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Happier Healthier Professionals

Phase Two: Randomised Controlled
Trials and Pilots Conducted with
Public-Sector Workforces
Report

January 2022







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About What Works for Children's Social Care

What Works for Children's Social Care seeks better outcomes for children, young people and families by bringing the best available evidence to practitioners and other decision makers across the children's social care sector. We generate, collate and make accessible the best evidence for practitioners, policy makers and practice leaders to improve children's social care and the outcomes it generates for children and families.

To find out more visit our website at: whatworks-csc.org.uk

Foreword

Frontline public service work is demanding. Unchecked, long working hours in an emotionally draining role can create problems for employers - high turnover and high absence. For workers themselves, problems can manifest themselves as poor well-being and health problems. It is not the case that high turnover rates, absence, poor well-being and work-related health conditions are solely problems for the public sector. However, some parts of the public sector are especially affected – such as health and social care, and the strain placed on these services during the pandemic may well have made existing problems much worse.

These problems have consequent costs, economic and moral. Ineffective delivery of public services due to staff working under strain has costs for employers and as well as the recipients of services (i.e. the public). Indirectly, there is a cost to the taxpayer through increased spend on sickness disability benefits as well as covering the cost of recruiting and training new staff to replace those that have left. However, poor staff well-being and morale, high absence and turnover should not be seen as simply the 'cost of doing business' in the public sector any more than in the private or voluntary sectors. Many organisations take the well-being of their staff seriously, and do so for sound reasons such as reduced turnover and absence, as well as authentic concern for staff.

To make the best decisions on how to improve staff well-being, organisations need evidence on:

- What works to improve staff well-being (and also why it works) and realise other organisational benefits;
- How to make those actions work;
- And just as importantly, what does not work.

With these considerations in mind, What Works for Children's Social Care embarked on an ambitious programme of work funded by the Economic and Social Research Council. As the lead for the Work and Learning evidence programme of the What Works Centre for Wellbeing, I was invited to contribute to this programme of research. Focused mainly but not exclusively on social work, the programme delivered four randomised controlled trials and two pilot studies involving over 2800 participants, 10 local authorities and two other organisations. Much of the research was conducted in the challenging conditions of the pandemic.

Lessons learnt from the programme include:

- The effects of interventions can dissipate over time, indicating problems with staff well-being cannot be 'cured' once and for all with a single, easy to administer 'silver bullet'.
- To prevent actions having no, or even adverse effects, it is important to understand a specific context and how to tailor or personalise actions to be appropriate for staff in that context.
- Some actions, such as flexible working, might be popular with staff but pose challenges for senior managers (e.g., ensuring appropriate levels of service provision).

Overall, it seems staff well-being needs to be worked at continuously, actions need to be adapted to be fit for a specific context, and senior managers need to look creatively at what is possible.

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Acronyms and Abbreviations

DfE: Department for Education

FTE: Full-Time Equivalent

HHP: Happier, Healthier Professionals Research Programme

HHP1: Happier, Healthier Professionals Research Programme: Phase One

HHP2: Happier, Healthier Professionals Research Programme: Phase Two

LA: Local Authority

RCT: Randomised Controlled Trial

WWCSC: What Works for Children's Social Care

Executive Summary

In this report, we describe results from four randomised controlled trials and two pilot studies, conducted between October 2020 and July 2021 with ten local authorities (LAs) and two partner organisations.

The projects reported here were developed following a previous round of trials conducted as part of the first phase of the Happier, Healthier Professional research programme, and consultation with our academic partners from University of East Anglia/UiT The Arctic University of Norway, Harvard Business School, King's College London and the research team at WWCSC.

Below are brief summaries of the high-level findings for each study.

RCT 1: SYMBOLIC AWARDS: MESSAGES OF GRATITUDE FROM CARE LEAVERS

Social care staff in seven LAs were sent a video of local care leavers talking about their positive experiences with their social worker. Care leavers reflected on the importance of the role of their social worker, the positive impact it had on their life, and expressed gratitude for their social worker's hard work and efforts. One video, each featuring several care leavers, was produced for each local authority.

Results: We did not observe a significant impact of the intervention on any of our outcome measures, though there were small, directionally positive changes across all of our outcomes for participants who had received the intervention compared to the control group. However, during interviews participants were very positive about the intervention, reporting that it had a positive impact on their motivation and well-being. This is supported by exploratory analysis which indicated that the intervention may have been effective in the weeks directly following its launch, before the effects appeared to attenuate over time. These exploratory analyses were not pre-specified in our trial protocol and should therefore be interpreted with caution. However, this provides tentative evidence that the intervention may have been effective, if only in short-term.

RCT 2: SOCIAL WORKERS INSPIRING THE NEXT GENERATION

This intervention involved a series of weekly text messages sent to newly qualified social workers and social workers in-training from the Frontline social work programme. The messages were written by Frontline alumni and experienced social workers. Each focused on a separate theme and was designed to provide 'words of wisdom' by reflecting on the challenges they themselves had faced at the start of their career in social work.

Results: The messaging did not have a statistically significant impact on any of our outcomes. Interviews conducted with participants suggest that this could in part be due to general fatigue from the high frequency of well-being related communications they received from both Frontline and the local authorities they work in, which had increased in intensity over the Covid-19 pandemic. Participants indicated that they would have preferred more practical advice as opposed to the positively valenced 'words of wisdom' in the text messages they received.

RCT 3: MINISTRY OF DEFENCE INSPIRING THE NEXT GENERATION

This intervention involved a series of eight weekly emails sent to Ministry of Defence, Defence Intelligence (MoD-DI) civilian and military employees who started their roles at the MoD-DI during the past two years. The emails contained messages written by current MoD-DI wellbeing/diversity and

inclusion leads, senior leaders, and experienced employees, which described the shared experiences, challenges, and the rewarding nature of their work.

Results: We did not observe a statistically significant effect on any of our outcome variables of interest post intervention. While there were some slight directional changes for the treatment group, the confidence intervals were large. In interviews, team managers at the MoD-DI indicated that they used the messages as aids to start conversations around wellbeing. They all agreed that wellbeing interventions at the MoD were important, but some felt that they had to be more resource intensive or personalised.

RCT 4: INCREASING DIVERSITY: TWO ONLINE EXPERIMENTS TO REDUCE BIAS IN SOCIAL WORK HIRING

Building on research conducted in other fields which has identified interventions that might decrease bias in recruitment processes, these two trials tested the effectiveness of testing two 'evaluation nudges' via online experiments. Participants were asked to imagine they were assessing applicants for a final stage interview for a managerial position within children's services, and were presented with fictitious CVs to review. Applicants had either stereotypically white or non-white names. Our hypothesis was that small changes to how applicant CVs were assessed might decrease racial bias from reviewers.

- Experiment 1 (Joint vs. Separate Evaluation): In the first experiment participants reviewed the same CVs either in pairs (the 'joint' condition) or consecutively (the 'separate' condition), to understand whether viewing CVs side-by-side changes the rate at which CVs with non-white sounding names are progressed.
- Experiment 2 (Blinding): In the second experiment participants assessed otherwise identical CVs with either a white-sounding name, non-white sounding name or no name (the 'blinded' condition) to test whether removing the candidate's name results in changes to participants' assessment of their quality.

Results:

- Experiment 1: Candidates with names typically associated with Minority Ethnic Groups were significantly more likely to be selected to progress in the 'joint' condition than they were when assessed individually. They were also significantly more likely to be progressed than the candidates with White British names in the 'joint' condition.
- Experiment 2: In our second experiment, we found no evidence of racial bias from participants in the absence of the intervention. We observed no differences in the evaluation scores of candidates when they had either a name typically associated with White British or Minority Ethnic backgrounds, or when the name was removed in the 'blinded' condition.

PILOT 1: DICTATION SOFTWARE: REDUCING ADMINISTRATIVE BURDEN

In this pilot study, social workers in two LAs were provided with a dictation software app - 'Dragon Anywhere' - for use on their work smartphones. This software allows users to dictate their case notes and reports rather than typing them, allowing them to produce notes while away from their laptops quickly and easily. The primary aim of the pilot was to understand the acceptability and feasibility of

the intervention for our participants. We also collected data about social workers' experiences of the dictation app.

Results: There was high variance in rates of uptake from participants, with some participants regularly making use of the software while others barely used it at all. There was, however, some indication from participants that their usage may have been higher had they had access to the software for a longer period of time. There was also a range of perceptions of the impact of the software. Some participants reported substantial time savings of up to 6 hours per week, although others saw fewer opportunities to use the software and therefore enjoyed little benefit. These findings suggest that LAs might provide the software selectively to staff who see most use for it, or consider creating resources to make the potential uses and benefits of the software more tangible for staff. We recommend a full impact evaluation in order to quantify what effects, if any, the provision of a dictation app could have for social workers.

PILOT 2: FLEXIBLE WORKING FOR SOCIAL WORKERS

This pilot study aimed to understand the feasibility and perceived impact of a flexible working policy (where social workers are able to 'compress' their working hours into fewer days). The evaluation was conducted in one LA where this policy was already in place. Interviews were conducted with staff in different roles and teams, and with staff who made use of the policy in different ways.

Results: The flexible working policy was considered by participants to be a more reliable, and therefore preferable, means of redressing their work-life balance than time off in lieu (TOIL), as the arrangements were more likely to be adhered to in the face of increasing demands. Individual and team workload were also seen as important factors in determining whether participants were able to adhere to their flexible working pattern. The team managers were key to enabling social workers to make full use of the flexible working policy. Participants were generally very positive about the policy, and there was some indication that it positively impacts social workers' motivation and feelings of work-life balance. However, senior staff reported challenges in balancing staff's working patterns with service delivery.

Introduction

Background

The number of full-time equivalent (FTE) children and family social workers employed in England between 1 October 2019 and 30 September 2020 was 31,854 (Gov.uk, 2021). The turnover rate of social workers - including those who have moved to a different role in their LA or left the LA entirely during this same period was 4,294, approximately 13.5% of the total workforce. 69.7% of full-time children and family social worker leavers had worked in their local authority for less than 5 years. There was an overall sickness absence rate of 2.9% (Gov.uk, 2021). Social workers also report a high prevalence of working overtime. A 2018 survey conducted by Bath Spa University together with The British Association of Social Work (BASW) and Social Workers Union (SWU) found that respondents worked an average of 64 days per year more than they are contracted to, or an average of 11 hours above contracted hours per week (Boichat & Ravalier, 2018).

It is likely that these rates of turnover, sickness absence and overtime are a result of particular challenges social workers face in their roles. The role is client-facing and often involves many competing and complex demands, which contributes to higher levels of stress and burnout relative to other comparable professions (Balloch et al., 1998; Lloyd et al., 2002; Ben-Porat & Itzhaky, 2015). Social work also involves substantial emotional labour, that is - the process of managing one's feelings and expressions required as part of one's job. This is cognitively taxing and can contribute to higher burnout and lower job satisfaction (Brotheridge & Grandey, 2002; Roh et al., 2016). The high workload is also a commonly cited challenge for the nation's social workers. In a Department for Education (DfE) longitudinal study, 58% of children's social workers agreed that their workload was too high, and 55% said they were being asked to fulfill too many roles in their job (DfE, 2021). Such factors can contribute to rates of turnover and sickness absence rates (Ravalier, 2019).

A survey of social services staff (N = 1234) in two social services departments in England further supports the significance of these challenges for the workforce (Coffey et al., 2004). The study revealed that children and family social services staff reported higher levels of absenteeism, lower well-being and the highest level of organisational constraints (e.g., conflicting job demands) compared to other departments (e.g. adult services). In line with this, the Labour Force Survey conducted in 2016 suggested that the health and social care sector is among the most stressful, with employees from this group having a statistically significant higher incidence of stress-related sickness compared to other sectors (HSE, 2017). A 2018 survey of 3,421 social workers revealed that their perceptions of working conditions, such as job demands, managerial support and peer support were worse than over 90% of employees in both public and private sector occupations (Boichat & Ravalier, 2018). The same survey found that nearly 40% of respondents intended to leave the profession entirely (Boichat & Ravalier, 2018), and indeed, there are significant issues with regards to the recruitment and retention of social care staff (Collins, 2008).

Taken together, these findings highlight the need for policies and interventions designed to improve the working conditions and promote the well-being of social workers, which might in turn positively influence staff recruitment, retention, and sickness absence rates.

Happier Healthier Professionals Programme

There is a body of evidence demonstrating that the well-being and working conditions for UK social workers are poor (Ravalier et al., 2020), yet, there is a lack of evidence on what works (or what interventions work) to improve the well-being of social workers.

Drawing on a number of fields including behavioural science, psychology and economics, What Works for Children's Social Care (WWCSC) launched the HHP research programme in January 2019. The aim of the programme was to improve the lives of social workers by developing and evaluating interventions which might positively influence subjective well-being, as well as other outcomes of importance to social workers in the workplace.

In the first phase of the HHP research programme (HHP1), we launched three behavioural interventions with 12 Local Authorities (LAs) across England. The <u>findings</u> from this work, as well as desk research undertaken by the WWCSC research team, and input from our academic partners and the WWCSC Practice team, informed the development of a new set of well-being interventions. As part of the programme's funding from the Economic and Social Research Council (ESRC), the group of eligible participants was extended to include other frontline professionals across England. The trial of social support messaging for MoD staff is therefore reported here alongside interventions for social workers.

The second phase of the HHP research programme (HHP2) was launched in January 2020, with interventions implemented in ten LAs, and twelve organisations in total. The interventions are outlined below, with links to trial and pilot protocols included¹:

- Symbolic Awards: Messages from Beneficiaries Social care staff were sent a video of care leavers from their LA talking about their positive experiences with their social worker. Care leavers reflected on the importance of the role of their social worker, the positive impact they had on their life, and expressed gratitude for their social worker's hard work and efforts.
- Social Workers Inspiring the Next Generation (SWING) Newly qualified social workers and social workers in-training from Frontline received weekly messages, written by Frontline alumni and experienced social workers. The messages were designed to provide 'words of wisdom' by reflecting on the challenges they themselves had faced at the start of their career in social work.
- Ministry of Defence Inspiring the Next Generation (MoD-ING) This intervention involved a series of eight weekly emails sent to MoD Defence Intelligence (DI) civilian and military employees who started their roles at the MoD DI during the past three years or less. The emails contained messages written by current MoD senior leaders and employees, which described the shared experiences, challenges and the rewarding nature of their work.
- Increasing Diversity in Social Work Hiring This study consisted of two online experiments
 designed to test interventions that might reduce bias in social worker recruitment processes.
 For both experiments, participants were asked to evaluate fictitious CVs for a hypothetical
 managerial position within Children's Services.

¹ Cases in which we deviated from the analytical strategies outlined in these documents are recorded, alongside the rationale for these decisions, in Appendix A.

- Dictation Software² A dictation software app 'Dragon Anywhere' was provided to social
 workers in two LAs. This software allowed social workers to quickly and easily dictate their case
 notes and reports rather than typing them.
- Flexitime A flexible working policy in which social workers are permitted to 'compress' their
 working hours into fewer days, so that they work either a four-day week or a nine-day fortnight.

Study Methods and Outcomes

Our interventions were evaluated through a combination of RCTs, some including Implementation and Process Evaluations (IPEs), and pilot studies. RCTs are beneficial in that they are the most robust method to establish causal relationships between interventions and outcomes, while IPEs provide insights into how interventions work and its implementation. Pilots aim to establish the feasibility and acceptability of interventions, often amongst a smaller number of participants.

RCTs

Four of our interventions were evaluated through RCTs. Three of these also included an IPE, to gather qualitative insights from participants. The RCTs were considered appropriate for this method on the basis that we were confident in the feasibility of the intervention and its implementation, and that it could be delivered at the scale required for full quantitative analysis.

For three of the four RCTs, the primary outcome was subjective well-being. Choice of secondary outcomes differed according to the theoretical underpinnings of each intervention and its logic model. In our online studies, outcomes were participants' assessments of fictitious applications for a role in a LA. Randomisation was conducted at an individual level for all trials.

