

# Workplace & Wellbeing

Developing a practical framework  
for workplace design to affect  
employee wellbeing

A research study



Royal College of Art

**THE HELEN HAMLYN  
CENTRE FOR DESIGN**

**Gensler**

## **Contents**

Foreword/ Page 3

Executive Summary / Page 4

Context / Page 6

A Sense of Control / Page 8

Research Questions / Page 9

Methodology / Page 10

Findings / Page 15

Conceptual Model / Page 18

Evaluation Toolkit / Page 22

Using the Toolkit/ Page 24

Real Life Examples / Page 25

Conclusions / Page 27

References / Page 28

Acknowledgements / Page 30

# Foreword



One hundred and fifty years after the birth of the modern office as a by-product of the industrial age, we are still searching for the right balance between management efficiency and employee wellbeing.

For a long time, the considerations of organisational management were prioritised over individual needs as a basis for business success. Today, however, such assumptions are being seriously challenged. Indeed, there is growing consensus in the knowledge-based economy that organisational purpose cannot be served effectively if the workforce is disengaged and dispirited in mind and body.

Workplace wellbeing has risen up the agenda inside organisations large and small, in the UK and internationally against a background of rising stress, anxiety and disassociation. Workplace design has been widely identified as a factor in making people feel better at and about work.

But what aspects of workplace design are most important to boosting people's wellbeing? Does employee participation in workplace design give that sense of personal control that can help raise morale and productivity? And how can a practical framework be developed that enables organisations to better understand the workplace needs of their people and identify design opportunities to support wellbeing?

These are the questions that this report seeks to explore.

Our study suggests that giving a voice to employees in the design of their workspace is one way to ensure they feel a 'sense of control' that is essential to personal wellbeing. It also highlights how important it is for organisations to have the right tools to capture the psychological and functional needs of their employees, gauge exactly how well the workplace is performing through the eyes of their people, and identify and advance opportunities for design improvement.

That is why the Workplace & Wellbeing research consortium, led by a combination of academic rigour at the RCA and deep practice knowhow at Gensler, has developed a practical framework for workplace design to affect and help shape employee wellbeing in the future.

Working actively with our industrial consortium of partners, we continue to explore new ideas in this critical area of workforce engagement and we welcome your own contribution to the dialogue.

Professor Jeremy Myerson  
Royal College of Art

Philip Tidd  
Gensler

---

This report is based on the findings of a research programme led by Gensler and the Helen Hamlyn Centre for Design at the Royal College of Art. Industry partners: Bupa, Kinnarps, Milliken and RBS



# Executive Summary

This design research project is set in the context of a 'wellbeing deficit' in the UK workplace that has caused a loss of productivity through sickness and stress. This wellbeing deficit is part of a worldwide trend, leading to unprecedented interest by organisations in ways to improve wellbeing, satisfaction and engagement of employees.

The study was led jointly by the Helen Hamlyn Centre for Design at the Royal College of Art with Gensler, the global architectural practice, thus combining the academic knowledge and practice-based skills of the RCA's largest centre for design research with Gensler's expertise in workplace consulting and design.

A review of literature in the field at the outset of the study explored definitions of wellbeing as a balance between personal resources and external circumstances and challenges. A 'sense of control' was identified as an important concept in relation to managing external factors and therefore critical to personal wellbeing.

The study set out to explore which aspects of workplace design are perceived by employees to be important to wellbeing and whether giving greater participation in the design of the workplace environment increases the sense of control and wellbeing of people at work. Results of early phases of the study fed into the development of a practical tool to help companies use workplace design to affect and improve employees wellbeing.

The study was conducted in three phases over a period of two years. In the first phase of research, the research team conducted a Scoping Study in four different organisations in London and the south east of England that have undergone different levels of workplace change over the past three years. Thirty interviews were conducted and analysed.

In the second phase of research, a Participatory Design Project was devised with three teams in one organisation in order to test the impact of different levels of design participation (high, low and no participation) on employee wellbeing. Teams worked to create, design and test interventions in the workspace. A validated measurement of mental wellbeing, the Short Warwick-Edinburgh Mental Wellbeing Scale, was used to measure the effects on employees.

Findings from the Scoping Study presented 'a snapshot of change' characterised by an ever-shifting workplace landscape

and a relentless squeeze on space. This constant change was seen by employees to worsen their physical and psychological wellbeing. Huge variations in levels of mobility, choice and flexibility for individuals emerged, with many people feeling excluded from decision-making processes in relation to the work environment.

The Scoping Study revealed that employee wellbeing and satisfaction was supported by such workplace factors as a sense of connection, a positive and purposeful environment, a variety of spaces, control over space and the opportunity to participate in the planning and design of the environment.

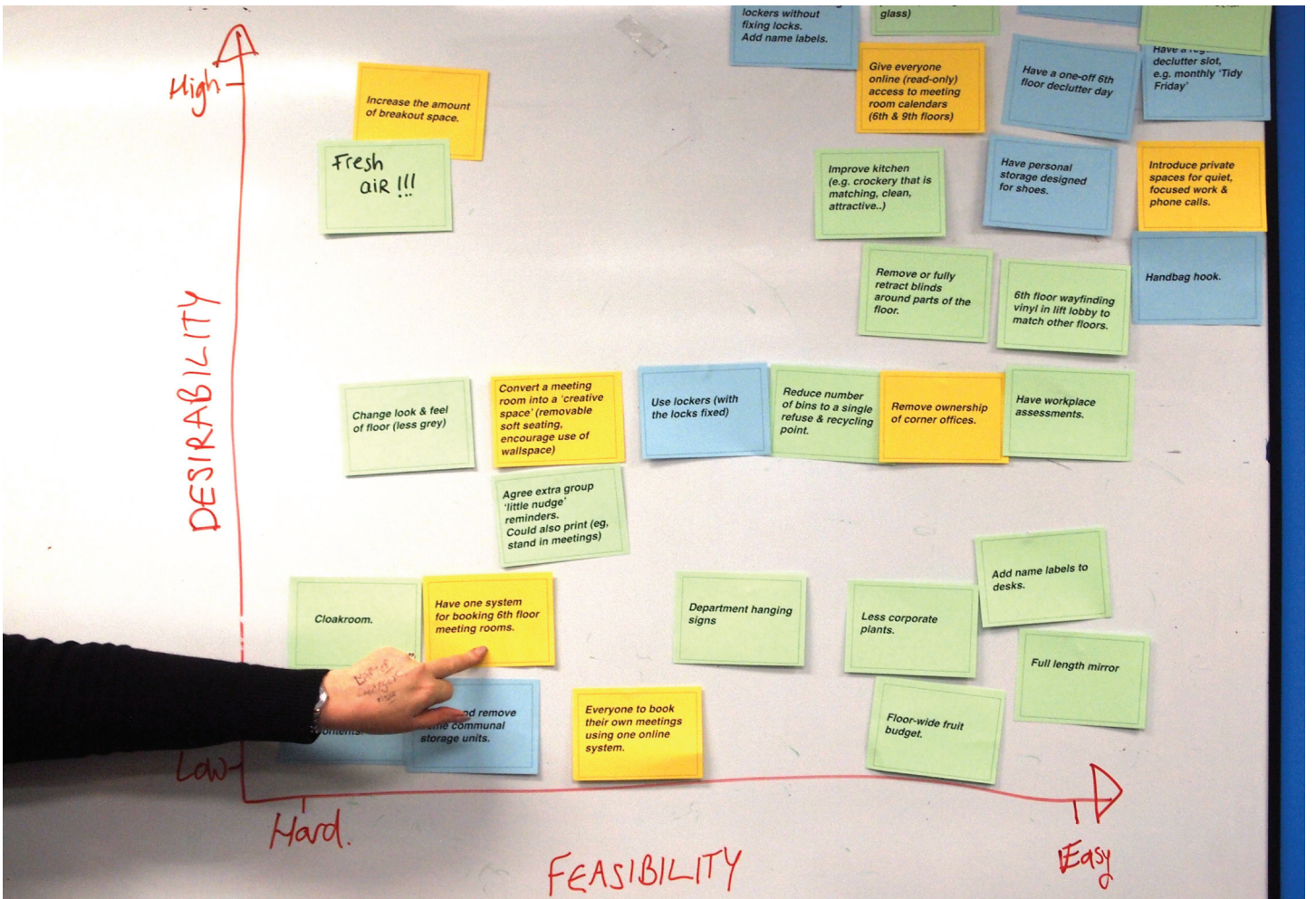
The Participatory Design Project found that people expressed satisfaction with the staff-designed workspace intervention irrespective of whether or not they had participated in the process. While teams that were given a role in the design of the environment recorded a rise in mental wellbeing compared to the no-participation team, there was hardly any difference in the level of wellbeing between low and high participation. This suggests that the invitation to participate is more important to wellbeing than the level or 'dose' of participatory activity offered.

Based on the findings of the first two phases of the study, the research team built a workplace wellbeing conceptual model that illustrates a necessary balance between the functional and psychological needs of the individual that organisational purpose needs to address. In the third and final phase of the project, this model was developed into a practical evaluation toolkit for organisations to use to measure workplace wellbeing and activate design to improve it.

The tool was tested extensively in several London workplaces, including an architectural office, health company and academic institute, as part of an iterative development process. Essentially this practical framework provides a range of activities that enable companies to capture and analyse the functional and psychological needs of their employees, map the results on a wellbeing matrix, identify design opportunities for improvement and co-create solutions.

The evaluation toolkit offers three different forms of employee engagement - from in-depth workshops to more informal drop-in sessions and quick questionnaires - and it also provides real-life examples of concessions, compensations and interventions in the workplace that organisations can adopt or adapt to affect employee wellbeing.







# Context

The context for this project lies with a current 'wellbeing deficit' in the workplace. Loss of workplace productivity through sickness or stress has been well documented and widely publicised internationally.

Absence from work costs the UK economy more than £14 billion a year according to the Confederation of British Industry (CBI 2013). In 2014, around 27.3 million working days were lost in the UK, according to the Health and Safety Executive; 23.3 million of them were due to work-related ill health, predominantly depression, stress, anxiety and musculoskeletal disorders, and just over 4 million due to workplace injuries (HSE 2015).

While physical injuries in the workplace have reduced from a generation ago, mental health problems are now sharply on the rise, costing the UK economy the equivalent of £1,600 per employee according to the UK National Work-Stress Network (2012).

This picture of a 'wellbeing deficit' is

part of a worldwide trend; workplace stress, for example, is rising in countries as diverse as Spain, Mexico, South Africa and India, with the fastest growth recorded in China and the greatest severity experienced by business people in the USA (Regus 2009).

As a result, there is now unprecedented organisational interest in the real costs of actively disengaged employees and in ways to improve workplace wellbeing, satisfaction and engagement (Pangallo and Donaldson-Feilder 2011).

Some of the wellbeing problems that workforces around the world are experiencing can be put down to inappropriate employment policies, inadequate training, insensitive management or unreliable IT systems. But the work environment is also a major interrelated factor in making us 'sick' of work.

## Literature Review

The research team carried out a literature review of research in the field. Since the 1980s, with some important

precedents before, studies in workplace environmental psychology have consistently pinpointed the relationship between physical environment and the experience and performance of workers (Sundstrom 2001).

This body of research has not only focused on such factors as the effects of ambient conditions (temperature, noise, air quality, illumination and so on) and workstations (seating, equipment, personalisation) on the individual, but also the impact of different layouts and types of workspace on groups and interpersonal relations.

As a consequence, we know a lot more today about the broad interplay between workplace design and the psychological processes that can lead to more positive outcomes for the individual (in terms of personal wellbeing, performance and satisfaction) and for the group (in terms of team cohesion and effectiveness).

