



GEM

What Does Research Tell About Wellbeing in the Workplace?

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The cost of low well-being at work

The psychosocial work environment impacts on employee wellbeing, mental health and risk of sickness absence (Stansfeld & Candy, 2006; Head et al, 2006; Netterstrom et al, 2008; Bhui et al 2012).

Mental ill-health at work has enormous costs to the economy: in 2007 the Sainsbury Centre for Mental Health estimated that the total cost to UK employers of absenteeism, presenteeism and staff turnover was £25.9bn (Sainsbury Centre, 2007).

In the UK, 40% of overall sickness absence is due to mental health problems amounting to 70 million working days lost to psychiatric sickness absence per year (Sainsbury Centre, 2007).

Stress management interventions

Interventions target either the individual or the organisation, or both levels.

Most interventions to manage stress and mental illness at work have targeted the individual, usually at a secondary or tertiary prevention level, using a clinical intervention such as CBT or treatment of depressive illness with medication (Bhui et al, 2012; Briner, 1997).

A meta-analysis of individually targeted health promotion has shown that it is not especially effective, but exercise as an intervention increases overall wellbeing and work ability and reduces sickness absence (Kuoppala et al, 2008).

Organisational interventions

Evaluations of organisational interventions for workplace stressors are limited.

Three reviews of interventions within organisations (Marine et al, 2006; Richardson & Rothstein, 2008; van der Klink et al, 2001) showed mixed evidence of benefit on health outcomes

van der Klink's meta-analysis of 48 studies of occupational stress interventions showed that the majority of interventions were delivered to individuals rather than targeting the organisation.

Organisational approaches to improving mental health and reducing sickness absence

Egan et al (2007): Four studies reported decreased **job demands** post-intervention, accompanied by improved health outcome. Improved **support at work** was also associated with improved health in the majority of studies.

Bambra et al (2007): Reviewed studies of workplace reorganisation involving increasing **skill discretion, team working and decision latitude** in diverse occupational groups. Mixed results.

Michie & Williams (2003): Reviewed six studies and found that training and organisational approaches to **increase participation and decision making**, increased **work support and communication** led to reduced sickness absence

Parks & Steelman (2008): Meta-analytic review found that **participation in organisational wellness programmes** was associated with decreased absenteeism and increased job satisfaction.

Methodological problems in organisational interventions

Systematic reviews conclude that there is a scarcity of randomised controlled trials (RCTs) of organisational based interventions.

Reflects the difficulty in organising RCTs in a work context; insufficient length of follow up; difficulties finding similar clusters for randomisation.

There is little knowledge of what works at an organizational level to improve employee wellbeing.

Measuring the work environment

Work environment is not just the physical surroundings of work but also include the social environment and relationships

There are several different ways of measuring psychosocial work environments:

- Job Demands-Control-Strain Model
- Effort-Reward Imbalance Model
- Health & Safety Executive Management Standards

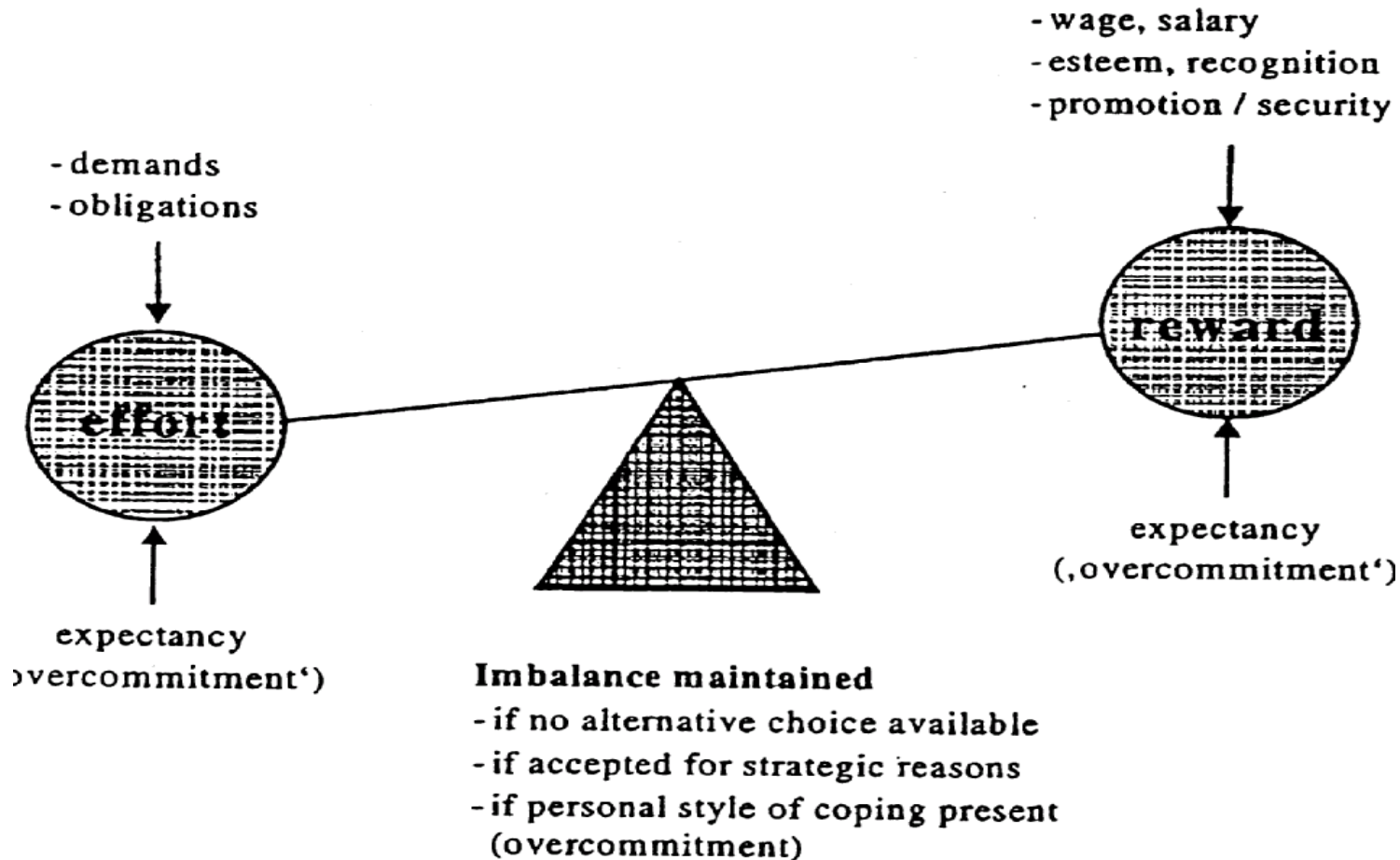
Job-strain model (Karasek 1979)

Decision Latitude (Control)

**Psychological
Demands**

	HIGH	LOW
HIGH	“Active”	“High strain”
LOW	“Low strain”	“Passive”

Effort-reward imbalance model (Siegrist 1996)



Health & Safety Executive management standards

- Demands
- Control
- Support
- Relationships
- Role
- Change

These standards can be related to **desirable states** in the organisation and to **competences for managers**

Rationale for current study: an efficient way of improving the psychosocial work environment

- Training managers to provide more effective supportive management for employees
- An e-learning intervention based on management standards and their implementation in terms of managing stress at work and promoting wellbeing
- Potentially a cost-effective way of influencing employees' wellbeing
- Convenient, accessible, can be applied to many managers at once

Research objectives

- Overall:

To evaluate whether a guided e-learning intervention using management standards, applied by managers, will improve employees' wellbeing and reduce sickness absence

Pilot study:

- Evaluate acceptability of the program and the trial
- Evaluate feasibility of recruitment and adherence to intervention
- Piloting data collection for sickness absence and cost-effectiveness / cost-benefit analyses
- Estimate outcomes for wellbeing and sickness absence

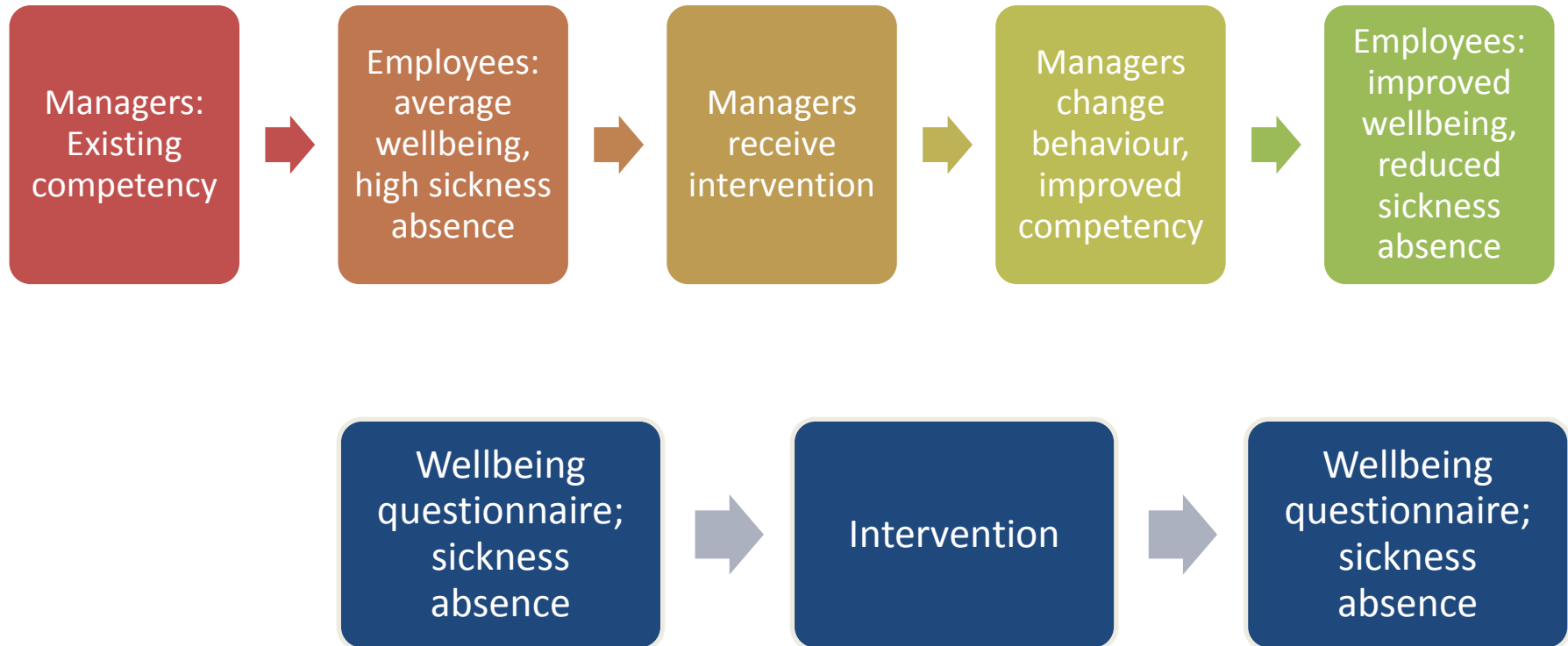
Main outcomes

- Overall
 - Wellbeing (Warwick-Edinburgh Mental Well-Being Scale, WEMWBS)
 - Sickness absence
 - Psychological distress (General Health Questionnaire, GHQ-12)
 - Psychosocial work characteristics
- Pilot study
 - Testing the feasibility (of recruitment and data collection)
 - Acceptability

Study design

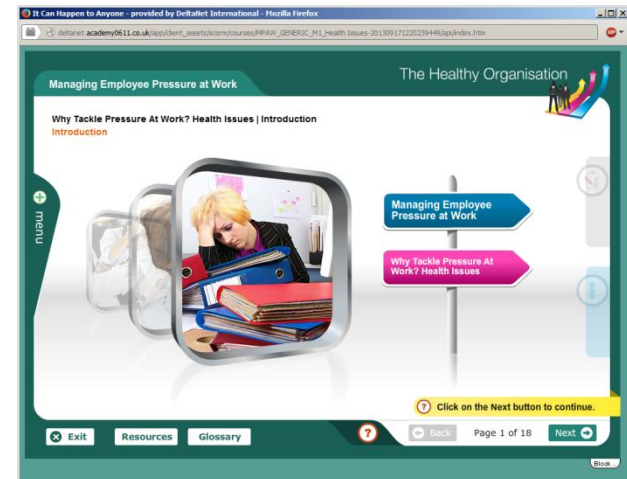


Study design



The intervention

- E-learning program “Managing Employee Pressure at Work”
 - Modules 1 to 3: Why tackle pressure
 - Module 4: Manager behaviour
 - Module 5: Helping your team
 - Module 6: Helping the individual
- Guidance: 2 facilitated sessions, phone and e-mail support



Cluster randomisation

- Groups of employees (clusters) were randomised for their managers to receive either the intervention or not (controls)

Who was included in the study and why?

- We needed 4 clusters...
 - Of similar size and structure
 - Separate locations or organisational units
 - Data on teams and sickness absence easily available

West Cheshire
AMH

East Cheshire
AMH

Wirral AMH

CAMH

- Who was randomised?

Learning
Disabilities

Facilities

Who was randomised?

Intervention group

(managers receive intervention)