Pilot Studies

Two of our interventions - dictation software and flexitime - were assessed using pilot evaluations. As the intervention would have been costly to provide at scale for social workers, the primary aim of the dictation software pilot was to understand the acceptability of the intervention among participants in order to assess its suitability for a larger randomised trial. We also gathered information on our hypothesised outcomes to understand the potential effectiveness of the intervention and to further inform our logic model. The flexitime pilot was not considered for an RCT due to the practical challenges of randomisation for this kind of policy intervention, and therefore we aimed to understand the feasibility and perceived effectiveness of the intervention via qualitative methods only.

Ethics

Ethics approval was obtained from the University of East Anglia Research Ethics Committee for each of the following studies:

- Symbolic Awards: Messages from Beneficiaries
- Social Workers Inspiring the Next Generation (SWING)
- Ministry of Defence Inspiring the Next Generation (MoD-ING)
- Dictation Software Pilot

² No protocol was published for the pilot of dictation software - this trial was originally intended to be an agile project to determine the feasibility of a possible RCT in 2021.

Flexitime - Pilot

We received ethics approval from King's College London Research Ethics Committee for the 'Increasing Diversity in Social Work Hiring' study.

In line with current research standards and principles of open science,³ the five studies outlined above were also pre-registered via the Open Science Framework website, with sample sizes, study designs, methodology and analysis plans all available publicly:

- 1. Symbolic Awards: Messages of Gratitude from Beneficiaries
- 2. Social Workers Inspiring Next Generation (SWING)
- 3. Increasing Diversity: Two Online Experiments to Reduce Bias in Social Work Hiring
- 4. Ministry of Defence Inspiring the Next Generation (MoD-ING)
- 5. Flexible Working for Social Workers

³ Simmons, J. P., Nelson, L. D., & Simonsohn, U. (2011). False-positive psychology: Undisclosed flexibility in data collection and analysis allows presenting anything as significant. Psychological Science, 22(11), 1359-1366.

Symbolic Awards: Messages of Gratitude from Beneficiaries

Trial type	RCT
Unit of randomisation	Individual-level (social care staff)
Number of local authorities	7 (Bracknell Forest Council, Bradford County Council, Devon Council, Northumberland County Council, Nottinghamshire County Council, Sutton Council, Surrey County Council)
Number of participants	N = 1,969 participants
Primary outcome	Social care staff subjective well-being
Secondary outcome(s)	BurnoutMotivationPerceived social worth

Background

Research suggests that symbolic awards, such as non-monetary awards that recognise employees for their work, e.g. certificates or messages of gratitude, can have a positive impact on the motivation and retention of various workforces (Thibault-Landry et al., 2017; Gallus, 2017). This was supported by research conducted in the first phase of the HHP programme, which showed that symbolic awards - in this case, messages of thanks from senior staff at their organisation - can improve outcomes for social workers (WWCSC, 2021).

Research also suggests that employees' sense about how their work is valued by others is a fundamental motivator (Ryan & Deci, 2000; Rhoades & Eisenberger, 2002), and that increasing the contact between employees and the beneficiaries of their work can increase their sense that their work has a positive impact on others (Grant 2007; Grant, 2008; Kosfeld & Neckermann, 2011; Grant, 2012). There is also evidence to suggest that public-sector employees such as social care staff are particularly motivated by the ability to contribute to society, rather than extrinsic awards such as pay (Crewson, 1997; Houston, 2000; Perry et al., 2010; Cowley & Smith, 2014).

Thus, we hypothesised that symbolic award interventions which highlight the positive impact of their work on others could have high potential to motivate and increase the wellbeing of social workers.

Intervention

In this intervention, social care staff received videos with messages of gratitude from beneficiaries of social care, specifically care leavers from their LA. In each video, three care leavers ('beneficiaries')

reflected on the importance of the role of their social worker in their life, the positive impact they had, and expressed gratitude for their social worker's hard work and efforts.

Participants

Social care staff from a wide range of roles received the video, including caseholding social workers, supervising social workers, family workers, assistant team managers, personal advisors, team managers, senior practitioners, parenting assessors and independent reviewing officers. Across seven participating LAs, the total number of social care staff in both the control and treatment group at the start of the trial was 1,969, with half of these (n = 984) randomised to receive the intervention. A total of 428 completed our survey to provide outcome data for our primary and secondary outcomes.

Method and Design

The trial was an individual-level RCT, with half of the participants assigned to the treatment group (who received the beneficiary message intervention) and the other half to a waitlist control group (who did not receive the intervention until after final data collection). Randomisation was conducted at the individual-level within each LA, using participants' baseline administrative data provided by the LAs.

We sent two online wellbeing surveys to all participants at the seven LAs to measure our outcome measures, once at two months pre-intervention and once one week post-intervention. We also conducted an IPE to better understand the evidence of feasibility and acceptability, and suitability to scale the intervention.

Exploratory Analysis:

We also conducted exploratory analysis to examine the attenuation of the impact of the messages on participants post-intervention. This analysis was not pre-specified. We conducted two exploratory analyses:

- 1. Treatment effects for responses received at different time intervals were calculated for each of our outcomes (with responses recorded later indicating a longer period between intervention and measurement). Participants were split into five roughly equal time periods after the survey went live one week post-intervention launch. These time periods are described below. Treatment effects were calculated using the same linear regressions from the specified analyses, but using data for these different subsets of the sample.
- 2. Using the same subgroup criteria we aggregated the treatment effects of our outcomes in each time period to observe the overall trend over time.

The five time periods were created using roughly the working week in which participants responded to the survey. However, there was one week in which there were fewer than 10 responses, and we therefore combined these with responses from the week before, as they were completed at the start of that week.

Outcomes of Interest

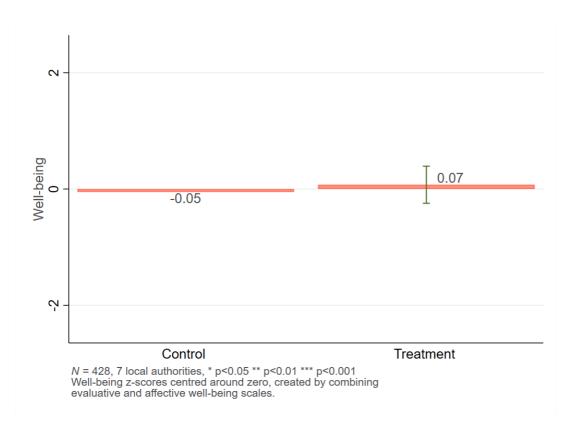
Our primary outcome was subjective wellbeing, the measure for which was produced by combining scales recording participants' affective and evaluate well-being. Our secondary outcomes were burnout, intrinsic and prosocial motivation, and perceived social worth.

Findings

Research Question 1: What impact does the beneficiary video have on the subjective well-being of social care staff who respond to the endline survey?

To answer this question, we ran linear regressions with the final number of social care staff who responded to this question in the endline survey (n = 428). There was a small but non-statistically significant increase in subjective well-being for social care staff in the treatment group (n = 207, M = .07, SE = .12) compared to the control group (n = 221, M = -.05, SE = .12), p = .44.

Figure 1: Subjective well-being and care leaver video intervention



Research Question 2: What impact does the beneficiary video have on the burnout levels of social care staff who respond to the endline survey?

There was no statistically significant difference in the burnout levels for social care staff in the treatment group (n = 201, M = 2.74, SE = .05) compared to the control group (n = 219, M = 2.78, SE = .05), p = .45.

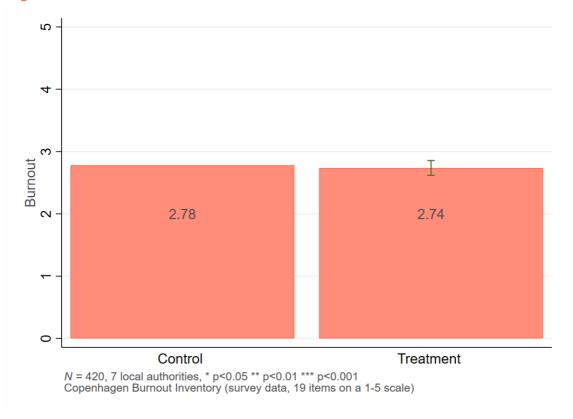
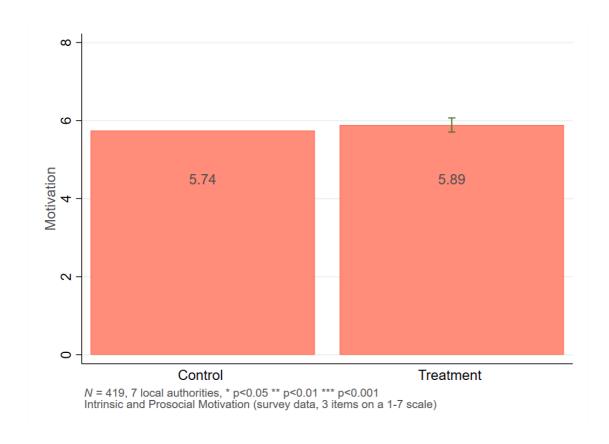


Figure 2: Burnout and care leaver video intervention

Research Question 3: What impact does the beneficiary video have on the intrinsic and prosocial motivation levels of social care staff who respond to the endline survey?

There was a small but non-statistically significant increase in motivation for social care staff in the treatment group (n = 200, M = 5.89, SE = .07) compared to the control group (n = 219, M = 5.74, SE = .07), p = .11.

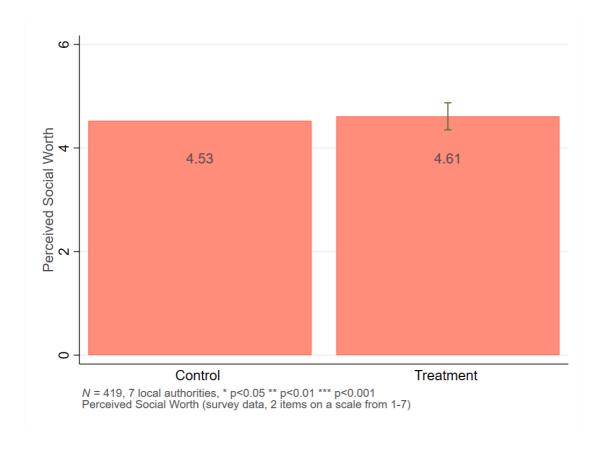
Figure 3: Motivation and care leaver video intervention



Research Question 4: What impact does the beneficiary video have on the perceived social worth of social care staff who respond to the endline survey?

There was a small but non-statistically significant increase in perceived social worth for social care staff in the treatment group (n = 200, M = 5.53, SE.10) compared to the control group (n = 219, M = 5.61, SE = .10), p = .05.

Figure 4: Perceived social worth and care leaver video intervention



Exploratory Analysis

Attenuation of intervention impacts over time

Exploratory analyses - illustrated in figures 5 and 6 below - suggest that the intervention may be effective in the weeks after its launch, but these effects may reduce over time. Figure 5 details the trend over time in the treatment coefficient for each of the outcomes, separated into roughly equal time periods after the survey went live (one week post-intervention launch). The second graph (figure 6) shows the average correlation coefficient of the outcomes in the same time periods.

Figure 5: Attenuation of outcome coefficients post-intervention

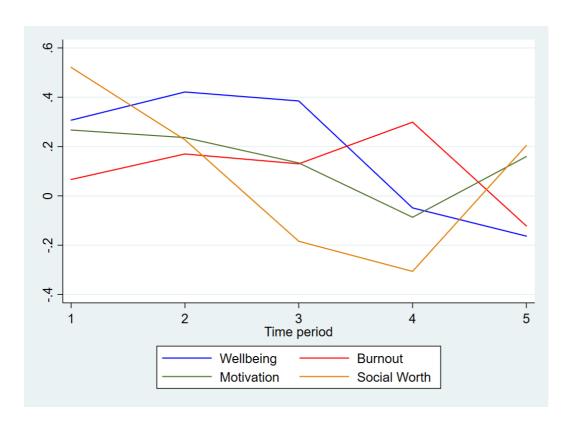
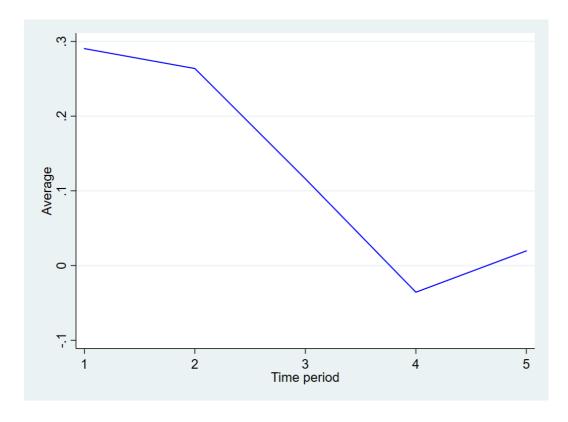


Figure 6: Average attenuation of outcome coefficients post-intervention



While the results of our primary analyses including all data collected are non-significant, these exploratory analyses indicate that the intervention may have initially been effective in the weeks directly following its delivery, before the impact attenuated over time. The potential short-term effectiveness of

the intervention may be supported by insights from the Implementation and Process Evaluation (IPE), in which social workers reported very positive impacts of receiving the video.

Implementation and Process Evaluation

The IPE examined the evidence of feasibility and acceptability, and suitability to scale the intervention. We conducted semi-structured interviews with two LA coordinators, five social care staff who received the video, and one care leaver who appeared in a video.

Findings

1. Evidence of feasibility and acceptability

- **Delivery mechanism:** Social workers found the video easy to access via the video platform Vimeo, and most reported that they watched it at home as they continued to work away from the office due to the Covid-19 pandemic.
- Possible varied uptake amongst treatment group: It was unclear what proportion of social
 workers in the treatment group had watched the video. One LA coordinator felt confident that
 at least 70 percent of the group had watched it, while the other interviewee felt that it had not
 been widely seen.
- Avenues for recruitment of participants: Both LA coordinators interviewed reported that
 using the LAs' Care Leaver Councils was a suitable process for recruiting participants in the
 videos, feeling that care leavers may be more inclined to respond to somebody they were
 already familiar with. However, one LA coordinator reported that it was still a challenge to find
 care leavers willing to participate, and suspected that there was some anxiety amongst some
 of the young people about what questions they would be asked when recording the video.
- Addressing the scarcity of positive feedback mechanisms: The majority of the social work staff interviewed indicated that there were no mechanisms already in place through which they could receive positive feedback on their work from care leavers, and that they only received feedback when something had gone wrong or if a complaint was made.
- Videos as an opportunity for care leavers to give thanks: The care leaver interviewee
 explained that there wasn't usually a service at their LA through which young people could
 express their opinions, noting they were keen to take this opportunity to share their
 experiences, and felt that others would feel the same way.
- Strong sense of motivation and social impact: Social care staff reported that the video acted as a powerful reminder of why they entered the profession, and of stand out cases they had where they felt they had made a difference in young people's lives.

"That's the purpose. It's a sense of achieving, even though I had nothing to do with them children or any involvement in achieving the success of where they are now. I just thought, yeah that's why I'm here. That's why I'll be here tomorrow."

One participant explained that it was rewarding to hear a positive story from a care leaver, and how this boosted their sense of value.

"I think I was crying at the end of it...because it's not something we hear very often. Quite often you're working with children's families who don't want our involvement, so there can be a lot of hostility. So it was really nice to hear some young people are really grateful for the help and support that they've received."

- Attenuation of impact: It was also reported by one participant that while the video motivated her, this effect was short lasting. This supports findings from our quantitative analysis which suggested there was an attenuating effect, whereby the positive impact on the outcomes well-being, motivation and perceived social worth reduced over time.
- Differential impact depending on team: While all the social care staff interviewed enjoyed receiving the video and agreed it was nice to watch, the level of enthusiasm appeared to vary depending on which team the staff members worked in. While those who worked with older children in care or in the leaving care team were very positive about the video, staff in other teams explained that it made them happy for those social care staff that did work directly with children leaving care, but did not have as large an effect.

