MENTAL HEALTH & PRODUCTIVITY PILOT

MHPP

INWORK RESEARCH REPORT

SLEEP, REST & BITE

January 2023

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GLOSSARY

Cognitive Behavioural Therapy (CBT)

THERAPY THAT FOCUSES ON HOW A PERSON'S THOUGHTS, BEHAVIOURS, EMOTIONS AND PHYSIOLOGY AFFECT EACH OTHER.

Efficacy study

A STUDY DESIGN THAT AIMS TO STATISTICALLY EVALUATE THE IMPACT OF AN INTERVENTION IN A CONTROLLED ENVIRONMENT.

Feasibility Study

A STUDY DESIGN THAT ALLOWS RESEARCHERS TO TRIAL SOMETHING NEW AND GET AN EARLY VIEW OF HOW SUCCESSFUL A LARGER TRIAL MIGHT BE AND HOW IT COULD BE RUN.

Qualitative Data

DATA WHICH IS FORMED OF WORDS, (E.G. STATEMENTS AND OPINIONS THROUGH INTERVIEWS OR FOCUS GROUPS). COMMON THEMES CAN BE IDENTIFIED IN THIS KIND OF DATA.

Quantitative Data

DATA WHICH IS NUMERIC AND MEASURABLE (E.G. SCORES ON A DEPRESSION QUESTIONNAIRE). FACTS WITH A LEVEL OF CONFIDENCE CAN BE DRAWN FROM THIS SORT OF DATA.

Randomised Control Trial (RCT)

A STUDY DESIGN THAT HELPS TO MAKE SURE THE RESULTS ARE ACCURATE AND NOT INFLUENCED BY THE RESEARCHERS OR THE STUDY DESIGN ITSELF, BY RANDOMLY SELECTING PEOPLE TO EITHER GET THE TREATMENT STRAIGHT AWAY OR NOT.

Statistical significance

THIS IS A WAY TO JUDGE WHETHER THE RESULTS OF THE RESEARCH COULD HAVE HAPPENED JUST BY CHANCE, OR IF THE TREATMENT WAS THE CAUSE OF ANY DIFFERENCE SEEN

Background

Mental health problems and stress affect us all, however old we are, what our ethnic background is, or what we do for a living. Although it is normal to feel stressed sometimes or to have a poor night's sleep, it is important to notice when these things are happening too much and affecting our day-to-day lives. Mental health problems are usually described based on the symptoms being experienced, how bad those symptoms are, and how long they go on for. Anxiety and depression are the most common ones, affecting roughly one in six adults in England (McManus et al., 2016). The number of mental health problems seen tend to go up a lot during large-scale disasters, such as during war, natural disasters (e.g. hurricanes and tsunamis), or global pandemics (Charlson et al., 2019; Saeed & Gargano, 2022; Douglas et al., 2009). In data collected after the COVID-19 pandemic in the UK in autumn 2022, around 16% of adults reported moderate to severe symptoms of depression. This is higher than before the pandemic (10%), but lower than the peak in early 2021 (21%) (ONS, 2022).

At work, mental health problems affect one in six workers each year and are the leading cause of time off work sick. Stress, anxiety and depression are the reason for approximately half of the working days lost (Deloitte, 2020).

The estimated cost to the UK each year of poor mental health has gone up 25% since the start of the pandemic, up to £56 billion in 2020/21 (Deloitte, 2022). About half of this cost is because of presenteeism (when someone goes to work, but gets less done due to poor health), and the rest of the cost is from time off sick and staff leaving their jobs due to mental health problems.

Although more generally people are now more aware of mental health problems and have less negative beliefs about them, this is not always the case at work. A national report found that around half of workers said they would not feel comfortable talking about their mental health at work (BITC, 2019). However, a more recent report found that almost two thirds of employers in the Midlands wanted to provide more mental health and wellbeing support to their staff (ERC, 2020). Researchers have started to show how the workplace could be a great place to offer support and stop more serious problems developing. Different programmes, interventions and resources have been trialled in the past in workplaces to reduce mental health difficulties, but there isn't much scientific evidence to say whether they work or not, and who for.

What is MHPP?

The Mental Health and Productivity Pilot (MHPP) is a three-year programme funded by Midlands Engine. Expert partners in the Midlands are working together to support good mental health at work and reduce negative beliefs and stigma about mental health. Through our work, we hope to support workers in doing their jobs, and help the Midlands be more productive. To do this, we are providing mental health support and resources that are backed-up by data, affordable and can be delivered long term.

The INWORK pilot trials are part of the MHPP programme. Four different programmes to support workers were trialled as part of INWORK - SLEEP, REST, BITE and MENTOR. Two other trials, PROWORK and Managing Minds, were also created and tested as part of MHPP. This report covers the trials delivered by the University of Warwick: SLEEP, REST and BITE.

The INWORK trials were run to test whether each programme of support being offered was realistic to deliver, acceptable to the people taking part, and could have a positive impact on the different indicators of mental health being focused on for each trial. For example:

- If employers advertised the trials, would people want to take part?
- Would more people drop-out of the treatment than, e.g. similar NHS services?
- Would employers want to advertise the trials and allow people to take part?

What did we do?

RECRUITMENT

To find people to take part in our trials we used two methods: through our partner employers or directly reaching working people in the Midlands via social media advertising. Our network of partner employers was built as part of the wider MHPP programme, with over 700 employers from sectors including health services, education, information and communication and manufacturing. Employers played an important role in the process, from sending out advertising materials, to being encouraging and flexible for employees taking part.

ELIGIBILITY

All research studies have rules about who can or cannot take part, called study eligibility criteria. These rules help to ensure that results are clear in what they tell us (e.g. not including someone with another condition or a lifestyle which might prevent the treatment from working as intended), whilst also making sure no one is included who might be at greater risk of harm from the treatment. Everyone who wanted to take part filled in a screening questionnaire.

For SLEEP, REST, and MENTOR this included questions about symptoms of depression, anxiety and insomnia, with other yes/no questions (e.g. currently in touch with mental health services). People were asked to take part in either the SLEEP, REST or MENTOR trials based on their answers, or were directed to other sources of help if they didn't meet the eligibility criteria.

BITE used two stages to see if people met the criteria to take part. At the first stage, there were questions looking for early signs of an unhealthy relationship with food and their body. In stage two, people who met the stage one criteria had a call with one of the therapists on the trial. If the therapist was happy that they did not show any signs of high risk, for example thoughts about suicide, they were invited to take part. Anyone who did not meet the eligibility criteria was directed to appropriate support (e.g. mental health and eating disorder charities, local primary care services, self-help resources).