But what is missing are the frameworks and tools that will help organisations to better understand those aspects



Figure 1: Dynamic model of wellbeing, adapted from Dodge et al., 2012

# Context

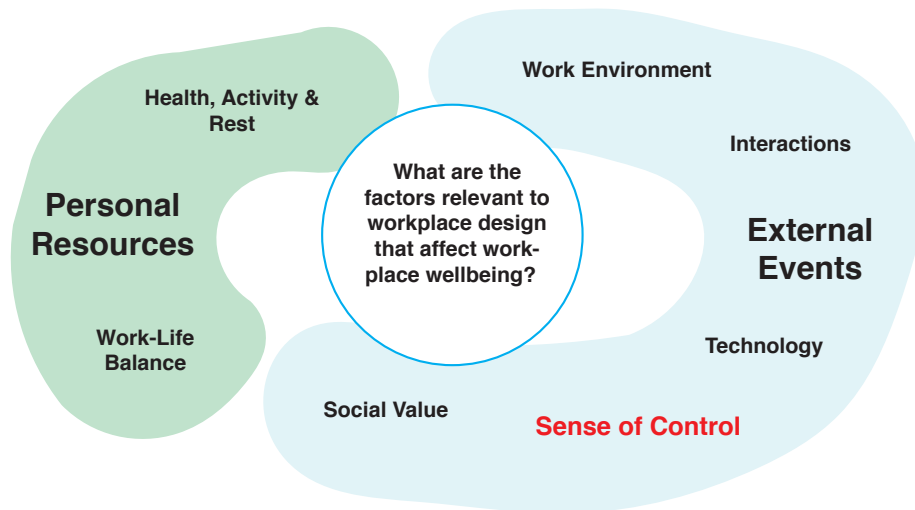


Figure 2: Factors affecting wellbeing at work

of workplace design that are most important to people's wellbeing, evaluate and measure their own position, and make the design decisions that will create healthier workplaces promoting greater comfort and productivity.

Fundamental definitions of wellbeing are central to developing a new approach. One way to describe wellbeing that we found useful was as the equilibrium between a person's own psychological, physical and social resources and external circumstances and challenges. (Dodge et al., 2012).

Personal wellbeing is subjective and dynamic within this model. This encompasses happiness, job satisfaction, freedom from anxiety and feeling worthwhile (ONS: Oguz et al., 2013).

Factors affecting wellbeing at work include: personal resources ('who you are') – your health, activity, level of relaxation and work-life balance; and organisational systems ('where you work') – environmental factors, social value of work, technology and infrastructure, social interactions and relationships, and sense of control. This is based primarily on research by New Economics Foundation (Jeffrey et al., 2014).

Indeed a 'sense of control' was identified within the literature as having the richest opportunities for further design research.

As office design moves away from individually assigned desks to new, more flexible ways of working in activity-based spaces, questions are raised about how workers establish privacy, identity and belonging.

In this context, a sense of control – which is so critical to personal wellbeing – extends to the level of participation that people have in the design and planning of their workplace. The levels of control and empowerment associated with group participation in office design have been connected to both higher levels of productivity (Knight & Haslam, 2010) and a higher degree of psychological comfort (Vischer, 2008).

## Participatory Design

Participatory design or 'co-design' is a growing field. It sees designers working collaboratively with end-users as equal partners to create, design and/or produce ideas, spaces, products, technologies or services.

Participatory design is commonly seen in such areas as community development, public services and urban environments, where asset mapping and co-design approaches help local people to work together to improve their neighbourhood. This creates social capital and community cohesion. It is intended to lead to more citizen-centred results as well as having an intrinsic value for participants who benefit from being part of the process.

These solutions are more sustainable due to a sense of ownership (Ramirez, 2008; Boyle et al 2010).

Co-design processes have application in workplace design. Past research suggests that being consulted, studied or otherwise involved in changes to the workplace has a positive effect on employee wellbeing.

Participatory design also relies on gathering the views of many stakeholders and on broad cooperation to achieve a positive result. This again suits the workplace, which is a community of individuals who may have different, often conflicting, needs, preferences and relationships. Co-design methods promote participation, open discussion and shared decision-making.

Exploring levels of participatory design within the workplace was therefore identified as an appropriate approach to study a 'sense of control'.

# A Sense of Control

In the workplace, a 'sense of control' has wide meaning. It applies to choices regarding work-life balance, surrounding environment, commuting and travel; it also refers to control in terms of access to tools, resources, spaces, control over territory and privacy, and control over relationships and interactions with others in the office community.

A sense of control features heavily in many reports as an established driver of wellbeing and happiness at work (Marks, 2014a; Gensler Workplace Survey 2014). In recent years substantial changes to our ways of working have had a great effect on our sense of control in the workplace. Knowledge working has allowed people to work more autonomously using technologies that suit them. This increased freedom has allowed people better insights into how they work best. Control of the workplace environment can manifest itself in different ways:

- Control over physical environmental conditions
- Choice of workspaces
- Freedom to reconfigure a workspace
- Personalisation
- Participation in the design process

Moving away from individual assigned

desks, to either hot-desking or working in task-based spaces, requires a cultural shift. The development of activity-based workspaces and remote working technologies aim to support employees, by offering them more choice. But these factors can also impact negatively on an employee's sense of belonging at work, an important element in measuring wellbeing.

There is evidence in the literature of design strategies that can give workers a greater sense of control over their physical environment. Stamford d. school, for example, uses furniture and objects that can be reconfigured by its occupants, 'to support idea generation, collaboration and experimentation' (Chan, 2014). Lightweight, flexible pieces using screens, coloured light, printed graphics and projections can allow employees to change the atmosphere of a space to meet functional and emotional needs (Myerson & Privett, 2014).

Empowerment of employees is linked to positive feelings about territory, belonging, ownership, place and attachment, and participation in design of the workplace can give greater satisfaction in the results (Vischer, 2008). Simply allowing people to

arrange decorative elements (plants, artwork) themselves at work improved productivity and reduced errors over an environment enriched by a designer with no user input, and lean environments with no enrichment (Knight & Haslam, 2010).

A sense of control is closely linked to territoriality, representing the space needed for an employee's work and their position in the organisation. However it is not limited to the appropriation of physical space, but related to an employee's 'sense of privacy, social status and perception of control' (Vischer 2008). Studies summarised by Vischer showed that concerns about privacy and confidentiality, raised by people moving from private offices to open plan, related more to social status and control.





# Research Questions



Influenced by the potential impact on wellbeing of two complementary concepts – a sense of control and levels of participation in workplace design – the research team devised the following research questions for the study:

- Does greater participation in the design of the workplace increase the sense of control and wellbeing of employees?
- How much participation is needed, and desired, to create a sense of control?
- Which aspects of workplace design are perceived to be most important to wellbeing at work?
- How can a practical evaluation tool be developed that enables organisations to capture employee needs and use design to support the wellbeing of teams?



To address these questions, a research plan was created with three distinct phases.

First, a general study of workplace occupancy was set up involving stakeholders in four different organisations with four different levels of workplace change.

Second, in-depth research was undertaken within a single organisation exploring different levels of participation in the design process and its effect on wellbeing, through a programme of workshops and interventions.

Third, a conceptual model of workplace wellbeing (arising from phases one and two) was developed into a practical toolkit for organisations to engage employees in a co-design process within the workplace to affect wellbeing.



The intention of the research plan was to generate knowledge in the following areas:

- Methods that allow teams to engage with and participate in the design of their workspaces
- Insights into how employees would change their environment, and why, given the opportunity
- Aspects of workplace design that have the greatest effect on wellbeing, from the group's perspective
- The effects that both a participatory process and the resulting design interventions have on employee wellbeing.

# Research Methodology

The Workplace & Wellbeing study undertook two phases of research in the first year of the project: first, a Scoping Study in four workplaces to observe different levels of change at work; and second, a Participatory Design Project to create office interventions to test improvements in employee wellbeing.

## Phase 1: Scoping Study

This research phase was conducted within four organisations in London and the south-east that have undergone different levels of workplace change in the past three years.

The research was conducted through cross-organisation interviews, stakeholder mapping (with managers, building services, department representatives and so on) and observations of teams within the workplace. The aim of the study was to:

- Understand how people adopt and adapt their workplaces to meet needs
- Gather reflections on the success of workplace design processes from the perspective of different stakeholders, and how it could be improved to give a greater sense of control
- Establish common themes between organisations in terms of approaches, constraints, levels of participation and levels of satisfaction
- Assess which aspects of the workspace emerge as contributors to employee wellbeing.

Thirty interviews were conducted in total across the four organisations (22 with employees, eight with other stakeholders). Each interview lasted 45 minutes in person and asked questions around 'your role, 'your patterns of work and use of space', 'how and where you work', 'changes to the workplace', 'the process of change' and 'the consequences

of change'. The 30 interviews were transcribed and a thematic analysis conducted.

## Phase 2: Participatory Design Project

In the second phase of the research, we worked with employees in one London-based organisation to create, design and test interventions within their office environment.

The intention of this approach was to give employees more sense of control over the workplace in two ways: first, by inviting them to participate in the design process using co-design methods; and second, by providing interventions designed for and by them, creating a sense of co-ownership of space. The interventions might themselves be adjustable or offer users more choice to meet the needs of the group and improve levels of comfort.

We worked with three teams of employees all situated on the same floor. Each team contained between six and nine people who work together and share similar work patterns. We tested different levels of participation with each.


**Team 1** was offered the highest level of participation by being invited to co-design ideas and interventions and becoming involved in their implementation.

**Team 2** was offered a lower level of

participation through engagement activities to identify those aspects of the workplace that were important to them and where opportunities for improvement lie. However they were not involved in how ideas and interventions were developed or chosen for implementation.

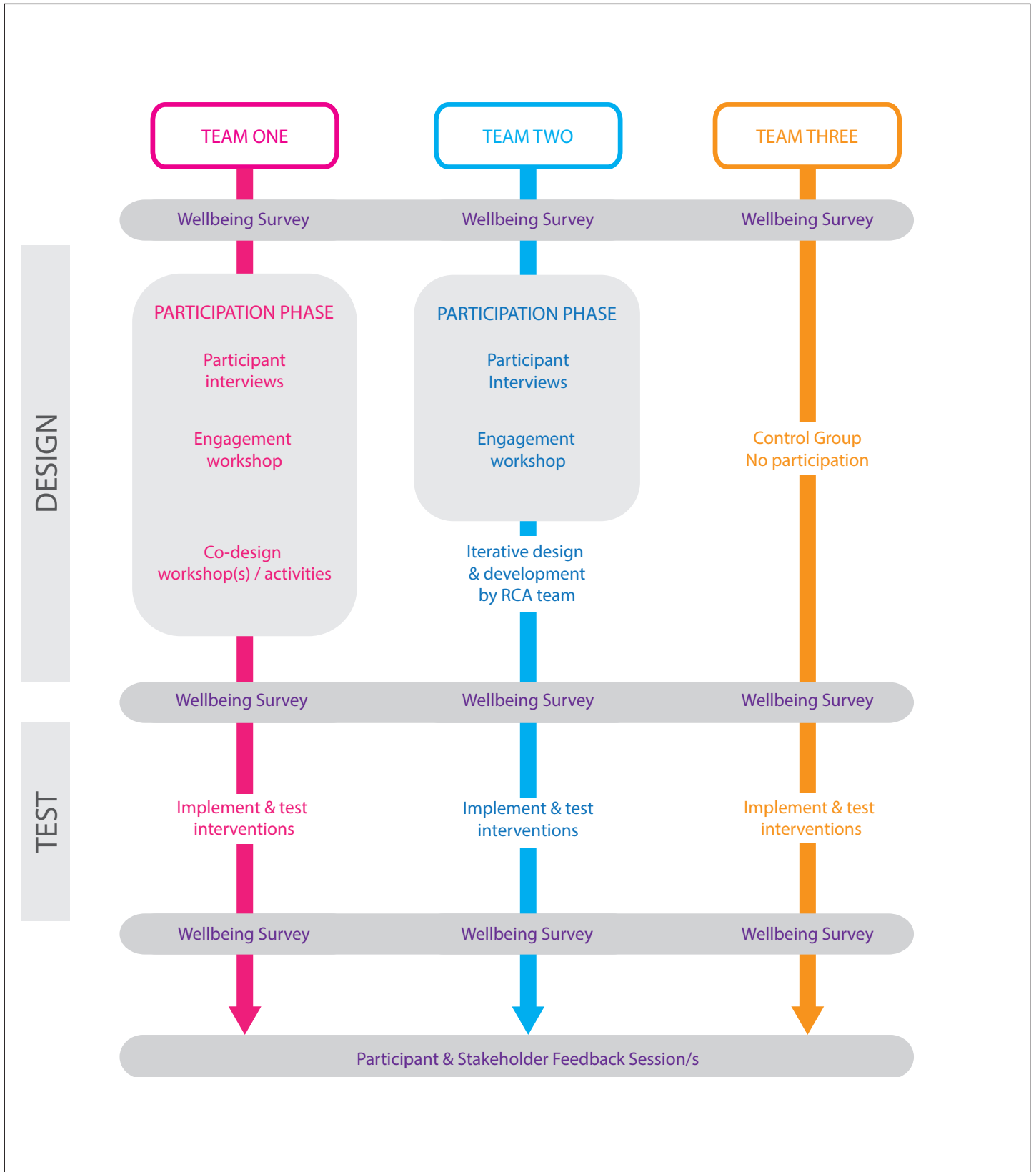
**Team 3** was excluded from design participation, but received interventions designed for the other teams on the floor.

