# Supporting employers and their employees with mental hEalth conditions to remain eNgaged and producTive at wORk (MENTOR): A feasibility randomised controlled trial

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### Supporting employers and their employees with mental hEalth conditions to remain eNgaged and producTive at wORk (MENTOR): A feasibility randomised controlled trial

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### ABSTRACT

Employees with mental health conditions often struggle to remain in employment. During the COVID-19 pandemic, these employees faced additional stressors, including worsening mental health and work productivity. In 2020, as part of a larger programme of work called the Mental Health and Productivity Pilot (MHPP), we developed a new early intervention (MENTOR) that jointly involved employees, managers, and a new professional (Mental Health Employment Liaison Worker, MHELW). The intervention involved trained MHELWs delivering ten sessions to employees with existing mental health conditions and managers (three individual sessions and four joint sessions) over twelve weeks. These sessions aimed to improve psychological flexibility, interpersonal relationships, and engagement of employees. This feasibility randomised controlled trial aimed to examine the feasibility and acceptability of the intervention from the perspective of employees and managers using a mixed methods approach. The intervention was largely considered feasible and acceptable. Initial findings suggest there may be benefits for employees productivity, mental health, and managers' mental health knowledge. Logistical challenges acted as a barrier to the participation of employees and managers in the trial and their retention throughout its duration. The major strengths of this study were the co-design and interdisciplinary approach taken. Overall, findings suggest that this novel intervention has potential but needs some adjustments and testing in a larger sample.

Mental health conditions are a major cause of disability worldwide (Vos et al., 2015). In the United Kingdom (UK) alone, in any week, 'one in six' people experience a common mental health condition (Deloitte, 2020) and approximately 300,000 people with long-term mental health

conditions leave their jobs each year (Stevenson & Farmer, 2017). It has been estimated that anxiety and depression are responsible for almost half of the working days lost in the UK annually (Deloitte, 2020; McManus, Bebbington, Jenkins, & Brugha, 2016). Yet research has

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shown that people with mental health conditions consider employment to be an integral part of their recovery, that it can improve wellbeing and that the benefits of staying in work outweigh the risks (Modini et al., 2016; Waddell & Burton, 2006; Dunn, Wewiorski, & Rogers, 2008).

A survey conducted in 2018 with almost six thousand participants accessing mental health services in England discovered that 25.4% reported experiencing discrimination in the workplace, 53.7% anticipated discrimination, and 72.9% reported not disclosing their condition (Yoshimura, Bakolis, & Henderson, 2018). This suggests that whilst the workplace can be a source of support and aid recovery, there is also a risk of stigmatisation and discrimination. Thus, navigating a mental health condition at work is not without challenges. Common challenges experienced by employees with a mental health condition at work include finding it difficult to engage in day-to-day activities, being able to speak about their mental health condition with their line managers and dealing with everyday challenging situations at work whilst experiencing symptoms (Yoshimura et al., 2018; National Health Service, 2022; Health and Safety Executive, 2022).

The latest UK National Institute for Health and Care Excellence (NICE) and World Health Organisation (WHO) guidelines for mental health at work (NICE, 2022; WHO, 2022) suggest that managers should have 'systematic support' to aid employee mental health and wellbeing, including training and regular refresher training courses. This guideline recommends skills such as: knowing how to have conversations about mental health, understanding stigma at work, knowing how to identify early signs of mental ill-health, understanding what to do in complex situations, adjusting workloads and monitoring and managing wellbeing in the workplace (NICE, 2022). Standard managerial-level interventions (e.g., aiming to raise mental health awareness in the workplace) improve managers' confidence in talking about mental health (Gayed et al., 2018). However, there is limited evidence of effects of these interventions on employees' mental health and productivity at work. Critically for individuals, businesses, and society the best preventative approach to help individuals with mental health conditions remain at work and stay engaged before leaving due to their condition remains unclear (Jarman, Hancock, & Scanlan, 2016). The Mental Health and Productivity Pilot (MHPP), which this study is a part of, aims to address this gap in the literature (Blake et al., 2022).

In response to these issues, we have developed an early and joint (employee-manager) intervention that aims to foster protective factors of health for employees dealing with mental health conditions at work. This intervention, named MENTOR, was developed in co-production with employees, managers, and healthcare practitioners - all with and without lived experiences of mental health. Three initial co-production workshops were held with employees and managers, and six interviews were held with healthcare practitioners. The perspectives of participating employees, managers and healthcare practitioners were then incorporated into a framework rooted in well-established theories of stress, wellbeing, and burnout in the workplace (e.g., the Self-Determination Theory (Ryan & Deci, 2020), the Conservation of Resources Theory (Hobfoll, 1989) and Contextual Behaviour Science (Hayes, Barnes-Holmes, & Wilson, 2012)).

MENTOR primarily aims to help individuals feel engaged and well at work. The intervention aims to do this by cultivating protective factors that may reduce the risk of individuals facing more severe and long-term problems (e.g., absenteeism or losing employment). When participants enrol in MENTOR, they cultivate three skills: 1) engagement, learning ways to stay well and be more productive at work; 2) interpersonal relationships, learning how to have open conversations about mental health at work; and 3) psychological flexibility, dealing with challenging situations at work (Prudenzi et al., 2023).

These skills are cultivated by *both* employees and managers taking part in the intervention. For the engagement skill and unlike other workplace interventions that aim to support managers by raising awareness about mental health conditions at work, this intervention aims to provide engaging and individualised intervention sessions for

employees but also for their managers to help them support their employees' mental health and wellbeing. This might also help managers explore ways to be more productive as a manager through setting goals that impact the relationship between employees and the organisation to improve employee engagement. Second, employees with mental health conditions often report having difficulties with interpersonal relationships at work (e.g., challenges in disclosing a mental health problem to a manager or actively seeking support from a manager without fear of stigma) (Deloitte, 2023). Having open conversations about mental health at work is one of the most cost-effective ways to support employees' mental health (Newheiser, Barreto, & Tiemersma, 2017). To this end, MENTOR aims to teach employees how to have open conversations at work and managers to learn about the types of difficulties employees with these conditions may face and how they can best support them.

Lastly, MENTOR intends to provide managers and employees with the skills needed to deal with problems and difficulties at work. Focusing on psychological flexibility and the ability to be open (willing to experience challenging thoughts and emotions when doing so helps you reach your goals), aware (being in the present moment), and active (able to make choices that are in line with your values and satisfaction at work, even in the face of daily stressful events). This framework has been selected because psychological flexibility skills have been found to promote health in workplace settings (Bond & Bunce, 2000; Prudenzi et al., 2021, 2022a, 2022b) especially in employees with elevated levels of psychological distress (Brinkborg, Michanek, Hesser, & Berglund, 2011; Flaxman & Bond, 2010).

