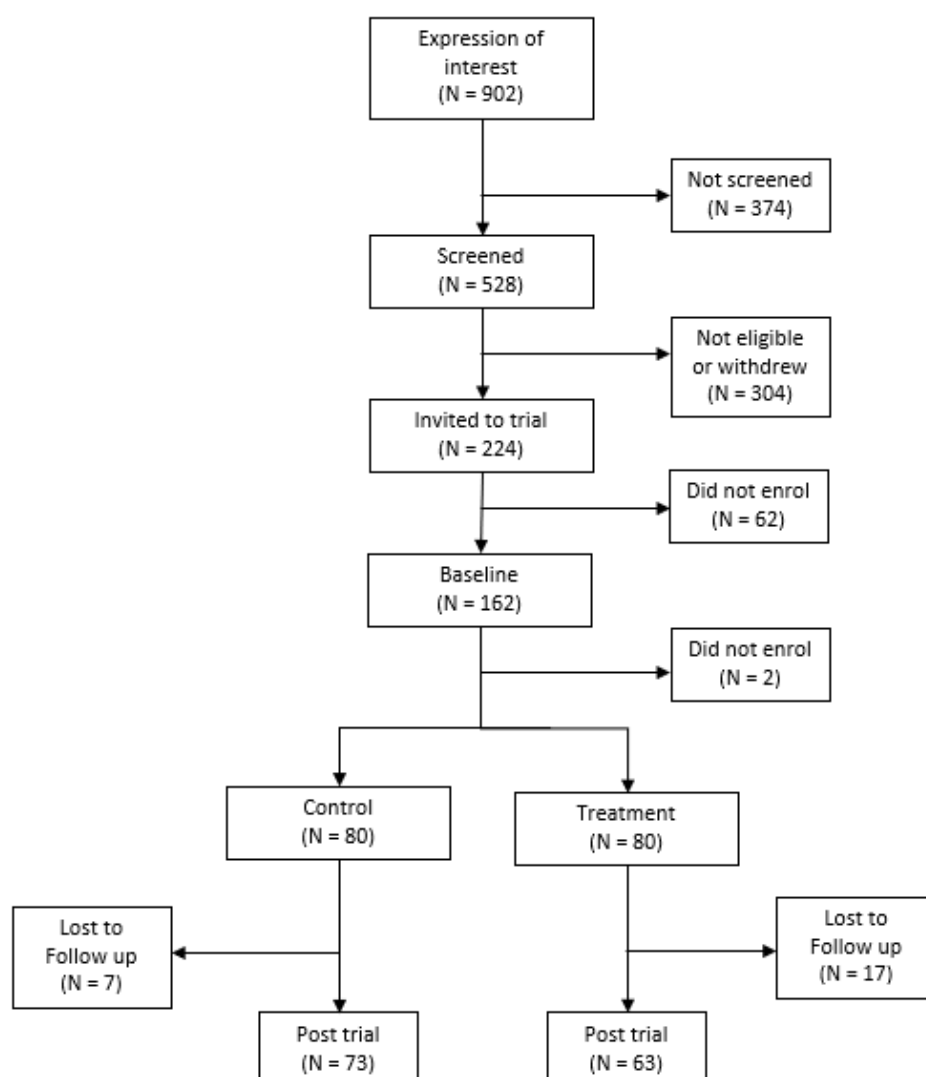


**Figure 1** Recruitment flowchart



**Table 1** Baseline characteristics

	dCBTi+ER (n=80)	Control (n=80)	Test statistics
<b>Demographics</b>			
Age, y	44.75 (9.15)	42.55 (9.67)	$t(157.52) = -1.48, p=0.142$
Sex, No. (%)			$\chi^2 = 0.18, p=0.673$
Women	60 (75.00)	63 (78.75)	
Men	19 (23.75)	17 (21.25)	
Other	1 (1.25)	0 (0.00)	
Ethnicity, No. (%)			$\chi^2 = 6.52, p=0.259$
White	65 (81.25)	64 (80.00)	
Black	4 (5.00)	0 (0.00)	
Asian	10 (12.50)	12 (15.00)	
Mixed	1 (1.25)	3 (3.75)	
Other	0 (0.00)	1 (1.25)	
Relationship status, No. (%)			$\chi^2 = 5.48, p=0.484$
Married	40 (50.00)	43 (53.75)	
Divorced	4 (5.00)	2 (2.50)	
Co-habiting	14 (17.50)	16 (20.00)	
Separated	1 (1.25)	3 (3.75)	
Single	14 (17.50)	14 (17.50)	
Widowed	1 (1.25)	1 (1.25)	
Other	6 (7.50)	1 (1.25)	
Hours of work	37.56 (6.64)	37.31 (6.66)	$t(158.00) = -0.24, p=0.812$
Education level, No. (%)			$\chi^2 = 4.82, p=0.567$
Doctorate	8 (10.00)	5 (6.25)	
Masters	11 (13.75)	13 (16.25)	
Bachelor	30 (37.50)	22 (27.50)	
Secondary school	12 (15.00)	18 (22.50)	
Some diploma	14 (17.50)	16 (20.00)	
Other qualification	4 (5.00)	6 (7.50)	
No qualification	1 (1.25)	0 (0.00)	
Income No. (%)			$\chi^2 = 4.92, p=0.554$
£10,000-£29,999	13 (16.25)	20 (25.00)	
£30,000-£49,999	32 (40.00)	30 (37.50)	
£50,000-£69,999	19 (23.75)	13 (16.25)	
£70,000-£89,999	9 (11.25)	7 (8.75)	
£90,000-£109,999	6 (7.50)	6 (7.50)	
£110,000-£149,999	1 (1.25)	3 (3.75)	
£150,000 or higher	0 (0.00)	1 (1.25)	
<b>Primary outcomes</b>			
Insomnia (ISI)	16.39 (4.12)	15.65 (4.38)	$t(157.43) = -1.10, p=0.274$
Depression (PHQ-9)	9.91 (4.44)	10.39 (4.63)	$t(157.75) = 0.66, p=0.509$
Anxiety (GAD-7)	8.69 (4.53)	9.12 (4.31)	$t(157.63) = 0.63, p=0.532$
<b>Categorical</b>			
Insomnia			$\chi^2 = 2.85, p=0.24$
No clinically significant insomnia	2 (2.50)	4 (5.00)	
Subthreshold insomnia	23 (28.75)	31 (38.75)	
Clinical insomnia	55 (68.75)	45 (56.25)	
Depression (PHQ-9)			$\chi^2 = 3.34, p=0.502$
Normal	9 (11.25)	4 (5.00)	