ELIGIBILITY CRITERIA

	INCLUSION	EXCLUSION
SLEEP	• ABLE TO GIVE INFORMED CONSENT • ENGLISH-SPEAKING • IN EMPLOYMENT • ≥ 18 YEARS OF AGE • ISI SCORE > 7 • GAD-7 SCORE ≥ 5 OR PHQ-9 SCORE ≥ 5	• RECEIVING TREATMENT FROM MENTAL HEALTH SERVICES • PREGNANT • CERTAIN MENTAL HEALTH CONDITIONS (E.G. EPILEPSY, PSYCHOSIS) • IN SHIFT WORK • RETIRING IN NEXT 10 MONTHS
REST	• ABLE TO GIVE INFORMED CONSENT • ENGLISH-SPEAKING • IN EMPLOYMENT • ≥ 18 YEARS OF AGE • ISI SCORE < 8 • GAD-7 SCORE ≥ 5 OR PHQ-9 SCORE ≥ 5	• RECEIVING TREATMENT FROM MENTAL HEALTH SERVICES • RETIRING IN NEXT 10 MONTHS • TAKING PART IN OTHER PSCYHOLOGICAL INTERVENTION TRIALS
BITE	• ≥ 18 YEARS OF AGE • IN EMPLOYMENT • AVOIDING FOOD DUE TO WORRIES THAT EATING NORMALLY WOULD LEAD TO A LOSS OF CONTROL OF EATING AND WEIGHT? • WORRY/DISTRESS ABOUT BODY SHAPE, WEIGHT AND SIZE • BMI ≥ 18.5	• CURRENT DIAGNOSIS OF ANOREXIA NERVOSA • THIRD TRIMESTER OF PREGNANCY

STUDY DESIGN

SLEEP and REST used a randomised waitlist-controlled trial design (RCT - see glossary). This means that there was a group of people (called the intervention group) who were enrolled in the SLEEP or REST intervention being trialled straight away, and another group who waited (called the control group). All people taking part first provided their informed consent and completed the baseline questionnaires. This is the first set of questionnaires used as a benchmark for what effect the interventions may have on improving certain symptoms. Individuals were then randomly put into either the intervention group or the control group. While the intervention group started the treatment, the control group continued with life as usual for 6-8 weeks (depending on which study they were in).
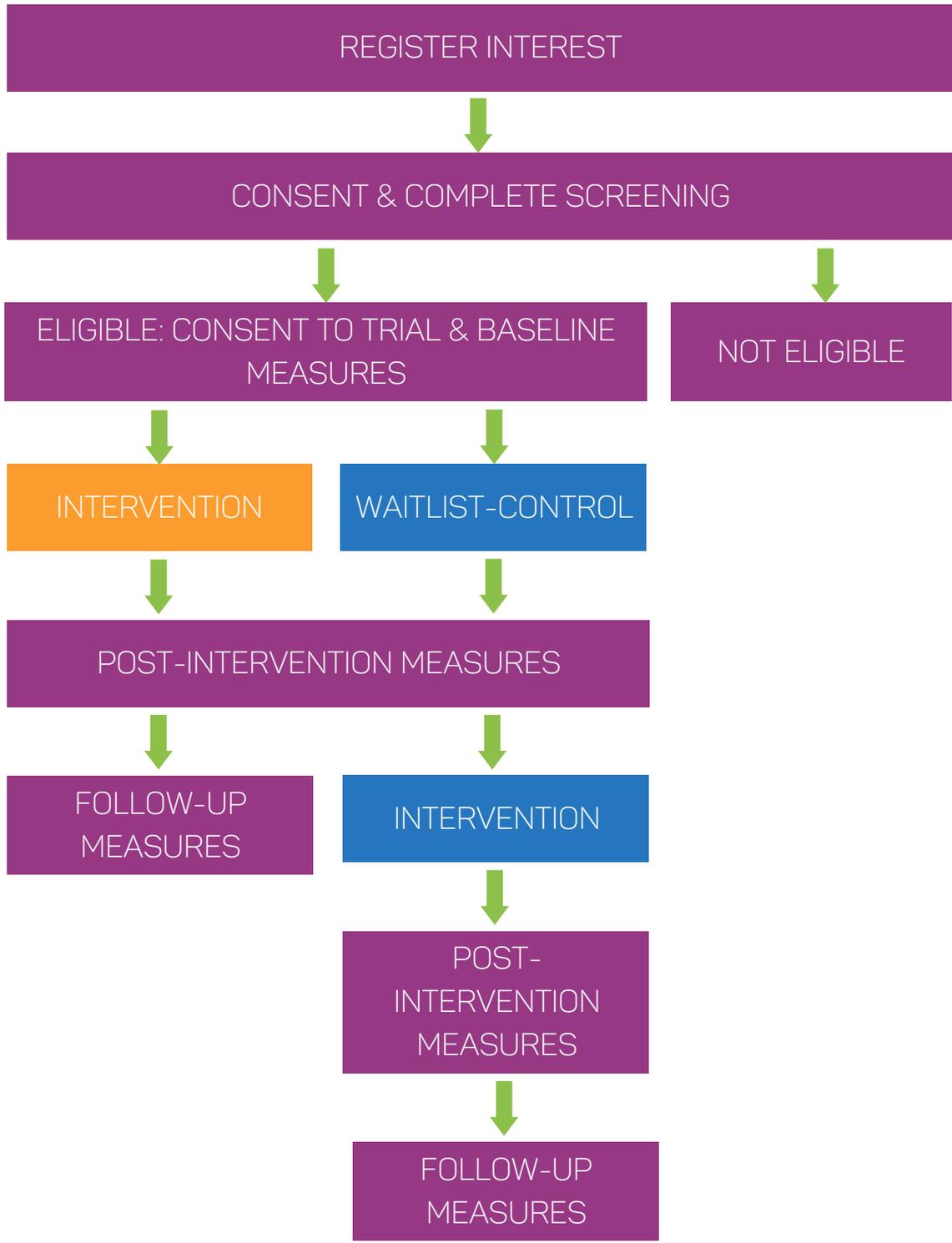
Using these groups means that, for example, if the change in depression symptoms is bigger in one group, this should be due to the intervention rather than other wider factors. This is because both groups are experiencing the same wider events (e.g. cost of living increases) and should have the same distribution in terms of other factors that could make a difference, e.g. ethnicity or gender. The control group then got the treatment after a 6-8 week delay to ensure that everyone had the chance to be supported.

Although SLEEP and REST both followed the same study design, the aims of the trials were different. REST was a feasibility trial, whereas SLEEP was run as an efficacy trial (see glossary). This means that the REST trial was trying to answer questions about how suitable it would be to deliver the programme via employers, as well looking at how many people dropped out and completed the materials. SLEEP was run as an efficacy trial, which means that it aimed to collect sufficient data in a controlled environment to be able to say how effective the intervention was in improving insomnia, depression and anxiety symptoms.
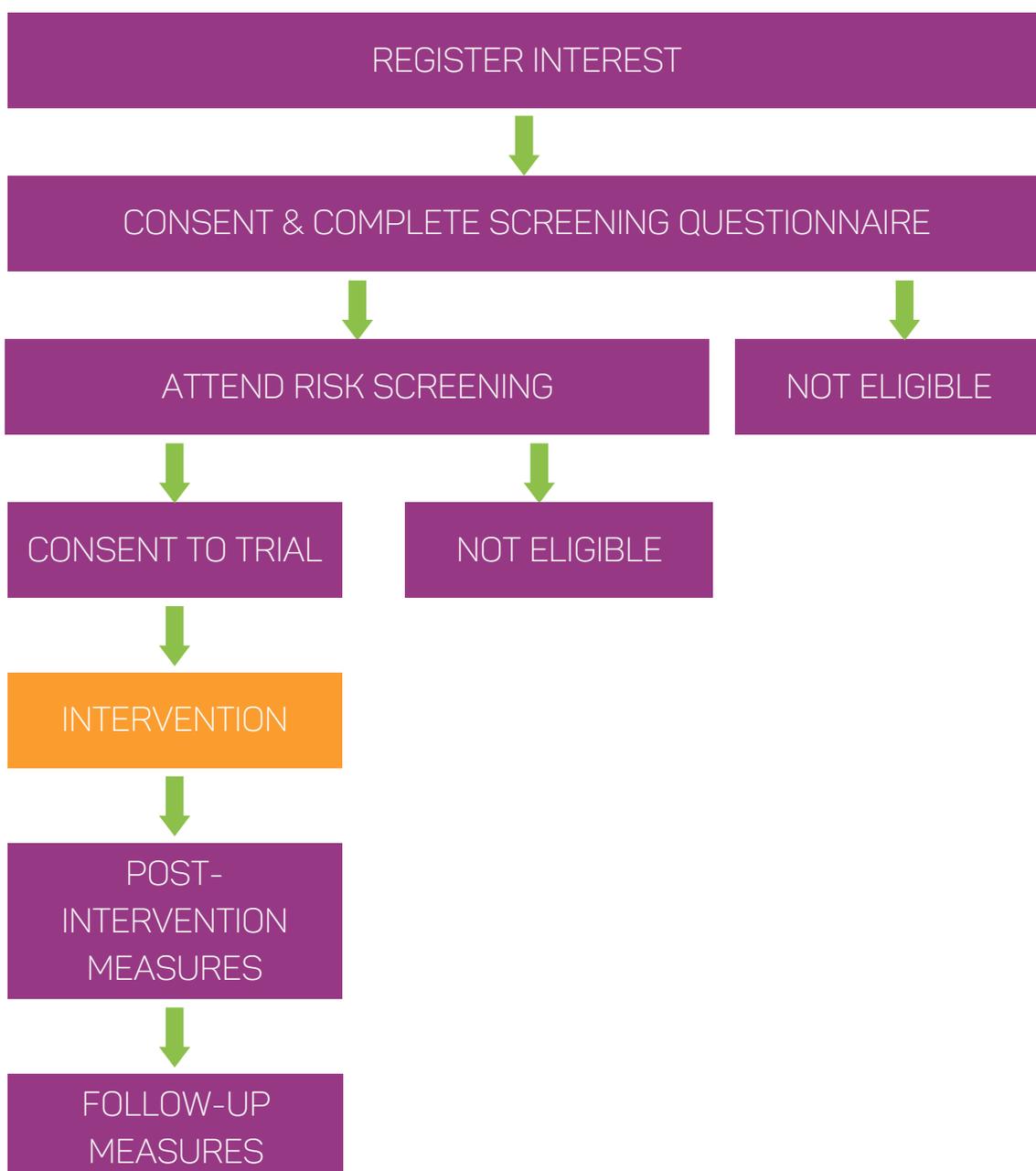
STUDY FLOWCHART
SLEEP & REST