With this pilot feasibility trial, we aim to test the feasibility and acceptability of the MENTOR intervention in comparison to a waitlist control group. This intervention will be delivered by a trained Mental Health Employment Liaison Worker (MHELW): an independent liaison between employees, their managers, and their mental healthcare providers.

### 1. Methods

The reporting of the current study is in accordance with the CON-SORT guidelines for pilot and feasibility trials (Eldridge et al., 2016).

### 1.1. Study design

The study employed a preregistered and controlled feasibility randomised controlled trial (RCT) design (ISRCTN Registry ISRCTN79256498: https://www.isrctn.com/ISRCTN79256498). The waitlist control arm received the MENTOR intervention after a 3-month delay. Ethical approval was been granted by the University of Birmingham's Science, Technology, Engineering and Mathematics, Research Ethics Committee, Ref: ERN-20-1813 and HRA (IRAS project ID 293809, REC reference: 21/HRA/1913).

### 1.2. Participants

Eligible participants were pairs of employees and their line managers from 32 organisations in the Midlands region. This region has been selected as a target area for workplace mental health support by the wider Mental Health and Productivity Pilot, which this study is a part of. These organisations included universities, NHS trusts, schools, and businesses. Pairs of employees and line managers were also recruited via direct recruitment (e.g., without receiving direct consent from the organisation). The study aimed to randomise 56 employee-manager pairs (28 participants per arm), factoring in a 25% attrition rate (anticipated in a fully powered RCT). Participants were randomised through a computer-generated 1:1 randomisation sequence by an independent statistician. The criteria for the employees taking part in MENTOR are found in Table 1.

**Table 1** Inclusion and exclusion criteria of employee participants.

Inclusion Criteria	Exclusion Criteria
Employees with a clinical diagnosis of a mental health condition	Currently in an acute mental health crisis (self-reported by the employee)
Currently receiving treatment for a mental health condition through UK National Health Service (NHS) services	Currently on extended sick leave (i.e., $> 4$ weeks)
$\label{eq:Aged} A\text{ged} \geq 18 \text{ years, including workers that}$ are past retirement age	Receiving input or engaging in another programme focused on assisting workers with a mental health condition (e.g., individual placement and support)
Able to give written informed consent	Planning to retire within the next ten months and unable to complete the intervention and the evaluation
Fluent in English	

### 1.2.1. Managers

Managers were direct managers of employees or senior managers. Where employees did not have a direct manager (e.g., employees being senior line managers), an Occupational Health or Chief Executive Officer (CEO) contact was given. Managers were approached after employees consented to take part in the study. Employees' contact details were disclosed to the managers only when both parties agreed to participate in the trial.

### 1.2.2. MHELWs

Ten MHELWs were fully trained to deliver the intervention. This is a new role that was specifically designed by the research team and the UK mental health charity 'Mind' to deliver the intervention. MHELWs were required to have a minimum of six months experience providing mental health and wellbeing services and have experience in providing advice, information, and support about workplace wellbeing. The MHELWs were the primary point of contact for participants throughout the study. MHELWs were also required to liaise with researchers throughout, for example to provide updates on study drop-outs. An extensive description of the role of the MHELW is described in the study's protocol (Prudenzi et al., 2023). MHELWs completed 50 hours of training over two weeks, on a training programme led by Mind and the lead researcher; see the protocol (Prudenzi et al., 2023) for further information on the training programme.

### 1.2.3. MENTOR intervention

A co-design approach was used to develop the manualised MENTOR intervention. Before designing the intervention, three co-production workshops were held with mental healthcare practitioners, employees who had lived experience of using mental health care services and operation managers from the charity Mind. These workshops explored the need for a new intervention like MENTOR, and what it would require to make such an intervention feasible. The workshops allowed researchers to take onboard feedback and develop the structure and aims of MENTOR.

MHELWs received two weeks of training to provide them with the knowledge and skills to deliver the intervention. This included training on the intervention content and skills sessions on working with people, boundaries and working remotely. An additional session was also delivered on recognizing diversity in practice and understanding the research aspect of MENTOR.

The intervention comprised 10 sessions: 4 x joint meetings with employees and their managers, 3 x meetings with employees only, and 3 x meetings with managers only. Sessions were delivered online via Zoom by MHELWs and lasted approximately an hour each. MHELWs and participants worked together to schedule the sessions each week. For greater accessibility, the intervention was also piloted to be delivered without video.

MHELWs were provided with a MENTOR manual, which included

information about the session structures and aims, instructions on how to deliver the sessions, the worksheet booklets to be used during the sessions, and optional resources that participants could use to progress against their goals and action plans.

The intervention was structured around the three main topics: Topic 1) Learning ways to stay well and be more productive at work (engagement), Topic 2) Learning how to have open conversations about mental health at work (interpersonal relationships), Topic 3) Dealing with challenging situations at work (psychological flexibility).

The first two sessions were individual with session 1a being employee only and 1b being manager only. These sessions focused on Topic 1 and established a goal-setting plan. Session 2 was then joint and involved creating a joint action plan together with the help of the MHELW. Skills were practiced and cultivated throughout the duration of the programme. In sessions 3a (employee only) and 3b (manager only), Topic 2 was explored and aimed to improve mental health literacy and having open conversations at work. These skills were consolidated during a joint session 4 and further developed throughout the programme. Topic 3 was explored in individual employee (session 5a) and manager sessions (5b) and in a joint session 6. During these sessions, participants practiced psychological flexibility skills to help them manage challenging situations at work. The final session (joint session 7) included reviewing all three topics and the programme, and a final reflection on how changes can be maintained.

MENTOR sessions were delivered by MHELWs who received fortnightly supervision meetings by programme managers at Mind and the lead academic (AP). MHELWs also received supervision from line managers at their local Mind branch. Employees' healthcare professionals were notified of their participation and once they completed MENTOR, with employee consent, a healthcare professional report (HCP) was sent. This report was written by MHELWs and informed HCPs about the difficulties employees had been facing at work and the impact on their mental health. It also included adjustments that had been made in the workplace and any remaining challenges in relation to their mental health.

### 1.3. Procedure

Organisations in the Midlands were approached via the Mental Health and Productivity Pilot network (https://mhpp.me/). Thirty-two organisations in the Midlands expressed an interest in participating in the current study. Participants were recruited via direct recruitment using flyers and posters (Twitter, LinkedIn, and Facebook). Individuals who expressed an interest in participation were sent a link to a prescreening eligibility questionnaire (via the Qualtrics Platform (Provo, UT)), which screened them against the eligibility criteria.