Mild	31 (38.75)	36 (45.00)	
Mild-moderate	27 (33.75)	28 (35.00)	
Moderate	10 (12.50)	7 (8.75)	
Severe	3 (3.75)	5 (6.25)	
Anxiety (GAD-7)			$\chi^2 = 3.06, p=0.383$
No to low risk	15 (18.75)	10 (12.50)	
Mild	36 (45.00)	34 (42.50)	
Moderate	18 (22.50)	27 (33.75)	
Severe	11 (13.75)	9 (11.25)	
<b>Secondary outcomes</b>			
Work productivity (WPAI:GH)			
WPAIGH1(absenteeism)^	2.06 (9.32)	6.11 (19.63)	$t(111.43) = 1.66, p=0.100$
WPAIGH2	34.38 (26.76)	38.25 (27.41)	$t(157.91) = 0.90, p=0.367$
WPAIGH3^	34.31 (26.75)	40.24 (28.45)	$t(155.41) = 1.35, p=0.179$
WPAIGH4	37.12 (27.10)	42.12 (29.33)	$t(157.03) = 1.12, p=0.264$
Job satisfaction (IJSS)	3.01 (0.39)	2.98 (0.38)	$t(157.70) = -0.56, p=0.573$
Well-being (WEMWBS)^	41.81 (7.31)	40.79 (7.66)	$t(154.46) = -0.85, p=0.397$
EQ-5D-5L overall health^^	69.91 (17.69)	67.11 (18.80)	$t(154.92) = -0.96, p=0.338$

^: dCBTi+ER (n= 79); Control (n= 79)

^^: dCBTi+ER (n= 79); Control (n= 78)

^^^: dCBTi+ER (n= 77); Control (n=80)

**Notes:** Means values are presented with standard deviations in parentheses unless otherwise specified. Test statistics results are from  $t$  tests for continuous variables, and Pearson  $\chi^2$  tests for categorical variables.

**Table 2** Adverse events

<b>Adverse Event Description</b>	<b>Related/Unrelated</b>	<b>Outcome</b>
Employee signed off work with mental health burnout	Unrelated	Withdrew from the trial
Head injury sustained during the trial	Unrelated	Continued in the trial
Signed off work, suspected vitamin deficiency	Unrelated	Continued in the trial
Signed off work due to stress after first therapy appointment	Unrelated	Withdrew from the trial
Rash from wearing the sleep tracker	Unrelated to the intervention	Continued in the trial

Table 2 summarises the adverse event reports received during the trial. None were judged serious or related to the treatment.

**Table 3** Outcome measure means and standard deviations at baseline and post-intervention

		Control	Treatment
		M (SD)	M (SD)
ISI	Baseline	N=80	N=80
		15.65 (4.38)	16.39 (4.12)
	Post-intervention	N=73	N=63
		14.05 (4.57)	8.33 (5.08)
PHQ-9	Baseline	N=80	N=80
		10.39 (4.63)	9.91 (4.44)
	Post-intervention	N=73	N=63
		9.33 (4.98)	5.02 (3.90)
GAD-7	Baseline	N=80	N= 80
		9.13 (4.31)	8.69 (4.53)
	Post-intervention	N=73	N=63
		8.38 (4.82)	5.30 (4.04)
IJSS	Baseline	N=80	N=80
		2.98 (0.38)	3.01 (0.39)
	Post-intervention	N=73	N=63
		3.03 (0.38)	2.93 (0.48)
WEMWBS	Baseline	N=80	N= 80
		40.89 (7.70)	41.82 (7.27)
	Post-intervention	N=73	N=63
		43.78 (8.35)	44.22 (8.53)
WPAI (% missed due to health)	Baseline	N=80	N=79
		6.04 (19.52)	2.06 (9.32)
	Post-intervention	N=72	N=61
		3.92 (16.80)	3.19 (10.50)
WPAI (% impairment due to health)	Baseline	N=80	N=80
		38.25 (27.41)	34.38 (26.76)
	Post-intervention	N=73	N=63

		26.99 (26.12)	26.19 (27.14)
WPAI (overall impairment due to health)	Baseline	N=80 39.73 (28.63)	N=79 34.31 (26.75)
	Post-intervention	N=72 28.49 (27.40)	N=61 28.37 (28.63)
WPAI (activity impairment due to health)	Baseline	N=80 42.13 (29.33)	N=80 37.13 (27.11)
	Post-intervention	N=73 30.41 (26.32)	N=63 31.75 (31.34)

Figure 2 Themes generated from qualitative interview data.