The effects on employee wellbeing of both the process and the design interventions were evaluated using quantitative and qualitative methods at the beginning and end of the project using qualitative methods (interviews, questionnaire and feedback session) and quantitative methods, through the Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS), which is a validated measurement of mental wellbeing.

<b>Organisation 1:</b>	A charity that has relocated to new purpose-built premises	 Scale of Change
<b>Organisation 2:</b>	A bank that has relocated to new premises without refurbishment	
<b>Organisation 3:</b>	An architectural practice that has added new furniture to existing premises	
<b>Organisation 4:</b>	A healthcare company that has made no workplace change	

Research Phase 1: four sites for research

# Research Methodology



Research Phase 2: plan for participatory design project

# Research Methodology

## Levels of Participation

<p><b>Team 1 – High Participation</b> Team 1 participated in an engagement workshop to decide as a group their needs from the workplace, establish what they considered to be most important in terms of their wellbeing, identify specific areas that were open to improvement and capture early ideas for interventions.</p>	<p><b>Team 2 – Low Participation</b> Team 2 followed the same process as Team 1, except that the participatory design processes stopped after the first engagement workshop. The researchers took Team 2's ideas and developed them into designs with input from the team members.</p>	<p><b>Team 3 – No Participation</b> Team 3 had no participation in the design process and was not engaged in any workshops. In the later stage of the project they were offered the interventions to test and to see whether interventions designed for or by employees can have wider appeal within the organisation.</p>
<p>Following the engagement workshop, Team 1 took part in a design workshop to prioritise ideas and progress the most significant ones into concepts for interventions or future plans.</p>		
<p><b>Three-minute online survey</b> (SWEMWBS), completed by all team members, repeated three times during the project.</p>	<p><b>Three-minute online survey</b> (SWEMWBS), completed by all team members, repeated three times during the project.</p>	<p><b>Three-minute online survey</b> (SWEMWBS), completed by all team members, repeated three times during the project.</p>
<p><b>Individual interviews</b> with six team members about their workplace.</p>	<p><b>Individual interviews</b> with six team members about their workplace.</p>	
<p><b>Engagement workshop:</b> group activities to let people share openly their thoughts on the workplace environment, to identify issues to be focus of project.</p>	<p><b>Engagement workshop:</b> group activities to let people share openly their thoughts on the workplace environment, to identify issues to be focus of project.</p>	
<p><b>Co-design workshop &amp; activities:</b> employees collectively and creatively develop their ideas for what they would like to change, prototype and test, facilitated by the research team.</p>		
<p><b>Four-week testing period of ideas</b></p>	<p><b>Four-week testing period of ideas</b></p>	<p><b>Four-week testing period of ideas</b></p>
<p><b>Invitation to feed back via questionnaire</b></p>	<p><b>Invitation to feed back via questionnaire</b></p>	<p><b>Invitation to feed back via questionnaire</b></p>



# Research Methodology

## Participatory Activities

### Participatory Activities

#### Interviews (Teams 1 & 2)

Interaction with Teams 1 and 2 began with a selection of individual interviews to get a greater understanding of roles, work patterns, needs and preferences. Interviews were also conducted with facilities managers to understand current protocols and pressures on the workplace.

#### Engagement Workshop (Teams 1 & 2)

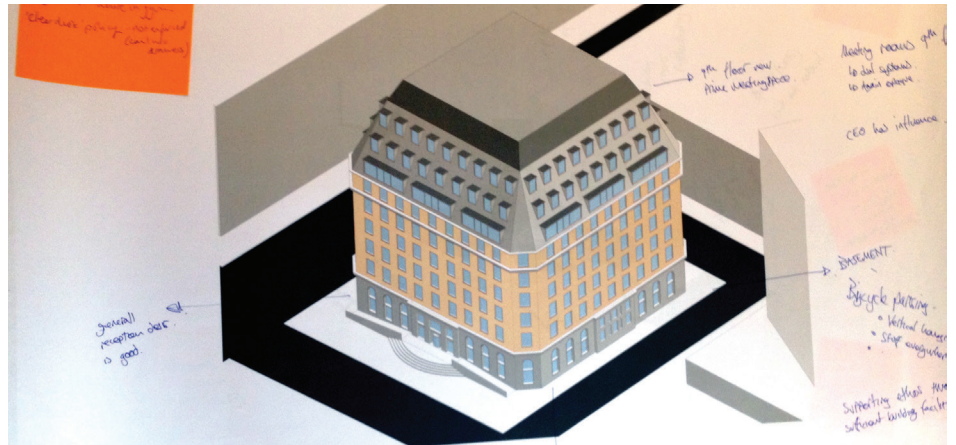
A two-hour engagement workshop attended by Teams 1 and 2 explored which aspects of the workplace could be improved. Each participant raised three issues with their working environment, opening up ideas and opinions to the rest of the group. The workplace was then discussed at five different scales (desk area, team area, floor area, inter-floor and the whole building), noting down observations and ideas where it was felt improvements could be made.

#### Co-Design Workshop (Team 1 only)

Team 1 took part in a two-hour co-design workshop where they developed initial ideas raised in the engagement workshop – both quick fixes and longer-term imaginative solutions. Participants plotted all the ideas from the engagement workshop on a graph of feasibility versus desirability to develop a shortlist of ideas that could be realised through the design interventions. This shortlist was based on what was thought to be possible and most likely to be well received within the project constraints.

The workshop participants then looked more closely at their floor, collectively making an alternative space plan. This was presented alongside images they had selected to visualise their ideas and communicate look and feel.

To extend participation by Team 1, interactive follow-up activities included



an online poll to select one idea to be trialed from six prioritised and an online survey to capture broader ideas on the future of the workplace.

### Design Outputs

With Teams 1 and 2, we worked towards three design outputs:

**1 Intervention:** a chosen design idea, requiring little investment, trialed on the office floor for a period of four weeks

**2 Action Plan:** A feasible idea that employees were able to put in place themselves, by committing time to identify the necessary steps and implementing within the timescale through internal channels within the organisation

**3 Future Proposal:** an idea for a more significant improvement to the workplace that requires larger investment.

Team 1 (high participation) worked toward producing all of these outputs themselves. Team 2 (low participation) handed over ideas to the RCA research team following the engagement workshop to develop on their behalf.

Design interventions were installed by the research team and tested with

employees in their office environment over four weeks. The installations were simple prototypes to help us achieve the intervention within the project constraints of time and resources.

### Analysis of Wellbeing

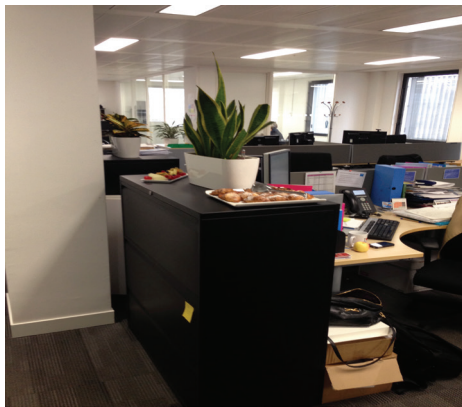
Wellbeing was evaluated using quantitative and qualitative methods. As employee wellbeing is personal and subjective, we looked for overall changes as a group rather than at an individual level, as we could not account for personality type or individual circumstances.

An established questionnaire (Short Warwick-Edinburgh Mental Wellbeing Scale) was used to create a wellbeing survey. This was web-based and therefore accessible to participants via desktop, tablet or smartphone. The survey was conducted at the start and end after the design intervention period with all three teams. This aimed to compare levels of wellbeing amongst groups who experienced different levels of participation.

Ethnographic research through a context-specific questionnaire was also conducted as part of a final feedback session. All data was analysed using thematic analysis, to identify recurring themes, vocabulary and feelings.

# Findings

## Scoping Study



Thematic analysis of 30 employee interviews in four different organisations experiencing different levels of change to their workplace created a 'snapshot of change', with many common themes evident despite the variety of workspaces and industry sectors investigated.

### A Picture of Relentless Change

A constant process of change in the work environment now appears to be the norm. Formal office moves are just the tip of the iceberg - changes of role and project, growth and shrinkage of teams, changes of strategy and policy and the introduction of technology innovations all contribute to an ever-shifting workplace landscape in which wellbeing needs are shifting too.

---

*"We have official shuffles, for example to make more space for a large project. But smaller shifts happen all the time. You move with the project."*

*"In the past year we've been moved four times."*

*"Small move but such an impact."*

---

There is a relentless and continuous squeeze on workspace. Desk to worker ratio, desk size, team floor space, storage space and alternative breakout space are all subject to continuous shrinkage. The majority of changes are

perceived by users to be for the benefit of the organisation at their expense and worsen their wellbeing, both physically and psychologically:

---

*"We're squished and desks are full."*

*"Numbers grew and space shrunk, this is a source of frustration in the team. Not a lot of support spaces..."*

*"I don't mind not having an assigned desk but the ratio needs to be reasonable."*

---

The general direction of change in the workplace is towards more mobility, choice and flexibility. But the study revealed huge variations in these aspects for individuals both between and within companies, depending on prevailing managerial cultures and available technologies.

---

*"I use breakout spaces sometimes, but not more than that. I need to use a large monitor."*

*"A lot of new people don't get a desk."*

---

*"I'm in the office about half the time. I have an allocated desk, a laptop. I frequently use meeting rooms and breakout areas. There's a general feeling of permission."*

### Process of Workplace Change

Workplace changes feel top-down, according to the findings of the study. Organisational agendas are behind workspace investment, or lack of it. Too often, workers feel their functional and psychological needs are not being taken into account. People feel disempowered due to a proliferation of rules from above – from the 'design/building police'. They also sense many degrees of separation to those that effect change and a lack of interest in asking for employee feedback or participation in design decisions.

---

*"No one said, hey what is it that you need?"*

*"There's a bit of cynicism about the flexible environment. In reality you have your e-mails."*

*"We feel like Gypsies. We're constantly being moved to make space for other people. Your needs are totally disregarded. You never get an answer. It's just desks to them."*

---

However, despite employees being aware of their workspace, how they use it and what it provides, active participation in the change process is often low. In some cases it was difficult to make decisions amongst groups in the same environment with different needs and tastes. Active participation in workplace redesign was not generally high on people's agenda.

---

*"I haven't been able to get them to take control over their space."*

*"No one will be interested until at least six months before a move."*

---

*"Some people weren't interested, until we showed them a floor plan of where they'd sit. Then everyone has an opinion."*

---

# Findings

## What Supports Wellbeing

Traits of workplace design that impact on wellbeing were identified from the Scoping Study.