Individuals who met the eligibility criteria were directed to the research team and then sent consent forms to participate in the study. When providing consent, they were asked to indicate the name of their current line manager or senior manager. For recruitment via an organisation, three levels of consent were received: from the organisation, the employees, and their managers. For the direct recruitment route (where we recruited participants without consent from the employers), consent was obtained from employees and their managers only.

Once consent was obtained, participants were assigned to a MHELW from the closest local Mind branch. The MHELW scheduled the intervention sessions which took place via Zoom on a weekly basis. Before the first session, participants completed baseline measures via the Qualtrics platform (Provo, UT). Post-intervention measures were returned at the end of the intervention.

### 1.4. Primary outcome measures

### 1.4.1. Feasibility

To investigate the feasibility of the MENTOR intervention, achievement of the following targets was assessed:

- o Recruitment of 15% (n = 55) of the employees of a full RCT sample size (n = 365 with 25% attrition rate) in a 5-month recruitment period (May to end of September 2022);
- o Retention rate of  $\geq$  60% as measured by attendance at the post-intervention assessment;
- Estimates of eligible participants recruited, failures to recruit due to recruitment issues and participants dropping out due to feasibility issues;
- o Completion rate of study questionnaires (employee and line manager) at baseline and at 3 months for both intervention and control groups, reported as percentage of missing data for each assessment schedule at baseline and 3 months.

### 1.4.2. Acceptability

To investigate the acceptability of the intervention, the following were assessed:

- o Participants attending  $\geq$  70% of the sessions (5 out of 7 individual sessions):
- Estimates of the rate of agreement/no agreement as to whether the MHELWs think in their opinion that each session of the intervention was delivered as intended;
- Estimates of failures to recruit due to lack of acceptability, participants dropping out due to lack of acceptability, and reports of adverse or serious adverse events.

### 1.4.3. Employee work productivity

Measured at baseline and three months. The six-item Work Productivity and Activity Impairment: General Health v2.0 (WPAI: GH) scale (Reilly, Zbrozek, & Dukes, 1993) was utilised to measure productivity. The subscale of absenteeism (percentage of work time missed because of one's health in the past seven days), presenteeism (percentage of impairment experienced while at work in the past seven days because of one's health) and overall work productivity loss (overall work impairment measured by combining absenteeism and presenteeism to determine the total percentage of the missed time) were selected for this study. The measure has displayed good internal consistency ( $\alpha=0.76$ ) (Tokac & Razon, 2021) and reliability (r = 0.71-0.87) (Peris et al., 2019).

### 1.5. Secondary outcome measures

### 1.5.1. Intervention fidelity

Two tools were developed by the project team specifically for this study to assess the fidelity of the current intervention: 1) MENTOR fidelity tool for MHELWs and, 2) MENTOR fidelity tool for managers of MHELWs. The first tool assessed whether MHELWs delivered the intervention as intended after each case. Intervention fidelity was assessed against the acceptability and feasibility criteria. The MHELWs were also asked to report the number of sessions completed with the employees, the managers, and the joint sessions. The second tool assessed whether MHELWs were trained and delivered the intervention as intended.

### 1.6. Secondary outcome measure: employees

### 1.6.1. Anxiety

The General Anxiety Disorder-7 (GAD-7) (Spitzer, Kroenke, Williams, & Löwe, 2006) was used to measure anxiety. The GAD-7 has 7 items and shows good internal consistency ( $\alpha = 0.79$ -0.91) and test-retest reliability (r = 0.83) (Ruiz et al., 2011; Spitzer et al., 2006).

### 1.6.2. Depression

The Patient Health Questionnaire-9 (PHQ-9) (Kroenke, Spitzer, & Williams, 2001) was used to measure depressive symptoms. The PHQ-9 is a 9-item scale and shows good internal consistency ( $\alpha = 0.91$ ) and test-retest reliability (r = 0.81) (Cameron, Crawford, Lawton, & Reid,

2008; Haddad et al., 2013).

### 1.6.3. Sense of control

The Sense of Control Scale (Lachman & Weaver, 1998) is a two-dimensional self-report questionnaire comprised of 12 items. The Sense of Control scale has two sub-scales: 'Personal Mastery' and 'Perceived Constraints'. The scale demonstrates good internal consistency ( $\alpha=0.86$  Perceive Constraints;  $\alpha=0.70$  Personal Mastery) and test-retest reliability (r=0.78) (Duffy et al., 2016).

### 1.6.4. Job satisfaction

The Indiana Job Satisfaction Scale (IJSS) (Resnick & Bond, 2001) was used to measure job satisfaction. The IJSS is a 32-item scale, composed of six subscales: 'General Satisfaction', 'Pay', 'Advancement and Security', 'Supervision', 'Co-workers' and 'How I feel about this job'. The IJSS has shown high internal consistency ( $\alpha=0.90$ ) and test-retest reliability (r=0.75) (Resnick & Bond, 2001).

### 1.6.5. Decisional conflict

The Decisional Conflict Scale (DCS) (O'Connor, 2010) was used to measure employee and manager decisional conflict. It is a 16-item scale designed to measure five dimensions of decision-making: feeling uncertain, uninformed, unclear about values, unsupported and effective decision-making. The scale demonstrates good internal consistency ( $\alpha = 0.79$ ) and test-retest reliability (r > 0.78) (Garvelink et al., 2019).

### 1.6.6. Health-related quality of life

The EuroQol Five-Dimensional Questionnaire EQ-5D 5L (Rabin, Gudex, Selai, & Herdman, 2014) is a 6-item scale that assesses generic quality of life through six subscales: 'Mobility', 'Self-care, 'Usual activities', 'Pain/discomfort', 'Anxiety/depression' and 'Health'. The EQ-5D-5L shows good internal consistency ( $\alpha=0.77$ ) (Bilbao et al., 2021) and test-retest reliability (r=0.73-0.84) (Long, Polinder, Bonsel, & Haagsma, 2021).

### 1.7. Secondary outcome measures: managers

### 1.7.1. Mental health knowledge

The Mental Health Knowledge Schedule (MAKS) (Lacho et al., 2010) was utilised to measure knowledge about mental health. It is a 12-item scale assessing evidence-based knowledge about stigma. The scale shows good internal consistency ( $\alpha=0.75$ ) (Abi Doumit et al., 2019) and test-retest reliability from 0.57 to 0.87 (Evans-Lacko et al., 2010).

### 1.7.2. Personal stigma

The Personal Depression Stigma Scale (PDSS) (Griffiths, Christensen, Joum, Evans, & Groves, 2008) was used to measure attitudes about mental health using a modified version of the 9-item self-report. The PDSS has two subscales that measure personal and perceived stigma. The scale shows good internal consistency ( $\alpha = 0.78$ ) and test-retest reliability (r = 0.67-0.71) (Griffiths et al., 2008).