Everyone who took part was asked to answer the same set of questions before getting the treatment, after finishing the treatment, and after 1-2 months (called follow-ups). Collecting this data allows researchers to look at the initial impact of the treatment (before vs after), as well as if any change were maintained over a longer period.

```
                    REGISTER INTEREST
                           │
                           ▼
              CONSENT & COMPLETE SCREENING
                    │                    │
                    ▼                    ▼
    ELIGIBLE: CONSENT TO TRIAL      NOT ELIGIBLE
       & BASELINE MEASURES
         │            │
         ▼            ▼
    INTERVENTION   WAITLIST-CONTROL
         │            │
         ▼            ▼
       POST-INTERVENTION MEASURES
         │            │
         ▼            ▼
    FOLLOW-UP      INTERVENTION
    MEASURES          │
                      ▼
                    POST-INTERVENTION
                    MEASURES
                      │
                      ▼
                    FOLLOW-UP
                    MEASURES
```

BITE

BITE was also a feasibility study, but a single-group design where everyone who took part followed the same timeline. Those who took part were asked to answer different questions at various points throughout the study, described in the section on primary and secondary outcome measures. This allowed researchers to see how different measures of eating attitudes, behaviours and wellbeing were changing as each person went through the BITE therapy. There was already evidence showing that the therapy used in BITE worked well in healthcare settings, e.g. NHS treatment. The BITE trial was exploring whether the people would take part and stay engaged, e.g. complete all the sessions, if they got access to the therapy via their workplace.

```
REGISTER INTEREST
        │
        ▼
CONSENT & COMPLETE SCREENING QUESTIONNAIRE
        │                              │
        ▼                              ▼
ATTEND RISK SCREENING            NOT ELIGIBLE
    │           │
    ▼           ▼
CONSENT TO   NOT ELIGIBLE
  TRIAL
    │
    ▼
INTERVENTION
    │
    ▼
POST-INTERVENTION MEASURES
    │
    ▼
FOLLOW-UP MEASURES
```

What did we measure?

SLEEP

The primary outcome measures are the indicators which researchers consider to be the most important to look at within the study. For SLEEP these were anxiety, depression and insomnia. We also measured job satisfaction, job productivity, time off sick, presenteeism (working whilst sick), and wellbeing (secondary outcomes). A small proportion of people also completed a qualitative interview (see glossary), where they were asked to describe in further detail their experiences of the programme. A research process was used to find common themes across the interviews.

DEPRESSION

Depression symptoms were measured using the Patient Health Questionnaire-9 (PHQ-9). This questionnaire asks people to rate how bothered they have been by certain problems over the past two weeks (e.g. little interest in doing things, feelings of hopelessness) on a scale of 0 (not at all) to 3 (nearly every day).

ANXIETY

Anxiety symptoms were measured using the General Anxiety Disorder-7 (GAD-7). This questionnaire asks people to rate how bothered they have been by certain problems over the past two weeks (e.g. feeling nervous, anxious or on edge) on a scale of 0 (not at all) to 3 (nearly every day).

INSOMNIA

People with insomnia may experience trouble getting to sleep, staying asleep, or waking up earlier than planned, which impacts the quality of sleep. Insomnia symptoms were measured using the Insomnia Severity Index (ISI). These questions ask people to rate statements about their sleep over the past two weeks (e.g. how difficult it was to fall asleep)

REST

The success of the REST trial was explored using five objectives, or primary outcomes:

- How many employers and employees were happy to take part? (Objectives 1 & 2)
- How much did people use the online materials, and did they finish the programme?
- Did taking part change peoples' scores on questionnaires for depression, anxiety, insomnia and job productivity?
- What were people' opinions about the online materials and the trial? e.g.
  - What did people think about the online nature of the programme?
  - Were there any barriers/issues with taking part?
  - Was there anything missing from the programme?

BITE

To judge success, BITE looked at:

Primary outcomes:
- How many people were willing to take part?
- How many people stayed involved at each stage of the therapy?
- The number of therapy sessions people turned up to

Secondary outcomes:
- How the treatment affected eating disorder, depression and anxiety symptoms, productivity, and time off work sick?

As well as these outcomes, those who took part were asked to answer a set of questions rating different aspects of the treatment (e.g. overall, how well did the BITE programme feel personally tailored to you and your needs?).

People who took part were also asked open-ended questions about their experiences (e.g. were there any advantages and disadvantages for you having the therapy offered and delivered in the workplace rather than a clinic?). A research process was used to find common themes across the answers.

DATA MANAGEMENT

The way data is managed is very important in any research project. We define up front what data we are collecting and why; how we will manage it and the steps we will take to make sure it stays private throughout the trial. This information is shared with people in an information sheet before they agree to take part in a trial.

We did several things in the INWORK trials to make sure that information we collected stayed secure. Information that would allow someone to be identified (e.g. e-mail address) was separated from research data (e.g. survey responses) as quickly as possible and was stored separately. Access to information was restricted, with the team only able to see the information they needed for their role in the research project. No identifiable information was shared with employers, and it will not possible to see who took part based on any reports we create.

PROGRAMMES

SLEEP, REST and BITE are all based on Cognitive Behavioural Therapy (CBT). CBT is based on the idea that thoughts, behaviours, and feelings (both emotional and physical) are all interconnected. CBT works by helping us to break unhealthy links between these elements, and uses change in one area, e.g. what we think, to lead to changes in other areas, e.g. how we feel.