2. Suitability to scale

• Ready for scaling: Our findings suggest that there is potential to replicate the intervention in other settings and at scale. The LA coordinators we interviewed were broadly positive about the trial and were keen to carry on the process independently. The care leaver we interviewed was part of the care leavers council and explained they had taken inspiration to create their own videos:

"Recently I started creating these sessions, so care leavers can come and share their experiences. Because I do think it's really important, like it's their service and we should be getting their opinions and their views. I definitely think it's kind of helped me you know, being able to gather some more information. Like I said, give the young people a voice."

Adaptation to tailor intervention: As above, however, our interviews suggested that the
intervention could be more tailored by including participants who work with other teams so that
the content was more relevant to a wider range of social work.

Discussion

The intervention did not appear to have any significant positive impact on any of our proposed primary or secondary outcome measures. The survey response rate was 29%, compared to 50% assumed in our power calculations, resulting in a total sample of 419 (versus 944 in our protocol). Holding other initial assumptions about the data constant, this resulted in a MDES of 0.27 rather than the 0.18 we had anticipated. There were small, directional changes for participants who had received the intervention (demonstrating increased subjective well-being, reduced burnout, increased motivation

and increased perceived social worth) compared to the control group, though these differences were non-significant. Findings from our interviews support the idea that the intervention may have had a positive impact on some social workers, with participants reporting that it had increased their motivation and acted as a 'pick-me-up'.

Additional exploratory analyses indicate that the intervention may have had a positive impact on our outcomes for the time directly following its launch, but that these effects may have faded over time. While these analyses were not pre-specified, and we should therefore be cautious in interpreting findings, this provides tentative evidence that, where light-touch interventions are effective, their effects may only last a short time. This could also imply that similar types of interventions may have more of an impact if conducted on a repeated and/or continuous basis. This is in line with recent research demonstrating that continuity of effort is a key factor in the success of workplace wellbeing interventions (Daniels et al., 2021).

One limitation of our study was our inability to measure whether or not social workers in the treatment group actually opened and viewed the video. This would have allowed us to conduct an analysis on the sample as treated, to understand whether actually viewing the video was effective in and of itself. This indicator would also have allowed us to examine variation in uptake across different LA sites, through which we may have understood more about the conditions which facilitate the successful implementation of the intervention.

The results of our primary analyses do not support previous findings from a <u>symbolic awards trial</u> we conducted in the first phase of the HHP programme. In that trial, participants who received a letter containing two lines of positive feedback from their manager reported increased feelings of being valued and recognised. It is possible that the reason this intervention was more effective than the beneficiaries videos was that it was more personalised, and thus potentially more effective in making employees feel like their efforts were being noticed. In line with this, evidence from previous research showed that an intervention involving interactions with direct beneficiaries of one's work increased participants' sense that their work had a positive prosocial impact on others (Grant, 2012).

This hypothesis is supported by our interviews with participants in this trial. Social care staff who worked with older children in care and in the leaving care team reported having found the videos especially powerful and relevant. Social care staff in other teams, however, felt the messages of gratitude were less relevant to them, since their roles did not directly involve working with older children in care, and suggested that future videos containing messages of gratitude could be aimed at specific teams.

Recommendations

- Continuous rather than one-off activities: Our exploratory analysis illustrating changes in the
 treatment effect over time suggests that LAs should aim to establish processes which collect
 and disseminate this kind of feedback on a more continuous (rather than once-off) basis in order
 to produce a more meaningful positive impact on their staff.
- Tailored messaging according to the work of teams: Interviews with social care staff
 indicated that the videos were perceived as particularly impactful for those who did direct work
 with children. Therefore, LAs might consider creating more personalised symbolic award
 interventions for different social work teams.

Directions for Future Research

- Future research could evaluate similar interventions which utilise more personalised messaging
 from beneficiaries. Researchers might also evaluate the impact of symbolic awards which come
 from current beneficiaries (i.e. children and families social workers are currently working with),
 which might make the impact of their work more salient.
- While this research used video recordings to deliver the messages of gratitude, future interventions might consider other, more direct ways of delivering the intervention. For example, in-person meetings between social workers and care leavers facilitated by LA Care Leaver Councils may provide additional prosocial benefits to both social workers and care leavers. Similarly, there may have been a prosocial benefit to viewing the video in the presence of other team members, as indicated by one of the interviewees in the IPE, who stated that they would have liked to watch the video with their colleagues.
- Future research could also aim to confirm the exploratory finding that the intervention's effects attenuated over time to understand how long any effects last for and how they might be sustained.

Social Workers Inspiring the Next Generation

Trial type	RCT
Unit of randomisation	Individual-level (social worker)
Number of participating organisations	1 (Frontline)
Number of participants	N = 267 newly qualified social workers of the Frontline programme including year one participants from 2020 (n = 87), and both year one and year two participants from 2021 (n = 178)
Primary outcome	Subjective well-being
Secondary outcome(s)	 Social worker sickness absence Burnout Sense of connection to profession

Background

High-quality relationships with others are a core component of well-being (Ryff & Singer, 1998). For example, in a study of over 650 employees and their supervisors in one public-sector organisation and one private-sector company, workplace loneliness was found to be related to lower levels of job performance, suggesting that a sense of connection at work can also positively impact on organisational outcomes (Ozcelik & Barsade, 2018).

Research also suggests that job resources such as strong social support can help to counteract excessive job demands (e.g. high workloads) and burnout (Bakker et al., 2005). There is evidence which suggests that workforce well-being interventions which leverage peer support to counteract these pressures are effective across different groups of public-sector employees, including police officers (Van den Heuvel et al., 2015), and hospital nurses (Rickard et al., 2012). Research also indicates that newer employees are at risk earlier in their careers (Maslach et al., 2001), and that newer employees reap more benefits from social connection interventions compared to more experienced or tenured employees (Winslow et al., 2017). Thus, interventions which increase the social support and connectedness for newer employees may be particularly effective in promoting well-being and other workforce outcomes.

A recent field experiment conducted with 911 call operators in Canada supports this hypothesis. Employees were sent a series of messages on an online platform from colleagues, with the messages designed to provide social support and increase the sense of professional identity (Linos, Ruffini, &

Wilcoxen, 2021). The intervention was found to have a positive impact on both burnout levels and retention levels six months post-intervention.

Intervention

The Social Workers Inspiring the Next Generation (SWING) intervention was adapted from the intervention implemented with 911 call operators described above. The intervention involved sending a series of weekly text messages to social workers and trainee social workers in the Frontline programme. The messages contained positive messaging based around specific themes, written by Frontline alumni and experienced social workers. Messages emphasised the shared experiences, challenges and rewarding nature of social work, aiming to promote a sense of professional identity. Participants were also invited to respond to each weekly message with their own thoughts and reflections via an online form, with the link to this included in each message, and responses which were deemed particularly impactful were included in the following week's message.

Participants

The participants were 1148 current trainees on the Frontline social work programme. The intervention was implemented in consecutive years with two cohorts. The first consisted of 281 social workers who had just entered their second year of their Frontline programme. These were newly qualified social workers, having just completed a PGDip in social work in the first year of the Frontline programme, working within LAs in their Assessed and Supported Year in Employment (ASYE) year. Out of these, 89 responded to our post-intervention survey. The second cohort included both first years (who had not yet qualified as social workers) and second years from the Frontline programme (N = 867), of whom 178 completed the survey.

For the second cohort, changes were made to the design of the intervention based on feedback from participants gathered in the IPE, including:

- Number and content of messages: The number of messages was reduced from eight to six messages, based on feedback from participants that their engagement with the messages reduced over time. We chose six of the eight messages from cohort one which were perceived by participants as most impactful, including four from Frontline fellows, and two from experienced social workers.
- Delivery mechanism: Messages were sent to the second cohort via email rather than text
 message. Participants reported that the text messages felt long and cumbersome, and may
 even have contributed to a feeling of being overwhelmed as a result of receiving work messages
 from multiple channels.

Method and Design

The trial was an individual-level RCT, with half of the participants assigned to the treatment group (who received the eight-week message intervention) and the other half to a control group (who did not receive the intervention).

Randomisation was conducted separately for each cohort - cohort one (N = 281) and cohort two (N = 867) using baseline administrative data on the total sample of participants provided by Frontline. Outcome data was collected via online surveys - once pre-intervention and once post-intervention. We also conducted an IPE with the first cohort to better understand the evidence of feasibility and acceptability, and suitability to scale the intervention.

Outcomes of Interest

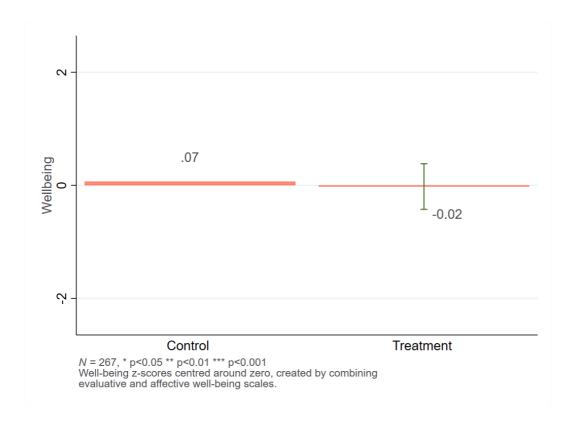
The primary outcome for the trial was subjective well-being, measured using combined scales for evaluative and affective elements of well-being. Secondary outcomes were burnout, sense of connection to one's profession, and self-reported sickness absence rates.

Findings

Research Question 1: What impact does the SWING intervention have on the well-being of participants who respond to a well-being survey?

To answer this question, we ran linear regressions with the final number of social workers who responded to this question in the endline survey (N = 267). There was no statistically significant difference in subjective well-being for social workers in the treatment group (n = 130, M = -.02, SE = .14) compared to the control group (n = 137, M = .07, SE = .16), p = .66, though subjective well-being was slightly lower for participants in the treatment group.

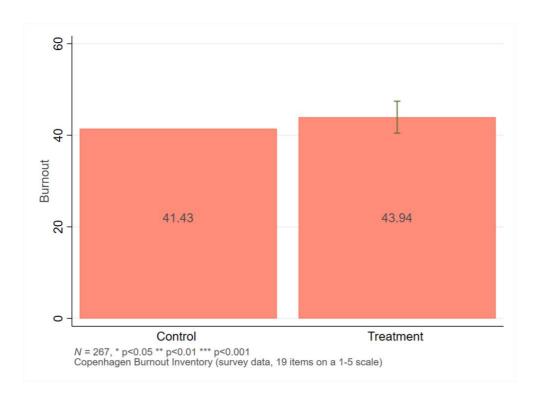
Figure 7: Subjective well-being and SWING



Research Question 2: What impact does the SWING intervention have on the burnout levels of participants who respond to a well-being survey?

We ran linear regressions with the final number of social workers who responded to this question in the endline survey (N = 267). Our linear regression model demonstrated no statistically significant difference between treatment and control groups, though burnout levels were slightly higher for social workers in the treatment group (n = 130, M = 43.98, SE = 1.53) compared to the control group (n = 137, M = 41.43, SE = 1.47), p = .15.

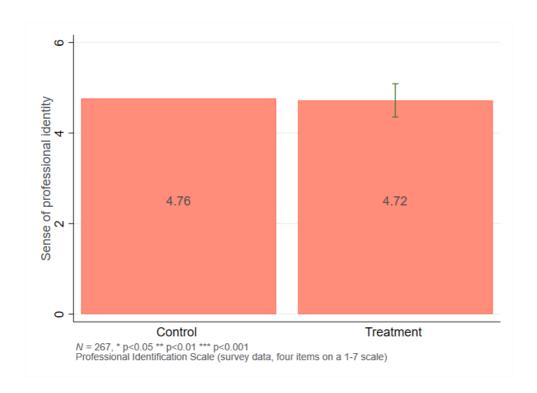
Figure 8: Burnout and SWING



Research Question 3: What impact does the SWING intervention have on the sense of connection to the profession of participants who respond to a well-being survey?

We ran linear regressions with the final number of social workers who responded to this question in the endline survey (N = 267). There was no statistically significant difference in levels of social workers' sense of professional identity for those in the treatment group (n = 130, M = 4.72, SE = .09) compared to the control group (n = 137, M = 4.76, SE = .11), p = .82.

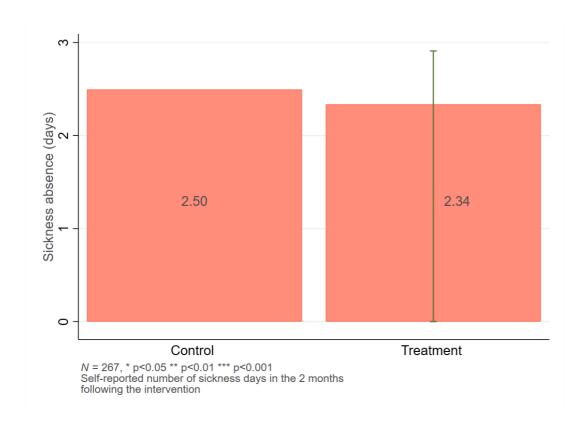
Figure 9: Professional identity and SWING



Research Question 4: What impact does the SWING intervention have on the sickness absence of participants who respond to a well-being survey?

We ran linear regressions with the final number of social workers who responded to this question in the endline survey (N = 267). There was no statistically significant difference in the rates of sickness absence between the groups. The treatment group reported slightly lower rates of sickness absence (n = 130, M = 2.34, SE = .15) compared to the control group (n = 137, M = 2.50, SE = .20), p = .58.

Figure 10: Sickness absence and SWING



Implementation and Process Evaluation

The Implementation and Process Evaluation (IPE) examined evidence of feasibility and acceptability, and suitability to scale. We conducted six semi-structured interviews with participants in the treatment group, with cohort one participants only.

Findings

1. Evidence of feasibility and acceptability

- Feedback form: Only one participant chose to respond to the messages. Interviews
 suggested participants the mechanism was "quite a clunky way of responding" on a phone and
 that they had too many other forms and surveys to complete.
- Length, frequency and number of messages: The length, structure and frequency of messages were acceptable to participants. One participant indicated that they "would have been happy for it to have continued". However, participants' also indicated that they were not able to engage with each weekly message, due to having a very demanding work week. There was a sense that due to time constraints, the message intervention was perceived as something additional to do on top of their already burdensome workload: "...but I suppose when things were just really busy, and everyone wants to talk to you. Then getting a text, I just felt like 'everyone wants more of me".

- Delivery mechanism: Participants reported that receiving the message via text message was
 acceptable, though we did not conduct interviews with participants from the second cohort who
 received the messages via email.
- Message content and tone: Participants reported a desire for message content that was
 more useful and practical for their work, for example links to external resources. Others
 suggested that messaging should recognise the negative as well as the positive elements of
 social work, which would validate their day-to-day experiences of the job.
- **Importance of choice of messenger:** Participants reported feeling more engaged with the content when it was written by Frontline alumni, as they felt they could more easily identify with their experiences.
- Lack of time/bandwidth to engage with messages: Despite short messages, participants
 felt time poor and unable to engage with their content. Reading these was not prioritised above
 other tasks.
- Impact on subjective well-being: Perceptions of the positive impact of the messages on subjective well-being were mixed. Some participants compared the messages favourably to other types of communications they received from the organisation as they felt like "a bit of good news". Others reported no perceived impact on well-being: "They were nice. Would I say helpful, probably not helpful as such in terms of my well-being.
- Sense of support from organisation: Participants reported feeling high levels of support from their organisation during the first year of the programme, whereas they felt more isolated during the second year due to decreased contact with fellow students and support staff. However, participants indicated in the interviews that the intervention may not have been the right type of support to fill that gap, with several participants reporting a desire for more tangible or in-person support.
- Sense of connection to profession: Generally, participants already felt high levels of connectedness to the profession as a whole, pointing to supportive team managers and colleagues in their LAs. As a result, participants reported little impact on this outcome. Some participants suggested that the messaging may have been more impactful for Year 1 participants in the programme, who may not yet feel as connected to others at work or to the profession.
- Sense of connection with other social workers: Participants reported that the messages had the most impact on their sense of feeling connected to other social workers, particularly in the context of the Covid-19 pandemic where they may have felt more isolated due to mainly working from home:

"I think it just sort of brought me a bit of perspective back in terms of that there's others out there and you're not alone... I think there have been points, particularly through the pandemic where I very much felt like that, especially starting in a new team, starting on a new team virtually... Then, you get these texts through and you think, no I'm not".

