Piloting an e-learning programme for Managers: the GEM Study

Tarani Chandola on behalf of GEM Study Team (Stephen Stansfeld, Lee Berney, Kam Bhu, Charlotte Clark, Ceire Costelloe, Natalia Hounsome, Sally Kerry, Doris Lanz, Jill Russell)

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Work and health

- Aspects of the work environment are related to health in many studies
- 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 work environments:

Job-strain model (Karasek 1979)

<table>
<thead>
<tr>
<th>Psychological Demands</th>
<th>Decision Latitude (Control)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGH</td>
<td>HIGH “Active”</td>
</tr>
<tr>
<td>LOW</td>
<td>LOW “Low strain”</td>
</tr>
</tbody>
</table>

Effort-reward imbalance model (Siegrist 1996)

Work and health outcomes

- Poor working conditions have been related to:
  - Low levels of wellbeing
  - Increased risk of cardiovascular disease
  - Increased risk of depression
  - Increased risk of sickness absence

Ill-health at work is expensive – it costs the UK economy billions of pounds every year

Health & Safety Executive management standards

Can you intervene at management level to change jobs, increase support, reduce demands?

HSE set up the management standards to identify areas of risk in organisations to provide a stimulus for change

- 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 in clusters selected from an organisation compared to similar clusters in the same organisation where it has not been applied
• 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

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
Who was randomised?

Intervention group (managers receive intervention)
- AMH-A
- AMH-B

Control group (managers receive no intervention)
- AMH-C
- Learning Disabilities

Study timeline 2013-2014

Questionnaire results and Qualitative Interview results

- Recruitment and retention
- Wellbeing, sickness absence and psychological distress

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)

Manager engagement

Number of modules (out of 6) completed

<table>
<thead>
<tr>
<th>Modules Completed</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>3 to 6 modules</td>
<td>51%</td>
</tr>
<tr>
<td>Less than 3 modules</td>
<td>37%</td>
</tr>
<tr>
<td>Withdrawn</td>
<td>12%</td>
</tr>
</tbody>
</table>

Target: 60%

Employee wellbeing scores – before and after intervention

<table>
<thead>
<tr>
<th>Average Score</th>
<th>Intervention</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>51.0</td>
<td>49.9</td>
</tr>
<tr>
<td>Follow-up</td>
<td>49.0</td>
<td>50.4</td>
</tr>
</tbody>
</table>

Employee sickness absence days – Before and after intervention

<table>
<thead>
<tr>
<th>No of days</th>
<th>Intervention</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>2.4</td>
<td>2.3</td>
</tr>
<tr>
<td>Follow-up</td>
<td>4.4</td>
<td>4.5</td>
</tr>
</tbody>
</table>
Psychological distress – GHQ-12 scores

- Mean GHQ scores:
  - Intervention (Jun-Sep 2013): 12
  - Follow-up (Jan-Mar 2014): 3.2
  - Control (Jun-Sep 2013): 2
  - Follow-up (Jan-Mar 2014): 2.9

Cost-effectiveness and cost-benefit

- Estimated cost of the intervention was £567 per manager and £81 per employee based on 49 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.

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)

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

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

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
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/jrh/108001796
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