West Cheshire
AMH

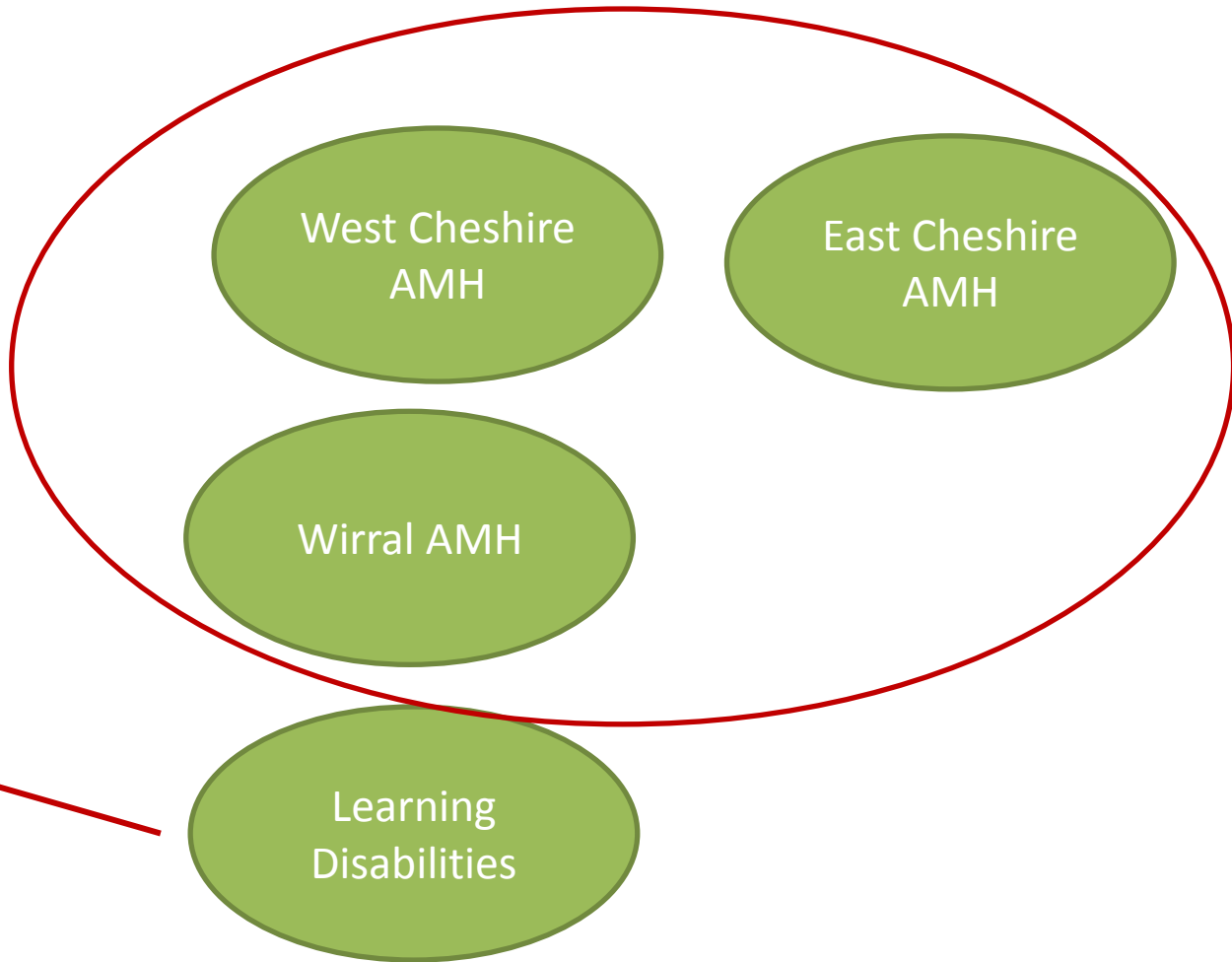
East Cheshire
AMH

Wirral AMH

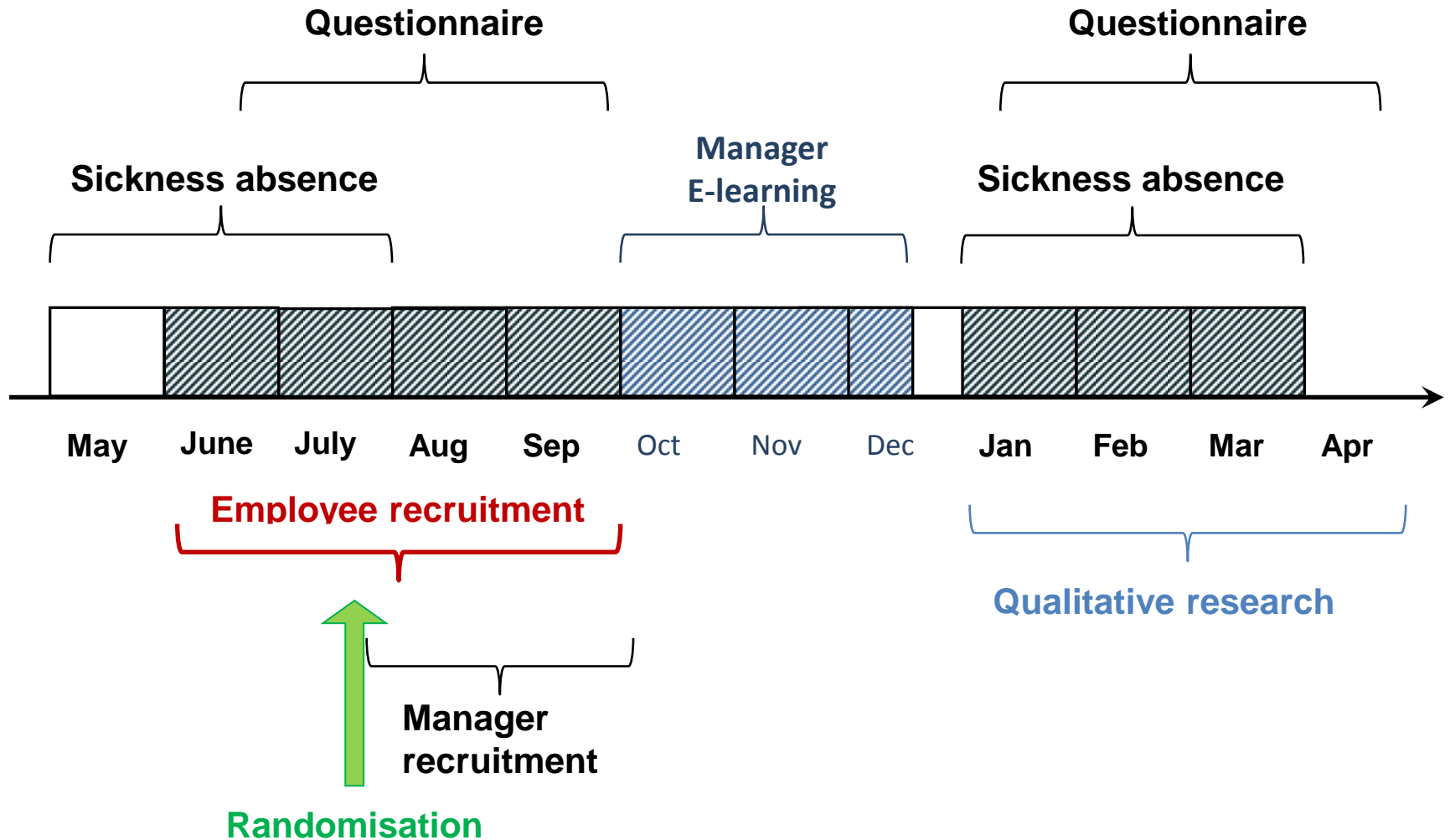
Control group

(managers receive no
intervention)