Impact of Covid-19 / working from home: The messages were perceived to be less useful in
the context of the Covid-19 pandemic and working from home, due to the high volume of
communications already being sent to social workers regarding well-being and self-care.
Participants also reported feeling fatigued due to increased screen time as a result of having to
carry out the majority of their work virtually.

2. Suitability to scale

• **Ready for scaling:** Our findings suggest several adaptations that might improve the impact of the intervention if implemented in other contexts, or at scale. These include 1) changes to the message content and messenger, 2) consideration of the suitability of the recipients' stage in their training, 3) the impact of virtual vs. in-office working on the effectiveness of the intervention.

Discussion

Our study failed to replicate findings from Canada which showed that the intervention had a substantial impact on dispatchers' burnout and turnover rates. We observed a slight decrease in subjective well-being, as well as a small increase in burnout for participants in the treatment group, though these differences were not statistically significant. Professional identity scores and levels of sickness absence for participants differed only marginally between the treatment compared to the control group.

The results reported include participants from two cohorts of Frontline participants who completed our endline survey (N = 267): year one participants from 2020 (n = 87), and both year one and year two participants from 2021 (n = 178). The total number of participants randomised was 1148, meaning that our survey response rate was 23%, lower than our predicted rate of 30%. As a result of this attrition, as well as challenges with recruiting more participants from other educational providers, the MDES for the trial was 0.34 rather than 0.19 (when holding other assumptions about the data constant). Based on the Linos et al. (2021) study, we would expect to be able to detect effects at a MDES of 0.22 or less. Therefore, it is possible that we were not well-powered enough to detect an effect if one existed.

Insights from the IPE provide some indication of why the intervention did not have an effect on participants. Firstly, there may not have been any unmet need amongst recipients for light-touch messaging, but rather for more substantial support. The intervention may therefore have instead made the lack of tangible support available more salient to recipients during the pandemic, potentially leading to the small negative effects on our outcomes. Participants also noted that they were receiving a high volume of well-being communications via their email, and receiving texts on the same subject may have added to their feelings of being overwhelmed. Some participants also reported that the content of the messages stood in contrast to their day-to-day experiences at work as they focused on the positive and did not address the "reality of social work", potentially leading to feelings of frustration.

Finally, while this intervention was very light-touch, social workers still reported feeling that it was a "*luxury*" and therefore not attractive or useful enough to engage with in the face of more pressing work priorities. These findings are in line with results from the first phase of the HHP programme, in which we found that even interventions which require little time or effort tend not to be effective for time-poor social workers.

Recommendations

Due to the trial showing no significant impact on our outcomes, we are not continuing with further data collection for the trial as previously indicated in the trial protocol. Policymakers should consider the following adaptations to the intervention prior to implementing it in other contexts:

- Appropriate messenger for social support messages: Social support messages should be written by people recipients can relate to.
- Tangible and instrumental support: Messages should include practical support and advice.
- **Timing of the intervention:** Consider the most appropriate time in social workers' training to send messages to maximise positive impact.
- **Deliver well-being interventions in person:** Social support interventions in social work settings may be best delivered in-person, particularly in the context of the Covid-19 pandemic where there has been less in-person contact with colleagues.

Ministry of Defence: Inspiring the Next Generation

Trial type	RCT
Unit of randomisation	Individual-level (MoD staff)
Number of participating sites	1 Site: Ministry of Defence (MoD) Defence Intelligence (DI) department
Number of participants	N = 276 MoD Defence Intelligence(civilian and military) employees
Primary outcome	Subjective well-being
Secondary outcome(s)	 Sickness Absence Organisational Commitment and Perceived Organisational Support Sense of Connection to Profession

Background

Past research has demonstrated that anecdotes and reflections written by senior-level colleagues which emphasise the importance of one's work can have a positive impact on employee performance and the extent to which they feel dedicated to their jobs (Grant, 2008; Linos et al., 2021). Moreover, there is evidence to suggest that workforce well-being interventions which leverage peer support are effective across different sets of public-sector employees, including police officers (Van den Heuval et al., 2015), and hospital nurses (Rickard et al., 2012). Research also suggests that newer employees reap more benefits from social connection interventions compared to more experienced or tenured employees (Winslow et al., 2017).

The Ministry of Defence (MoD) encompasses a number of organisations including the Royal Navy, Army, Royal Air Force, Joint Forces Command and MoD Civil Service, with their civil servant workforce encompassing 56,680 employees (MoD, 2017). Defence Intelligence (DI) is an integral part of the MoD, gathering and analysing military intelligence for decision makers (Gov.uk, n.d.). DI hires between 200-300 new employees each year, including a mixture of military and civilian staff.

As part of their work, MoD-DI staff deal with wide-ranging issues that are of key importance in protecting the public, including dealing with responses to national disasters, preventing child exploitation, and being involved in diplomatic missions with hostile countries (Alessandri, 2019). Perhaps influenced by the distressing content of their work, mental health issues are cited as the leading cause (22%) of non-industrial MoD Civil Servant sickness absence, and the highest cause of long-term sickness absence (MoD, 2017). MoD-DI staff are therefore an important group to target with well-being interventions.

Intervention

To complement the <u>SWING trial</u> detailed earlier in this report, we collaborated with the MoD to develop and test an intervention which involved sending a series of social support messages to staff at the MoD-DI. As with SWING, MoD Inspiring the Next Generation was adapted from an intervention where 911 call operators in Canada were sent a series of messages on an online platform from fellow colleagues, designed to provide social support and give advice to new hires (Linos et al., 2021).

In our trial, a series of eight weekly emails were sent to MoD-DI civilian and military employees. The emails contained content written by current MoD senior leaders, well-being/diversity and inclusion leads, and experienced employees, which described shared experiences, challenges and the rewarding nature of their work. The messaging was designed to enhance employees' sense of workplace identity, social support and belonging. Participants were also invited to respond to each weekly message with their own thoughts and reflections via an online form, with the link to this included in each message.

Participants

Participants included 276 staff members at the MoD-DI. Employees were eligible if they were civilian or military staff within the DI department, and had started working in DI in the two years prior to the launch of the intervention. Out of these, 98 responded to our post-intervention survey.

Method and Design

The trial was designed as an individual-level RCT, with half of the participants assigned to the treatment group (who received the eight-week message intervention) and the other half to a control group (who did not receive it). Randomisation was conducted using baseline administrative data provided by the MoD (N = 276).

Outcome data was collected via online surveys once at pre-intervention and once at post-intervention. We also conducted an IPE to help understand the fidelity and adaption; programme differentiation; reach and acceptability; mechanisms of the intervention.

Outcomes of Interest

The primary outcome for the trial was subjective well-being, using scales to measure evaluative and affective elements of well-being. Our secondary outcomes were sickness absence⁴; organisational commitment and perceived organisational support; and a sense of feeling connected to one's profession.

Findings

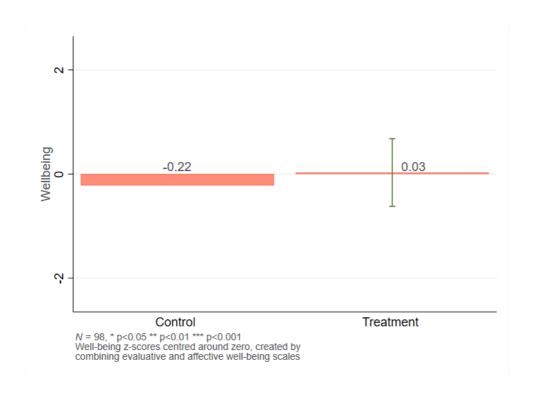
To answer our research questions, we ran linear regressions with the final number of MoD staff who responded to this question in the endline survey (n = 98).

⁴ We do not include analysis on the sickness absence outcome in this report as we are awaiting endline administrative data from the project partner.

Research Question 1: What impact does the MoD-ING intervention have on the subjective well-being of eligible MoD-DI staff?

The well-being for MoD-DI staff in the treatment group (n = 44, M = .03, SE = .25) was slightly higher than the control group (n = 54, M = -.22, SE = .25), p = .47, but this was not statistically significant.

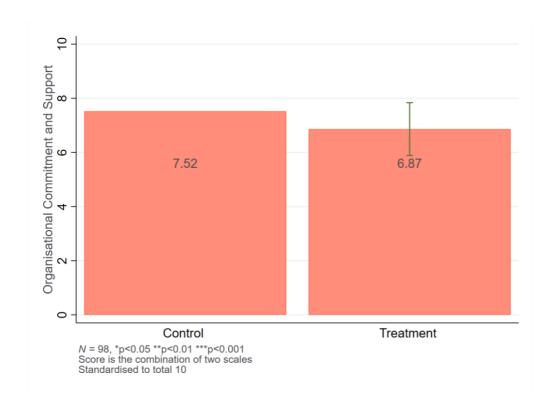
Figure 11: Subjective well-being and MoD-ING



Research Question 2: What impact does the MOD-ING intervention have on the organisational commitment and perceived organisational support of eligible MOD-DI staff?

The level of organisational commitment and support was slightly lower for the treatment group (n = 44, M = 6.87, SE = .37) than for the control group (n = 55, M = 7.52, SE = .29) p = .19, though this difference was not statistically significant.

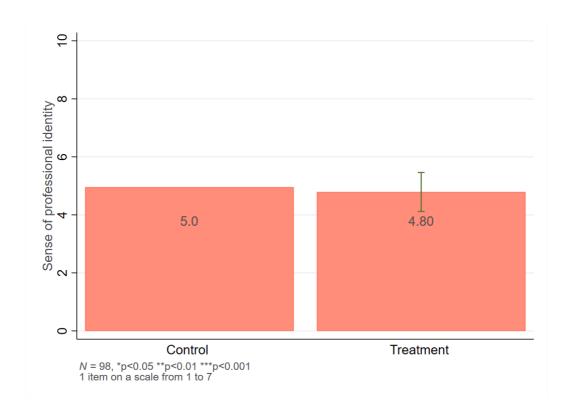
Figure 12: Organisational commitment and perceived organisational support and MoD-ING



Research Question 3: What impact does the MOD-ING intervention have on the sense of connection to the profession of eligible MOD-DI staff?

Though not statistically significant, participants in the treatment group had a slightly higher score for sense of connection to the profession (n = 44, M = 4.80, SE = .25) as compared to the control group (n = 54, M = 5.00, SE = .18), p = .63.

Figure 13: Sense of connection to the profession and MoD-ING



Implementation and Process Evaluation

The IPE examined the reach and acceptability of the intervention for key stakeholders, and aimed to assess whether there is evidence to support the intervention theory of change.

We conducted three interviews with recipients of the intervention, and one interview with our project partner at the MoD who supported the implementation of the trial. Although our aim was to sample interviewees of differing ranks, the only participants that we were able to recruit were high ranking personnel. Despite having joined the MoD-DI within the two years prior to the intervention, they had long spanning careers in the army before this, and currently held management positions; thus, the IPE findings reported here are limited and likely biased.

Findings

1. Fidelity and adaptation

- Delivery: All interviewees agreed that email was the best method to receive the messages and that it would reach the greatest number of people. They all said that on receiving a message, they would usually leave it to read later when they had a spare moment.
- **Differentiation in implementation:** The trial was designed so that messages would be delivered to personal email accounts and read privately. However, interviews revealed that in their role as team managers, the recipients had used the messages to kickstart conversations around well-being, introducing a more conversational, pro-social aspect to the intervention.

Managers explained that they saw it as their responsibility to open up well-being conversations with their team, rather than their staff interpreting the emails individually.

"Reading the messages and knowing that, okay this is what somebody's gone through, and this is how they've come out of it... Even if I wasn't directly taking something away from it in terms of my own mental health, it made me more conscious that everybody struggles in different ways. ..Everybody has different trigger points, and everybody has different drivers. So what works for one doesn't work for another. So it made me conscious as a line manager to really intimately know each member of my staff, to understand how deep rooted the problem was."

2. Programme differentiation

• Existing well-being interventions: One of the interviewees felt that, despite there being well-being support out there, it was not publicised and they had found it difficult to access help in the past. In terms of differentiation from existing practice, two of the recipients reported that the content of the intervention was much the same as others that had existed in the thirty years they had been in the army. One said that the existing well-being programmes at the MoD feel like "stuff that is done to you rather than stuff that is done with you or done for you".

3. Reach and acceptability

- Receipt and engagement with messages: The survey data shows that out of 41 respondents
 from the treatment group, 32 of them remembered receiving the messages. All interviewees
 reported having received and read at least most of the messages. One interviewee explained
 that reading the messages depended on their workload.
- **Mixed attitude to messages:** While interviewees were sceptical that the messages would benefit them, two saw them as having the potential to make an impact. "It might not have any effect on me... but at least if there's one line or one sentence or one quote, that might help, you never know".
- Message content: Two participants enjoyed the variation in the content of the messages, explaining that they read some weeks more intently than others because they resonated more, or because they didn't know much about the topic. One participant thought it was good to have messages that came from a mix of civilian and military staff and that the messages gave civilian staff an insight into what the military does. While one of the participants appreciated the weight on messaging, they felt that the content was the same as what they had been reading for the thirty years that they had been at the MoD. They didn't feel that any of the messages stood out to them.
- Desire for more personalised messaging: One of the participants described initial scepticism
 towards the emails, viewing them as yet another approach to "mass communication". However,
 they said they expected those above them at the MoD to "take bland generalities and make
 them specific and meaningful". Another participant felt support around well-being should be
 more targeted and tailored to individuals.

Conversely, another participant felt that the messages stood out more than interventions in the past due to the fact they were written in a more personal way. This led the participant to suggest that, if someone read out the email as a video message, this could appear more genuine and thus have a larger impact.

Virtual overload: All the interviewees felt that they received too many emails from DI. One interviewee felt that, as they received so many emails, when there was one that didn't require attention such as the intervention, it tended to get left behind. They also suggested they would like more face-to-face interaction, which would allow for the well-being department to increase its visibility. They suggested that combining the messages with roadshows (i.e. more intensive in-person or virtual interventions that showcase a range of services that can support staff in their well-being) could be a better way to actively engage people.

4. Mechanisms

- Impact on sense of professional identity: One of the interviewees explained that they didn't think about DI when reading the messages, but instead read them as an "individual person". They explained that it's easy to feel disconnected from the Main Building in London, and it's easy to become "robotic". Rather, they appreciated the personal touch of the messaging as it was a reminder of the people who work inside of the organisation, and who want to make a difference. In their words, the messages helped them to recognise "where my cog is in the bigger engine".
- Subjective well-being: Two of the interviewees explained that in recent years they had struggled with their own mental health. For both, these experiences meant that they were more receptive to the messaging. One of these participants felt that, as a manager, it was their responsibility to look after the well-being of their team and this sometimes obscured their own needs. However, receiving these messages made them stop and think that they had to think of their own well-being as well. One the other hand, the third, more sceptical participant described the intervention as "impact neutral".
- **Negative reactions:** None of the recipients we interviewed reported a direct negative impact, nor could they foresee any possible negativities for their team members.

Discussion

The results reported here include outcome data collected from 98 participants who responded to the endline survey, out of a total of 267 employees who were included in the randomisation, and a MDES of 0.57 rather than our expected MDES of 0.22 based on a higher response rate to our survey. However, our analyses indicated that the intervention did not have an effect on any of our outcomes, though our current sample size may have led to the large confidence intervals as well as to less precise estimates of effects. We have also not received endline administrative data on this cohort, and thus were unable to include analyses on participants' sickness absence levels, one of the secondary outcomes for the trial.

