcher at the WWCSC: shibeal.oflaherty@whatworks-csc.org.uk.

The WWCSC can be contacted at: What Works for Children's Social Care The Evidence Quarter Albany House Westminster, London, SW1H 9EA Email: research@whatworks-csc.org.uk

To participate, please click "Agree" next to the below statements to proceed to the survey:

I confirm that I have read the above information. I voluntarily agree to participate in the research.



Appendix I: Ethics Approval Letter



What Works for Children's Social Care The Evidence Quarter, Albany House, London, SW1H 9EA Faculty of Social Sciences Norwich Business School

University of East Anglia Norwich Research Park Norwich NR4 7TJ United Kingdom

Email:z.bika@uea.ac.uk

Web: www.uea.ac.uk

23 June 2020

To Whom It May Concern,

This letter is to confirm that the three interrelated ESRC funded 'What Works Centre for Children's Social Care' projects (RIN: R201659) titled 'Healthier, Happier Professionals: Pro-Time (1); Symbolic Awards (2); and Inspiring the Next Generation (3) were granted ethics approval from the NBS S-REC on 14th May, 2020 after submitting the amended documentation.

Approval by the NBS-REC should not be taken as evidence that your study is compliant with GDPR and the Data Protection Act 2018. If you need guidance on how to make your study GDPR compliant, please contact your institution's Data Protection Officer.

Kind regards,

2 Biro

Zografia Bika PhD Chair of the NBS Research Ethics Committee

NBS RESEARCH ETHICS INFORMATION at https://www.uea.ac.uk/norwich-business-school/researchethics