SLEEP

SLEEP is a 6 week digital online programme based on cognitive behavioural therapy for insomnia (CBTi) and emotion regulation (which teaches us to recognise, accept, and control our emotions). Topics covered in the programme include learning about what sleep is and how it affects our bodies and minds, monitoring of sleep, sleep restriction therapy and stress management techniques. Four video conferencing sessions with a trained therapist are also included.

REST

REST is an 8 week programme based on cognitive behavioural therapy with tools and information designed to reduce symptoms of stress, anxiety and depression. REST is fully self-guided online and builds practical skills and techniques to help people cope with stressful situations.

BITE

The BITE programme is a brief, online programme of cognitive behavioural therapy for eating disorders in those who are not underweight (CBT-T). Ten weekly therapy sessions were delivered online by a trained therapist. The sessions were structured around five parts including learning about and changing eating, challenging beliefs about eating, emotional triggers for eating, looking at the connection between eating and weight, and body image.

What did we find?

SLEEP
DEMOGRAPHICS

n — Total = 160; Intervention = 80; Control = 80

Age — Mean = 43.65 years (22-65 years)

GENDER

FEMALE (77%); MALE (22%); OTHER (1%)

ETHNICITY

OTHER 0.6%
ASIAN 13.8%
BLACK 2.5%
MIXED/MUTLTIPLE 2.5%
WHITE 80.6%

RELATIONSHIP STATUS

DIVORCED 3.75%
SEPARATED 2.5%
WIDOWED 1.25%
OTHER 4.4%
SINGLE 17.5%
COHABITING 18.8%
MARRIED 51.9%

INCOME

Income brackets: 10-29k, 30-49k, 50-69k, 70-89k, 90-109k, 110-150k, 150k+
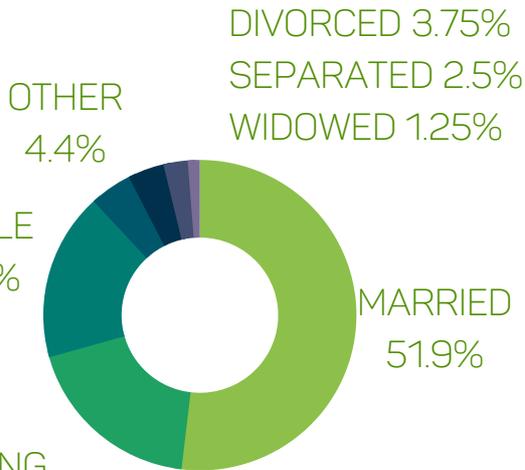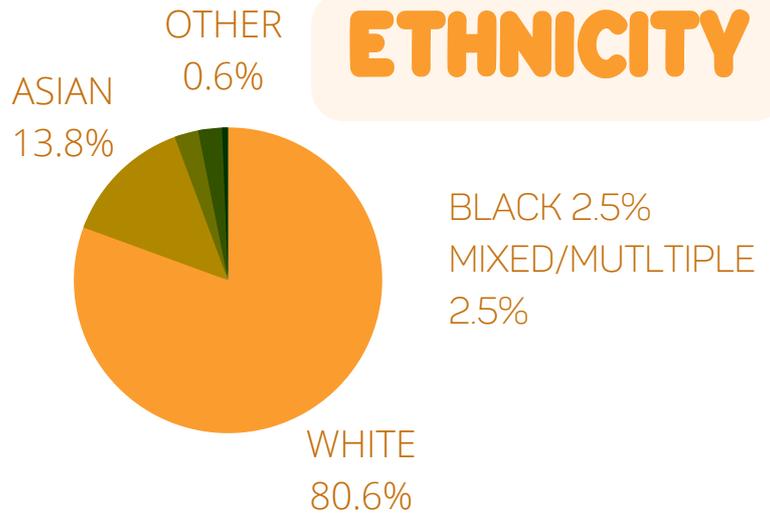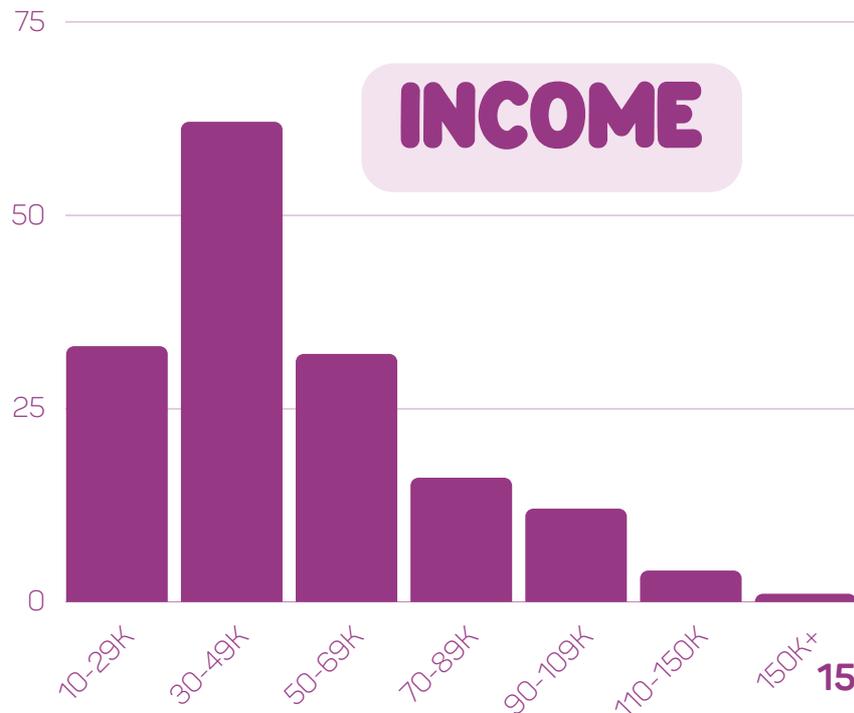
REST
DEMOGRAPHICS

n — Total = 52; Intervention = 25; Control = 27

Age — Mean = 41.71 years (22-63 years)

GENDER

FEMALE (85%); MALE (15%)

ETHNICITY

ASIAN 1.9%
BLACK 1.9%
MIXED 1.9%
WHITE 94.2%

RELATIONSHIP STATUS

OTHER 7.7%
SEPARATED 3.8%
SINGLE 17.3%
MARRIED 48.1%
COHABITING 23.1%

INCOME

| 10-29K | 30-49K | 50-69K | 70-89K | 90-109K | 110-150K |

BITE
DEMOGRAPHICS

n Total = 47

Age Mean = 39.74 years

GENDER

FEMALE (91.5%); MALE (8.5%)