Learning
Disabilities

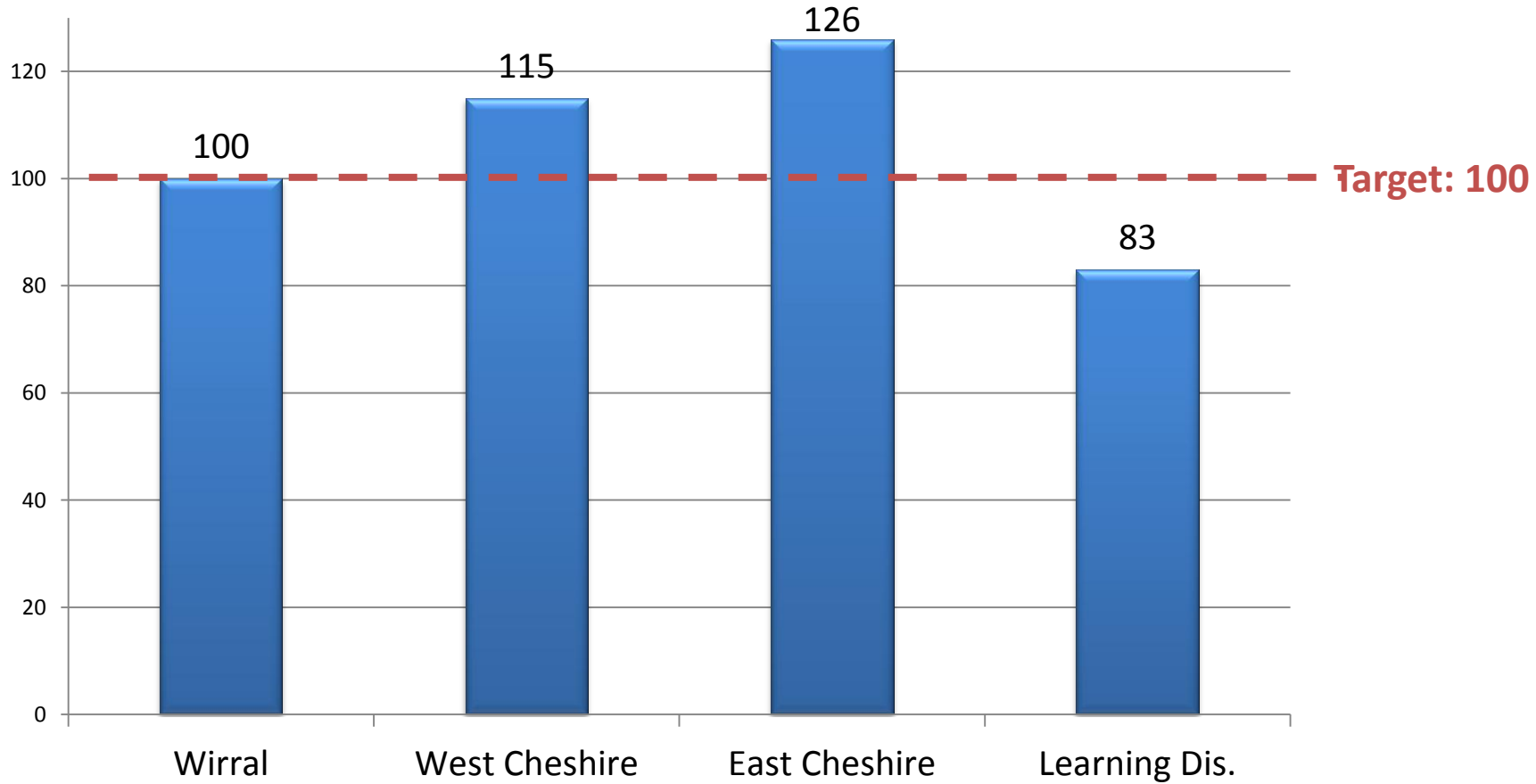


Study timeline 2013-2014

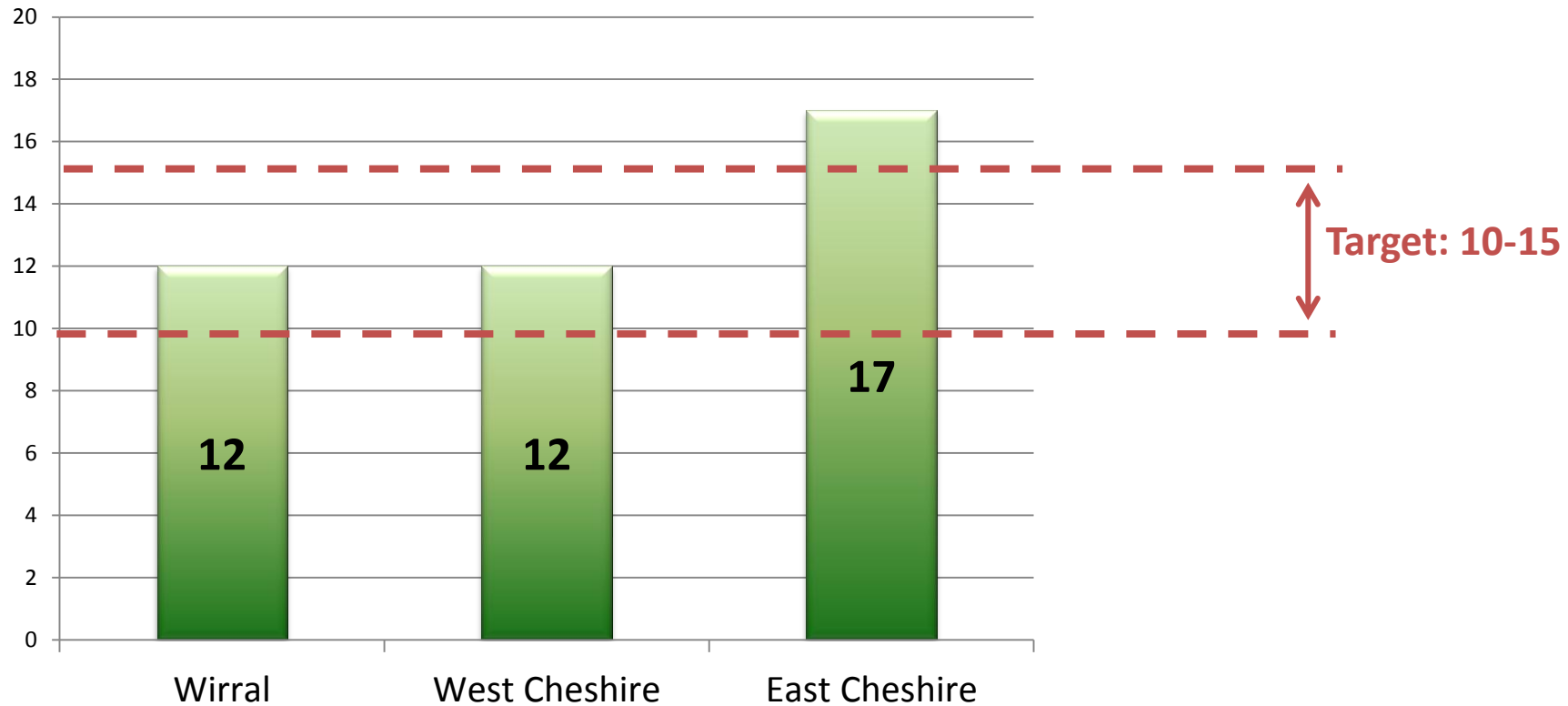


Results

Employee recruitment (total: 424)

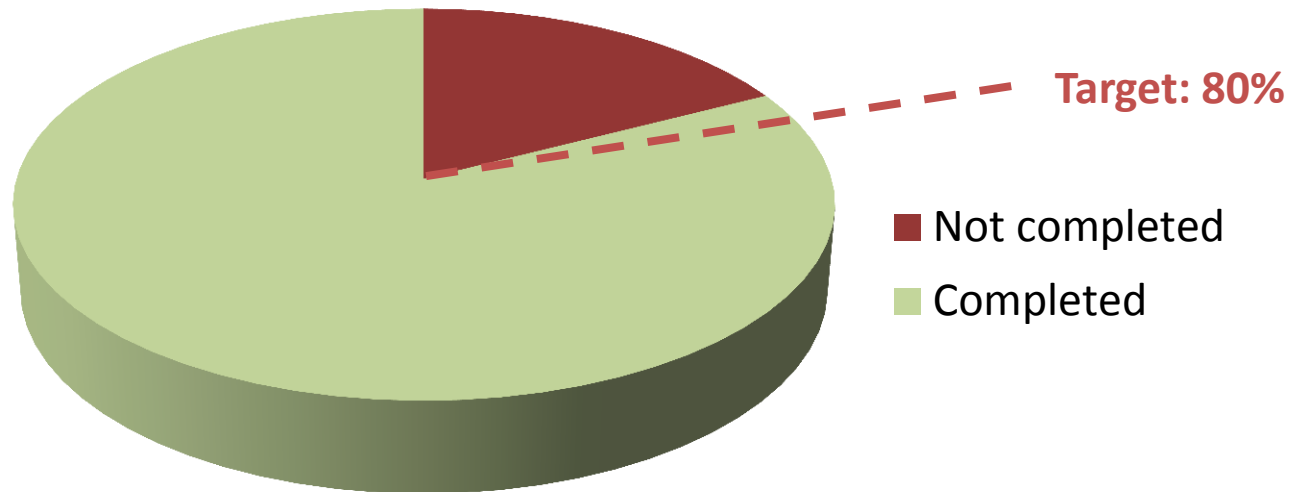


Manager recruitment (total: 41 out of a possible 49)



