

## Working Late

*Strategies to enhance productive and healthy environments for the older workforce*

Alongside climate change and the threat of terrorism, our ageing society sits as one of the three important national challenges identified by government; one that requires thoughtful and urgent attention across a range of key areas. Alongside this, we need to reconfigure our attitudes to older people and our willingness to accept the stereotypes embedded in society: one that often perceives older people as dependent, frail and unfulfilled, unable to participate fully in the society they have been part of shaping.

An important aspect in this context is the place older people occupy in the workforce. The demographic shift means that there will be a rise in the age of the workforce (there are now twice as many 50 plus aged workers than those aged 25 years or younger); pensions policy also dictates that many people will work longer than their predecessors. This raises questions such as how will this/should this affect employment practices in the future and how employers and institutions should prepare for and adapt to ensure the full integration of older workers.

### **Background**

The RSA has developed this Design Directions brief with the Working Late collaborative research project at Loughborough University in order to explore how different design-led approaches can help to motivate, engage and empower employees to participate in a series of four health interventions. The intended output of this collaboration will be creative and innovative methods of conveying health information to maintain and promote the health of workers across the life course.

Working Late is a four year Collaborative Research Project, funded by the New Dynamics of Ageing research programme, which will address practice and policy-relevant issues associated with later life working. It will develop interventions and design solutions to promote health and productivity, and improve the quality of working life of older people. The RSA's Design Directions scheme has an established interest in the ageing population and the role for design in addressing the issues associated with older people.

Loughborough University's Working Late programme of research (led by Professor Cheryl Haslam) comprises four integrated work packages which provide useful context and background to the brief.

The first of these will develop and utilise a model of continuous active engagement with user groups, older workers, academic and non-academic experts to ensure that the research is informed by the views, experience and expertise of stakeholders. The second will examine work participation, impact of age discrimination legislation and interactions between work, family commitments and the journey to work.

The third work package, and the one that relates specifically to the Design Directions brief, will develop new interventions to promote the health of workers across the lifespan.

The final work package will develop design models for an inclusive workplace seeking to optimise health, wellbeing, safety and productivity of workers of all ages.

### **Context**

Work package three: maintaining and improving health across the life course

Participants should read this carefully as it provides important background to the brief.

In work package three (WP3), the researchers at Loughborough will design interventions to increase physical activity levels of workers of all ages, with the aim of changing employees habitual activity levels and promoting the adoption of healthy, active lifestyles. It has been recommended that such occupational health initiatives should adopt a lifespan approach, involving all ages<sup>1</sup> if the health of older workers is to be assured.

Physical activity is an important component of a healthy lifestyle and epidemiological research has demonstrated protective effects of physical activity in relation to obesity, coronary heart disease, hypertension, diabetes, osteoporosis, cancer, anxiety and depression. Current guidelines state that adults should undertake a minimum of 30 minutes of moderate intensity activity, at least five times

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<sup>1</sup> Ilmarinen, 2006

per week. The proportion of adults meeting this recommendation falls with age: 47% of males and 30% of females between 16 to 44 years meet the recommended levels compared to 32% of males and 22% of females between 45 to 65 years<sup>2</sup>.

Work Package three will develop sustainable interventions targeted at all workers to ensure that employees of all ages benefit from a more physically active lifestyle. There is strong evidence that while the physical ability to work declines with age, the effects of this decline can be delayed by exercise. Regular physical activity contributes to better balance, coordination, and agility, which in turn may help prevent falls in older people<sup>3</sup>. Walking is an ideal form of exercise and is the most popular form of physical activity in the UK<sup>4</sup>. Walking programs have been shown to produce gains in fitness, reductions in blood pressure, increase in bone density and enhanced mood state, with the greatest gains being observed in older adults, and in sedentary and obese individuals<sup>5</sup>. Walking will form the basis of the worksite interventions.

A multi-factored physical activity programme will be designed comprising four types of health intervention:

- 1 incidental activity – e.g. by encouraging use of stairs, discouraging telephone/email contact, encouraging workers to walk to each other's offices/desk
- 2 active commuting, i.e. walking or cycling to work
- 3 exercise at work – individual or team based activities
- 4 pedometer based interventions – issuing employees with pedometers and encouraging them to increase their daily step count by setting daily or weekly goals. Use of pedometers has been shown to be associated with significant increases in physical activity, reductions in body weight, BMI, blood pressure and improved health outcomes<sup>6</sup>.

Multi-dimensional interventions will be developed to ensure that no workers are excluded. For example, individuals with a long commute to work would be unable to participate in an intervention focused on active commuting if they live beyond cycling/walking distance. The interventions will last for 12 months, with the aim of leading to permanent changes in people's behaviour. The Loughborough research team has a very strong track record in workplace health promotion. For example, Professor Cheryl Haslam's research on reducing musculoskeletal disorders was judged 'best intervention study in the workplace' by the American Psychological Association and the National Institute of Occupational Safety and Health in 2006.