### Sense of Connection

Members of staff emphasised a positive connection between the workplace and the outside world through natural light, birdsong, plants (including those tended to by employees) and pleasant views. A building situated near to amenities to support employees' lives outside of work was also a big plus – cafés, shops, bars, gym, and a choice of transport options making the commute easier and more pleasurable.

---

*"Views connect to the city ... you get so involved in the little things, so actually it's good to say 'there's all that, and it's OK'."*

---

### Positive Environment

Office buildings that are welcoming and legible, with good wayfinding and communal spaces that encourage people to build cross-departmental links, were seen by employees to support wellbeing. Environments that showcase the organisation's environmental or charitable activities, and project a professional, purposeful ambiance without too much intrusive branding, were regarded as a plus alongside team identity and space to showcase work.

---

*"Even within the office people don't necessarily know what we do – it would be great if we had a space to say 'these are our tools, this is what we do, come and ask us questions'."*

---

### Supportive Culture

Employees responded really well when the organisation recognised their responsibilities outside of work and made flexi-time, compressed hours, home working and other flexible options available to all. Assumed time in lieu or a culture that actively discourages



overtime were seen to have a positive impact on wellbeing.

---

*"I was invited to staff training even though I'm on a short-term contract, along with a lady here for three weeks - they want everyone to feel welcome"*

---

### Variety of Spaces

The provision of a versatile, flexible range of spaces that can adapt to the needs of employees was seen as important to wellbeing: meeting rooms; breakout and refreshment spaces; creative and alternative spaces. These spaces should offer bookable and drop-in, casual or formal use, near colleagues to breakout or huddle, or removed from the team for privacy. There should be variety in range of sizes and types of spaces; range of bookable/drop-in; private/open; casual/formal spaces. Whether employees have a fixed-desk or hot-desk, they like to be near those they work with most, whether that's by team, project or a fluid community, to communicate, support and build a group dynamic.

### Control over Space

Alongside the provision of a variety of spaces, the ability to change your working environment to suit your needs was rated as important. Employees wanted control over what they use their storage for (such as personal belongings or work files) and how

their workstation is set up. Personal autonomy in this context extended to accessing new ergonomic products such as sit-stand desks.

### Participation in Process

Employees felt better about work when invited to give some input to their workplace design. Collaborative action was seen to help build a supportive culture and a sense of control. But while giving people a voice in the design of their environment brings benefits, there was little evidence that individual were encouraged to share their ideas with a view to making changes. The result was often paralysis rather than participation.

---

*"I think we're old enough and mature enough to know what's appropriate and what's not."*

---

### Barriers to Wellbeing

Generally, employee wellbeing was seen to suffer when there were poor connections with the outside world, badly managed communication between teams, difficulties in wayfinding and inadequate provision of a variety of flexible spaces, thus exposing staff to constant noise and distraction. Decision-making that failed to account for the impact on the individual and a general lack of consultation over workplace design were also factors seen as unhelpful.



# Findings

## Participatory Design Project

The Participatory Design Project focused on three teams in one organisation, all based on the same floor.

### Design Intervention

Team 1 (high participation) and Team 2 (low participation) both focused on the corporate feel and identity of the space, its dullness and low levels of natural light with poor connections to the outside, in their engagement workshops.

Team 1 then went on to co-design a 'Life and Light' intervention with the research team. This comprised the introduction of plants in the space installed in hanging skyplanters, a range of salad crops, herbs, chillies to eat that the team would cultivate. Blinds were fully retracted to increase light. This intervention was delivered to Team 2 (low participation) and Team 3 (no participation).

### Action Plan

In their engagement workshops, Team 1 resolved to address the lack of personal storage and distracting clutter. Team 2 identified redundant furniture and storage units. Both teams worked together to organise a De-Clutter Day as part of a social activity on a Friday. Team 3 did not initiate this activity but participated in it.

### Future Proposal

Team 1 (high participation) used their co-design workshop to create a mood board and space plan for an ideal future workplace. Team 2 (low participation) were given sketch design ideas by the research team on how they might repurpose a meeting room into a flexible creative space – an idea that Team 2 had proposed.

All the ideas generated by Teams 1 and 2 gave the team members an active role in reshaping their workspace, thus contributing to a 'sense of control'. They chose plants that they could care for themselves and rearranged the office to suit needs that they had identified through a participation process.

A qualitative survey at the end of the project after the design intervention had been running for four weeks revealed that, irrespective of the level of participation, there was a wide welcome for the hanging plants and the retracted blinds bringing more daylight into the building. In particular the idea of caring for and even naming plants was popular.

The 'Tidy Friday' action plan was also successful because it enabled people to take ownership of the entire office floor. Generally, focus on the workspace

over several months during the research project led to further ideas and initiatives. Workers broadly appreciated the opportunity to participate in the design and look of the environment even if they sometimes struggled to commit time to the activities.

---

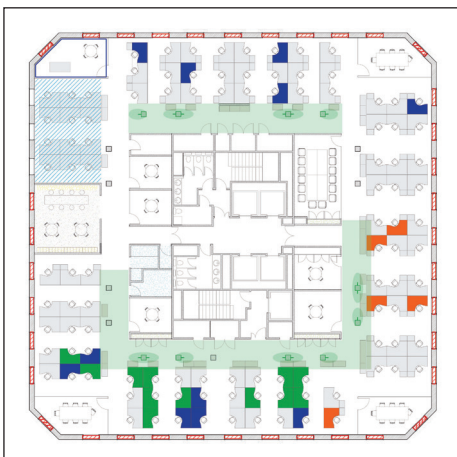
*"We did not take part because of workload when the project was happening, but I loved the new plants and would have even more if we could!"*

*"I had the amount of involvement I would have liked. I would have had bigger plants – everywhere"*

*"I'd like to be more involved. It would have been good to have shared / learnt more about best practice workplace design... I would have been happy to research this and share it with the group."*

*"Happy with this level of involvement – i.e. participate in discussion and have the option to contribute to ideas. For me the only thing that could have been better was investment to make more significant change – although I understand this has followed."*

---





# Findings

## Measuring Wellbeing

The Participatory Design Project made use of the Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS), a validated tool developed to evaluate the impact of a project on the mental wellbeing of a group of people. This was presented to participants as an online survey that they could complete themselves.

The survey was distributed before the design participation project began and at the end (after implementation of the design intervention) to chart changes in team wellbeing that might be attributed to the project. Our original intention was to use the scale to also measure wellbeing at a midway point after the participation stage and before implementing the intervention, but this was dropped due to inconsistencies in terms of which team members responded. Our results therefore analyse changes in wellbeing due to the project as a whole, from before the project began to after the project ended. They are based on a sample of 18 people in total, drawn from the three teams.

Participants responded to seven positively worded statements with 1 of 5 worded categories, from 'none of the time' to 'all of the time'. Each team's average mental wellbeing score was calculated from members that responded. Questions scored 1-5 depending on the response; the maximum overall score for all questions was 35.

The overall average mental wellbeing score for Team 1 (high participation) and Team 2 (low participation) increased by a small but significant amount (Team 1 by 3 points from 26.7 to 29.7; Team 2 by 3.5 points from 27.6 to 31.2). However the mental wellbeing score for Team 3 (no participation) did not increase by a significant amount (just 0.5 points from 28.7 to 29.3).

**The Short Warwick-Edinburgh Mental Well-being Scale (SWEMWBS)**  
Below are some statements about feelings and thoughts.  
Tick the box that best describes your experience of each over the last 2 weeks

I've been feeling optimistic about the future					
I've been feeling useful					
I've been feeling relaxed					
I've been dealing with problems well					
I've been thinking clearly					
I've been feeling close to other people					
I've been able to make up my own mind					

The Short Warwick-Edinburgh Mental Well-being Scale (SWEMWBS)  
© NHS Health Scotland, University of Warwick and University of Edinburgh, 2007, all rights reserved

In answer to the statement 'I've been feeling useful', Team 1 and Team 2 recorded higher increases than Team 3. As the project encouraged greater empowerment and 'a sense of control' in the workplace environment through participation in workshops, caring for plants and each person de-cluttering their own workspace, these engagement activities had some impact on wellbeing.

Similarly, in answer to the statement 'I've been feeling close to other people', Team 1 (high participation) and Team 2 (low participation) again recorded higher increases than Team 3 (no participation). As the project encouraged people to share problems and work together to find an outcome that suits everyone, these collaborative activities had some impact on wellbeing.

Overall, the survey implies that there is a detectable link between workplace participation/engagement and mental wellbeing. The teams that were engaged, including those that were invited but did not participate, recorded bigger increases on the wellbeing scale than the team that was not given the opportunity to participate.

However there was no real difference between the wellbeing scores for Team 1 (high participation) and Team 2

(low participation), indicating that the level or 'dose' of design participation is less important than the overall invitation to engage in some way. Providing a more intense or prolonged participatory design experience does not automatically boost wellbeing further.

The increases recorded in the 'after' survey perhaps reflect the greater sense of ownership or satisfaction with the interventions by those teams that helped to create them.

More in-depth feedback from all teams (through a qualitative survey) provides greater context, showing that many people appreciate being invited to participate in an open design process even though in practice they may not be able to prioritise this over other activities.

The study suggests that any participatory exercise, whether light-touch or intensive, should be open to all with content shared throughout the process. This keeps people informed of the on-going activity so they can more easily join in at any stage, even though, in practice, not everyone will want or be able to do so.

# Workplace Wellbeing Model



A conceptual model to chart and assess wellbeing needs in the workplace was developed as part of the study.

Using the thematic analysis from phase 1 (Scoping Study in four organisations) and the live findings recorded in phase 2 (Participatory Design Project) to test and refine, the model illustrates a necessary balance between the functional and psychological needs of the individual that organisations need to provide in the workplace. This approach mirrors to some extent the purpose of the organisation itself, which can also be seen as combination of functional and psychological needs.

The model therefore presents two axes of need, from functional need to psychological need, and from the organisation to the individual. Individual needs are those that appear to benefit the individual more than the organisation; organisational needs are those that benefit the organisation more.

At the heart of the model is what has been termed 'the psychological contract' - in return for hard work, commitment and loyalty, the individual worker expects

the organisation to be responsible for their workplace wellbeing.

## Functional Needs of the Organisation

Organisations have a number of functional requirements in order to be productive, efficient and viable. They must capitalise on assets and property, utilising space in an efficient way (for example, by introducing new working practices). They must raise performance and increase commercial competitiveness (for example, through collaboration). Keeping the workforce safe and healthy to work, through provision of ergonomic work settings, is also part of this picture.

*"People think there's an optimal arrangement. The end goal is whether I'll produce better work..."*

## Psychological needs of the organisation

Organisations also have 'softer' psychological needs based around creating and maintaining a positive culture, reputation and brand. These needs are related to motivating the workforce and attracting and retaining talent (for example through training, social amenities and other incentives),

as well as exerting influence in the wider world of customers, partners and suppliers.

*"It (workplace design) makes a small difference to me. Training and the culture and information and the speed of my tools are important..."*

## Functional Needs of the Individual

Individuals have a number of functional requirements to carry out their work. These broadly relate to environment (light, heat, air quality, spatial layout, ambience, décor and so on), tools (technology, furniture, protocols and systems) and settings (spaces for different work and social activities).