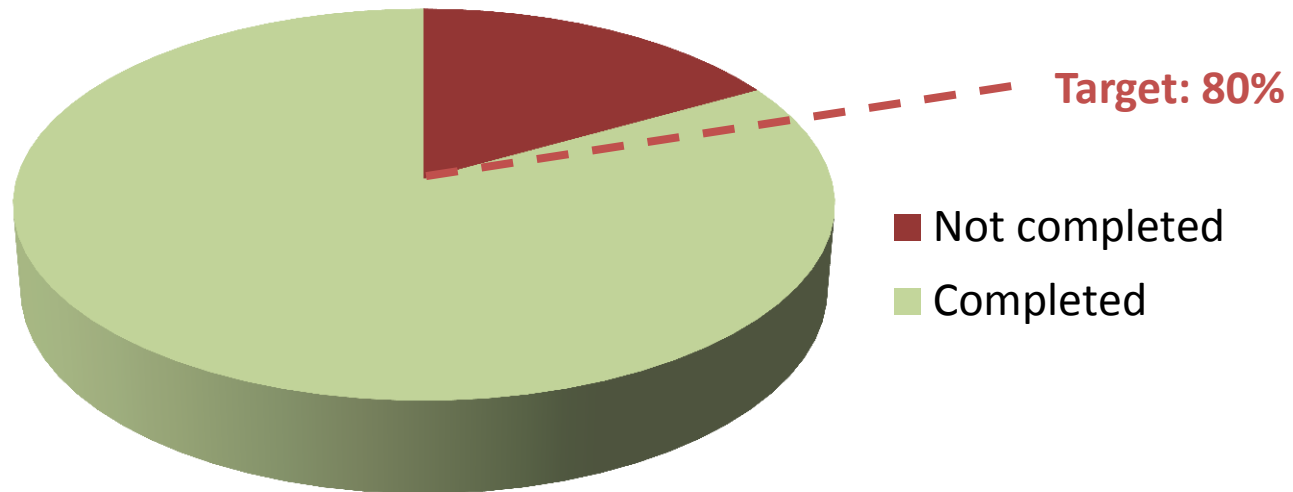
Baseline questionnaire

Completion rate: 82.55% (350 out of 424)



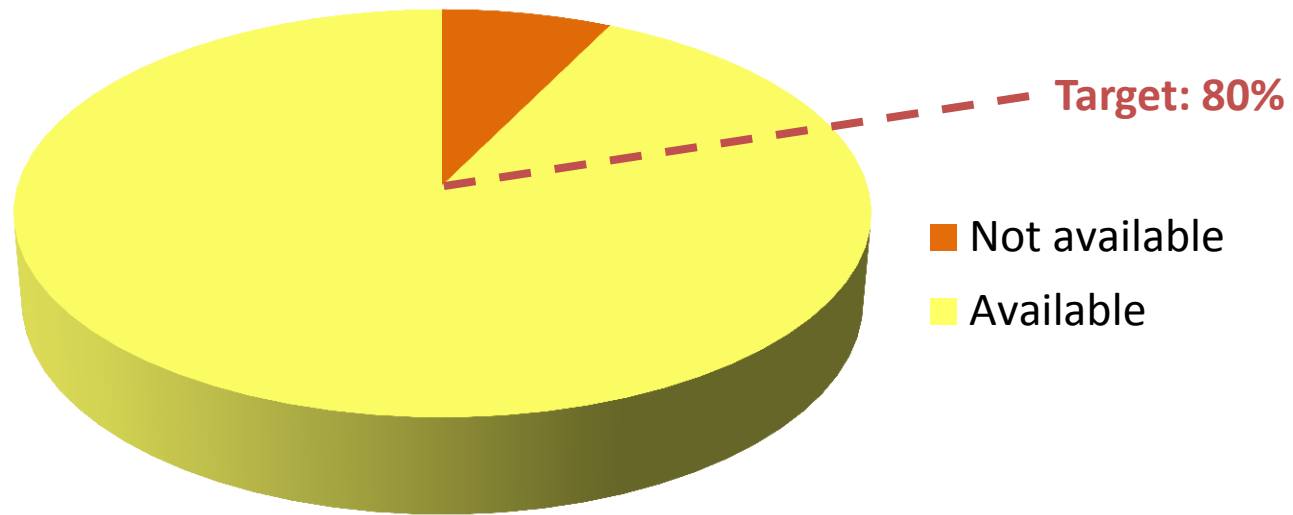
Follow-up questionnaire

Completion rate: 83.14% (291 out 350)



Sickness absence data

Available for 92.7% (393 out of 424)

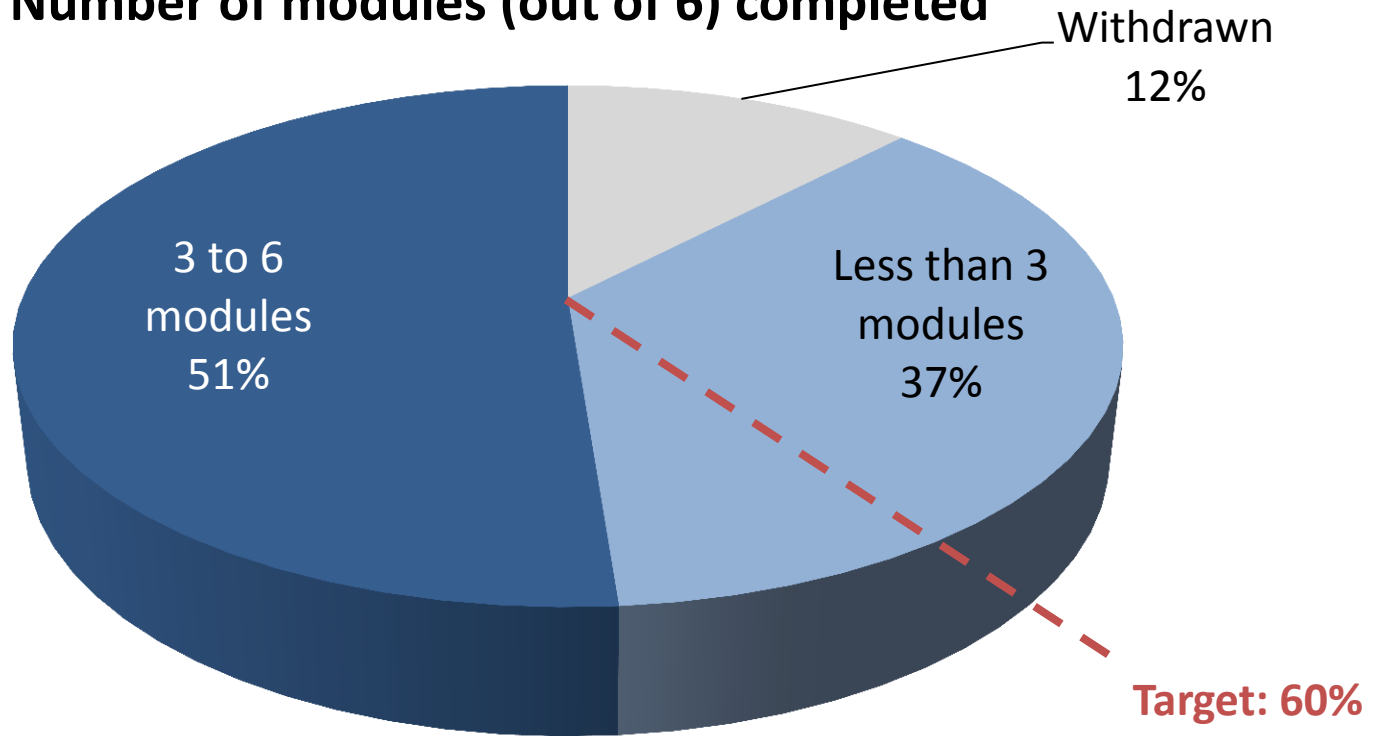


Acceptability

- The questionnaire was well received and there was a good response at baseline and follow up
- Managers liked the e-learning program and found it visually appealing and easy to understand
- In general the trial was acceptable to both managers and employees