### 1.7.3. Self-efficacy

The General Self-Efficacy Scale (GSE) (Chen, Gully, & Eden, 2001) was used to assess managers' mental health self-efficacy using an adapted 9-item scale. The scale has good internal consistency ( $\alpha=0.76\text{-}0.90$ ) (Kusurkar, 2013) and test-retest reliability (r=0.67) (Schwarzer & Jerusalem, 1995).

### 1.7.4. Promotion intentions

Managers' intentions to promote mental health in the workplace were measured with an adapted version of a safety scale designed to assess managers' safety promotion intentions (Mellen & Kelloway, 2009). The scale has three items: "I intend to achieve the performance-based goals that I set for myself," "I want to apply what I learn about mental health to my work setting", and "I will likely promote

mental health in my workplace".

### 1.7.5. Burnout

The Shirom-Melamed Burnout Measure (SMBM) (Shirom & Melamed, 2006) was used to measure job-related burnout. It is a 14-item scale with three subscales designed to capture the burnout syndrome's core components: physical fatigue, emotional exhaustion, and cognitive weariness. The SMBM shows good internal consistency ( $\alpha=0.75$ ) (Schilling, Colledge, Brand, Ludyga, & Gerber, 2019).

### 1.7.6. Work performance

The Individual Work Performance Questionnaire (IWPQ) (Koopmans et al., 2014) was used to assess work performance. It is an 18-item consisting of three subscales: task performance, contextual performance and counterproductive work behaviour. The IWPQ has good internal consistency ranging from 0.78 to 0.85 across the three subscales (Koopmans et al., 2014).

### 1.8. Quantitative analysis

Analyses were performed using SPSS version 24 (IBM Corp., 2016) and the statistical software Stata (Stata, version 16.0, Stata Corp). Descriptive statistics (means, standard deviations (SDs), and medians) were used to report recruitment, retention rates and outcome measures (both primary and secondary). As per protocol, intention-to-treat (ITT) analyses were carried out with the multiple imputation approach taken for missing data at post-intervention. A 2  $\times$  2 ANOVA - with Time as the within-subject variable (baseline and 3-month post-intervention) and Condition (MENTOR intervention group and control condition) as the between-subject variable – were conducted to test whether outcome measures improved in the active condition relative to the control at the 3-month post-intervention time-point. This approach was followed up by a post-hoc analysis, including the test of the simple effects between the study variables, and a sensitivity analysis.

### 1.9. Qualitative analysis

Individual and focus group interview data were analysed using Thematic Analysis (Clarke, Braun, & Hayfield, 2015). The analyses were focused on processes and experiences of how the intervention was delivered, its acceptability, barriers, and enablers of participation and engagement with the intervention. A critical realist stance was adopted to gain insight into participants' own experiences of receiving the intervention and MHELWs experiences of delivering the intervention acknowledging that the data was informative of reality and needed to be interpreted to access underlying structures (Scott, 2005; Willig, 2012). NVivo (QSR International, 2020; Release 1.0) was used to structure and manage data from interview transcripts, followed by repeated reading to become familiar with the data and line-by-line coding to allow for a thematic analysis to be conducted. A data-driven inductive approach (Boyatzis, 1998) was used for analysis, allowing for a flexible exploration of patterns (themes) within the data without using a pre-conceived hypothesis.

An initial framework providing structure for analysis and the subsequent interpretation of the descriptive themes was shared with the wider research team and non-researchers involved in the delivery of MENTOR (Mind and a MHELW) through a reflexive discussion. This allowed for triangulation and, for those involved, to acknowledge their active roles within the research process to avoid bias in the analysis.

### 2. Results

### 2.1. Demographic data

Of the employee participants (n=37), 29 (78.38%) were female, 7 (18.92%) were male, and one person (2.70%) preferred not to say. For

managers (n = 27), 20 were female (76.92) and 7 were male (23.08%). The modal age group for both employee and manager participants was 40-49 years of age. For further demographic information please refer to Table 1 in the supplementary file.

All employees who completed demographic assessments were in paid employment and worked an average of 37.65 hours per week, reporting an average of 4.58 years in their current role.

All managers who returned post-measures worked full time, an average of 44.31 hours per week, and reported an average of 4.2 cumulative years in their current role. Additionally, 5 managers (18.52%) reported that they were currently taking part in another intervention (leadership programme (n = 3), coaching (n = 1), and executive programme (n = 1)).

### 2.2. Primary outcomes

### 2.2.1. Feasibility of the intervention

Forty employee-manager pairs were randomised to MENTOR intervention (n = 17 pairs) or to the waitlist control condition (n = 23 pairs). See Fig. 1 for a summary of participant allocation, analysis and follow ups. Feasibility was assessed against the targets set at the beginning of the intervention and is summarised in Table 2.

### 2.2.2. Acceptability of the intervention

Twenty-four pairs started the intervention (n = 24 pairs), 50% of these pairs were retained and reached at least 7 sessions (n = 12 pairs), the minimum number of sessions needed to be classed as a completer. Therefore, the acceptability retention target ( $\geq$ 70%) was not reached. Details of the outcomes of other acceptability targets can be found in Table 3. Estimates of the rate of agreement/no agreement as to whether the MHELWs think they delivered the intervention as intended are reported in section 'MENTOR fidelity'.

### 2.2.3. Preliminary analyses

Missing data were analysed using Little's missing completely at random (MCAR) test. Data for employees ( $X^2 = 78.555$ , df = 3648, p = 1) and managers (X2 = 39.512, df = 482, p = 1) were missing completely at random. Outliers were investigated using boxplots, histograms, standard residuals (>3 sd), Cooks and Mahalanobis distance. The significant influential outliers detected were winsorised using the next nearest value which was not an outlier (Field, 2013). The Absenteeism measure for employees and the Intention to Promote Mental Health (SPI), Stigma (PDSS), and Mental health knowledge (MAKS) scales for managers were not normally distributed, i.e., skewness and kurtosis levels cut-off values (asymmetry <2 and kurtosis <7) (Curran, West, & Finch, 1996). Data transformations were used using the square route for the manager variables and the square route followed by LOG10 for the employee variable. Between groups t-tests were conducted for the baseline measures and no significant differences were found. The multiple imputation method was utilised for the missing data by generating five different and plausible datasets and combining them (Rubin, 2004; Schafer, 1997).