*"We don't have wall space to show our work. Even within the office people don't know what we do."*

*"It's important for the team to be together, communication-wise and information-wise..."*

## Psychological needs of the individual

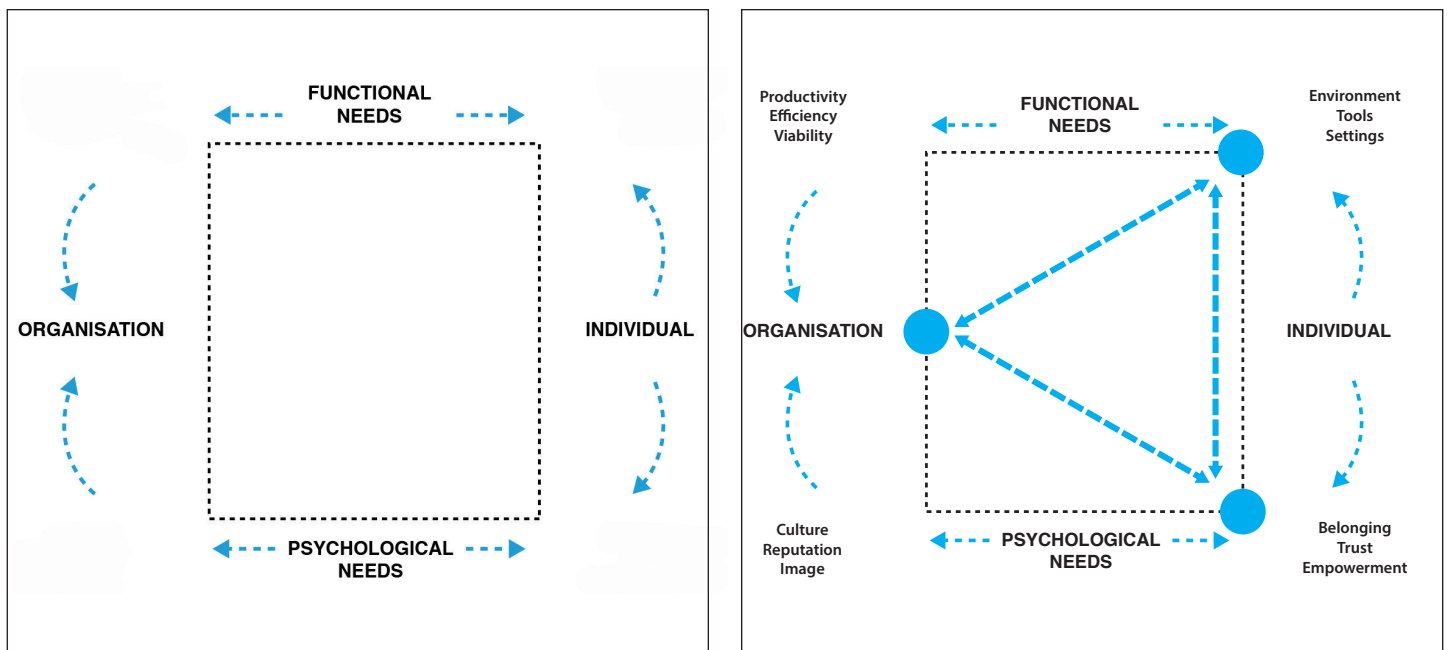
Individuals have a range of psychological needs in the workplace that are related to belonging, trust and empowerment. They want to feel valued, cared for and acknowledged.

They want to feel that their contribution is worthwhile. Factors relating to levels of flexibility, autonomy and choice in the workplace come into play here, also issues of identity and territory and the process of participating in workplace design.

*"They're saying yes, we pay you a salary, but we also want you to be happy here."*

*"In a big office like this the hardest part is to figure out what I'm allowed, and how to be noticed. Huge deal..."*

# Workplace Wellbeing Model



## Aligning Needs

The model proposes that for wellbeing in the workplace to be optimised, organisational purpose has to be geared towards meeting both the functional and psychological needs of the individual on an equal basis.

Our research showed that individuals naturally put more emphasis on their own needs rather than those of the organisation. But there is an interrelationship between the two: just as an organisation benefits through higher productivity if its staff feel happy, enabled and valued, so employees also understand that the needs of the organisation have to be met for the business to succeed.

Needs in each organisation are constructed, not a given. They mirror the organisation's resources and purpose, and vary accordingly. Employees have different expectations for aspects of the workplace depending on sector, in terms of workspace, pay, wellbeing and social value of work.

## Four Variants

The research presents four versions of the model: a Full Alignment model in which the organisational purpose is fully aligned with both the individual's functional and psychological needs; two Partial Alignment versions in which the organisational purpose is aligned with either the functional or psychological needs of the individual, but not both; and a Non-Alignment Model in which organisational purpose is aligned to neither the functional nor psychological needs of the individual.

It is proposed that the ideal state of wellbeing in the workplace is when the organisation's needs and individual needs are aligned, both functionally and psychologically. The organisation's purpose is reflected in the way employees work (functional) and the way they are treated (psychological).

This state of equilibrium is rare and hard to achieve, although the research team identified examples in the field. In this scenario, the organisation benefits directly from its investment in the

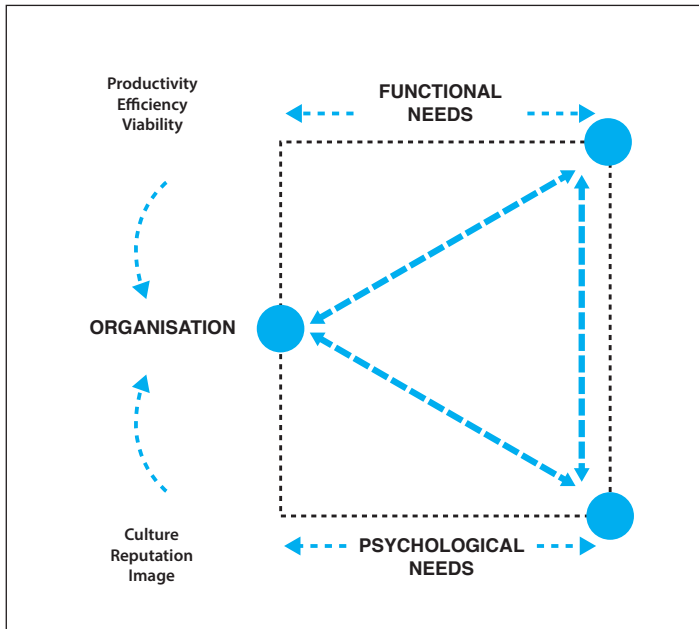
workplace and in people's wellbeing because the psychological contract ensures that people will work harder, have more commitment, be more innovative, and so on.

More often, the alignment is incomplete or partial in one way or another. In the worst cases, there is a complete non-alignment, resulting in a demotivated workforce adrift in a disorganised workplace.



# Model

## Full Alignment



In this scenario, there is total alignment between organisational purpose and the functional and psychological needs of the individual. All elements of the model are in harmony.

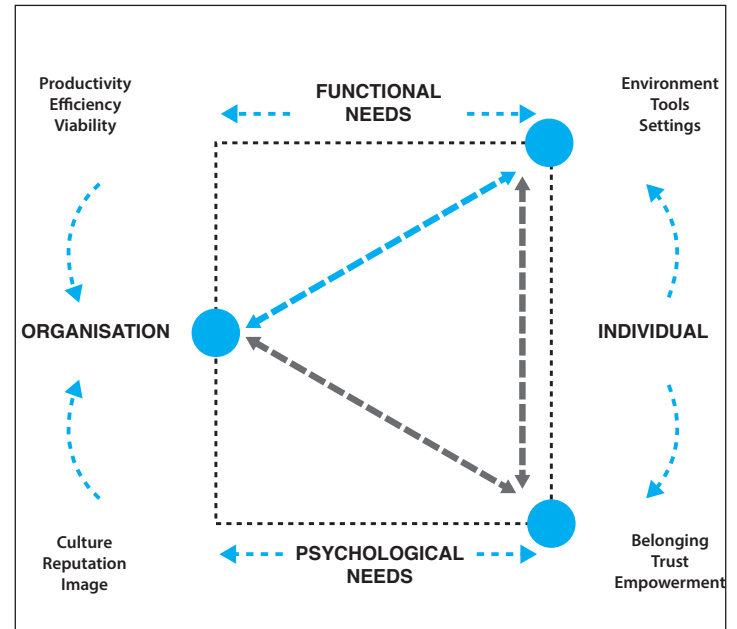
Functional needs of the individual are met by providing an environment with the right conditions for work that reflect the mission and values of the company – for example, if the organisation has strong sustainability credentials then the building's eco-friendly energy and lighting systems live up to those values.

Tools are appropriate for the work undertaken – for example, if the organisation is a tech leader then the IT systems are state of the art. A variety of settings offer choice and autonomy for different work and social activities, as well as popular social amenities, for example bike stands, showers, urban gardens or green external views.

*"I saw the building going up and I thought I'd love to work there."*

Psychological needs of the individual are met by policies that promote belonging, trust and empowerment – for example, training opportunities are open to include permanent, temporary and contracted staff; comprehensive change management processes accompany any relocation; there are forums for feedback and consultation on design; employees are protected from unpaid overtime; the conflicting priorities of work and life are carefully balanced; and there are compensations when things don't work or go wrong – for example, ice creams handed out to staff when the building gets very hot.

## Partial Alignment: Type A



In this scenario, there is partial alignment between the organisation's purpose and the needs of the individual, resulting in a fracture in workplace wellbeing. Functional needs are met in terms of providing the right physical work environment, tools and settings to match the organisation's purpose.

*"We have a company-wide policy for flexible hours, so I said to my pregnant friend 'why don't you work from home?' 'My boss doesn't allow it.'"*

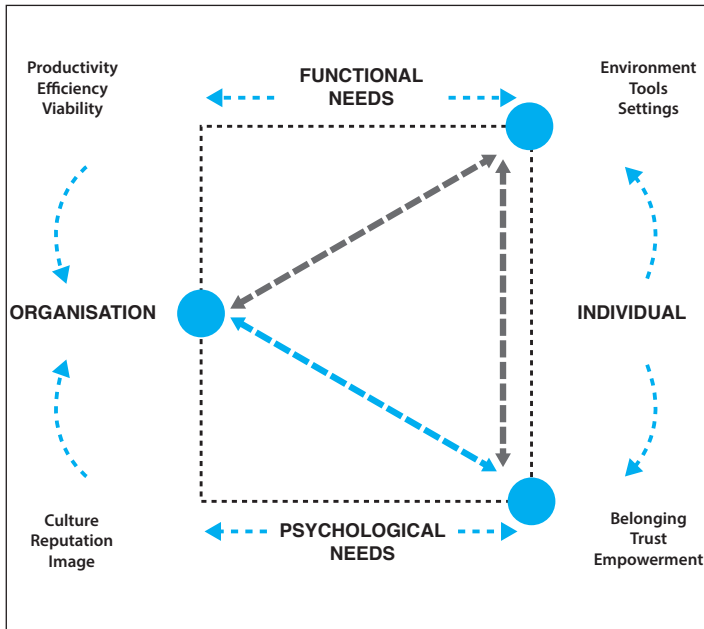
However the psychological contract with employees is weak – staff members do not feel trusted, empowered or understood and they have no real sense of belonging, indicating that their underlying psychological needs have not been considered. Staff complaining about a failure to offer flexi-time or homeworking to all on an equal basis, even though the office itself is well designed, is a sign of a wellbeing deficit as a result of this partial alignment.

This scenario often occurs after an organisation has invested in the design of a new workplace without having taken their workforce through a change management process, allowed staff some level of participation in the decision-making for the new space, or given employees freedom to use new environments. Organisational imperatives have trumped private individual ones.

*"The whole building does Dress-Down Friday, except this floor, which is Dress-Down-Last-Friday-Of-The-Month. That's probably the biggest gripe on the floor."*

# Model

## Partial Alignment: Type B Non-Alignment



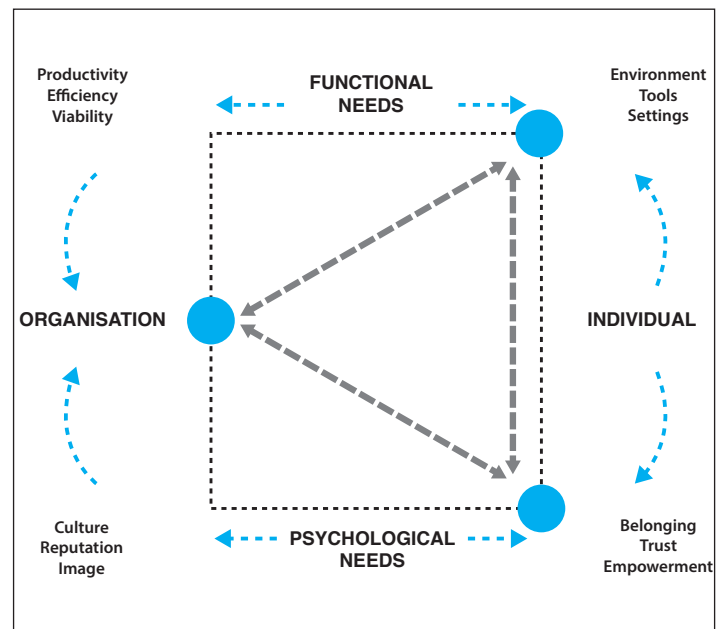
In this scenario, there is also a partial alignment between the organisation's purpose and the needs of the individual. But the type of fracture in workplace wellbeing is different from Type A.