Manager engagement

Number of modules (out of 6) completed



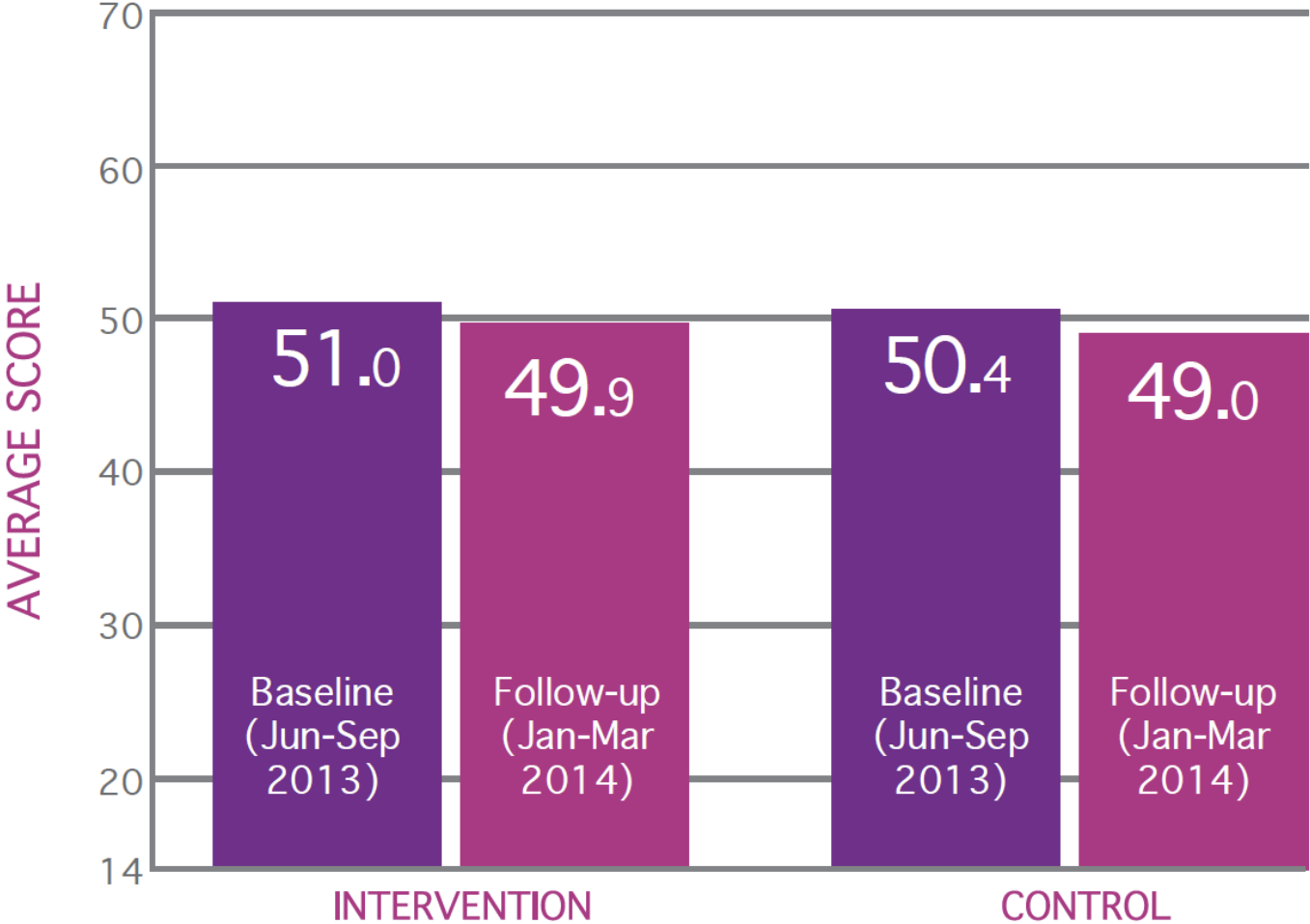
Employee wellbeing

12. Below are some statements about feelings and thoughts. Please tick the box that best describes your experience of each over the last 2 weeks

✓ **ONE** box on **EVERY** line

	None of the time	Rarely	Some of the time	Often	All of the time
a) I've been feeling optimistic about the future	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
b) I've been feeling useful	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
c) I've been feeling relaxed	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
d) I've been feeling interested in other people	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
e) I've had energy to spare	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅
f) I've been dealing with problems well	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅

Employee wellbeing scores – before and after intervention



Intervention effect on well-being: ITT analysis

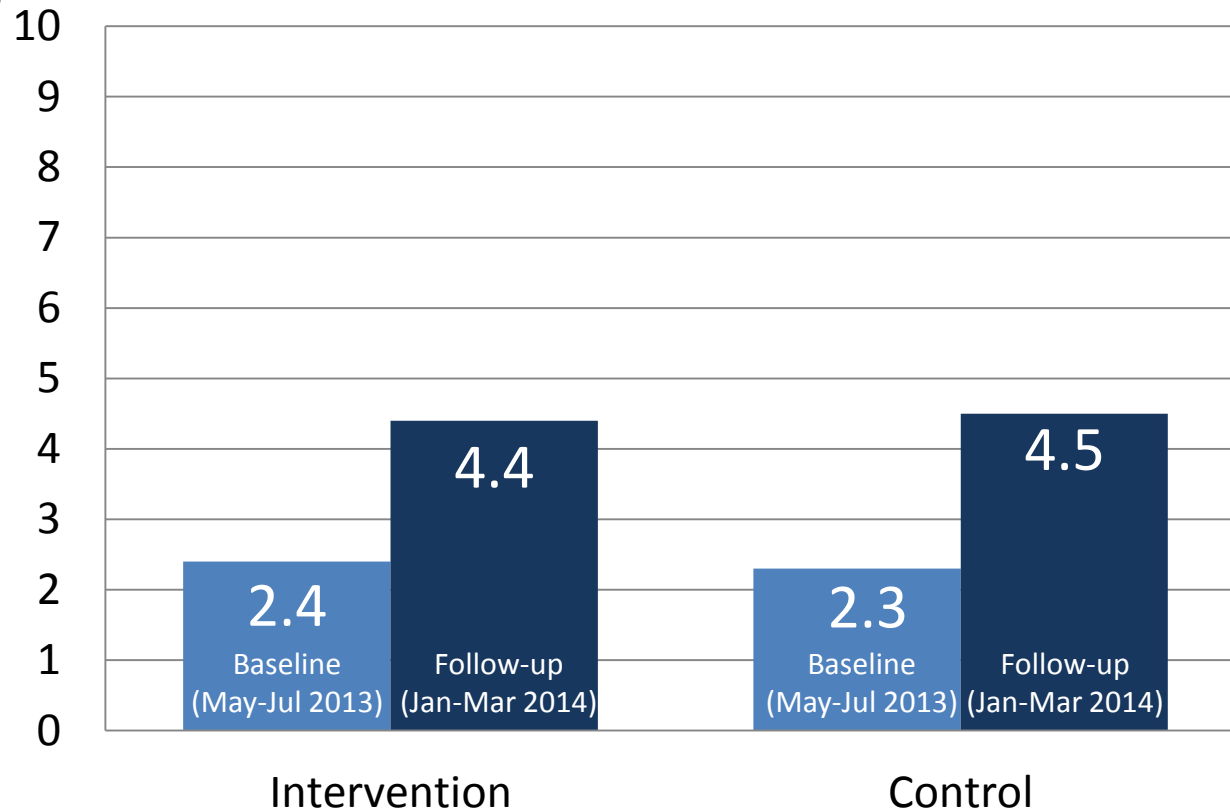
			Baseline	Follow-up	Difference between baseline and follow-up (95% CI)	Intervention effect adjusted for baseline and clustering ¹
		n	Mean (SD)	Mean (SD)		
Wellbeing score	Control	59	50.4 (8.0)	49.0 (8.5)	-1.4 (-2.8 to 0.0)	
	Intervention	225	51.0 (8.3)	49.9 (8.3)	-1.1 (-1.9 to 0.2)	0.5 (-3.2 to 3.7)