Interviews with recipients of the messages support the findings from survey data that the intervention may have had little to no impact on our proposed outcomes. While staff appreciated the need for well-being support, some felt that help should be more tailored and in-person, perhaps requiring more investment in time and money from the MoD. There was also a sense that the messages didn't offer something new, and were similar to the well-being interventions the MoD had been already delivering for decades. One manager reported that their sceptical view of the messaging could be a reflection on the "levels of cynicism" they had experienced during their long career; however, they hoped that the messages could have more of an effect on newer recruits, provided that management played a part in making them meaningful.

What emerged most strongly in all three interviews was that, as managers, the participants felt a high degree of responsibility for the well-being of their staff and felt they could use messages as a tool to open up conversations around well-being. This may have impinged on the validity of the randomisation of the trial, as it appears as though some managers were discussing the content of the messages with other staff members on their team. Managers also stated that they used the message material in well-being discussions with their team. Some liked the personal aspect of the messages, and felt that it spoke to personal issues they themselves were experiencing.

One large caveat was that all three interviewees had long spanning military careers at the MoD, meaning that the content of the messages - which was aimed at new starters - may not have been suitable for this cohort. New starters with less experience may have reported more favourable perceptions of the messages, since the messaging was tailored for newer entrants to the organisation. Additionally, the intervention was delivered to staff who had started at the organisation during the past two years, and the coordinator interviewee felt that delivering the intervention later than during the first few months of work would likely result in a reduction of the potential positive impact of the intervention.

While the intervention was broadly similar in design to SWING, where messages were sent to Frontline participants, the outcomes differed. Similar to our SWING findings, this intervention did not have a statistically significant negative impact on any of our outcomes. However, in the case of the SWING intervention, this was delivered specifically to new starters at LAs through the Frontline organisation, which differs to the current intervention where MoD staff included tenured army personnel. Both our interview findings echo those of SWING where participants suggested that they would prefer more intensive face to face well-being interventions.

Recommendations

Due to the trial not appearing to have a positive impact on any of our outcomes, we are not continuing with further data collection for the trial as previously indicated in the protocol. Prior to rolling out of the trial in other contexts, we recommend that significant changes would likely need to be made to the intervention design, including the following:

- **Prompt managers to discuss messages:** Involve managers to help make the messages more salient and to utilise their position to open up subsequent conversations around wellbeing.
- **Tailor message content carefully:** Consider tailoring the messages so that staff entirely new to the MoD receive more new-starter based material in their messages.
- Target staff with messaging early on: Send messages to staff early on during their induction to the organisation, during which they likely need social support the most.

Increasing Diversity Online Experiments

Trial type	2 x online RCTs	
Unit of randomisation	Individual-level (qualified social workers)	
Number of participants	N = 303	
Intervention	Joint vs. Separate Evaluation	Blinding Applications
Primary outcome	Candidate progression	Candidate evaluation score

Background

In 2019, of those social workers whose ethnicity was known (83% of the total workforce), 78% were White, 12% Black, 6% Asian and 4% were of mixed ethnicity (DfE, 2019). Children's social care is one of the most diverse public sector workforces (Gov.uk, 2019), and social work undergraduate programmes receive the highest number of applications from individuals from ethnic minority backgrounds (UCAS, 2020). Despite this, in 2020 just 2% of directors in children's services identified as Black African or Black Caribbean, despite 12% of children's social workers in England being Black (ADCS, 2020).

While some of this variance in representation in senior roles may be explained by socio-economic differencessuch as unequal access to education and variation in educational attainment (DfE, 2021b, Britton et al., 2020; ONS, 2020), there is reason to suspect that racial discrimination may play at least some role in hiring decisions in the workforce. A recent survey conducted with 100 Black safeguarding professionals found that almost half of respondents felt that they lacked fair and equal opportunities to progress in the workplace (Brown et al., 2021). Research conducted elsewhere further highlights the pervasive issue of discrimination in hiring practices (Bertrand & Mullainathan, 2004; Rich, 2014; Weichselbaumer, 2017; Lancee et al., 2019; Gomez-Gonzalez et al., 2021; Hangartner, 2021).

There is research to suggest that 'evaluation nudges' - interventions which make changes to the choice environment of those people assessing candidates - can reduce bias in recruitment processes. For example, one experiment conducted with students at universities in the USA found that by asking participants to assess a CV from a man and a CV from a woman side by side, they were more likely to be influenced by objective measures of performance included in the application and less likely to be influenced by the candidate's gender when deciding whether or not to select them to be progressed (Bohnet, 2016). The authors hypothesise that the intervention focuses the evaluator's attention on the pertinent aspects of a candidate's application, and away from those which are unrelated to job performance, such as their ethnicity.

Other research indicates that removing features of a candidate's identity altogether may reduce bias. In one study, an orchestra introduced a 'blind audition' in which musicians performed out of view of the evaluators, which resulted in a significant increase in the rate at which women were hired (Goldin & Rouse, 2000). Similarly, the anonymisation of applications by removing names from CVs and other forms was shown to decrease gender bias from reviewers selecting researchers for the Hubble Space Telescope Time Allocation Committee (Johnson et al., 2020).

Interventions

We designed two interventions to debias decision-making when assessing job applications. In both experiments, participants were asked to imagine they were evaluating applicants for an interview for a managerial position within children's services. Participants assessed the fictitious candidates' CVs, which contained the candidate's name, a short profile description, date of birth, address, education, professional experience and a short personal statement. Participants were also asked to imagine that they would be working closely with the successful applicant at the LA.

In each of our experiments, we chose names from which participants would be able to infer the candidates' ethnicity. Names were either typically White British names, or names which are typically associated with Black African, South Asian or Middle-Eastern backgrounds. Henceforth we refer to the second set of names as 'minority ethnic groups'.5

Joint vs. Separate Evaluation

In the first experiment, participants were provided with 10 candidate CVs and for each were asked to decide whether they should be progressed to the interview. They were told that they should aim to select no more than 5 applicants to progress to the next stage. All participants assessed the same 10 unique CVs, each containing different educational background, professional experience and personal statements. Participants were randomly assigned to evaluate candidate CVs in one of two conditions:

- **Joint evaluation**; participants were presented with five pairs of two candidate CVs, which they viewed side-by-side. Each pair contained one application from a candidate with a typically White British name, and one from a candidate with a name from a Minority Ethnic Group.
- Separate evaluation; participants were presented with the same 10 candidates' CVs to assess consecutively.

Participants also saw different combinations of candidate names and CV content to ensure that the influence of these factors in the rates of candidate progression could be more accurately measured.

Blinding Applications

⁵ We are using the term 'minority ethnic groups' in this case to refer to names typically from three ethnic groups. We acknowledge that these do not encompass all of the groups which could be referred to by this term, but decided after discussion that this would be the most appropriate term to use for the purposes of describing this study.

In this experiment, participants were asked to review one CV and score it on three criteria, outlined in the outcomes section below. CVs differed only in the name at the head of the document, where they were randomly assigned to one of three conditions:

- Candidate's name is typically White British;
- Candidate's name is typically associated with a Minority Ethnic Group;
- Candidate's name has been removed (the 'blinded' condition).

Participants

Participants in both experiments were 303 qualified social workers, including team managers and senior leaders. Participants were recruited through WWCSC contacts and networks and were provided with a £20 voucher to incentivise them to take part in the study.

Method and Design

We conducted these experiments using the online survey platform Qualtrics. The experiments took the form of two individual-level RCTs, conducted consecutively by participants in one session. The order that the experiments appeared was also randomised to ensure there were no order effects on the findings.

Outcomes of Interest

In the Joint vs Separate Evaluation experiment, the outcome was a binary measure for each candidate evaluated by the participant, indicating whether or not the participant chooses to 'progress' the applicant to the next stage of the recruitment process.

In the Blinding Applications experiment, we create an overall evaluation score between three and 21 from three separate scores given by each participant for the candidate to assess candidates' ability to:

1) manage a complex caseload; 2) manage a team of social workers; and 3) conduct and manage supervision and training.

Findings

Experiment 1: Joint vs Separate Evaluation

Research Question 1: What impact does the joint evaluation intervention have on the rate at which Minority Ethnic Group candidates are progressed by participants in our online recruitment process experiment, in comparison to the rates at which Minority Ethnic Group candidates are progressed in the separate evaluation condition?

Research Question 2: What impact does the joint evaluation intervention have on the rate at which White British candidates are progressed by participants, in comparison to the rates at which White British candidates are progressed in the separate evaluation condition?

To answer these questions, we ran linear regressions with interaction terms for the fictitious candidates' ethnicities and the treatment condition (N = 303). The data were re-shaped so that each of the ten 'decisions' made by participants was a row in the dataset, effectively creating a sample of 3030 with observations clustered at the level of the participant.

There was a statistically significant increase in the rate at which Minority Ethnic Group candidates were progressed by participants in the joint condition (n = 76, M = 84.22, SE = .49) compared to the separate condition (n = 75, M = 68.15, SE = .49), p = <0.01. There was also a statistically significant reduction in the rate at which White British candidates were progressed in the joint condition (n = 76, M = 52.53, SE = .49) compared to the separate condition (n = 75, M = 69.91, SE = .49), p = <0.01.

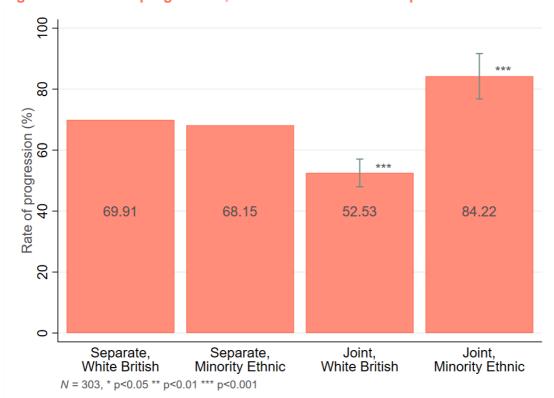
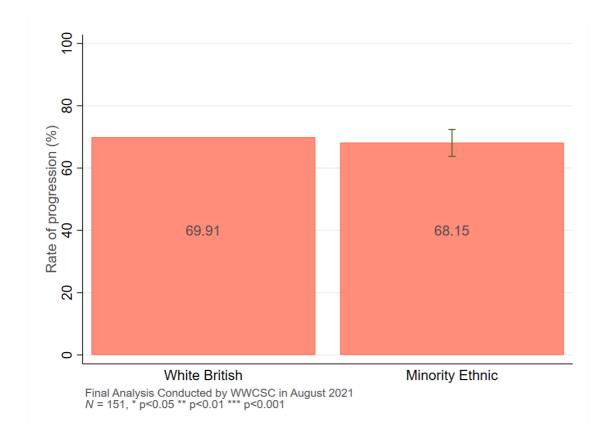


Figure 14: Rates of progression, evaluation condition and perceived ethnicities

Research Question 3: What difference is there in the rate at which White British and Minority Ethnic Group candidates are progressed by participants in the separate evaluation condition?

There was no statistically significant difference between the groups, with White British candidates (n = 75, M = 69.91, SE = 0.49) marginally more likely to be progressed in the separate condition than the Minority Ethnic Group candidates (n = 76, M = 68.15, SE = 0.49), p = .60.

Figure 15: Rates of progression for candidates of perceived ethnicities



Experiment 2: Blinding Applications

Research Question 1: What impact does 'blinding' applications have on the total evaluation scores given to candidates by participants, as compared to applications from candidates from a Minority Ethnic Group in our online recruitment process experiment?

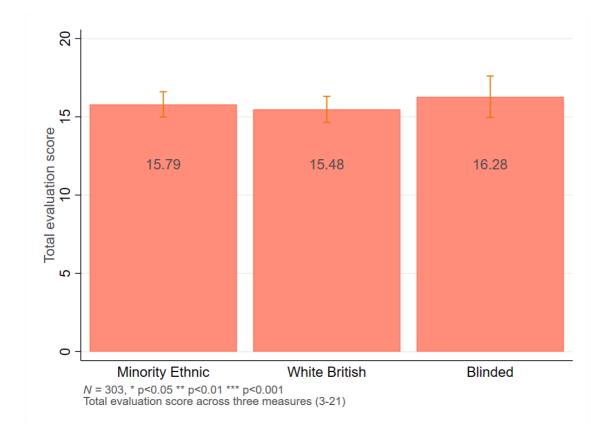
Research Question 2: What impact does 'blinding' applications have on the total evaluation scores given to candidates by participants, as compared to applications from White British candidates?

The results of the linear regressions indicate that there was no statistically significant difference between the evaluation scores of candidates in the blinded condition (n = 104, M = 16.28, SE = 2.45) compared to either of the two 'ethnicity' conditions (n = 105, M = 15.79, SE = 3.27, Minority Ethnic Group), p = .21, and (n = 94, M = 15.48, SE = 3.16, White British), p = .06.

Research Question 3: What difference is there in the total evaluation scores given to White British and Minority Ethnic Group candidates by participants?

As shown in Figure 16 below, there was no significant difference between participants' evaluation scores of CVs from White British and Minority Ethnic Group candidates, p = .45.

Figure 16: Candidates' evaluation scores and the Blinded Application condition



Discussion

While there was no evidence that the fictitious White British and Minority Ethnic Group candidates were assessed any differently in the absence of our interventions, with rates of progression roughly equal in the separate conditions, participants were much more likely to 'progress' Minority Ethnic Group candidates when there was an explicit choice between candidates in the 'joint' evaluation condition. While previous research has shown that these interventions can be effective in reducing or eliminating bias against women and ethnic minorities in recruitment, our results indicate that they might potentially produce an effect in the opposite direction where this pre-existing bias was not found.

It should be noted that there are substantial limitations to the external validity of these experiments. Firstly, the scenarios presented on the survey platform as representations of recruitment processes are not close representations of those in LAs, where the recruitment team would have more time to assess candidates and would likely have access to more information as part of the application. Similarly, it is likely that very few of the study participants are involved in recruitment within their LAs, and it is possible that the prevalence of bias differs amongst those who are part of these processes.

Lastly, there is also a possibility of experimenter demand effects, whereby participants were able to identify the focus of the experiment, which may have influenced their decision-making and increased the likelihood that the non-white candidates were selected.

While we cannot exclude the possibility of experimenter effects, this finding is consistent with the hypothesis that anti-racism is at the forefront of social workers' minds, and that they would like to see a greater diversity in managerial roles within the sector. However, in the absence of an IPE we are unable to confidently conclude which mechanisms may have led to these results.

Recommendations

- Blinding applications as default: As it is a low-cost and light-touch intervention, we
 recommend that the Blinding Applications intervention is implemented where similar policies
 are not already in place as a means to protect against bias in recruitment processes
- Embedding explicit candidate comparison: Recruitment teams might identify ways that they might incorporate direct comparisons between candidates as an additional step in their processes. For example, a second reviewer might compare the applications of candidates not initially selected for interview with those who were as an additional step to guard against bias.
- As good practice in recruitment and selection, applicants should be evaluated against explicit behavioural criteria.

Directions for Future Research

- Future research might aim to test the effectiveness of evaluation nudges in real-world contexts
 by randomly assigning these policies either to recruitment teams within LAs, or at the level of
 roles advertised. Findings from these field studies would better enable researchers to
 understand whether and to what extent bias exists in LAs recruitment processes, as well as the
 effectiveness of interventions designed to address this.
- Researchers might also adapt and evaluate interventions which have been shown to increase the volume of applications from minority groups for senior roles. For example, there is evidence that a targeted referrals policy might be effective in increasing applications from women in maledominated industries, and this intervention might be tested in the social work context (Nicks et al., 2021). There is also evidence to suggest that small changes to the language used in job advertisements emphasising interest in employee diversity for example can increase the pool of applicants from these groups, which might also be evaluated in a field experiment (Flory, Leibbrandt, Rott, & Stoddard, 2021).