The psychological contract with employees is strong – staff members feel trusted, empowered and understood. They have a strong sense of belonging based on a commitment and attraction to the organisation's mission and values. Their psychological needs are met.

However their functional needs are unmet. The environmental conditions might not be appropriate given what the organisation is trying to do – for example, a healthcare company offering a sterile space with no natural light; or the tools and systems are inadequate – a tech company with malfunctioning IT systems; or there is insufficient choice or variety of settings.

*"Despite hyper-awareness, we're still at our desks."*

A vibrant sense of identity with the organisation's mission is therefore undermined by a workplace that is not fit for purpose. This scenario can occur when an organisation has adopted a new workspace culture but not adapted its workplace functionally to reflect new ways of working, or when the protocols associated with space and tools are too heavy-handed and inflexible, or when plans for workspace redesign are constantly delayed.



In this scenario, there is a complete non-alignment between organisational purpose and both the functional and psychological needs of the individual. All elements of the model are out of synch with each other.

Functional needs of the individual are not met. The organisation is not providing the right environment, tools or settings to get the work done effectively. Psychological needs of the individual are not met either. Employees do not feel they belong. They feel disempowered, mistrusted and misunderstood.

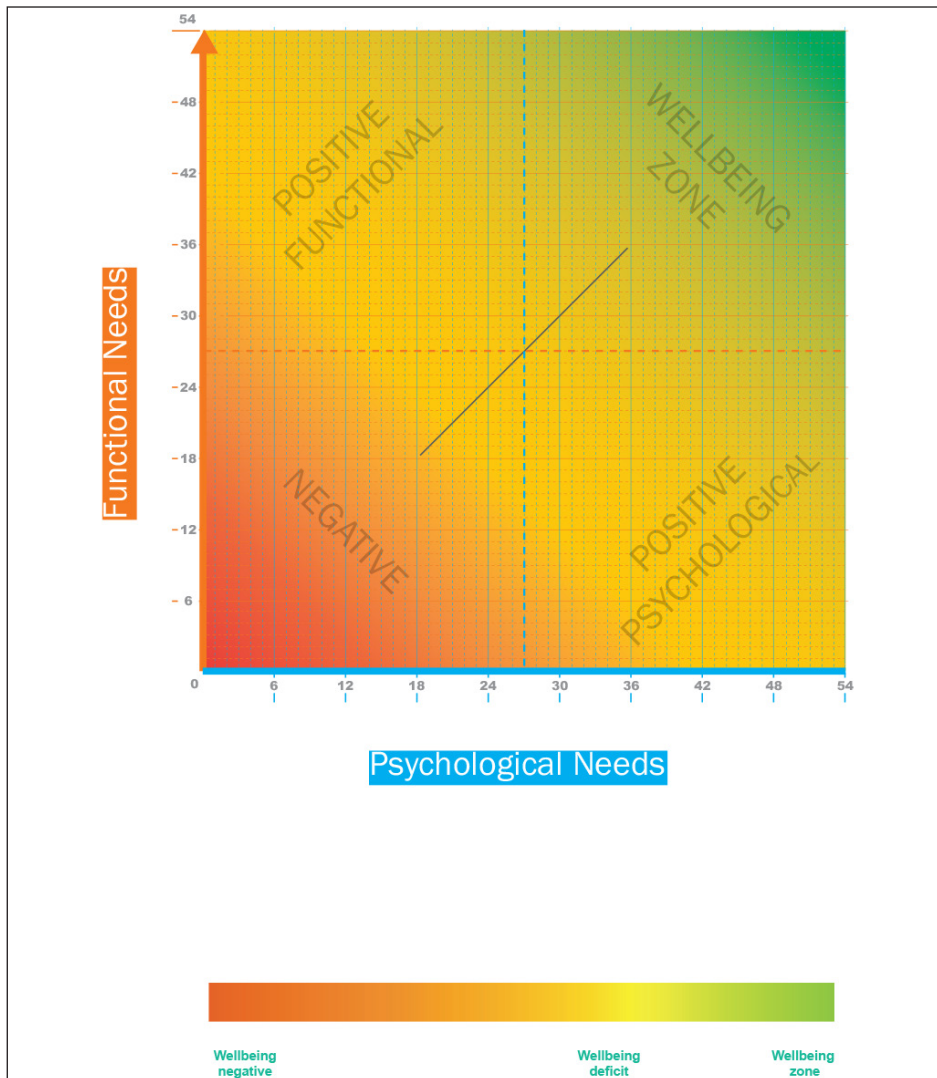
*"...If you don't feel in control, you complain more..."*

This scenario can occur when an organisation is physically stretched – the office is full beyond capacity but there is no budget for improvements and no planned investment. At the same time, there is a failure to compensate for physical workplace shortcomings by meeting psychological needs.

Functional discomfort is therefore matched by psychological discomfort, for example people feeling marginalised, undervalued and unprotected from a culture of unpaid overtime.

In this scenario, employees can feel the organisation is not practising what it preaches. The organisation's purpose is broken by a combination of a malfunctioning workplace and a weakened psychological contract with staff members.

# Evaluation Toolkit



Having established a workplace wellbeing conceptual model at the end of the first year of the project, the research team then moved into phase 3 of the study in year two. The model became the basis for the development of a practical, on-site evaluation tool for organisations to use themselves.

The tool evaluates how well a company already meets employee needs and identifies where their employees see the biggest opportunities for improvement. During development, the evaluation toolkit was tested at some London workplaces where researchers tried different methods of data collection – from running a range of participatory workshops to drop-in sessions and

paper-based questionnaires.

The tool works by asking employees to complete a series of questions about how their psychological and functional needs are supported in the workplace. By answering each of the questions in turn, participants are able to generate a score for how wellbeing needs are being met in each of the two categories.

Participants are then able to plot these scores on a Workplace Wellbeing Matrix, creating an overall picture of how well the organisation is performing. Using this information, employees can then generate ideas for making improvements in the workplace that will help support their wellbeing.

## Workplace Wellbeing Matrix

The matrix used in the toolkit evaluates employee wellbeing and generates an overall organisational wellbeing 'score'. The matrix is used to plot employees' answers to a questionnaire along two axes: functional needs (such as tools, settings and environments) and psychological needs (such as empowerment, belonging and trust).

## Wellbeing Zone

Employees whose scores sit in the green area feel that their functional and psychological needs are being met, creating a well-rounded workplace environment.

## Wellbeing Deficit

Where employees' scores sit in the yellow area, there is a wellbeing deficit. If these scores fall towards the top left, then the deficit is with their psychological needs. In this case they feel that while their functional needs are being met in terms of the physical workplace, tools and settings, their psychological needs are not being sufficiently addressed. This results in generally lower levels of wellbeing.

Employees whose scores sit towards the bottom right of the yellow area feel that there is a deficit in their functional needs. So while their psychological needs are well met, with staff members generally feeling trusted, empowered and understood, functional needs are not met, with improvement required.

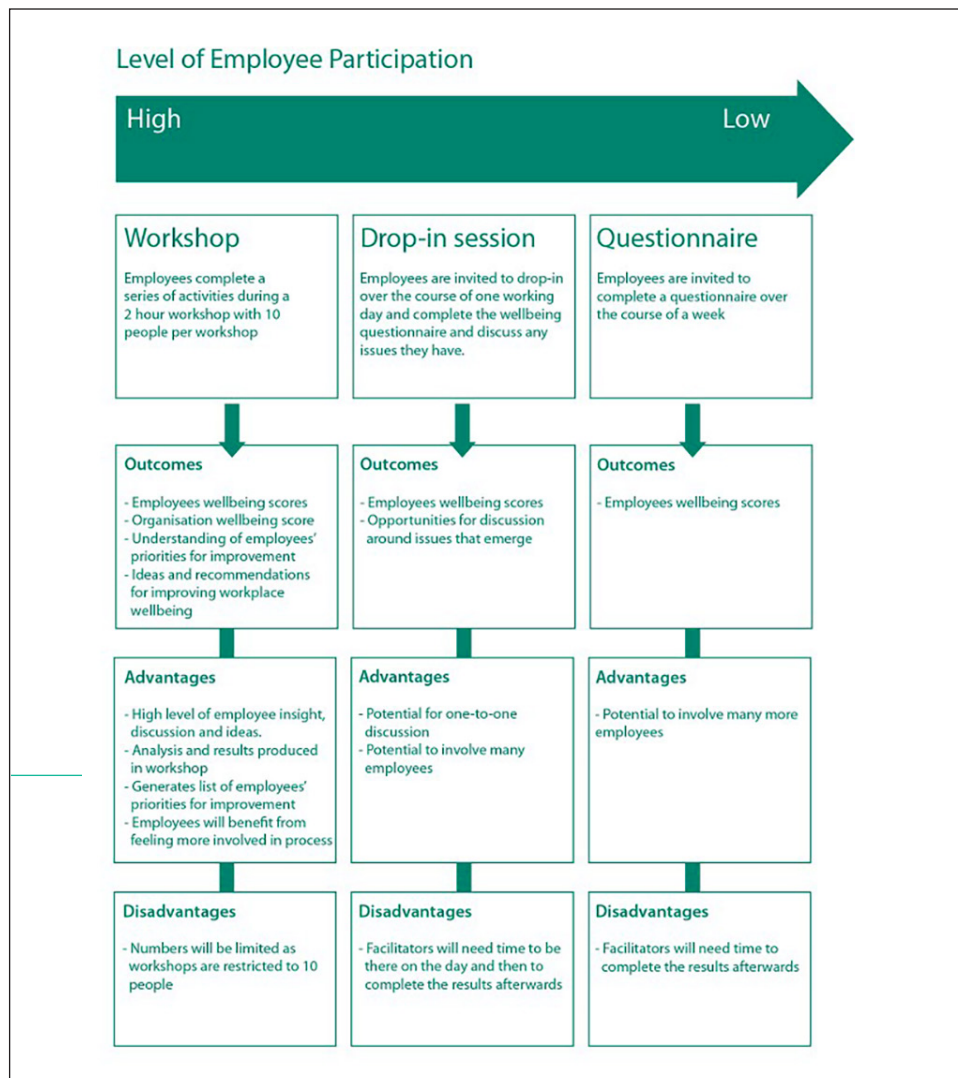
## Wellbeing Negative

Employee scores that sit in the orange area feel that neither their functional nor their psychological needs are currently being met. Needs may be in conflict with each other or sidelined by other organisational priorities; either way, there is a significant need for improvement.





# Using the Toolkit



- to be honest and critical)
- Particular departments or roles
- Anyone with a special interest such as HR/Facilities

## How do you Want to Engage People?

- Ensure managers support the project and allow employees time to take part
- Communicate the project, its aims and how people can get involved using posters, social media, e-mail
- Make it easy for people to take part, for example, situate the drop-in venue beside the coffee facilities

## How will you Give Feedback to Employees?

- It is vital to give feedback to employees, for example, letting them know the organisation's wellbeing score and what steps are being taken as a result

## Taking it Forward

The evaluation toolkit emphasises the need for the results of the data analysis to be used and communicated. Offering the chance to provide feedback but without any further action can have a negative impact on employees' levels of engagement with the organisation.