Adherence effect on well-being

			Baseline	Follow-up	Difference between baseline and follow-up (95% CI)	Adherence effect adjusted for baseline and clustering
		n	Mean (SD)	Mean (SD)		
Wellbeing score	Manager adherent	120	52.0 (8.6)	51.4 (8.8)	-0.7 (-1.8 to 0.5)	
	Manager not adherent	105	49.8 (7.9)	48.2 (7.5)	-1.6 (-2.8 to -0.3)	1.6 (0.1 to 3.2)

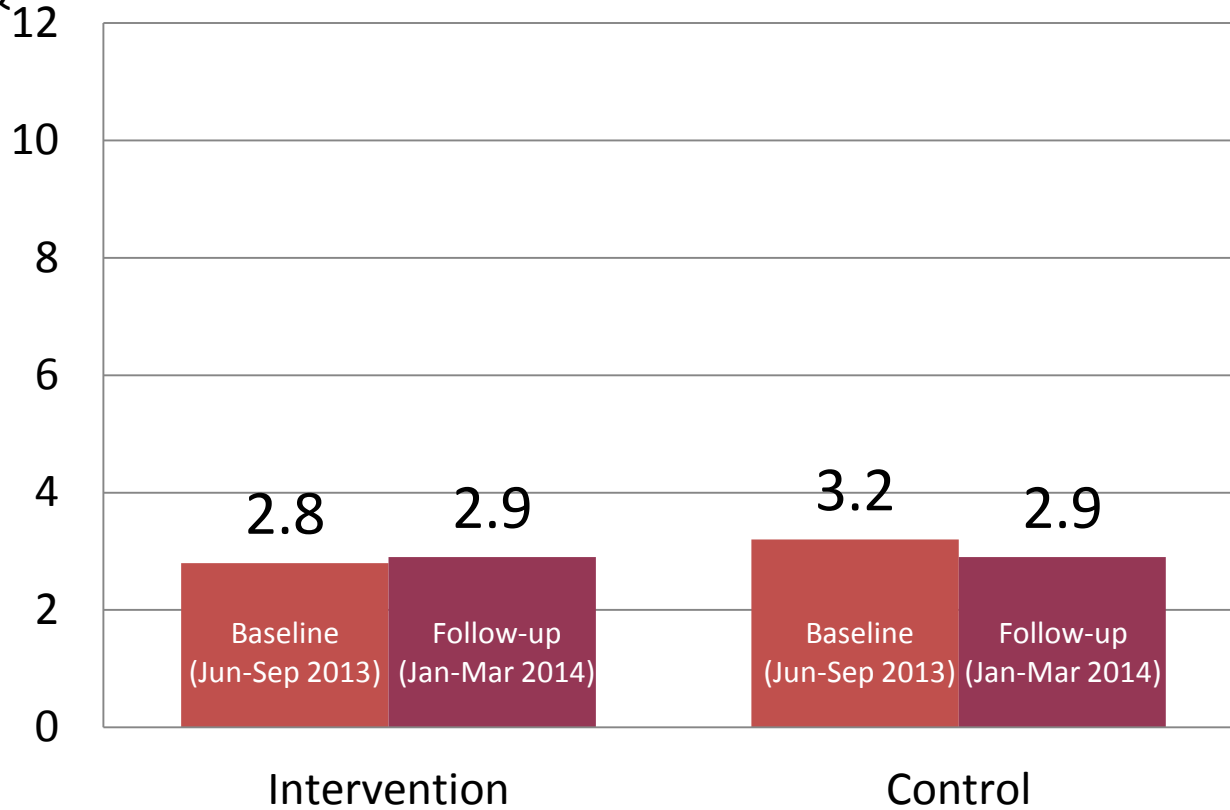
Employee sickness absence days – Before and after intervention