ETHNICITY

NON-WHITE
17%

WHITE
83%

OTHER
8.5%

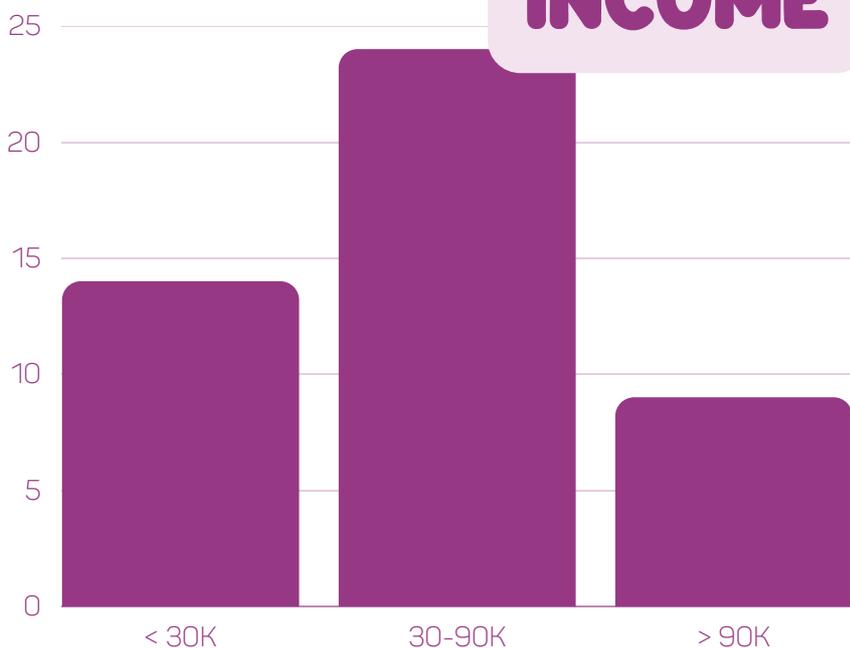SINGLE
21.3%
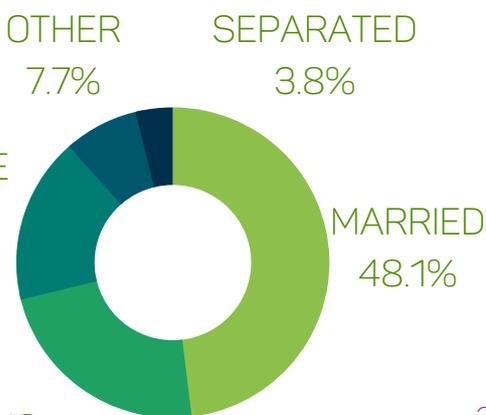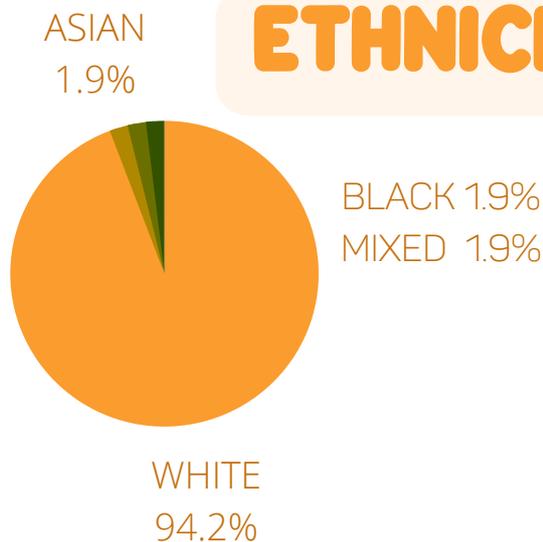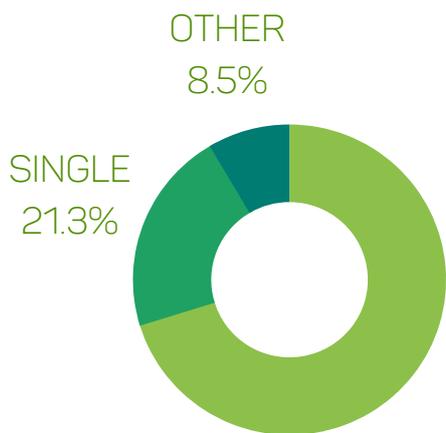
MARRIED/COHABITING
70.2%

RELATIONSHIP STATUS

INCOME

< 30K   30-90K   > 90K

EMPLOYER DEMOGRAPHICS

Number of expressions of interest (EOI) and number of consent to trial/baseline questionnaire responses by sector.

SECTOR	EXPRESSIONS OF INTEREST (N = 1032)	SLEEP BASELINE (N = 162)	REST BASELINE (N = 53)	BITE BASELINE (N = 47)
Accommodation & food services	1	0	1	0
Agriculture, forestry & fishing	1	1	0	0
Arts, entertainment & recreation	25	6	3	0
Business, administration & support services	31	7	1	0
Education	378	60	23	34
Finance & insurance	1	1	0	0
Health & social care	44	10	6	0
Information & communication	47	11	1	3
Manufacturing	19	9	0	0
Professional, scientific & technical	42	14	4	1
Public administration & defence	171	33	12	0
Retail	18	4	0	0
Self-employed	1	1	0	0
Transport & storage	17	4	1	1
Unspecified	236	1	1	8

SLEEP

PRIMARY OUTCOMES

Taking part in **SLEEP** significantly improved sleep, depression, and anxiety symptoms (see glossary for definition of statistically significant findings).

INTERVENTION GROUP

50% REDUCTION IN INSOMNIA & DEPRESSION SYMPTOMS

40% REDUCTION IN ANXIETY SYMPTOMS

CONTROL GROUP

10% REDUCTION IN INSOMNIA & DEPRESSION SYMPTOMS

8% REDUCTION IN ANXIETY SYMPTOMS

SECONDARY OUTCOMES

There were significant improvements in mental wellbeing and overall work impairment, with no significant changes in all other secondary outcomes.

INTERVENTION GROUP

CONTROL GROUP

11% INCREASE IN MENTAL WELLBEING

3% INCREASE IN MENTAL WELLBEING

36% IMPROVEMENT IN OVERALL WORK IMPAIRMENT

11% IMPROVEMENT IN OVERALL WORK IMPAIRMENT

QUALITATIVE ANALYSIS

A random sample of **21 participants** were included in the analysis. A main theme: 'Better sleep improved my life' was found, with three other themes capturing how the programme led to the positive changes in sleep and wellbeing.

'BETTER SLEEP IMPROVED MY LIFE'

THE VALUE OF THERAPY VS DIGITAL ONLY

PRACTICE, FEEDBACK & PROBLEM-SOLVING

WORKING FROM HOME DURING COVID-19

SPILLOVER EFFECT

The main theme 'Better sleep improved my life' captures all the sleep and general wellbeing benefits people taking part experienced. The spillover effect describes the knock-on effects they noticed in other parts of their lives due to sleeping better.

"IT WAS OVERALL POSITIVE AND I FOUND IT BENEFICIAL. I FOUND THAT I... UNDERSTOOD MY SLEEP BETTER AS A RESULT OF THAT. AND IT ALSO HELPED ME WITH SOME ISSUES THAT WERE IMPACTING MY SLEEP AS WELL."

"I THINK IT'S MADE REALLY IMPORTANT IMPROVEMENTS TO MY SLEEP PATTERNS AND MY QUALITY OF LIFE AND WELLBEING IN GENERAL SO I REALLY HAD HIGHLY POSITIVE VIEWS ON THE EXPERIENCE".

One of the themes talks about 'The value of therapy sessions versus digital-only'. Several people said that the therapy sessions were 'the best part' of their experience. Participants liked the support from the therapists, and the chance to ask questions about content when needed.

> *"I WOULD SAY PROBABLY WITH THE SLEEP THERAPIST MADE THE MOST DIFFERENCE. IT WAS JUST SORT OF GETTING THINGS IN MY HEAD. SO, WHEN SHE WAS TALKING ABOUT LITTLE BITS ABOUT THE MODULES AS WELL, IT WAS JUST MAKING THINGS A LITTLE BIT CLEARER."*

> *"I LEARNED HOW TO KEEP A CONSTANT, LET'S SAY, PATH AND NOT CHANGE EVERY NIGHT OR FOLLOWING MORE OR LESS SLEEP NECESSITY BUT TO RESPECT THE RULES WERE USEFUL."*

Some of the ways that taking part may have helped people to improve are captured by the second theme 'Practice, feedback and problem-solving.' For example, sleep restriction therapy (SRT) and following good sleep hygiene involved practising positive behaviours. This will be helpful for future development of the programme, to help us understand which parts of the process helped people make improvements.