## Choose a Method to Use

This toolkit was devised as activities that can be undertaken using three different methods depending on what suits the organisation best. Companies can choose one method or a mix of all three. Each method offers a different level at which employees can participate – from a workshop requiring two hours of an employee's working day – to a questionnaire requiring just a few minutes of their time completed at their leisure. At the interim scale is a drop-in session, which allows them to complete the questionnaire and raise issues with the facilitator.

## Choose a Scale

The toolkit presents a practical

framework that advises companies to be specific about what they want to address. Do they, for example, want employees to answer the survey questions with reference to their own office floor, the entire building or the way they work in the whole organisation more generally? The results for each of these scales may be very different. The toolkit offers helpful advice on setting up the participatory activity within the organisation:

## Who do you Want to Involve?

- Particular teams, or groups of employees (for example, it may be preferable not to have both junior and senior staff attend the workshop at the same time as people may not feel they are able

For all three methods, it is important that the results should be summarised and communicated to all employees, along with information about the next steps that will be taken. These could include passing the analysis on to internal HR/facilities management for action, giving it to a design team as part of a briefing process, or making it part of a higher level change management process.

If there are simple changes that can be made in the shorter term, these should be identified at this stage. Where participants have identified a need that can simply not be met due to conflicts with organisational need, communicating the reason for this can help to mitigate the negative effect on wellbeing.

# Real-life Examples

The Workplace & Wellbeing evaluation toolkit includes a variety of real life examples of situations where a deficit in wellbeing has been addressed. Recognising that it is not always possible - due to a conflict with the needs of the organisation - to give employees exactly what they want, they can be divided into three groups. These can be described as concessions, compensations and interventions.

## Concessions

Concessions mean giving employees what they are asking for, whenever possible.

**Functional Problem:** No consistent way to book a meeting room, meaning that it is a time-consuming and frustrating process.

**Concession:** A new, coherent booking system is introduced that is equally accessible to all employees.

**Psychological Problem:** Difficulty accessing training and development opportunities.

**Concession:** Each employee is given a personal training budget, allowing them to make more flexible decisions about what they need to access and when they can do it. A mentoring programme is also introduced, giving junior staff regular contact with more senior members of the company and making sure that senior managers are known to everyone

## Compensations

Compensations recognise that there are limits to what can be achieved and requires the organisation to acknowledge when employees are being asked to make a sacrifice or to accept less than ideal working conditions. Simply recognising a hardship and, where possible, offering a mitigating benefit can help to counteract potential negative effects on wellbeing.

**Functional Problem:** The office gets very hot on a few summer days, with limited opportunity for temperature control.

**Compensation:** Employees are given ice cream on these very hot days – this makes people feel that the issue has been acknowledged.

**Psychological Problem:** Frequent space changes mean that employees have been moved several times and feel like they don't know what to expect next.

**Compensation:** A weekly bulletin is set up to help make strategic decisions more transparent and shared facilities are upgraded to mitigate the impacts of moving.

## Interventions

Interventions mean giving employees the opportunity to take ownership of their environment and make improvements to their own local workspace.

**Functional Problem:** A breakout space is rarely used outside of lunch hours, as it doesn't really provide a useful working environment.

**Intervention:** Employees are asked what would make the space more useful to them, and then given the opportunity to rearrange it and install the pin-boards that they had suggested, creating more of a cafe/pin-up style meeting space.

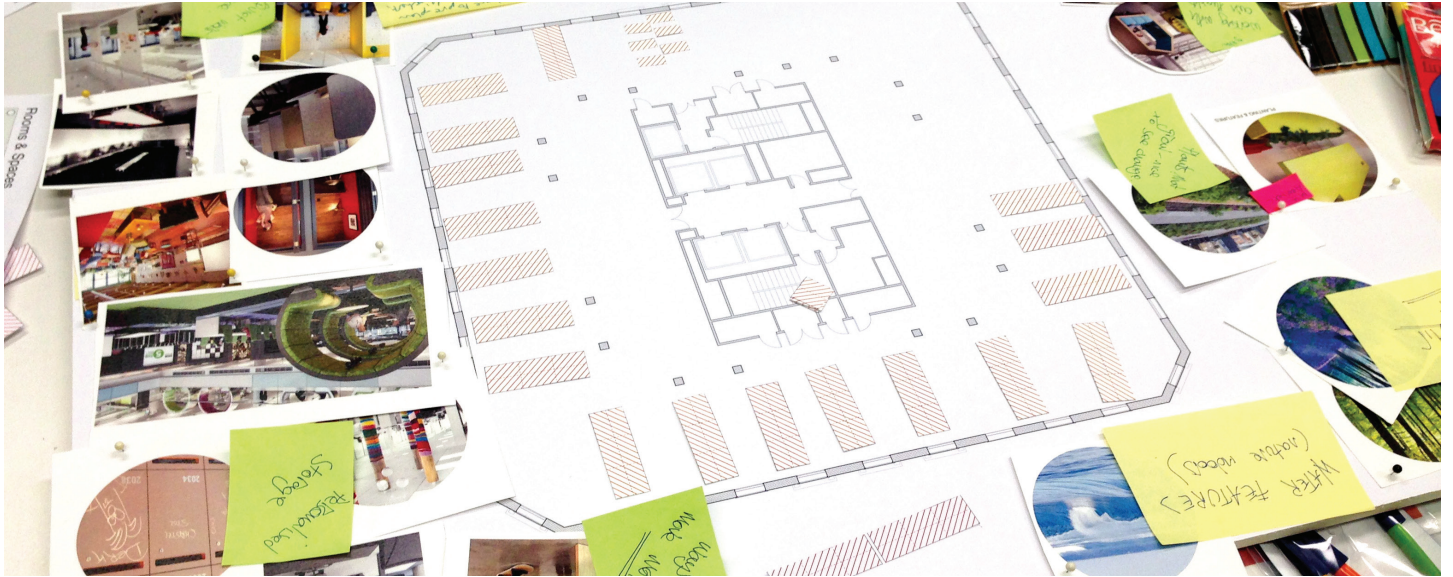
**Psychological Problem:** One team feel the work they are doing is not understood or appreciated by other people in the office.

**Intervention:** The group – along with their line manager – organise a small exhibition of their work to explain what they do and demonstrate the value of it.





# Conclusions



The Workplace & Wellbeing study revealed that:

Organisations should ensure that both the functional and psychological needs of the individual are met in order to meet their purpose. Failure to create a full alignment between individual and organisational needs will have some negative effects on employee wellbeing.

Where full alignment cannot be achieved, a system of 'concessions, compensations and interventions' should be in place to moderate the effects on wellbeing.

Concessions mean giving employees what they are asking for, whenever possible. Compensations means acknowledging when employees are asked to make a sacrifice or accept poor working conditions. Interventions mean giving employees the opportunity to take ownership and make improvements to their local work environment.

Employees appreciate being given the opportunity to exercise some control over the change process that is now a constant part of working life through participation in workplace design. But the invitation to participate is more important than the level of participation on offer.

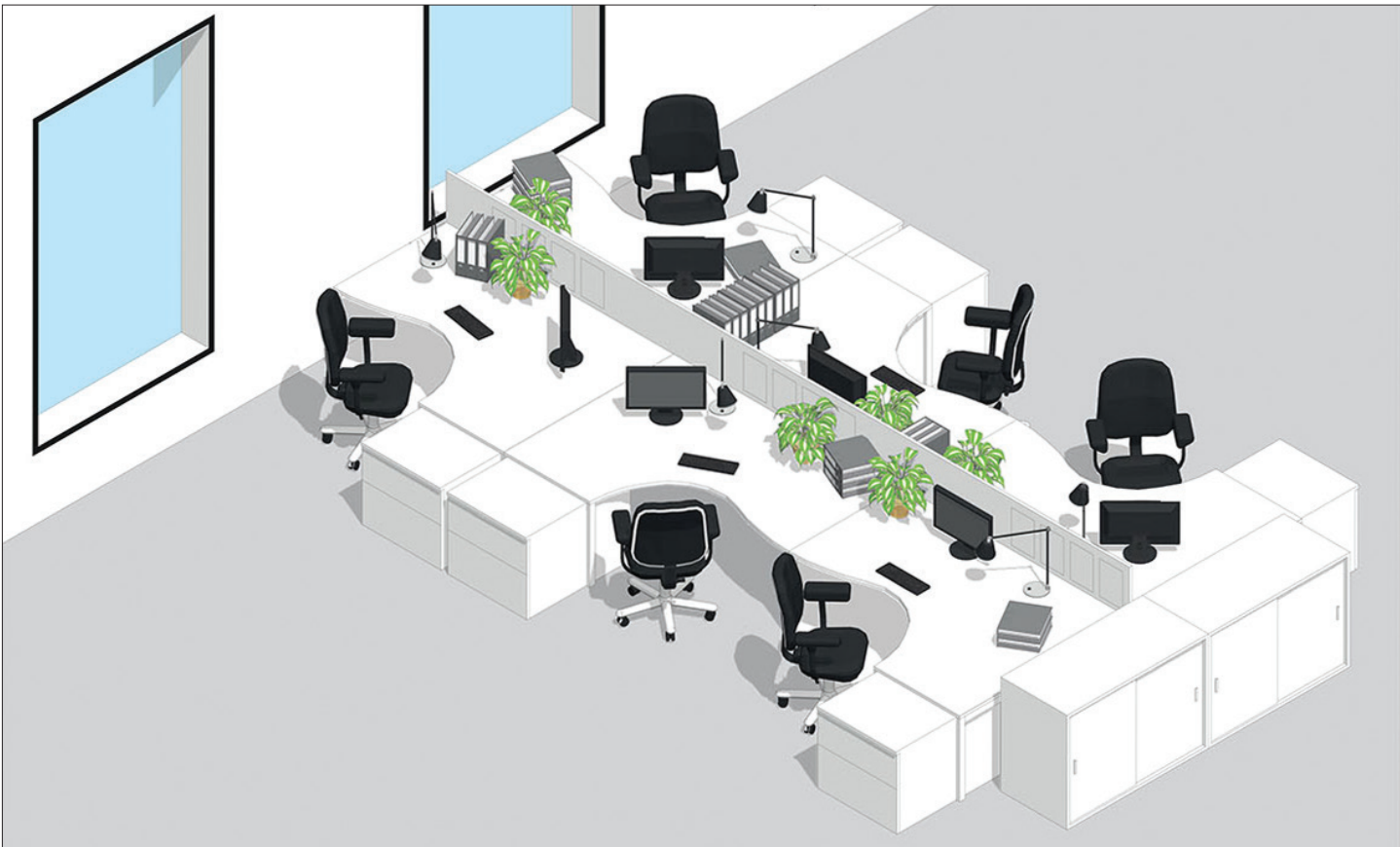
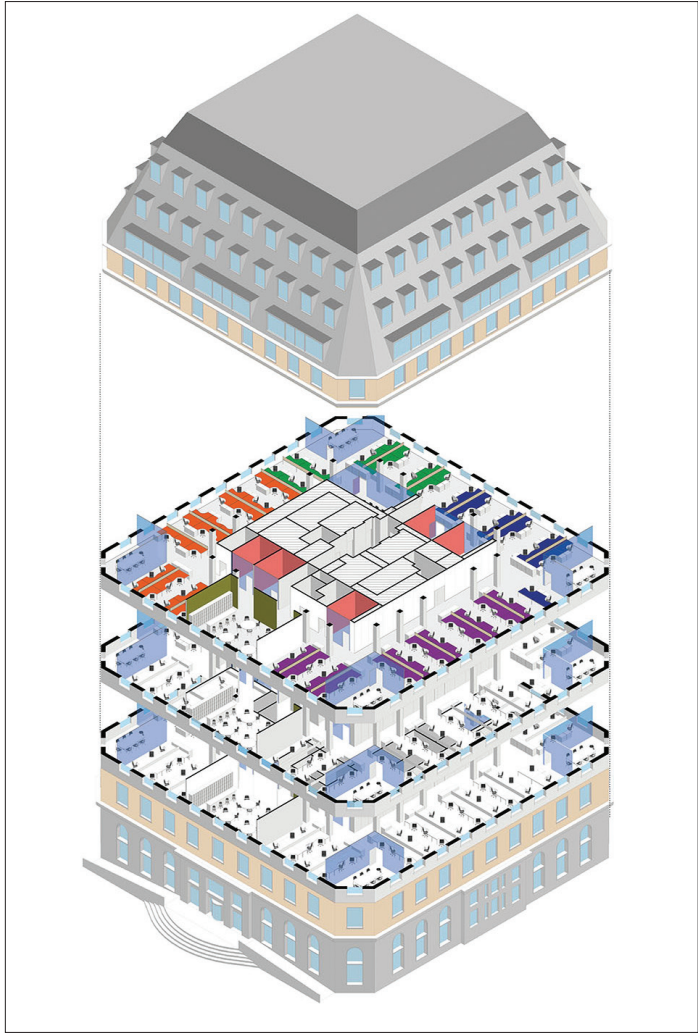
Those teams that were engaged in the Participatory Design Process at any level (whether high or low participation) registered a higher increase in their mental wellbeing than the team not invited to participate. Staff-designed interventions were welcomed by all, including those who did not participate in the process.