Dictation Software

Trial type	Pilot study
Data collection methods	Semi-structured interviews; survey data; quantitative usage data
Number of participating local authorities	2
Outcomes	Rates of usage, productivity, time-pressure

Background

Social workers experience high workload demands, with high caseloads and administrative burden. They report that time-pressure as a result of these administrative tasks, such as statutory reporting, has a direct impact on the time they are able to spend with children and families (Munro, 2011). In recent polling conducted by WWCSC, paperwork was the factor most commonly listed by social workers (25% of respondents) as one of the top three pressures on their time that takes them away from working directly with children and families. Similarly, a recent DfE report (N = 2,240) found that ten percent of social workers who were thinking of leaving the profession said that a more manageable workload in terms of administration and paperwork would be the primary factor that would encourage them to remain in social work. In line with this, administrative support has been identified as one of several potential moderators of burnout amongst social workers (Hussein, 2018), suggesting that interventions that offer administrative support may have a positive impact on burnout levels.

Pilot Context

This short pilot evaluation was conducted to understand the feasibility and potential effectiveness of the provision of a dictation software tool ('Dragon Anywhere') for social workers, with the aim of informing the possible roll-out of a larger RCT of the software across more LAs.

As a result, the study was designed to be conducted relatively quickly in two LAs that had expressed interest in trialling the intervention as a RCT. No research protocol was produced, but the pilot aims were to:

- understand the likely level of uptake of the software across participants (and therefore the potential risk and informativeness of an RCT);
- to generate insights which might improve implementation in a future trial; and
- to determine whether there were any early indications of the effectiveness of the intervention across a range of workforce outcomes.

Intervention

The 'Dragon Anywhere' application is designed to allow participants to dictate notes quickly and accurately into text in the app on either a smart mobile device or tablet, which can then easily be sent to the individual's email address. Written notes can then be edited and included in case notes, reports or assessments. WWCSC ran 1-hour seminars with participating social workers from both LAs, outlining the rationale for introducing dictation software, guidelines for commands, and how to download and navigate the app. Scenarios where the software might save them time, such as taking notes shortly after home visits, were also discussed, as well as LA-specific policies and procedures for use, including GDPR. Participants were also given time to practice using the software during the training seminar.

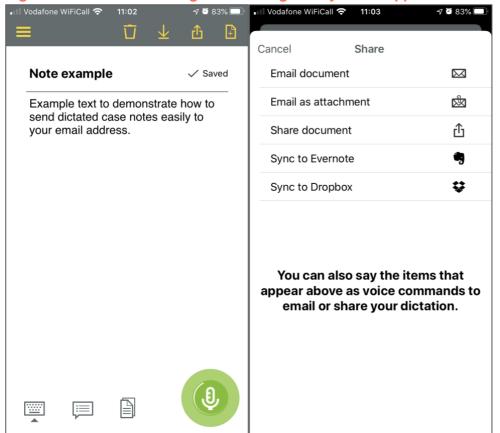


Figure 17: Screenshot image of the Dragon Anywhere App on a mobile phone

Participants

The samples in Brent and Coventry included a range of social work staff in a variety of roles from teams across children services. These included: Through Care; Children in care; Safeguarding; Assessment; Quality Assurance; and Fostering. Most were social workers, though senior practitioners and team managers were also included in both samples.

In Coventry, interviews were conducted with eight members of staff in children's services from a range of roles, including newly qualified social workers, social workers, senior practitioners, and team

managers. In Brent, interviews were conducted with three members of staff, two of whom were so-called 'super users' - the two participants who used the software the most out of the cohort. We also conducted both a pre-intervention and post-intervention focus group in Brent.

Method and Design

This pilot study consisted of two groups of social workers from the participating LAs, Brent and Coventry. In total, 52 social workers in these authorities - 20 from Brent and 32 from Coventry - were given access to and encouraged to use the Dragon Anywhere smartphone app for four weeks. Sampling was purposive, recruited through liaison between the LA coordinator and the Principal Social Worker to identify which team within the service might be most suitable for provision of the intervention.

Pre-intervention focus groups were conducted in Brent but not in Coventry, while interview and survey data was collected post-intervention in both LAs. We were also provided with app usage data by Dragon Anywhere for the Brent cohort, whereas usage information in Coventry was measured via self-report survey data at the end of the pilot, as analysis from the software provider was not available. Data recorded for users in Brent included cumulative minutes spent on the app and numbers of individual sessions.

Feasibility and acceptability was assessed through app usage data, survey data and interview data. We conducted 11 individual interviews in total (Coventry n = 8, Brent n = 3), as well as two focus groups in Brent - one at pre-intervention, and one at post-intervention.

Research Questions

1. Evidence of feasibility and acceptability

To understand the feasibility and acceptability of the intervention, we assessed:

- a. Attitudes towards dictation software and the acceptability of the app; assessed through focus groups and interviews conducted pre-intervention, to understand the beliefs regarding the need for such software, its ease of use and the desirability of the Dragon Anywhere software across the sample of participants.
- b. **Usage information**; usage during the pilot period assessed through both the software providers (Brent) and participant self-report (Coventry). Indications of likely future usage also gathered through post-intervention surveys and interviews at both LAs.
- c. **Variation in implementation and usage**; assessed through interviews in both LAs postintervention by gathering information on variations in participants' use of software with respect to how it is used to contribute to specific tasks, as well as when and where it was used.
- d. Barriers and facilitators for use; as identified in the post-intervention focus group and interviews.

Interview and survey data was collected to more accurately understand the perceived impact, positive or negative, of the software on a small number of staff outcomes identified in discussion with social workers in the pre-intervention focus groups, including self reported time spent on administrative tasks and sense of time-pressure.

3. Unintended Consequences

We also aimed to identify any positive or negative impacts not pre-specified by the logic model.

Analysis

We transcribed the interview and focus group data, and then analysed these using the analysis software NVivo. We used an inductive approach, grouping the data into codes and emerging themes informed by our primary research aims to understand the feasibility and promise of the intervention. Using these themes, we generated specific research questions after the fact. Information collected from our survey and app usage data was used to further inform our findings.

Findings

1. Evidence of feasibility and acceptability

This research question assessed whether the intervention was delivered as intended, whether it was acceptable to those delivering and receiving it, and aimed to identify the contextual facilitators and barriers to successful implementation.

a. Attitudes towards using dictation software

There was broad agreement amongst focus group participants that there was demand for an intervention which reduced the time-pressure associated with administrative tasks and paperwork. One participant reported that they spent "at least 2 days per week just doing write ups", and others that they often worked overtime or weekends to get this done.

One participant explained that they fill out many reports with long, repetitive formats back to back (such as child protection assessments, child and family reports, court reviews, CIN reviews), which they felt provided an opportunity for the software to reduce this burden. Similarly, one social worker interviewed in Coventry at the end of the pilot noted that they had wanted access to similar software for some time. There was also buy-in from one team manager who saw potential benefits in her team using the software, and was eager for them to start using it.

However, the idea of the software was not universally popular. Several social workers expressed scepticism that the intervention would be useful, citing a lack of administrative support and inefficient forms and templates as the key driver for the time-pressure they experienced surrounding paperwork. As such, some suggested that the software would not be the right solution to address this issue.

Acceptability of Dragon Anywhere

The app was generally regarded as intuitive and easy to navigate, and participants reported that the interface, functions and commands were picked up relatively easily, though there seemed to be some differences in experiences of using the app according to how comfortable participants were with technology. A younger participant explained that they found the software easy to use because they were familiar with using technology in their everyday lives. For some, being unfamiliar or lacking confidence with technology was also seen as a positive motivator for using the app. One participant

struggled to type quickly, and found dictation saved them time in typing up notes, and said that it was similar to when administrative staff would be available to type up audio recordings of meetings or visits.

However, not all participants were enthusiastic about using the app for reporting tasks. Several participants reported that they were comfortable with their current processes, and that they didn't feel that adopting a new technology would be particularly beneficial to them, other than in particular circumstances. While these views tended to refer to the idea of dictation in general, rather than the Dragon Anywhere app, they still provide evidence that the intervention may not be universally acceptable for social workers.

Non-integration with case management systems

Participants from both LAs also reported that they would have preferred if the software was able to integrate with their case management systems. This would have allowed them to make notes directly into the system rather than sending them to their email inboxes to be edited. Participants noted that, although the software being available on the mobile app allowed them to record notes when they were away from their laptops, it added a step to the process of logging case notes which made the app less attractive to them.

b. Usage information:

Brent

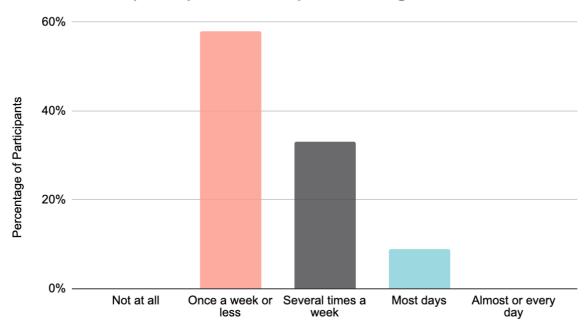
Fifteen out of the twenty participants in Brent had logged on to use Dragon Anywhere at least once over the course of the four week study, though only three participants used the app more than five times over the course of four weeks. All other participants hardly used the app at all, logging less than 10 minutes in total

Coventry

In Coventry, just over half of the participants reported using the software once a week or less, with a smaller group using it several times a week and two participants reporting 'most days' (see Figure 18). However, 17 out of 22 (77%) participants said that they would continue to use the software in the remaining time it was available to them (which in Coventry was an additional two months), four respondents said they weren't sure, and only one person said they would not use it.

Figure 18: Participant self-reported usage





In addition to this, comments in the survey from those who used the software once a week or less suggested that they anticipated their usage to increase over time.

"The tool is very useful to save time, especially when completing more than one home visit within one time frame. This gives the opportunity to record visits in the car between each visit....it is very useful and the more I use this software the easier and quicker it is getting to utilise it to its full potential."

Taking both LAs together, we consider the rate of usage to be moderate. While some of the survey respondents in Brent reported that they had never used the app, in Coventry there appeared to be higher uptake with more than a third of participants reporting that they used the app at least several times a week and a higher percentage indicating they would continue to use it. However, it should be noted that the data in Coventry was self-reported, and therefore may be biased by a perceived pressure from participants to report positive findings.

c. Variation in implementation and usage

Perceived usefulness varied by type of document

There was general consensus amongst participants that the usefulness of the software for reporting tasks varied depending on the types of documents which were being completed. Social workers reported that the length, formality and formatting of the document were all important factors in this.

Participants' most commonly cited use of the software was for case notes, as this was considered to be the clearest efficiency gain and they were able to record notes shortly after visits while they were fresh in their minds. One social worker reported that the software made it easier to record the "six or

seven things" they needed to record from a visit, which they were able to put into a long note before editing and inputting this into the case management system at a later date. Court documents were perceived as a less suitable use for the software, as they require more precise and carefully considered wording and argumentation.

Participants indicated that the length of the report also impacted on how convenient the software was to use. Whereas there was less potential to save time on typing up short notes, some participants found that dictating their longer case notes saved them time:

"For the longer notes definitely... I mean the time that I took just to dictate today's visit for example, I'm not a slow typer but I'm not the fastest either. Now I know that I've sent it to myself, I know that I need to tidy it up, but I know that the burden of that long visit is done."

Patterns of usage

As the pilot took place in the midst of the Covid-19 pandemic, participants were working almost entirely remotely when they were given access to the software, with limited travel for home visits. Participants noted that they were generally comfortable using the software at home or in transit, but there were privacy concerns regarding dictating notes in the office.

Several participants mentioned that they found the software most convenient to use in the car, as this provided privacy and meant that they could record notes immediately after a visit. One participant also noted that they found the software particularly useful to record case notes when they had a series of home visits towards the end of the day. They said that without the software, they would either have to work into the evening to record notes from the visits, or risk producing lower quality notes the next day. Thus, the dictation software allowed them to produce detailed notes in a short period of time which could then be edited and logged on the case management system later.

d. Barriers and facilitators:

Technical challenges

A number of social workers mentioned difficulty pasting the text from the app into their email, and then from their email into the formatted documents they fill out. However, it seems likely that these challenges would lessen as users became more familiar with the commands.

Transcription accuracy

Lack of accuracy was also seen as a negative aspect of the app by some participants. One social worker that had particular difficulty with the accuracy of the app explained that she found the app frustrating as she had to spend a substantial amount of time correcting errors, while others reported that the app had difficulty transcribing names.

Lack of time to dedicate to embedding app into ways of working

Several participants recognised potential benefits of the intervention, but reported that they anticipated there being an upfront time investment required to make best use of it and explained that they were often too busy to make this investment - especially within the timeframe of the pilot evaluation. Although

dictation is a skill which can be developed over time, some participants perceived that the initial challenges in doing this were a significant barrier in choosing to use the software.

Those that did use the app more regularly reported that the more time they invested in using the app, the more comfortable they became with it, and the more they got out of it in terms of time saved. This suggests that, if participants were given more time to trial the software, usage may have been higher overall.

Training

The training session was generally viewed positively. Participants described the sessions as informative, clear and of an appropriate length, which helped aid the implementation and address any concerns they had (e.g. GDPR processes and data protection). Training was also reported as a factor that could mitigate against the belief that learning how to use the app in one's own time was too much of a commitment. The WWCSC-led sessions were booked into participants' diaries ahead of time and meant that the participants had a period of protected time to experiment with the app, rather than being left to practice and embed the process without any guidance.

e. Perceived benefits

Time-pressure and time spent on administrative tasks

There was significant variance in the views of participants on whether they had experienced some benefit from the software, with some social workers indicating that they perceived little or no value in the intervention, and others already enjoying substantial time efficiencies.

The low usage indicated by the data for participants in Brent implies that many of the participants in the pilot are unlikely to have experienced much benefit from the software, although some interviewees described substantial positive benefits. One participant, for example, described the software as a "game changer", both in terms of the time saved writing notes (they noted that they were not a fast typist) and also in the quality and detail of the notes taken meaning that they felt they were able to make more informed decisions. Another participant interviewed explained that using the app meant that they sometimes saved an hour during a session of writing up minutes which they estimated amounted to saving six hours over the course of a week.

Indeed, the majority of survey respondents in Coventry responded very positively when asked whether the app had impacted on them. In the free text response section, many of them explained that they had found the software easy to use and convenient as they could use it in transit. Several participants wrote that it had saved them time, with a few also mentioning that an initial commitment was needed to become used to it and to experience rewards.

Detail and style of writing in reporting

Some social workers reported an increase in the level of detail they were able to capture from a home visit, with the tool allowing them to dictate notes in full shortly after the meeting, while they might have forgotten elements if they had waited until they were back in the office:

"I had quite a lengthy home visit where a lot was spoken about and I took some notes, but it's not always appropriate to be frantically writing during the visit. So after, I booted up the app and I had about ten minutes as soon as I'd come out of the visit while it was fresh, to dictate my thoughts and feelings about what I'd spoken through with the parent. It worked really well actually."

Other participants felt that the act of speaking out loud meant that their notes were less formal, and one participant reported that they felt this made them more child-friendly, which they saw as a potential benefit:

"I think it's more child friendly as well, because I produce wording in a less formal way when I'm talking than I do when I'm typing, when I'm typing it seems to be much more adult."

However, another participant disagreed that the informal tone of the notes produced was a benefit for the work they were producing.

3. Perceived unintended consequences

Additional work and inaccuracies

While some social workers reported time savings from using the app, and others perceived little difference, there were also reports from some participants that the software had cost them time on the occasions they had used it. One social worker thought that the level of detail they were left with after dictation was a "*nuisance*" as it meant that there was more information than needed and this required more stripping down in the editing process. Similarly, some social workers reported challenges in the accuracy of the transcriptions, which slowed down the process of producing notes and undermined any potential time savings for these participants.

Discussion

Generally, the software was well received by participants. The app was generally considered easy to use, though a small number of participants reported errors (for example, in the app's ability to pick up on names). The training session provided by WWCSC researchers was generally well received, with participants welcoming the protected time to learn the various commands and ask questions.