### 2.2.4. Productivity (employees)

A significance level of p<.05 was used. The  $2\times 2$  mixed ANOVA indicated a significant effect of Time for work impairment  $F=(1,36)=4.876,\,p=.034,$  partial  $\eta 2=0.575.$  This indicates that during the time participants were receiving the MENTOR intervention, work impairment significantly improved. However, the group  $\times$  time interaction was not significant  $F=(1,36)=0.462,\,p=.501.$ 

Mixed ANOVAs on absenteeism did not show a significant main effect of Time,  $F=(1,36)=1.971,\,p=.169,$  or Time x Condition,  $F=(1,36)=0.462,\,p=.501.$  Mixed ANOVAs on presenteeism did not show a significant main effect of Time,  $F=(1,36)=0.929,\,p=.342,$  or Time x Condition,  $F=(1,36)=1.322,\,p=.258.$ 

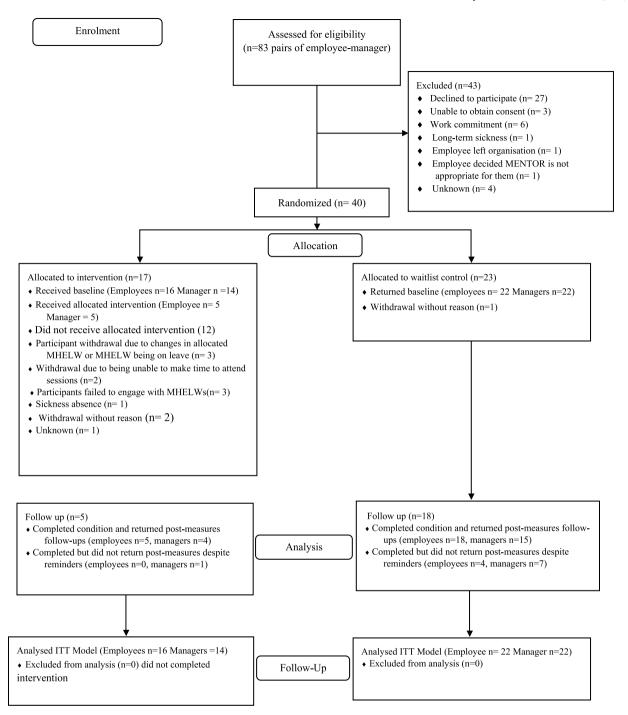


Fig. 1. CONSORT flow diagram.

### 2.2.5. MENTOR fidelity

MHELWs completed the intervention fidelity assessment form for 15 employee-manager pairs. The 15 pairs were those participants who completed the intervention (n = 12) or did not complete but did not drop out of the intervention (n = 3). MHELWs reported that 12 out of 15 pairs who received the intervention completed 70% of the sessions (5 out of 7 sessions for the employees). It was reported that all (100%) of MHELWs used the worksheets as suggested in the training programme and the manual. Almost all pairs (87%) set personal goals and joint actions. All the MHELWs encouraged the 15 pairs to practice skills and steps/actions between the sessions and sent the healthcare professional reports (HCPs) to the research team upon completion of the programme, in preparation to be sent to their healthcare professionals. One of the

employees declared that they did not wish their report to be sent.

### 2.2.6. MHELWs

Eight of out ten MHELWs left their current work throughout the pilot study. Ten MHELWs were originally recruited and trained to meet the expected demand for MENTOR from participating organisations. The unforeseen COVID-19 pandemic significantly impacted planned employer engagement and participant recruitment. This resulted in a greater number of MHELWs than was necessary for the number of participants recruited, which contributed to eight out of ten MHELWs leaving their posts throughout the study.

**Table 2** Feasibility of MENTOR.

Feasibility	Result
Recruitment of 15% (n = 55) employees of the full RCT sample size (n = 365 with 25% attrition rate) in a 5-month recruitment period (May to September 2021)	40 employee-manager pairs were randomised to MENTOR intervention (n = 17 pairs) or to the waitlist control condition (n = 23 pairs). Of the target number (n = 55 pairs), 73% were randomised. The target number factored in a 25% attrition rate (approximately 14 pairs); the number of participants recruited was satisfactory for this pilot study.
The retention rate of ≥60% as measured by attendance at the post-intervention assessment	38 randomised employees returned baseline questionnaires, with 23 returning post-intervention questionnaires (60.5% data completers). 36 randomised managers returned baseline questionnaires, with 19 managers returning post-intervention questionnaires (52.7 % data completers).
Estimates of eligible participants recruited, failures to recruit due to recruitment issues and participants dropping out due to feasibility issues	16 pairs did not start the intervention: 9 pairs allocated to the control group did not return post measures and did not reply to emails to start the intervention, 2 intervention participants failed to engage with MHELWs, so they didn't have any session/start MENTOR after randomisation, 4 withdrawals without any reason (2 intervention pairs and 2 control pairs). 1 intervention pair withdrew without having any sessions after randomisation, stating they could not participate due to work commitments.
Completion rate of study questionnaires (employee and line manager) at baseline and 3 months for both intervention and control groups, reported as percentage missing data for each assessment schedule at baseline and 3 months	24 employee-managers pairs started the intervention, 23 employees (10 pairs allocated to the intervention group and 13 pairs allocated to the waitlist control group) returned baseline questionnaires (attrition rate 4.2%) and 19 pairs (attrition rate 20.9%, 6 pairs allocated to the intervention group, 13 pairs allocated to the waitlist control group) also returned post-intervention measures.

**Table 3** Acceptability of MENTOR.

Acceptability	Result
Participants attending $\geq 70\%$ of the sessions (5 out of 7 individual sessions)	Of the participants who started the intervention (n = 24 pairs), 50% of the pairs were retained and reached at least 7 sessions (n = 12 pairs). 7 pairs (3 = intervention, 4 = control) completed the full 10 sessions and 5 pairs completed at least 7 sessions.
Estimates of failures to recruit due to lack of acceptability, participants dropped out due to lack of acceptability, or adverse or serious events	Of the 11 pairs allocated to MENTOR intervention group who started MENTOR, 5 pairs completed MENTOR and 6 pairs started the intervention but withdrew during the intervention. Of the 13 pairs allocated to the waitlist control group who started MENTOR, 6 pairs withdrew after starting MENTOR, with 2 pairs withdrawing after session 1, 3 pairs after session 2, 1 pair after session 3.

### 2.2.7. Adverse events

Two non-serious adverse events were reported. As per trial guidelines, both adverse event forms were sent by the MHELW to the research team and the Principal Investigator (PI) within five days from when the event was reported. The events were classified as "non-serious", and both were "unlikely to be related to the trial". One of the cases experiencing the non-serious adverse event was withdrawn from the trial due to not being able to continue, and their care coordinator was informed of this decision. The other case was regularly monitored.