The SLEEP trial was run during the COVID-19 pandemic, and the final theme is about how this affected people's ability to take part. Some people were using computers more for work, and doing the therapy online was a natural extension. Some found that they had better access to private space due to working from home. This meant that taking part during working hours was easier.

> *"I THINK WE'VE ALL GROWN ACCUSTOMED TO DOING SO MUCH OF OUR LIVES ONLINE NOW THAT I DIDN'T REALLY HAVE MUCH OF AN ISSUE WITH IT.I DON'T THINK I COULD'VE DONE THIS ANY OTHER WAY BUT ONLINE ANYWAY"*

# REST

OBJECTIVE 1 : WERE EMPLOYERS WILLING TO TAKE PART?

- **301 employers were contacted**
- **104 employers attended a call or webinar about the trial**
- **33 employers agreed to host the REST trial**

OBJECTIVE 2 : WERE EMPLOYEES WILLING TO TAKE PART?

- **902 people expressed interest in INWORK (SLEEP, REST, MENTOR)**
- **60% completed screening questionnaires**
- **74 people were invited to take part after screening**
- **53 people completed the baseline questions to take part**

OBJECTIVE 3: ENGAGEMENT WITH THE ONLINE CONTENT

Engagement rates of the 52 participants enrolled (1 person withdrew)
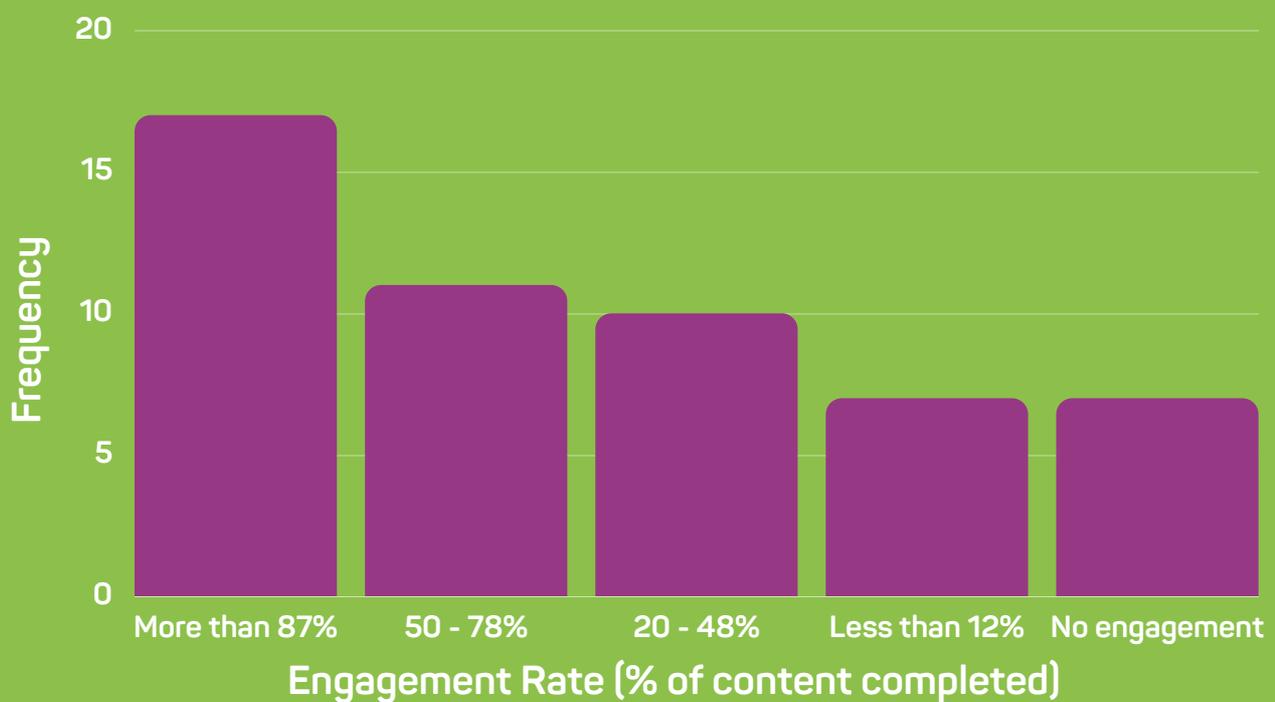
OBJECTIVE 4: HOW DID TAKING PART AFFECT SYMPTOMS OF DEPRESSION AND ANXIETY?

There were some improvements in anxiety and depression symptoms in both the intervention and control groups. However, due to the study being designed to look at feasibility, and the small number of participants in each group, the findings were not statistically significant. This means we can't say for sure whether the difference was likely to be due to the REST treatment, or could have happened just by chance. This was the case for all other quantitative outcome measures.

INTERVENTION GROUP

21% REDUCTION IN ANXIETY SYMPTOMS

17% REDUCTION IN DEPRESSION SYMPTOMS

CONTROL GROUP

12% REDUCTION IN ANXIETY SYMPTOMS

7% REDUCTION IN DEPRESSION SYMPTOMS

QUALITATIVE ANALYSIS

A random sample of 10 people were interviewed for the qualitative analysis. Four related themes were found, which are described below with quotes.

'THIS ISN'T A QUICK FIX'

'ANYONE COULD PICK THAT UP AND FIND IT VERY USEFUL'

INDIVIDUAL-LEVEL IMPACTS FROM THE PRACTICAL SKILLS AND TECHNIQUES

REST THEMES

PROGRAMME STRUCTURE & DESIGN FACILITATED ENGAGEMENT

Overall, those who took part said that the practical skills and techniques they learned had an impact in lots of areas of their life. These improvements included greater self-awareness, and acceptance and control of emotions. Participants also spoke about other things, such as speaking more openly about mental health and feeling encouraged to seek more support in the future.

> "BUT IT DID ACTUALLY GIVE ME SOME TOOLS THAT WHEN MY BRAIN WAS RACING AT NIGHT AND PARTICULARLY WHEN ANXIETY IS HIGH, I COULD USE SOME OF THE THINGS THAT I LEARNED TO TRY AND QUELL SOME OF THAT AND TO KIND OF STOP IT FROM SPIRALLING INTO SOMETHING A BIT MORE STRONGER AND A BIT MORE SERIOUS."

Several participants said that they would like REST to be rolled out so it could benefit more people. The view was that, 'anyone could pick that up and find it useful', particularly with the pressure on mental health services. It was also said that the programme "couldn't have been more timely," due to stress in their lives.

> "SO, I FEEL LIKE IT WAS FOR ANYONE WHO'S SUFFERING WITH GENERALISED ANXIETY OR DEPRESSION OR EVEN JUST WORRY IN GENERAL, I THINK ANYONE COULD PICK THAT UP AND USE IT AND FIND IT VERY USEFUL."

25

The way the programme was designed also helped people stay involved and complete the content. This included the way new content was released in 'chunks' each week, instead of all at once. Having the content online also meant that it could be completed alongside other work and personal tasks, and also helped with keeping concerns private if needed. However, some participants said that the use of technology could be a problem for some people who are less confident doing activities online.

> *"HAVING IT SPLIT UP LIKE THAT SO THAT THIS WEEK, THIS IS WHAT WE'RE GOING TO LOOK AT, NEXT WEEK WE'LL LOOK AT SOMETHING ELSE… THAT WAS DEFINITELY USEFUL FOR ME, IT KIND OF IT MATCHES THE WAY THAT I LIKE TO LOOK AT THINGS, TO SPLIT THINGS UP INTO SMALLER CHUNKS AND CONSIDER THEM LIKE THAT."*

In the last theme 'this isn't a quick fix' participants talked about the barriers to taking part, including how someone's journey to improving their mental health is often not a quick or easy one. They discussed how repeating and practising the skills learnt in the programme was required beyond the 8 week course. This was difficult for some people, due to time pressures and the need to be self motivated.