Rates of usage appeared to differ across the two LAs. This may be due to differences with respect to participant' initial levels of buy-in and enthusiasm, suggesting these are important moderators of the success of the implementation, although it should be noted that the data indicating higher rates of usage in Coventry was self-reported. Additionally, participants at both LAs reported that their usage may have increased if they had access to the software for a longer period. This might have allowed them to overcome the learning curve associated with learning how to use the app and its commands, and to embed the software into their ways of working. A longer study might therefore provide more reliable estimates of likely usage. In sum, we take these data to be tentative evidence that the provision of dictation software would result in a level of uptake which would justify a wider roll-out within LAs.

The ability to use the app to record notes remotely was perceived as a major benefit. Participants were able to record notes in transit or directly following a visit or meeting, while the events of the meeting or

visit were still at the forefront of their mind. However, participants also noted several barriers to making full use of the software. For example, some interviewees also reported feeling frustrated that they were unable to remember commands that could increase the effectiveness and speed at which they were able to dictate.

Similarly, the software did not integrate with the LAs' case management system, meaning that it took participants longer to record case notes since it involved an extra step of copying over notes to the system. Participants also reported a preference for a dictation tool that could be used on both their mobile phone and laptop, which would further simplify the process of submitting their notes.

Perhaps reflecting the varying levels of usage across the pilot, participants also reported a wide range of views with respect to the impact of the intervention on their sense of time-pressure and productivity. While some participants reported that the software had resulted in substantial benefits - with one participant estimating they saved up to six hours per week by using the app - a small number reported that it had no meaningful impact, or even cost them time on the few occasions that they had used it. However, some of these users indicated that they expected the software would be more beneficial the more they used it.

There were several limitations to the study. Firstly, it was a small-scale pilot and participants were not selected at random. Therefore the internal validity of the study is low. Additionally, the number of participants recruited for the pilot study was small, and findings reported here from both interview and survey data does not necessarily represent the views of all social workers at both LAs. The length of the pilot was four weeks, meaning that we are unable to reliably determine how rates of usage and perceived impact of the software may have changed over time. The short length of the pilot was also cited by a number of participants as limiting their ability to get used to the app and learn how to use it, and thus participants who reported low uptake may have had a different experience if they were provided with more time to incorporate the tool into their ways of working. As a result, we recommend running a larger RCT over a longer period to answer these questions more effectively.

These findings support the notion that there is a high level of individual difference in the perceived usefulness of dictation software, with some participants identifying and subsequently realising benefits through a variety of uses, while other participants did not anticipate these benefits and were subsequently motivated to use the software much less.

Recommendations

- Training: LAs who wish to implement the intervention might consider assigning a dictation 'lead'
 who could facilitate the training and be on hand to provide training for new starters, share best
 practice, as well as support and guidance for social workers who are already using the software.
- Mobile app: LAs looking to introduce dictation software should aim to retain the mobile element
 of the software.
- Identify users within the workforce: LAs might consider a short pilot to understand which of
 their staff realise most benefit from the intervention, to ensure that their budget is not spent on
 licences which are subsequently unused.
- Make uses and benefits salient: LAs may consider producing resources to make the potential
 uses and gains of the app more tangible for social workers during implementation to increase
 uptake.

• **Shareable guidance:** LAs might consider producing some bite-size guidance documents which could be shared with social workers to be referred to when making notes.

Directions for Future Research:

- Future research might consider running a larger RCT of at least 6 months duration, informed by the findings from this pilot, in order to better understand and quantify the potential impact of the provision of dictation software for social workers on their productivity, time spent on administrative tasks and sense of time-pressure.
- Researchers might also evaluate the effectiveness of different dictation software providers, such as those which function on desktop as well as mobile, to understand whether these types of products are more attractive and subsequently more useful for social workers.
- Other interventions which are designed to positively affect social workers' administrative burden
 might also be fruitful areas for future research, such as streamlining reporting templates and
 processes or administrative support for teams. While these interventions might require
 substantial upfront investment from LAs, they may meaningfully reduce the burden on social
 workers which might in turn have downstream effects on outcomes for children and families.
 Future research projects might aim to capture these impacts via RCTs alongside cost-benefit
 analyses.

Flexible Working for Social Workers

Trial type	Pilot study	
Data collection methods	Semi-structured interviews	
Number of participating organisations	1	
Outcomes	Well-being; life-work balance; productivity; autonomy	

Background

In recent years, there has been a dramatic increase in the incidence of flexible work practices (FWPs), which are described as practices that transfer autonomy to employees over when, where, or how much they work (Brewer, 2000; Kelly & Moen, 2007; Leslie et al., 2012). The Covid-19 pandemic has seen a huge increase in the focus on FWPs, and in the discussion around the potential benefits of a shorter working week.

A series of large trials conducted in Iceland between 2015 and 2017 in a range of workplaces measured the impact of shifting employees to a shorter working week (i.e. from 40 hours to a 35 or 36 hour working week) without any reduction in pay (Haraldsson & Kellam, 2021). This resulted in substantial improvements in employees' well-being, work-life balance, perceived burnout and stress, as well as resulting in higher productivity, despite working fewer hours overall. Indeed, in addition to improving well-being, evidence indicates that employees who use practices such as telecommuting (Gajendran & Harrison, 2007), flexible schedules (Leslie et al., 2012), and compressed work weeks (Baltes, 1999) outperform those who do not.

Pilot Context

We focused on a policy which allows staff to compress their contracted working hours into four-day weeks or nine-day fortnights. The evaluation took place in one LA - Stockport. Service leaders report that a high proportion of staff choose to work four-day weeks or nine-day fortnights, though the exact number was not recorded. A second LA withdrew from the trial due to changes in their practice model.

Using qualitative data collected through interviews, this study aimed to understand how social workers and managers experience flexible working in Stockport and what the perceived benefits and unintended consequences are. We also examined facilitators or barriers to the uptake of and making best use of flexitime.

Intervention

The policy already has high levels of uptake in Stockport and a clear process exists for staff to apply to make use of flexitime, though informal processes between staff and manager have also been put in place more often during the Covid-19 pandemic as the need for flexible working increased. The policy is available to all staff in children's services. Usually, staff make a formal request to work compressed hours through HR and it is then the responsibility of the team manager to work with the individual to identify a suitable non-working day, taking into account other team members' working patterns to ensure service delivery is not disrupted.

Participants

We interviewed six social workers (of which one was a senior practitioner), four team managers and one service lead. The staff were from teams across children's services, including Referrals and Assessment, Child Protection and Complex Safeguarding, Adoption and Locality social work teams. The participants also had a range of experience with flexible working: four participants were long-term users of flexitime (used for over one year), five were more recent users (less than one year), and two participants did not make use of the policy.

Method and Design

The evaluation consisted of 11 semi-structured interviews with staff in Stockport at one time-point.

Research Questions

1. Evidence of feasibility and acceptability

- **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 managers and frontline practitioners?
- d. What potential short- and long-term impacts of the intervention do stakeholders identify?
- **e.** Do there appear to be any unintended consequences or negative effects of the intervention?

2. Readiness for trial

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

Analysis

Thematic analysis was conducted on NVivo using a deductive approach. Transcribed interview data was coded and analysed according to the research questions, though we also attempted to identify and understand any unanticipated mechanisms or outcomes as a result of the intervention. The themes we identified are reported as subheadings under the relevant research questions.

Findings

1. Evidence of feasibility and acceptability

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)?

Range of flexible working patterns

Staff noted that there are a range of flexible working patterns used by social workers and managers in Stockport. Most frequently, staff shared that they work compressed hours, i.e. they work the same number of hours as those in full-time contracts but in fewer days. This was most commonly a nine-day fortnight rather than a four-day week, which participants suggested was more difficult to adhere to due to the demanding nature of the job.

Different views on boundaries and adherence

Multiple interviewees noted the need - and challenge - of being "strict" in adhering to their non-working time. One social worker reported that norms had formed in their team around not disturbing their colleagues' non-working days with issues to do with their cases, noting that "it would be [the same as] if you were off sick or off on leave."

More senior members of staff, however, were more likely to think of their non-working time as time where they were "contactable" in cases where their team needed them, perhaps as a result of the increased responsibility for service delivery in their role.

Flexitime as an alternative to TOIL

Most participants reported that they viewed flexitime as an alternative to accruing time off in lieu, or 'TOIL', which they perceived as difficult to take in practice. Stockport's FWP was perceived by the majority of participants as a favourable alternative to TOIL, in the sense that the hours worked over and above those contracted could be protected in a more formal arrangement which was less likely to be encroached upon by work demands.

Process for approving flexible working

The formal process for requesting and approving the policy through a discussion with managers, assessment of the impact on service delivery and then sign off from the service lead and HR, was widely understood by interviewees. However, one interviewee noted that it was not uncommon for staff to have adopted a flexible working arrangement, often a nine-day fortnight, agreed outside of the usual sign-off processes. This regular time was perceived as more likely to be protected than 'ad hoc' TOIL booked by staff in response to specific instances of working over contracted hours. This was echoed by the service lead, who reported that the informal processes were more subject to change according to the demands of the service.

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

Barriers

Commitments when being on duty take precedence over flexible working arrangements

A key consideration for managing staff's FWPs was the duty system. Teams are 'on call' to cover for colleagues in another team at agreed times, and this was widely understood by all participants as an essential element of service delivery, meaning they did not expect to be able to take flexitime on days or weeks when their team was on duty.

Managers reported that planning the duty rota alongside their team's working patterns was a significant challenge, but that they were generally able to plan around the duty rota while accommodating their team's working patterns:

"It makes doing the duty rota incredibly difficult, because I've got one person off every other Monday. One person has every other Wednesday. One of them has got every other Thursday. Two of them have got every other Friday. Then I have every other Monday as well, and the team leader has every Friday afternoon, and the service lead has every other Friday off... You have to have a very clear rota and admin strategies so that you don't end up in a pickle." [Team Manager]

Another manager reported that they had put in place a system where their team is split so that staff were on duty less often, making it easier for them to make use of flexitime while also ensuring that the needs of the service were being met. Planning was made easier by the initial application process which ensured that managers and staff considered the capacity within their team when they were submitting their request for flexitime.

High caseloads sometimes make taking flexitime infeasible

Interviewees reported that their caseload and that of their team meant there were times when taking their arranged flexible working day was not possible. One manager said that although caseloads rarely meant that flexible working was cancelled, this did rely on their remaining at a "manageable" level. They also reported that another common concern was that their work might fall upon their colleagues in their absence, and that they were wellbeing of ensuring that this did not happen.

Facilitators

Role of manager in maintaining benefits of flexitime

Social workers emphasised the importance of the manager in facilitating their team's flexible working patterns. One manager explained that this took the form of organisational and practical support, such as having a clear overview of team's cases, being wellbeing in allocating these and stepping in to assist when required. However, symbolic support, such as emphasising commitment to the well-being of their team, was also reported to give licence to social workers to make full use of the policy.

The manager also said that they considered staff well-being and work-life balance to be key parts of supervision, noting that a substantial part of their monthly meetings with individuals in their team were dedicated to making sure they felt supported and able to perform in their roles:

"I think our manager is really supportive of that anyway, and you know especially during these times she has really encouraged us to make sure that we are...As long as our work is done and we are doing what we need to do, she would absolutely be in support of us doing that, which would make it much easier." [Social Worker]

Importance of communication across teams

Communication between teams via managers was seen as an important protective factor for maintaining service quality while managing individuals' flexible working patterns. One social worker cited the "relatively small" teams as a reason why this was easier to manage, as this meant that there was a natural awareness of other teams' capacities and workloads. Cross-team communication also meant that team managers were able to organise reliable mechanisms for responding to assist other teams if they were under-staffed.

Flexible working perceived as extension of broader organisational culture

The LA's wider organisational culture was seen to make flexible working and its benefits a more realistic proposition than it might be in other LAs. One manager described commitment to flexible working as part of the LA's 'values', while generally in the sector there was a view from one social worker that the long hours were "part and parcel of the job and that we shouldn't complain about it."

One social worker, who noted that changes to their personal circumstances had led to a five-day week becoming infeasible, pointed towards the 'person-centredness' of the practice model in the organisation's work with children and families, and felt that this was something that was also in evidence in their dealings with staff.

Need for reciprocal flexibility from staff

Several interviewees noted the importance that staff reciprocated senior management's commitment to the policy by being flexible and responsive to the needs of the service in return, for example by moving or delaying their non-working day. The service lead indicated that there was a tacit understanding amongst staff that the benefits afforded by the policy required some flexibility in order for the policy to be feasible.

This was supported by participants, who described this as an example of when teams in Stockport "pulled together" as part of a larger unit, and as part of the trade-off that came with being given licence to work flexibly at other times. Social workers reported that there was a sense that there could never be an expectation that flexible working would always trump their work commitments:

"In social work there [are] always those times when it can't be avoided. You know, if you are out on duty working with something, and you end up at the hospital until eight o'clock at night, then there is nothing you can do about it. That's just the way it goes." [Social Worker]

This notion was supported by a manager who described being happy to occasionally "log on" for specific tasks on their non-working day, knowing that it "balances out" because of the commitment to maintaining work-life balance across the organisation.

c. Is the intervention acceptable to key stakeholders including managers and frontline practitioners?

Flexitime policy generally well-liked by staff

Broadly, the LA's commitment to the flexitime policy was popular across participants in all roles. Although, one manager reported that caseloads in their team made the policy difficult to implement. However, the majority of interviewees indicated that they were generally able and supported to make use of the policy.

d. What potential short- and long-term impacts of the intervention do stakeholders identify?

Increased well-being of social workers taking flexitime

Social workers, managers, and the service lead in Stockport believed that flexitime represented a clear net benefit to staff. A team manager reported that there had been a "massive" impact on their well-being at Stockport compared to their previous employer where flexible working was not available. The service lead described the perceived benefit of the policy in the context of the pandemic:

"I certainly think since the social workers on the team that I'm managing at the moment have a flexible working arrangement, their well-being is increased. They seem more motivated, they seem happier, and they report that having a kind of additional day to kind of just relax or do something for them, they find that really helpful at the moment." [Service Lead]

Enhanced enjoyment of non-working time

Most staff interviewed chose to use their work-life day on either a Friday or a Monday to extend their weekend, meaning they were able to enjoy an extended uninterrupted period of non-working time. One participant, a parent who recently rejoined the workforce after sickness leave, reported that the longer break allowed them to "switch off", which was otherwise a challenge in the job. Others reported more practical benefits of working fewer, longer days, including their new working pattern allowing them 'headspace' to properly support their family.

Increased sense of resilience or lower stress

Participants also reported substantial positive impact on their levels of stress, and consequently increased resilience to handle the pressures of their roles. One social worker said they were "*much less stressed*" both during their shorter week and also more generally in the knowledge that they had their work-life balance days.

"I've certainly got more time, and I feel like I've got more protected time to spend on my actual personal life, my private life. Whereas in the past, work just kind of overwhelms you as part of your identity as a social worker, because it's so demanding, and I don't feel that now. I really do feel like I've got that more, well I've definitely got a better balance." [Team Manager]

Increased Productivity

Some participants reported feeling that they were able to be more productive at work as a result of the FWP. One team manager described feeling "fresher" having had a three-day break, which they felt led to increased focus and ability to complete tasks. This was supported by several other social workers who noted that they felt better able to concentrate having had a longer break.

However, this potential benefit was not reported by all participants, with one noting that "you're doing the same amount of work in the week anyway", while a manager felt that they noticed no difference in productivity in either direction as long as they "planned (their) diary well".

Increased Motivation

Several interviewees reported that they felt their motivation had increased as a result of being able to work compressed hours. Managers felt that their teams were "more motivated...happier", and said that they experienced similar benefits themselves due to feeling "less tired" when they were at work. However, again, this was not an impact reported by all participants. One team manager said that it wasn't something that they had noticed, while another described themselves as "motivated anyway", though they agreed that they felt better during their shorter week.

Autonomy

Some participants agreed that an increase in autonomy was a benefit of the policy, though generally this was less strongly supported by the interviews with social workers than the mechanisms listed above.