### 2.3. Secondary outcomes: employees

### 2.3.1. Mental health outcomes

At baseline, 28.95% of the sample were classified as having moderately severe anxiety and severe anxiety, 34.21% of the sample had moderate anxiety and 7.89% had mild anxiety. 18.42% of the sample had severe depression, 15.79% had moderately severe depression, 31.58% had moderate depression and 26.32% of the sample had mild depression. All secondary outcomes for employees are summarised below in Table 4.

The  $2\times 2$  mixed ANOVAs did not indicate any significant interaction between Time and Condition across the measures, see Table 4. There was a main effect of Time, F (1, 36=9.281), p=.004, partial  $\eta 2=0.842$ , for all decisional conflict subscales but values and clarity.

### 2.4. Secondary outcomes: managers

### 2.4.1. Mental health knowledge

The 2  $\times$  2 mixed ANOVAs indicated no significant interaction between Time and Condition across measures. There was a main effect of Time for the MAKS (Mental Health Knowledge), F= (1,34) = 7.314, p = .011, partial  $\eta 2 = 0.748$ , Contextual Performance F= (1,34) = 8.071, p

**Table 4**Baseline and post-intervention means and standard deviations of all secondary outcomes for employees.

	Baseline M (SD)		Post Intervention M (SD)	
Measures	Control	Intervention	Control	Intervention
GAD-7 (Anxiety)	12.09	11.38 (5.07)	12.21	10.12 (3.97)
	(5.22)		(4.20)	
PHQ-9 (Depression)	11.68	13.63 (6.45)	12.00	9.98 (3.11)
	(6.02)		(5.62)	
SCS (Sense of Control)				
Personal mastery	4.57	4.66 (1.17)	4.8 (0.8)	4.62 (0.86)
	(0.76)			
Perceived constraints	4.36	3.92 (1.47)	4.21	3.66 (0.76)
	(1.14)		(0.87)	
IJSS (Job Satisfaction)	2.94	3.05 (0.35)	3 (0.29)	3.04 (0.19)
	(0.36)			
General satisfaction	3.27	3.24 (0.62)	3.23	3.17 (0.36)
	(0.58)		(0.47)	
Pay	2.73	2.98 (0.38)	2.69	2.89 (0.36)
	(0.52)		(0.48)	
Advancement and	2.67	2.74 (0.71)	2.75	2.61 (0.19)
security	(0.63)		(0.48)	
Supervision	3.35	3.48 (0.64)	3.39	3.44 (0.27)
	(0.55)		(0.44)	
Co-workers	3.12	3.42 (0.51)	3.2	3.42 (0.26)
	(0.47)		(0.41)	
How I feel about this job	2.73	2.73 (0.44)	2.79	2.84 (0.22)
	(0.36)		(0.31)	
DCS (Decisional	42.40	42.48	33.80	32.22 (6.51)
Conflict Scale)	(17.09)	(20.87)	(15.27)	
Uncertainty	51.52	59.90	43.29	46.03 (11.4)
	(20.35)	(30.16)	(18.78)	
Informed	30.68	30.73	24.98	22.39
	(19.98)	(21.67)	(13.12)	(10.12)
Values and clarity	40.15	33.85	33.99	31.29 (4.97)
	(21.92)	(23.27)	(23.14)	
Support	42.80	40.63	28.68	30.17 (6.63)
	(21.41)	(26.51)	(18.43)	
Effective decision	45.74	46.09	36.06	31.46 (7.6)
making	(19.42)	(22.92)	(17.96)	
EQ-5D-5L (Euro-QoL-	0.72	0.71 (0.15)	0.74	0.72 (0.19)
five-dimensional	(0.20)		(0.18)	
scale)				

= .008,  $\eta 2 = 0.788$ , and the IWPQ (Productivity), F= (1, 34) = 8.194, p = .007, partial  $\eta 2 =$  . 794.

Managers randomised at baseline had a mean MAKS score of 14.67 (SD = 4.69), indicating that the managers had a poor self-reported mental health knowledge at baseline. All secondary outcomes for managers are summarised below in Table 5.

### 2.5. Qualitative results

Findings from the thematic analysis were organised into 5 themes. The theme structure is summarised below in Fig. 2.

### 2.5.1. Theme 1: delivery of MENTOR

MHELWs provided insights into how the adapted the intervention was suitable for participants' needs. Barriers to delivery were also discussed, which may help to determine factors influencing retention rates. This theme encapsulates three subthemes discussed in further detail below.

2.5.1.1. Theme 1, subtheme 1: structure and format. MHELWs were generally satisfied with the duration of sessions and the overall length of the MENTOR intervention, stating that the current format was enough to have a positive impact. MHELWs found the content covered in topic one (i.e., staying well and being productive at work) and topic two (i.e., having open conversations about mental health at work) overlapped and often felt repetitive. Finally, MHELWs reported using their own judgement to make reasonable adjustments to the existing format of MENTOR by adapting the length of sessions as the intervention was designed to offer flexibility, making it more accessible for participants.

2.5.1.2. Theme 1, subtheme 2: criticisms and barriers. Barriers to the delivery of MENTOR included logistical challenges faced by MHELWs in arranging and booking sessions, for differing reasons. Sickness absences were often reported since all participating employees had a clinical diagnosis of a mental health condition and were currently receiving treatment(s) through NHS services, resulting in re-engagement issues upon their return and delays in scheduling sessions. Some cases were unable to complete MENTOR and were withdrawn if employees were on

**Table 5**Baseline and post-intervention means and standard deviations of all secondary outcomes for managers.

Baseline M (SD)		Post Intervention M (SD)		
Measure	Control	Intervention	Control	Intervention
Mental Health	3.86	3.68 (0.52)	3.48	3.42 (0.31)
Knowledge (MAKS)	(0.58)		(0.3)	
Stigma (PDSS)	4.11	3.64 (0.51)	3.7	3.52 (0.26)
	(1.06)		(0.38)	
Self-Efficacy (GSE)	29.67	30.86 (3.51)	30.38	30.82 (1.65)
	(1.75)		(2.19)	
Intention to promote	4.03	4.01 (0.13)	4.06	4.01 (0.21)
mental health (SPI)	(0.21)		(0.22)	
Burnout (SMBM)	2.88	2.61 (0.69)	2.81	2.68 (0.53)
	(0.97)		(0.42)	
Physical fatigue	3.44	2.85 (0.78)	3.63	3.11 (0.77)
	(1.3)		(0.8)	
Emotional exhaustion	1.43	1.39 (0.25)	1.33	1.32 (0.25)
	(0.37)		(0.25)	
Cognitive weariness	2.66(1)	2.69 (0.85)	2.59	2.47 (0.42)
			(0.46)	
Productivity (IWPQ)	3.4	3.31 (0.29)	3.56	3.6 (0.25)
	(0.46)		(0.29)	
Task performance	3.76	3.79 (0.74)	3.93	4.05 (0.37)
	(0.69)		(0.5)	
Contextual performance	3.91	3.84 (0.62)	4.21	4.15 (0.3)
	(0.71)		(0.5)	
Counterproductive work	2.23	1.97 (0.81)	2.18	2.12 (0.49)
behaviour	(0.8)		(0.71)	

extended sick leave (i.e., >4 weeks). Therefore, some sessions had to be rescheduled to prioritise participant mental health needs where necessary. Whilst this approach offers greater flexibility, it may result in delivery delays and poor engagement with line managers.