> *"A PART OF REALISING WHEN I WAS GOING THROUGH THE PROGRAMME, THIS ISN'T A QUICK FIX. HOWEVER, MANY TECHNIQUES ARE THERE, IT'S NOT JUST A CASE OF, OH WELL, I'VE TRIED THAT TECHNIQUE, OOH KA-CHING IT'S WORKED AND I WASN'T EXPECTING THAT. BUT, THIS WILL TAKE A CONSIDERABLE AMOUNT OF EFFORT ON MY PART, AND I, AS MUCH AS I SAY, I KNOW WHY THE REASONS ARE, PART OF IT IS DOWN TO ME TO HELP FIX AS WELL THOUGH, IT'S NOT JUST DOWN TO THEM TO DO."*
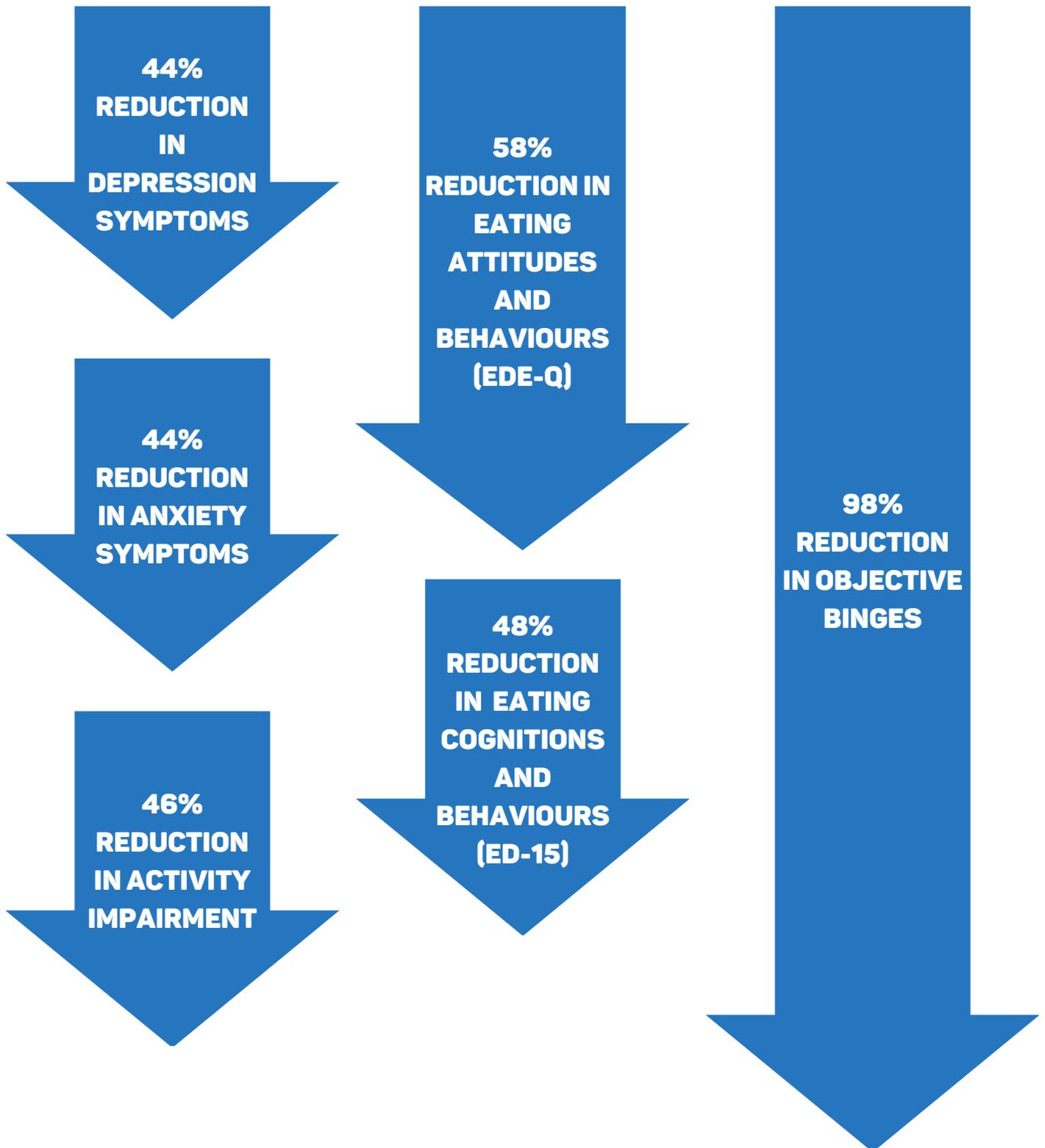
BITE

PRIMARY OUTCOMES

A total of 175 participants expressed an interest, of which 109 completed the eligibility questionnaire and 47 consented to the trial.

More than half of participants (61.7%, n=29) completed the treatment. Most people who completed treatment, 79.31% (n=23) also completed the two follow-up appointments. People came to almost all of their therapy appointments (98.23%).

A 'Participant Experiences' questionnaire was sent a month after finishing treatment. 24 participants answered the questions and said that the treatment was acceptable, helped to reduce eating disorder behaviours, and was well tailored to their personal needs. They rated these factors from 8.50 to 9.63 out of 10.
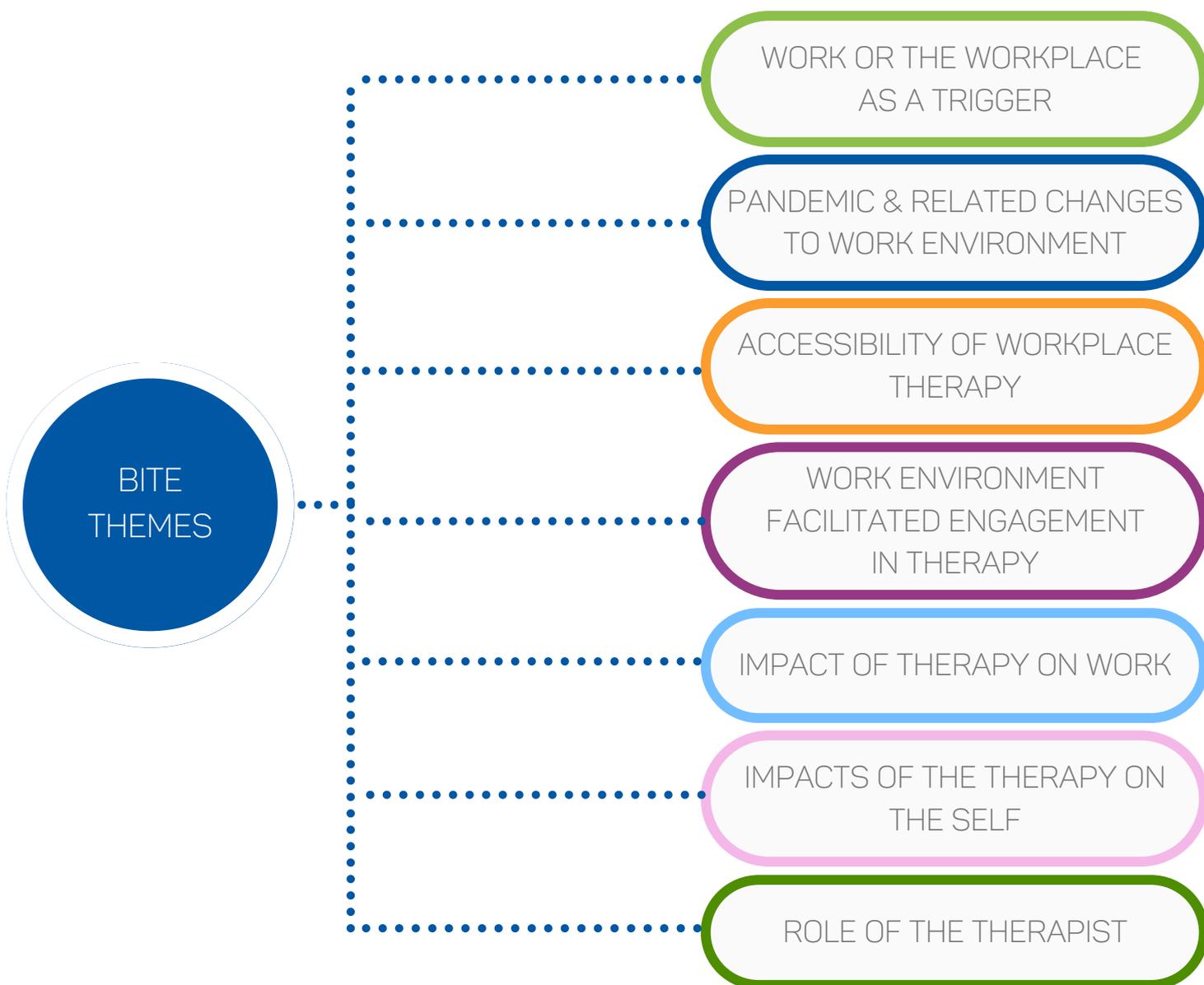
Most participants (70.83%) said they would be more likely to attend appointments at work rather than an a clinical setting like a doctors or hospital, and 16.67% had no preference. Participants said they were able to engage better with their work, both during and after getting the therapy.