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

Increased pressure felt by managers

Although the general perception across the interviewees was that flexible working was well-managed and had minimal impact on service delivery, there were examples of where the team members' flexible working days had a negative downstream impact on their managers. Two of the four team managers interviewed said that they had experienced some challenges in managing the flexible working of those in their teams, reporting that on occasion it had fallen to them to pick up work in order to maintain service delivery. This meant that when several cases required their attention at once they naturally had less capacity for the other important aspects of their role.

Potential for increased time-pressure inflicted upon colleagues

There was some indication that the FWP could negatively impact time-pressure for staff. One social worker reported feeling conscious of the possible impact of their flexible working day on the rest of the team, noting that they suspected it could be a source of frustration in their team.

One team manager reported that while these instances were "few and far between", there would be times when a number of staff were unexpectedly missing and this in combination with the flexitime arrangements impacted the remaining members of the team. One team manager also noted that there

had been times, such as when team members were taking a non-working day on a Friday, when colleagues might have to work past finishing time to cover.

However, several managers reported that they felt that generally teams were able to respond to any challenges which emerged without too much impact on their own cases or feeling of time-pressure.

Challenges in balancing needs of staff with risk of disruption to service delivery

The tension between supporting staff to work flexibly and not allowing service delivery to be compromised was noted by managers and the service lead. The service lead noted that they always tried to be aware of any potential impact of the policy on service delivery, describing the balance between being "fair to the team" and any impact on the service.

3. Readiness for trial

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

Interviews in Stockport suggested that the FWP worked generally as anticipated in the logic model, and suggested that there are signs of potential that it positively influences the mechanisms identified ex ante. Perceived increases in well-being as a result of an improvement in work-life balance were particularly prominent, as well as positive impacts on resilience and stress. However, increases in social workers' feelings of autonomy were less supported by the findings.

The importance of processes to ensure that there is enough cover for staff taking their additional time off was clear. As such, careful planning would be required for LAs to ensure that the adoption of the policy did not have unintended negative consequences on service delivery or the well-being of other team members

Discussion

This evaluation identified a number of key factors to consider for future implementations of FWPs amongst social workers. Senior leadership's commitment to staff well-being and work-life balance - considering it a priority to be balanced alongside service delivery - was seen as key to the success of the policy. There was also the understanding amongst staff that they might sometimes be required to adjust their working patterns to ensure that the needs of the service were being met while operating under the FWP. Moreover, the role of team managers in planning and communication was considered particularly important to the success of the policy in order to ensure that service delivery or other team members' caseloads were not unduly affected.

While there was a strong sense amongst participants that the policy represented a benefit to the workforce, senior staff reported tensions in finding the right balance between flexible working and service delivery. There were also some reported instances of time-pressure being displaced to other staff. These challenges further highlight the importance of managers' vigilance with respect to demands on the service and robust processes for managing caseloads accordingly, both within and across teams.

The evaluation took place in the context of the Covid-19 pandemic, a time when the importance of work-life balance was at the forefront of workers' minds in all sectors. Participants noted that changes to working patterns as a result of working from home and in response to competing demands in their private lives (for example, juggling parental roles with a full-time workload at home) had had unexpected effects on their work-life balance and well-being. While the increased flexibility as a result of working from home was welcome, the increased volume of cases and complexity resulted in working conditions which were detrimental to stress and burnout levels.

Our findings are supported by a recent DfE report which found that social workers reported a reduction in working hours compared to the year before, identifying 'home working, reduced travelling time and more virtual meetings' as key drivers for this. The same report also found that 'workplace culture' was the most common reason cited by social workers who had left their LA in the past year, while poor 'work-life balance' was also reported (DfE, 2021). This suggests that it is more important than ever that LAs find ways to facilitate working patterns which allow staff to make the most of their leisure time, while still meeting their work obligations. While there is evidence that organisational culture in social work is difficult to change (Drumm, 2012; Smith et al., 2017), meaning that introducing the policy in a new context may be challenging, a FWP which allows staff to compress their working hours into fewer days presents one possible way for LAs to achieve this.

There were a number of limitations to the pilot study. First, our evaluation gathered data at one time-point only - some time after the initial launch of the policy - meaning that participants were less able to identify how the new scheme had impacted on their well-being and other outcomes prior to its introduction. This may have reduced the quality of assessing their experiences regarding the new policy. However, staff were able to compare their experiences to time spent at other LAs, or from before they decided to make use of the policy, providing useful context for their beliefs around it, while others only recently took it up.

Interpretation of the findings should also consider that staff who had more positive perceptions of the flexitime policy may have been more likely to agree to take part in an interview, compared to staff who viewed it less favourably. While the reporting on participants' experiences summarised here provides evidence on the breadth of experiences from social workers in different teams and roles, these should not be considered exhaustive or indicative of the prevalence of experiences.

Recommendations

- **Planning**; It is important that LAs conduct careful planning and establish clear processes, especially around the duty system, before the introduction of FWPs.
- Monitoring of potential negative impacts on team workload; Managers should carefully
 monitor the extent to which time-pressure is displaced to other team members, and adjust
 working patterns accordingly to ensure workloads are equitably distributed across their team.
 Work within teams to ensure flexible working is spread evenly for example, alternating days
 of the week when team members use their FWP, to ensure capacity is not adversely affected.
- Commitment to work-life balance and organisational culture; Senior leaders and managers
 should aim to demonstrate the LA's commitment to staff work-life balance by protecting staff's
 non-working days wherever possible. This may help to cultivate a wider organisational culture
 where staff well-being is prioritised, and which may produce further downstream benefits for the
 LA such as increased organisational commitment from staff.

Directions for Future Research

- Future evaluations of FWPs might evaluate the effectiveness of the policy when it is newly
 introduced to a workforce. This might use the features identified as being of particular
 importance in Stockport as the basis of its model.
- There is a large body of correlational evidence for FWPs, causal evidence is limited (Nijp et al., 2012), and thus future experimental research is needed in order to provide more robust information for policy-makers. For example, the policy could be offered to teams within LAs as part of a wait-list RCT, or develop methods to match social workers or social worker teams in quasi-experimental designs. Outcomes to measure might include well-being as measured by surveys, as seen in other HHP trials, as well as productivity via report submission data.
- Future research could also examine the extent to which FWPs result in the imposition of penalties on employees. One study found that FWPs can result in career penalties which depend on managers' perceptions of the policy and whether they believe the employee is taking up FWPs for what they perceive as personal/self-serving reasons versus productivity reasons (Leslie et al., 2012). Past research also suggests that taking up FWPs could impact negatively on promotion rates (Bloom et al., 2015). This could have important implications for social workers who take up FWPs, the majority of whom are younger, female, and are likely to take up FWPs for personal reasons, e.g. to facilitate work-life balance and for child-rearing.

General Discussion

Strengths of Research and Contributions to Existing Literature

Burnout and staff turnover rates continue to present a substantial challenge for the Children's Services sector, with a recent DfE report (DfE, 2021) indicating that many staff are feeling increasingly strained as a result of the pandemic and its impacts on their working lives. The findings described in this report provide potentially valuable insights for senior leaders and decision-makers at LAs to introduce policies to improve the well-being of their workforce and consequently the services they are able to provide to the children, young people and families in their area.

There is a gap in the literature regarding how behavioural interventions (interventions aimed at promoting positive behaviour change in a particular domain) can be successfully deployed across workforces to improve well-being (Linos et al., 2021). Moreover, historically the evaluation of the impact of interventions targeting employee well-being in organisations has been a challenging task (Murta et al., 2007). In this report, we add four RCT and two pilot studies to this nascent evidence base (Fisher, 2010; Jones et al., 2019; Krekel et al., 2019; Linos et al., 2021; Proudfoot et al., 2009; Murta et al., 2007; Creswell, 2021; White, 2013; Richards et al., 2019).

In the six studies outlined in this report, we ran three RCT field experiments, one lab study, as well as two pilot studies within Children's Services departments within LAs. These field experiments are advantageous compared to laboratory experiments in that they allow us to compare differences between groups with similar characteristics, infer causality from any significant differences observed, and run a reliable test of cause-and-effect relationships (Gerber & Green, 2012). Conducting research in field settings also allows us to measure outcomes in a manner that does not alert participants to the fact that they are being studied, and to measure behaviour over an extended period of time. i

The methodology involved in three of the RCT studies - a mixed-method approach utilising both quantitative and qualitative data collection - was a particular strength of the research (Richards et al., 2019). This design allowed us to assess both the quantitative impact of outcomes and to shed further light into the design and implementation (e.g. potential barriers and uptake) of the behavioural interventions. This also allowed us to examine the hypothesised causal relationships and mechanisms, and to strengthen the external validity of the RCTs (Creswell, 2021; White, 2013).

General Limitations

Generalisability to other public sector workforces and contexts

We had planned to recruit partner organisations from other public sector workforces (such as teachers and police officers) to our studies. This would have allowed us to examine the effectiveness of our interventions across different professional contexts and settings. However, these plans were impacted by the Covid-19 pandemic, which hindered our recruitment of research partners in these sectors. Organisations' attention was understandably focused on their response to the pandemic, resulting in a lack of capacity to engage in field research. Subsequently, we were only able to include participants from two workforces - Children's Social Care and the MoD - in our studies. As a result, the generalisability of our findings to other workforces is limited.

Similarly, we had originally planned to include two sites in our flexitime study. However, one site - where we had intended to introduce the policy - withdrew shortly before the start of data collection. This limited the informativeness and generalisability of the evaluation as we were unable to evaluate the perceived effects and challenges of introducing the policy to a new workforce.

Survey and LA attrition and low power to detect effects

Survey measures were included as outcomes in all four of our RCTs. However, in three of these trials we collected fewer survey responses than we had anticipated, meaning that our sample sizes were smaller and thus our ability to detect the effects of our interventions was reduced. This attrition in each of these trials increases the likelihood of a Type 2 error of failing to reject the null hypothesis when an effect was present.

For example, in the Beneficiaries trial, the survey response rate was 29% versus 50% assumed in our power calculations, while 12% of the randomised sample had left their LA by the time the endline data was collected. One site also withdrew shortly before implementation due to technical challenges in launching both the survey and the intervention to staff. This resulted in a total sample of 419 (versus 944 in our protocol), and a MDES of 0.27 rather than the 0.18 we had anticipated. In our MoD-ING trial we collected 98 responses, which was 37% of the total cohort, whereas we had aimed to collect responses from 70% of the group, resulting in a MDES of 0.57. While we had planned to continue recruitment for the trial to reach the intended sample, due to a lack of any observed differences in our outcomes, we decided to halt data collection for the trial.

Response Bias and Demand Effects

Reliance on self-report methods for outcome data may also limit the scope of what is being measured due to response bias, which occurs when participants who respond to a survey differ systematically from those who did not respond (Menachemi, 2011). It is possible, for example, that the participants who responded to our survey were more enthusiastic or motivated than those who did not, which would imply that the results from our survey analyses would be generalisable only to this subset of workers rather than the population more generally. It is also possible that the interventions were differentially effective for participants with poorer baseline measures of our outcomes, since those initially high on those outcomes were likely to have benefited less from the intervention, inhibiting the overall effectiveness.

It is also possible that the intervention may have produced differences between the treatment and control group's response rate to our surveys, which would also limit the validity of our results. Participants allocated to the control group, for example, may have felt less compelled to fill out the endline survey, which would mean that our analysis would not be conducted on statistically identical groups. We conducted balance checks to understand whether attrition differed between treatment and control groups for each of our field experiment RCTs. In the control group, 26% of participants completed endline surveys compared to 24% in the treatment group, suggesting that differential attrition is unlikely to be a confounding factor in our analyses.

Our planned analyses of administrative data would have had the benefit of not being susceptible to attrition bias, as we would have collected data on all study participants rather than participants self-selecting into our sample. However, we were unable to collect the majority of this data from LAs, who reported being under-resourced and therefore struggled to retrieve the relevant data within our project timelines.

Another limitation which could be present in our studies are Experimenter Demand Effects (EDEs), a bias that occurs when participants infer the aims of an experiment, and respond in a way that helps to confirm a researcher's hypothesis (Mummolo & Peterson, 2019). This can inflate the treatment effect reported in the analysis. This is a risk in our studies, where the majority of our outcomes came from self-report data. Similarly, our IPE interviews are also susceptible to this bias as they were semi-structured and researchers may unintentionally influence interviewees' responses, though measures were taken to mitigate this.

Virtual Working and the Covid-19 Pandemic

Due to the pandemic, we conducted all interviews and focus groups virtually, via Zoom. However, recent evidence suggests that video conferencing is perceived by interviewees as favourable, and preferred to other methods of interviewing such as face-to-face or telephone interviewing, though it can result in technical difficulties for some (Archibald et al., 2019). Moreover, it is a cost-effective tool to conduct qualitative data collection, and was beneficial for the research team in that we were able to conduct a higher number of interviews within a shorter period of time, with less costs involved in time spent travelling to and from partner sites.

However, some elements of our research were hindered by being limited to virtual settings. For example, our plans to increase survey completion by visiting LAs in-person were not possible due to the restrictions on travel. Moreover, plans to travel to organisational partners to increase senior-level buy-in (e.g. by presenting to senior leaders in person on the importance and logistical elements of the research) were halted. These barriers likely had an impact on our studies in the form of reduced buy-in from organisational partners, increased attrition due to lower survey completions, as well as less visibility on our end of contextual factors at organisational partner sites.

More broadly, the Covid-19 pandemic has resulted in a surge of support in the form of increased resources and funding towards well-being resources for staff. This may have reduced the potential impact of our interventions on staff. Additionally, staff and organisational partners were also under significant strain due to the Covid-19 pandemic (e.g. increased workloads, adapting to new work practices while working from home). This may have resulted in staff feeling less able to engage with the interventions and potentially inhibited their effectiveness - as evidenced by the IPE conducted as part of the impact evaluation for the SWING intervention.

Conclusions

Public-sector organisations, such as Children's Services departments, are characterised by high levels of work pressure and emotional labour, and their employees are prone to poor well-being (Maslach et al., 2001; Van Loon et al., 2015). The task of social workers is made harder by the many competing and complex demands made on them, which contributes to higher levels of stress and burnout (Balloch

et al., 1998; Lloyd et al., 2002; Ben-Porat & Itzhaky, 2015), while also feeling under-appreciated for their contributions to some of the most vulnerable people in society (DfE, 2019b; DfE, 2020; DfE, 2021). In the DfE's 2021 survey of children's social workers, 14% of social workers said they did not think they would be working in child and family social work at a local authority in 12 months' time.

There is, however, a paucity of evidence showing how LAs might address these issues through the introduction of policies or interventions. The findings we present in this report represent meaningful contributions to this evidence-base which will inform the decisions of policy-makers as well as the choices of future researchers.

Our two pilots - evaluating the potential effectiveness of dictation software and a flexible working policy - provide two possible avenues by which LAs might reduce the time-pressure felt by their staff. While the dictation tool was not adopted widely by participants, our findings indicate that solutions which address reporting burden might be highly beneficial for social workers. In the future, researchers might aim to evaluate these interventions more fully via RCTs. They might also identify other interventions to improve social workers' time-pressure and administrative burden, perhaps by streamlining reporting processes, which social workers describe as highly burdensome.

Analysis of our online experiments provides evidence that LAs which embed explicit candidate comparisons might increase the diversity in their candidate pool. Removing candidate names from assessment processes presents another means by which LAs can protect against bias in their recruitment. Researchers might test the effectiveness of these nudges in field experiments, or interventions which have been shown to be effective in increasing applications from candidates with a diverse range of backgrounds in other fields.

Our three messaging interventions - SWING, MOD-ING and Beneficiaries - harnessed different forms of content from different messengers, aiming either to cultivate a sense of professional identity or to express gratitude for their work. The effects of these appeared to vary greatly, suggesting that policy-makers should carefully consider the delivery mechanism for this type of intervention, though the results of the Beneficiaries trial provide tentative evidence that LAs might benefit from creating more mechanisms for social workers to receive positive feedback from the children and families they work with. Future research could examine the impact of messaging which is more personalised, that could be delivered on a more continuous basis, and would require less resource for LAs to produce than the videos in our trial.

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