The interventions will be implemented in large companies or organisations that have a number of

sites to allow the researchers to compare those people who take part in one of the interventions as opposed to those who are subject only to control conditions, within the same organisation. Within each large organisation participants working at different sites will be enrolled into either control or intervention conditions to help reduce 'contamination' effects between the groups.

### Control condition participants

These people will receive generic information on the benefits of regular physical activity but they will not receive any other intervention during the 12 month study period. At the end of the study period, control participants will receive tailored advice on how to increase their physical activity and will be given a pedometer to keep.

### Intervention participants

These participants, on the other hand, will use/take part in the interventions designed by the research team so the difference between specifically designed interventions that seek to engage individuals, as opposed to simple, generic health/activity information can be measured.

All employees (intervention and control group) will be assessed at baseline (before the interventions started), six months (intervention midpoint), 12 months (intervention complete) and then six and 12 months post intervention. Measurements will include: activity levels (using pedometers), body weight and composition, waist hip ratio, blood pressure and resting heart rate. Other measures will include job satisfaction and morale, and workability (defined as a dynamic interaction of individual health, competencies and values in the context of the physical and social organisation of work).

### Brief

Consider the four types of health interventions mentioned previously – they are central to the brief. You are asked to propose how these could be communicated effectively in order to engage the active participation of employees of all ages.

You may wish approach this brief through conventional forms of print, screen-based information or ICT-based information graphics to communicate and encourage participation in the health interventions. Alternatively, you may wish to consider other design-led proposals that could influence the behaviour of participants and persuade them to take part. This could be a proposal for a service, network or activity (or a combination of these) that could be implemented easily, providing the means and motivation for participation.

### Important points to bear in mind:

- Your proposal must be capable of implementation – a complex product that would need developing and manufacturing would not be suitable in the context of this brief. Selected projects need to be capable of implementation quickly as they form part of the

2 Department of Health, 2005

3 Pate et al., 1995

4 Chief Medical Officer, 2004

5 Shephard, 1997

6 Bravata et al., 2007

- wider Working Late research project
- Your proposal needs to be sustainable in the sense that the participants who the research team engage for the project must continue their involvement throughout the 12 month period of the intervention
- It is intended that the winning project(s) will be implemented as part of the 12 month interventions described and used by the research team. This is a great opportunity for your project to 'go live' as part of this major research project and the research team will seek to involve you at the implementation stage (ie making the proposals real) and at various stages during the 12 month life of the interventions

### **User research**

Insight and understanding of those for whom you are designing is very important so you should find a user group, as a way of developing your proposals in order that they reflect the needs, motivations and capabilities of the group. This is a user group you choose in order to develop your proposal, as distinct from the participants on whom the winning proposals will be trialled. Your research should clearly present and communicate the following:

- a clear statement that outlines the barriers to participation and how your proposal tackles these barriers
- the insights that led to the ideas you are proposing
- the users you have consulted, how you conducted the research, and how it helped you understand the issues

### **Scenarios**

You should develop visualisations and scenarios-of-use through storyboards derived from observation and discussion with your users, reflecting an understanding of social/lifestyle trends.

### **Submission details**

To facilitate the judging of this project, entries must be submitted as flat work, as follows:

- 1 a short report that explains why you chose the approach in your final proposal and describes the initial research and development with users and any others with whom you collaborated
- 2 a maximum of five boards, size A3 (submitted on lightweight card) showing:
  - research recording existing scenarios or problems
  - development of ideas and engagement of users in the design process
  - envisioned scenarios of use in relation to the four health interventions
  - your final proposals in detail
- 3 a sketchbook of ideas development

### **Further information**

More information about the Working Late project can be found at <http://www.workinglate.org/>

More information about the NDA programme can be found at <http://www.newdynamics.group.shef.ac.uk/>

More information about the Work and Health Research Centre at Loughborough University can be found at <http://www.lboro.ac.uk/departments/hu/groups/whrc/>

### **The Working Late Collaborative Research Project**

is funded by the New Dynamics of Ageing (NDA) research programme. The NDA research programme is a seven year multidisciplinary research initiative, and is a collaboration between five UK research councils – ESRC, EPSRC, BBSRC, MRC and AHRC. This reflects the largest and most ambitious programme of ageing research ever mounted in the UK. In July 2008, Loughborough University was awarded £1.3 million from NDA to carry out the four year project entitled Working Late: Strategies to enhance productive and healthy environments for the older workforce.

Working Late is led by Professor Cheryl Haslam, Director of Loughborough University's Work and Health Research Centre in the Department of Human Sciences. This collaborative research project comprises numerous partners with expertise in a wide range of disciplines including psychology, occupational health, gerontology, biology, ergonomics, engineering, sociology, and health economics.