44% REDUCTION IN DEPRESSION SYMPTOMS

58% REDUCTION IN EATING ATTITUDES AND BEHAVIOURS (EDE-Q)

44% REDUCTION IN ANXIETY SYMPTOMS

98% REDUCTION IN OBJECTIVE BINGES

46% REDUCTION IN ACTIVITY IMPAIRMENT

48% REDUCTION IN EATING COGNITIONS AND BEHAVIOURS (ED-15)

24 participants filled in an experience questionnaire 1 month after finishing the therapy. The answers were analysed to look for common themes. Seven themes were found, which are described below with quotes from participants. Overall, the analysis suggests that therapy at work is acceptable, and can improve eating disorder symptoms, although there are some barriers.

BITE THEMES

- WORK OR THE WORKPLACE AS A TRIGGER
- PANDEMIC & RELATED CHANGES TO WORK ENVIRONMENT
- ACCESSIBILITY OF WORKPLACE THERAPY
- WORK ENVIRONMENT FACILITATED ENGAGEMENT IN THERAPY
- IMPACT OF THERAPY ON WORK
- IMPACTS OF THE THERAPY ON THE SELF
- ROLE OF THE THERAPIST

WORK OR THE WORKPLACE AS A TRIGGER

"TIME PRESSURE MEANS NOT ALWAYS GOT TIME TO EAT IN A STRUCTURED WAY LEADING TO SNACKING/GOING WITHOUT FOOD."

PANDEMIC & RELATED CHANGES TO WORK ENVIRONMENT

"MY BINGING GOT A LOT WORSE WHEN THE PANDEMIC STARTED. I WAS AT HOME ALONE AND I'D REGULARLY ORDER TAKE AWAYS AND BINGE. SOMETIMES EVEN AT LUNCHTIME."

ACCESSIBILITY OF WORKPLACE THERAPY

"I WOULD NOT HAVE GONE LOOKING FOR THERAPY. THE FACT IT CAME INTO MY EMAIL BOX MADE ME STOP AND THINK. I WORK LONG HOURS AND TRYING TO FIND TIME TO GO AND SEE SOMEONE IN PERSON WOULD NEVER HAVE HAPPENED. I HAVE BENEFITTED FROM THIS PROCESS IMMENSELY BECAUSE I COULD ACCESS IT IN WORK TIME."

WORK ENVIRONMENT FACILITATED ENGAGEMENT IN THERAPY

"...BEING ABLE TO TALK TO MY DIRECT LEAD ABOUT SPENDING TIME LOOKING AFTER MY MENTAL HEALTH NOW THAT THE HOUR-LONG SESSIONS HAVE FINISHED. I CAN STILL TAKE SOME OF THAT TIME TO LOOK AFTER MYSELF."

IMPACT OF THERAPY ON WORK

"BY CONTINUING THE HABITS AND PRINCIPLES LEARNED IN THE PROGRAMME (E.G. REGULAR MEALS AND SNACKS, TAKING BREAKS), I AM DEFINITELY A LOT MORE PRODUCTIVE AND FOCUSED WITH WORK".

IMPACTS OF THERAPY ON THE SELF

"I HAD BETTER COPING MECHANISMS FOR WHEN THOUGHTS ABOUT MY BODY IMAGE CAME INTO MY HEAD WHICH MEANT THEY DIDN'T 'DERAIL' ME FOR LONG."

ROLE OF THE THERAPIST

"[THE THERAPIST] WAS SUPPORTIVE AND APPROACHABLE BUT ALSO PRAGMATIC, FOCUSED ON THE GOALS OF THE PROGRAMME AND KEPT ME ON TRACK. I REALLY FEEL THAT I AM WELL ON MY WAY TO FULL RECOVERY FROM MY EATING DISORDERS THANKS TO HER. I AM CONFIDENT THAT I WILL NEVER HAVE SUCH BAD ISSUES AGAIN."

What will be next?

LEARNINGS & NEXT STEPS

SLEEP

- The SLEEP trial has already shown us that the intervention works and improves sleep, depression and anxiety. We also know that people were willing to take part in the programme at work.
- The next trial could be run across the whole of the UK (rather than the Midlands only) to see if the impact is the same for different groups of people.
- We also want to understand how this sort of programme could be delivered in the future outside of a research trial, for example who should deliver the therapy, how could referrals work, is it affordable?

REST

- The feasibility stage of the REST trial showed that the study design caused recruitment challenges, and let us see some changes that could help in future.
- The small number of participants means that we can't really say yet how good the intervention is at improving symptoms of depression and anxiety.

- The analysis of the REST interviews has helped us to see the strengths and limitations of the current programme, which we will use to improve the programme for the next trial.
- The next step will be to run a full trial with enough people to let us judge the effectiveness of the intervention on improving depression and anxiety symptoms (rather than if people are willing to sign-up, and how many complete the intervention). Funding has already been awarded as part of MHPP for this next trial, which will run in spring/summer 2023.

BITE

- BITE was found to be an acceptable and feasible intervention delivered at work for people with eating disorder symptoms who are not underweight.
- These positive results will allow us to apply for funding to run a full trial to look at the effectiveness of the therapy with a larger and more diverse group of participants.

THANK YOU

A final thank you to all our partner organisations and employees in the Midlands that took part in the MHPP trials.

For more information, please contact the University of Warwick research team at: wmg-mhpp@warwick.ac.uk or visit https://mhpp.me/

PUBLISHED PROTOCOLS:

SLEEP Protocol: https://bmjopen.bmj.com/content/12/7/e058062

REST Protocol: https://bmjopen.bmj.com/content/12/12/e060545

BITE Protocol: https://onlinelibrary.wiley.com/doi/full/10.1002/eat.23701

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