2.5.1.3. Theme 1, subtheme 3: success and impact of MENTOR intervention. MHELWs described the novelty of MENTOR as a major strength. According to MHELWs, MENTOR equipped participants with adequate skills and tools to continue maintaining their mental health, wellbeing, and productivity post-MENTOR. MHELWs stated that they did not need to provide additional support to cases once they had completed the MENTOR intervention. They described participation in MENTOR as an investment for both line managers and their organisations. The short-term investment of having to set time aside to participate in sessions was offset by the long-term perceived benefits that participating in MENTOR would reduce absenteeism for their employees over time and improve mental health within the workplace.

### 2.5.2. Theme 2: acceptability and feasibility

Participants reported that MENTOR was a generally positive experience, however both participants and MHELWs expressed concerns around the suitability of trial materials. Two subthemes: 'acceptability of MENTOR content and materials' and 'experience of working with MHELWs' are described below.

2.5.2.1. Theme 2, subtheme 1: acceptability of MENTOR content and materials. A line manager highlighted that the MENTOR toolkits may not be adaptable across different organisations based on their respective size and set up. Whilst the toolkits are thought to achieve their purpose, this suggests that the individual characteristics of certain organisations might present barriers to their effective use. Nevertheless, MENTOR sessions provided opportunities for reflective conversations between employees and line managers on mental health, wellbeing, and workplace performance. This was crucial in helping line managers understand that employees may require work-related support for their mental health conditions (e.g., through reasonable workplace adjustments). Meanwhile, participants described being more able to overcome challenging situations using psychological flexibility skills learned through the open, aware, and active framework. It allowed them to take a step back from stressful situations to become more composed before attempting to find a resolution or implement effective support. Whilst the content of MENTOR worksheets was well received by employees, they suggested that branding could be improved to be targeted at working professionals.

2.5.2.2. Theme 2, subtheme 2: experience with MHELWs. All employee and line manager participants reported positive experiences with MHELWs in that they felt understood as an individual and their problems were validated. Participants and MHELWs formed close relationships during the trial. This was important to facilitate engagement and ensure participants felt comfortable and confident having open conversations regarding their mental health. The flexibility of sessions facilitated this as MHELWs could adapt their format based on participant progression with intervention content, meaning conversations were always relevant to participants to maximise engagement. Finally, MHELWs played a pivotal role in supporting participants to reach goals set during session one. MHELWs encouraged participants to put key skills learned during MENTOR into practice and enabled their use after the trial ended.

### 2.5.3. Theme 3: mental health and productivity

Participants reported MENTOR as largely beneficial in helping improve their mental health, wellbeing, and productivity both in and outside of work. MENTOR enabled participants to better understand the benefits of seeking help and implement effective strategies to improve

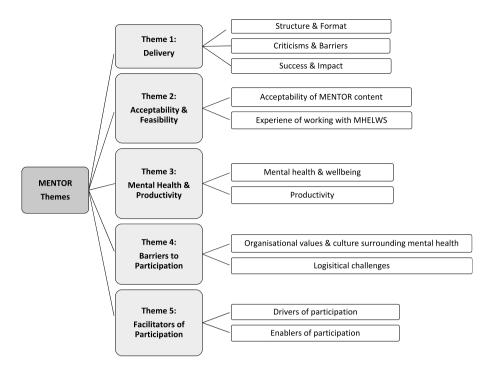


Fig. 2.0. Themes identified in the qualitative analysis of the MENTOR study.

daily life and functioning.

2.5.3.1. Theme 3, subtheme 1: mental health and wellbeing. Since participating in MENTOR, line managers and organisations have become more conscious of how employees' mental health impacts their productivity. This led to them making more reasonable adjustments to ensure their employees feel supported. MENTOR encouraged line managers to prioritise employee mental health irrespective of the urgency of other work-related tasks and become more understanding of each employee's needs. This understanding is vital in allowing managers to ensure they validate mental health conditions to then be able to seek or provide the right support. Employees also described how participation enhanced their confidence and strengthened relationships with their line manager and wider colleagues by opening conversations about their mental health. Employees reported participating in MENTOR positively impacted their lives as it clarified their personal goals in improving their mental health.

2.5.3.2. Theme 3, subtheme 2: productivity. Prior to MENTOR, some line managers had raised concerns around their employee's productivity at work. This in turn affected line manager productivity as they found themselves spending additional time with given employees to slowly work through their tasks. Additionally, during the pandemic, keeping businesses afloat took priority (e.g., ensuring remote working arrangements were in place). Productivity was therefore prioritised over employee mental health. Since participating in MENTOR, both line managers and organisations have become more conscious of how employee mental health can impact their productivity. MHELWs placed emphasis on how employee mental health can be improved which led line managers to make more reasonable workplace adjustments.

### 2.5.4. Theme 4: barriers to participation in MENTOR

Participants highlighted key barriers to their participation. These barriers were related to organisational values and culture regarding mental health issues, and logistical challenges.

2.5.4.1. Theme 4, subtheme 1: organisational values and culture surrounding mental health. Differing dynamics between organisations and their cultures (e.g., target driven leadership and promotion of high-performance culture) may have influenced relationships between employees and line managers. Leadership style was as important as having open conversations around mental health and could subsequently act as a barrier to participation. Stigma surrounding mental health within the workplace may have also prevented employees from seeking help. Thus, preventing participation as they may have thought doing so could jeopardise their employment.

2.5.4.2. Theme 4, subtheme 2: logistical challenges. Logistical challenges around arranging and attending MENTOR sessions acted as a barrier to participation for some participants. This may stem from poor acceptability of the participant information sheet and subsequently, participants reported a poor understanding of the time commitments that MENTOR involved. This was further evidenced when arranging sessions with line managers. Line managers were sometimes unable to commit to the full hour sessions. Conversely, employees reported they would have benefitted from a longer initial session with MHELWs to allow for a better understanding of what MENTOR involves. Finally, whilst MENTOR is an individual-level intervention, it requires collaboration between employees and line managers on certain tasks. For example, one session required employees and line managers to set joint goals. However, employees highlighted that there were large differences between their and their line managers' roles therefore, a lack of cohesion prevented them from engaging in joint sessions.