- No of days

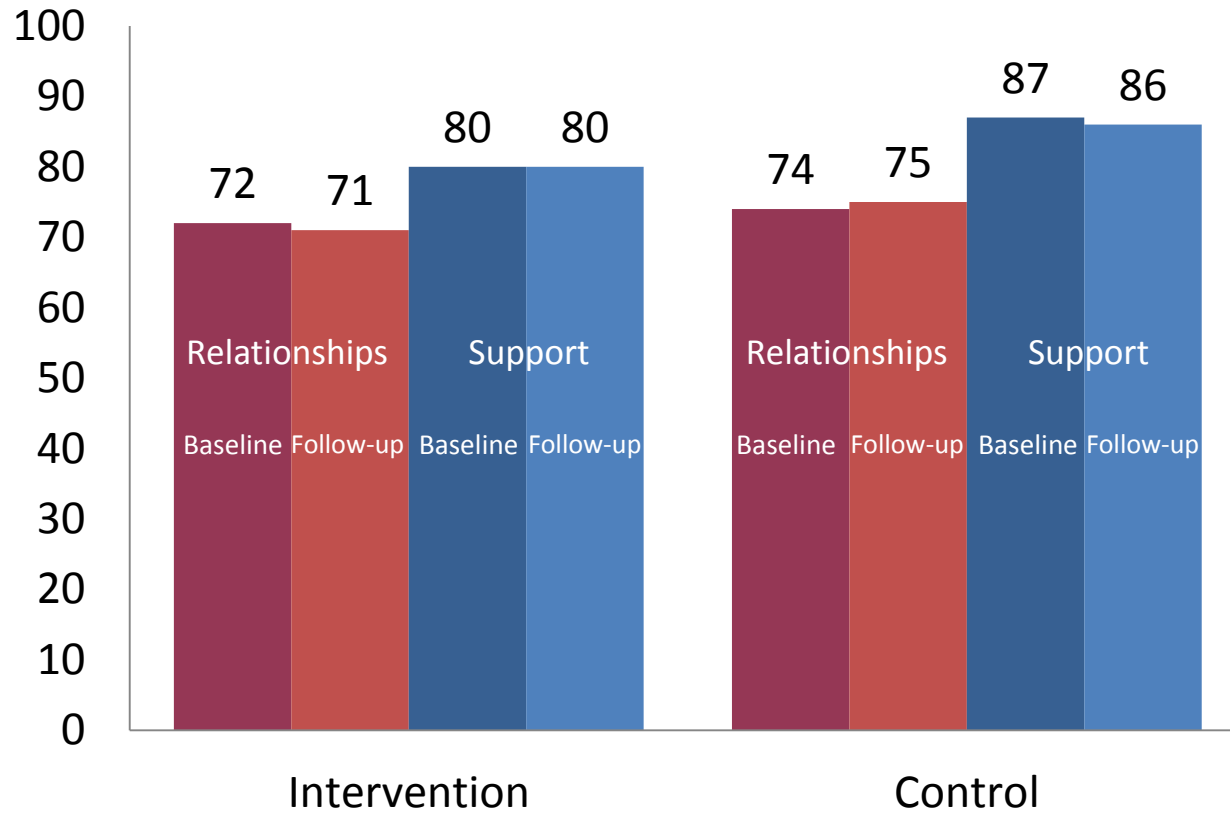


Psychological distress – GHQ-12 scores

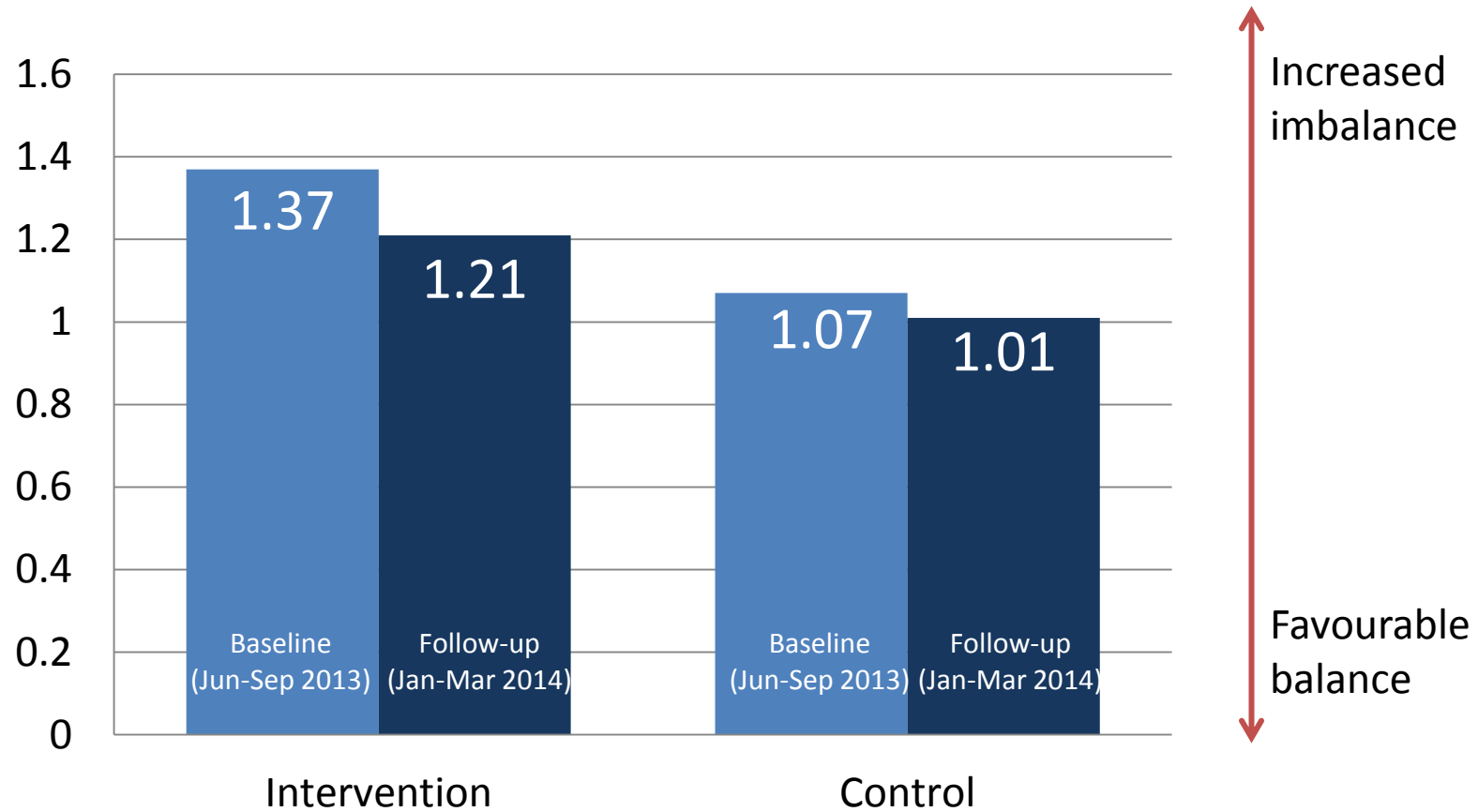
- Mean GHQ



Supervisor relationships and supervisor support



Effort-reward imbalance



Adherence effect on work stress

		Baseline	Follow up	Difference between baseline and follow-up (95% CI)	Adherence effect adjusted for baseline and clustering
Job Strain	n	Mean(SD)	Mean(SD)		
Manager Not Adherent	100	2.1 (25.5)	7.2 (24.7)	-5.2 (-9.1 to -1.2)	
Manager Adherent	121	-7.7 (27.7)	-3.9 (26.8)	-3.8 (-7.7 to 0.0)	-4.6 (-9.6 to 0.4)
					Adjusted odd ratio for adherence effect, adjusted for baseline and clustering
Effort>Reward	n	Baseline n (%)	Follow up n (%)		
Manager Not Adherent	105	48 (45.7)	55 (52.4)		
Manager Adherent	122	40 (32.8)	44 (36.1)		0.6 (0.3 to 1.1)

Cost-effectiveness and cost-benefit

- Estimated cost of the intervention was £623 per manager and £75 per employee based on 41 managers taking part
- From the employers perspective the intervention did not have a positive impact on the cost-benefit balance
- This was only a feasibility analysis and the study was not large enough to truly test cost-effectiveness



Qualitative research outcomes

Acceptability and ease of use of intervention

- Motivation
- Some managers had a particular interest in stress
- Wanting to help their team by becoming better managers
- Attitudes to e-learning

Opinions of GEM - positive

- Easy to access, simple to use, visually appealing
- Superior to other e-learning packages
- Material and links to further information were useful
- Modules were not too time consuming

Opinions on GEM – reaffirming existing knowledge

- The most common response was that the content was familiar
- However, most reported that it was good to have their existing knowledge and practice reaffirmed, validated
- Particularly important for managers who had never received training

Opinions on GEM - time

- Modules not time-consuming but difficult to find time
- No time allocated by senior management – left to managers
- Easier for some to find protected time/space than others (ward/community)
- Some managers more liable to interruptions (e.g. open office)

Factors influencing the trial outcomes?

- Possibly the interval between the intervention and follow-up questionnaire was too short - not allowing enough time for change
- Perhaps the intervention itself could be strengthened to encourage more behaviour change from managers
- It could be that the organisational change going on led to more managers and employees moving during the trial
- Possibly personal and home stress were more relevant to wellbeing than work stress

Influencing employee wellbeing – manager engagement and management buy-in



- We had poorer uptake from managers than we expected for the intervention – may be managers and teams who could most be helped by the intervention didn't engage?
- Managers found they could not set aside time to complete the intervention – this could be related to the organisational changes in the Trust
- In future we might need more buy-in from senior management to ensure the intervention is an accepted part of everyday practice

Summary of Results

- Overall the trial was acceptable to managers and employees and recruitment of employees was good
- Data collection targets for questionnaire measures and sickness absence were met
- There was no significant improvement in wellbeing or sickness absence related to the intervention
- Manager engagement with the intervention was lower than we hoped

Discussion

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Plans for our full trial

- We will work on the intervention to make it more engaging for managers
- This will include some self-assessment of managers skills and discussion with peers
- We will get greater engagement with senior management
- We will increase the interval between the intervention and the follow-up to allow it more time to work
- We will go into private sector as well as public sector organisations

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Ceire Costelloe, Natalia Hounscome, Sally Kerry, Doris Lanz, Jill Russell



GEM

Stay informed, get involved:

- If anyone would like to be involved in developing the next study we would welcome that!
- www.gemstudy.net
- gem@qmul.ac.uk
- <http://www.nets.nihr.ac.uk/projects/phr/10300706>

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**National Institute for
Health Research**

Publications from GEM study

***BMJ Open* 2015;5**

<http://bmjopen.bmj.com/content/5/10/e007981.abstract>

NIHR Journals <http://www.journalslibrary.nihr.ac.uk/phr/volume-3/issue-9>

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