### 2.5.5. Theme 5: facilitators of participation in MENTOR

Despite initial stigma and reluctance to openly talk about and provide help for mental health conditions, participants were motivated to improve wellbeing and workplace productivity and therefore engage with the trial.

2.5.5.1. Theme 5, subtheme 1: drivers of participation. A key personal motivator for employee participation was the high burden of disease, affecting aspects of their life such as daily functioning and workplace

productivity. For example, two employees revealed they had stepped down from their roles due to mental health difficulties that prevented them from fulfilling their job commitments. This was further evidenced by MHELWs describing their caseload as comprising of employees who all experienced long-term mental health conditions and were unsuccessful in improving their wellbeing from previous support they had received. However, pre-existing support from other organisations pre-MENTOR acted as a key driver that allowed employees to confidently seek further support by participating in the trial. In addition, having a good working relationship with line managers encouraged employees to participate in MENTOR. This meant that employees felt comfortable disclosing their mental health difficulties, whereas managers demonstrated a heightened sense of commitment to the trial, primarily to support their employees effectively.

2.5.5.2. Theme 5, subtheme 2: enablers of participation. A major enabling factor was the flexibility to arrange and rearrange sessions, as participants were aware that this would not influence the support they received. This also allowed them to fit in MENTOR sessions around their normal work hours rather than having to set aside personal time. The combination of practical and reflective sessions also acted as an enabler of participation, as the sessions felt more tailored to the individual needs of participants. Another enabling factor was that MENTOR also equipped line managers with general management skills, allowing them to improve within their given roles. The adaptability of the intervention allowed participants to tailor the programme and its content to suit their needs and schedule, increasing engagement and productivity.

### 3. Discussion

This study aimed to assess the acceptability and feasibility of a joint employee/manager intervention to improve work performance and mental health for employees with mental health conditions, in line with conventional recommendations for feasibility studies (Teare et al., 2014). To our knowledge, this is the first intervention with a joint employee/manager format that aims to achieve this.

Our findings indicated that the recruitment rate was feasible. Forty pairs were randomised, which is consistent with the median sample size found in pilot RCTs (Billingham, Whitehead, & Julious, 2013). The feasibility target of participants completing their condition (intervention/control) was satisfactory for employees and near satisfactory for managers. The acceptability retention rate target for participants finishing the intervention was only partially achieved. This was broadly due to the reallocation of participants to new MHELWs due to some MHELWs leaving the study, employees going on long-term sick leave and obstacles in booking manager sessions. The fidelity acceptability results, which measured whether each intervention session was delivered as intended were strong, showing that MENTOR had good face validity with stakeholders.

The feedback from participants who successfully finished the intervention indicated that it was perceived as relevant to the workplace issues faced by employees, as a direct result of their mental health conditions. Employees also expressed the intervention benefited their mental health and productivity. Managers indicated they were now more mindful of employee mental health and would make adjustments. MHELWs highlighted some concerns faced when delivering the intervention that were shared by participants, including issues with scheduling sessions, and a lack of understanding of clinical trial processes.

The quantitative analyses showed that employees improved their work impairment and decisional conflict from baseline to post-intervention within groups. There were also significant improvements in work performance and mental health knowledge for managers from baseline to post-intervention within both groups. Significant differences were not found when comparing participants who received MENTOR intervention with participants allocated to the waitlist control group.

This may be attributable to the the fact that this study was not designed (or powered) to detect such differences.

Increases in employee productivity have been found in other work-place interventions which focus on psychological flexibility and resource building (Bond, Flaxman, & Lloyd, 2016; Tammemagi, O'Hora & Maglieri, 2013). Furthermore, improvement in mental health knowledge of managers has also been found in previous manager workplace interventions (Schwarz et al., 2019), leading to improvements in their self-reported behaviour and beneficial effects on employee mental health (Tsutsumi et al., 2005), including reduced sickness (Milligan-Saville et al., 2017) and improved employee productivity (Takao, Tsutsumi, Nishiuchi, Mineyama, & Kawakami, 2006). More studies with larger sample sizes are needed, however, to corroborate these findings (Gayed et al., 2018).

This intervention presents several strengths. First, it was codeveloped by psychologists, psychiatrists, people with lived experiences of poor mental health, Mind (a national mental health charity) staff and healthcare practitioners with feedback from multiple experienced academics in occupational health psychology, clinical and health psychology, and psychiatry. Second, MHELWs felt the training provided them with the knowledge and confidence to apply their knowledge to participants with mental health conditions. Third, the intervention was theoretically informed (Ryan & Deci, 2020; Hobfoll, 1989; Hayes et al., 2012) and based on previous successful interventions (Tammemagi, O'Hora & Maglieri, 2013; Schwarz et al., 2019; Prudenzi et al., 2021; Eklof & Ahlborg, 2016). Lastly, the prevention-based approach was a strength because managers have a key role in the prevention of mental health difficulties in the workplace (Blake, Hassard, Bartle, & Thomson, 2023), but many organisations do not offer training, and there are only a few studies which focus on this aspect (Blake et al., 2022).

In terms of limitations, the COVID-19 pandemic and difficulties engaging employers during the recruitment period significantly impacted MENTOR recruitment. Second, logistical issues arose that were unrelated to the intervention itself and consequently affected delivery times and retention of employee-manager pairs. MHELWs reported difficulties in booking sessions as some line managers struggled to make time in their schedules. Managers' busy workloads and schedules appeared to be the main barrier to both their recruitment and engagement.

Future research should consider how best the intervention and its content might be delivered. Given the issues of scheduling manager sessions and lower than expected retention rates, a focus on making the intervention more concise may be beneficial. This could involve reducing the length of the sessions that managers are involved in to better accommodate their schedules. Our findings also indicate that the current format of the intervention could be adapted to combine sessions, thereby improving delivery efficiency.

### 4. Conclusions

To our knowledge, this is the first study to assess the acceptability and feasibility of a joint and early intervention for employees with a mental health condition and their managers at work. The feasibility and acceptability of the intervention was satisfactory, and preliminary evidence indicates that MENTOR may improve mental health and productivity of employees and mental health knowledge of managers. However, improvements to the format of the intervention are required to increase retention rates and a definitive trial is needed to test effectiveness for improving individual and organisational outcomes.

### Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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### Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.jcbs.2023.100720.

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