Participants in the Participatory Design Project chose to create and test solutions that gave them greater control and ownership of their workspace. They weren't asking for things to be done for them – for example they already had office plants but wished to grow and care for their own, and they already had blinds but wished to be able to retract them. Also, the ideas that were implemented (new plants, more light and de-cluttered space) benefited everyone equally as they were not related to specific job function or work patterns.

Although there was enthusiasm for the idea of participation and appreciation of being included, people found it difficult to find the time to participate. Therefore, the workplace wellbeing evaluation toolkit that has been developed and tested as a major output of the project offers three different forms of engagement depending on time commitment: in-depth workshops requiring at least a couple of hours of the working day are balanced against informal drop-in sessions and short questionnaires.

The practical framework also promotes the need for organisations to take things forward through co-created solutions. Offering employees the chance to provide feedback on their needs, but without any further action, can have a negative impact on people's wellbeing.

The development of the evaluation toolkit provides a foundation for further research work by the RCA/Gensler-led consortium. Our intention is that 'live' on-site experiments inside organisations will explore how functional design changes with different spatial, material and technical interventions can affect psychological wellbeing.



Scales of workplace interaction in phase 2 of project



# References

- Alker, J.** (2014) Office Buildings are Key to Workers' Health, Wellbeing and Productivity. The Guardian [online]. <http://www.theguardian.com/sustainable-business/2014/sep/24/office-building-design-worker-health-wellbeing-productivity> [Accessed 4 March 2015]
- Alviar, K.** (2014) Feeling Stressed with a Lack of Creative Thinking? Get some tips from Google's greener offices. [online] <http://qmsaltd.com/feeling-stressed-with-a-lack-of-creative-thinking-get-some-tips-from-googles-greener-offices/> [Accessed 4 March 2015]
- Balch, O.** (2014) How to Create Happy and Sustainable Workplaces? ~ open thread The Guardian [online] <http://www.theguardian.com/sustainable-business/2014/oct/22/happy-sustainable-workplace-open-thread> [Accessed 4 March 2015]
- Boyle, D. & Harris, M.** (2009) The Challenge of Co-production. London, New Economics Foundation
- Breen, M.** (2002) Malcolm Gladwell Tips off Designers at Steelcase: How companies are discovering that office layouts that encourage kibitzing with fellow employees can actually enhance productivity. *Canadian Interiors*, 39(1) p.60
- Chan, T.** (2014) Spatial Design and Collaboration: Lessons from Stanford's d.school and TED. [online] Available at: <http://www.marsdd.com/systems-change/mars-solutions-lab/news/spatial-design-collaboration-stanfords-d-school-ted/> [Accessed 4 March 2015]
- Csikszentmihalyi, M.** (2002). Flow: The Classic work on how to achieve happiness. London: Rider Books
- The Guardian 500.** (2014) Happiness at work survey report for The Guardian 500. The Guardian [pdf] <https://app.happinessatworksurvey.com/assets/guardian-500-report.pdf> [Accessed 4 March 2015]
- Davis, M.** (2013) Hurried and Alone: Time and technology in the consumer society. In Coote, A. & Franklin, J. Time on our Side: Why we all need a shorter working week. nef, London. [http://b3cdn.net/nefoundation/fb306fbab76f46ca\\_1im6i20sk.pdf](http://b3cdn.net/nefoundation/fb306fbab76f46ca_1im6i20sk.pdf) [Accessed 4 March 2015]
- Desmot, P. & Pohlmeier, A.** (2013) Positive Design: An introduction to design for subjective wellbeing, *International Journal of Design* Vol.7 No.3
- Dodge, R., Daly, A., Huyton, J., & Sanders, L.** (2012) The Challenge of Defining Wellbeing. *International Journal of Wellbeing*, 2(3), 222-235. [http://www.ernationaljournalofwellbeing.org/index.php/ijow/article/viewFile/89/238?origin=publication\\_detail](http://www.ernationaljournalofwellbeing.org/index.php/ijow/article/viewFile/89/238?origin=publication_detail) [Accessed 4 March 2015]
- Dorrestijn, S., & Verbeek, P. P.** (2013) Technology, Wellbeing, and Freedom: The legacy of utopian design. *International Journal of Design*, 7(3), pp.45-56
- Foster, F.** (2015) On You Marks... Get Set, Lunch! Stylist [online] <http://www.stylist.co.uk/life/reclaim-your-lunch-break-on-your-marks-get-set-lunch> [Accessed 4 March 2015]
- Gensler.** (2013) 2013 U.S. Workplace Survey – Key Findings. Gensler [pdf]. [http://www.gensler.com/uploads/document/337/file/2013\\_US\\_Workplace\\_Survey\\_07\\_15\\_2013.pdf](http://www.gensler.com/uploads/document/337/file/2013_US_Workplace_Survey_07_15_2013.pdf) [Accessed 4 March 2015]
- Greater London Authority, n.d.** Healthy Workplaces: How can we help? [online] [Accessed 04 March 2015]
- Happiness Works.** (2015) Happiness at Work Survey. [online]. <https://www.happinessatworksurvey.com/try?> [Accessed 11 March 2015]
- Hassenzahl, M., Eckoldt, K., Diefenbach, S., Laschke, M., Lenz, E., & Kim, J.** (2013) Designing Moments of Meaning and Pleasure. Experience design and happiness. *International Journal of Design*, 7(3), pp.21-31
- Haynes, B.** (2008) The Impact of Office Comfort on Productivity. *Journal of Facilities Management*, 6 (1). 37-51. Available at: <http://shura.shu.ac.uk/4593/> [Accessed 4 March 2015]
- Health@Work, n.d.** The Workplace Wellbeing Charter. [pdf] Available at: [http://www.wellbeingcharter.org.uk/media/PDF/WWC\\_Self\\_Assessment\\_Standards\\_A4\\_Booklet\\_Liverpool\\_2\\_WEB.PDF](http://www.wellbeingcharter.org.uk/media/PDF/WWC_Self_Assessment_Standards_A4_Booklet_Liverpool_2_WEB.PDF) [Accessed 4 March 2015]
- Jeffrey, K., Mahony, S., Michaelson, J. & Abdallah, S.** (2014) Well-being at work: A review of the literature. New Economics Foundation [pdf] <http://b3cdn.net/>
- Kinnarps.** (2015) Workplace and Lifespace Design for the Diverse Decade. Kinnarps
- Li, N.** (2013) Sleeping on the Job: Are working hours damaging health and performance? The Guardian [online] <http://www.theguardian.com/sustainable-business/sleeping-working-hours-damaging-health> [Accessed 4 March 2015]
- Luthans, F.** (2002) The Need for and Meaning of Positive Organizational Behaviour. *Journal of Organizational Behaviour* Vol.23 695-706. <http://onlinelibrary.wiley.com/doi/10.1002/job.165/epdf> [Accessed 4 March 2015]
- Killingsworth, M.** (2015) Track Your Happiness. Version 0.13.4 [Mobile application software] [Accessed 11 March 2015]



- Knight, C., & Haslam, S.** (2010) The Relative Merits of Lean, Enriched, and Empowered Offices: An experimental examination of the impact of workspace management strategies on well-being and productivity. *Journal of Experimental Psychology: Applied*, Vol 16(2), June 2010, pp.158-172
- MacKerron, G.** (2012) Mappiness. Version 1.1.5. [mobile application software]. [Accessed 11 March 2015]
- Marks, N.** (2014a) Guardian readers reveal what makes them happy at work. *The Guardian* [online] <http://www.theguardian.com/sustainable-business/happy-work-what-makes-you>
- Marks, N.** (2014b) Reclaim your Happiness at Work on the International Day of Happiness. *The Guardian* [online]. <http://www.theguardian.com/sustainable-business/reclaim-happiness-work-international-day-happiness> [Accessed 4 March 2015]
- Michaelson, J., Mahony, S., & Schifferes, J.** (2012) Measuring Wellbeing: a guide for practitioners [pdf]. New Economics Foundation. <http://www.neweconomics.org/publications/entry/measuring-well-being> [Accessed 11 March 2015]
- Myerson, J. & Privett, I.** (2014) *Life of Work*. Black Dog Publishing, London
- Nef Consulting.** (2015) Happiness at Work Survey [online]. <http://www.nef-consulting.co.uk/our-services/strategy-culture-change/well-being-at-work/happiness-at-work-survey/> [Accessed 11 March 2015]
- Oguz, S., Merad, S. & Snape, D.** (2013a) Measuring National Well-being - What matters most to Personal Well-being? Office for National Statistics [pdf]. [http://www.ons.gov.uk/ons/dcp171766\\_312125.pdf](http://www.ons.gov.uk/ons/dcp171766_312125.pdf) [Accessed 4 March 2015]
- Pangallo, A & Donaldson-Feilder, E.** (2010-11) The Business Case for Wellbeing and Engagement: Literature review', HEFCE
- Petermans, A. & Pohlmeier, A.** (2014) Design for Subjective Wellbeing in Interior Architecture. Proceedings of the 6th International Architectural Research Symposium, Finland 2014. <http://ojs.tsv.fi/index.php/atut/article/view/45378> [Accessed 4 March 2015]
- Piore, A.** (2014) Designing a Happier Workplace. *Discover* [online] <http://discovermagazine.com/2014/march/11-designing-a-happy-workplace> [Accessed 4 March 2015]
- Ramirez, R.** (2009). A 'Meditation' on Meaningful Participation. *The Journal of Community Informatics*. [online] <http://ci-journal.net/index.php/ciej/article/view/390/424> [Accessed 10 September 2014]
- Regus (2009)** Stress Out? A study of trends in: [http://www.regus.co.uk/images/Stress%20full%20report\\_FINAL\\_Designed\\_tcm294-21560.pdf](http://www.regus.co.uk/images/Stress%20full%20report_FINAL_Designed_tcm294-21560.pdf) [Accessed 30 March 2016]
- StudioTilt** (2014), *Codesigning Space*. Artifact, London
- Sundstrom, E. & Sundstrom, M.** (1986) *Work Places: The psychology of the physical environment in offices and Factories*. Cambridge University Press
- Sutton, J.** (2012) Interview: Taking Control of your Space. *The Psychologist* Vol.25 (pp.830-833). <https://thepsychologist.bps.org.uk/volume-25/edition-11/interview-taking-control-your-space> [Accessed 4 March 2015]
- Thaler, R. H. & Sunstein, C. R.** (2008) *Nudge: Improving decisions about health, wealth, and happiness*. New Haven, CT: Yale University Press
- Thompson, S. & Marks, N.** (2008) Measuring Well-being in Policy. New Economics Foundation [pdf] [http://b.3cdn.net/dation/575659b4f333001669\\_ohm6iioqp.pdf](http://b.3cdn.net/dation/575659b4f333001669_ohm6iioqp.pdf) [Accessed 04 March 2015]
- Thompson, S., Aked, J., Marks, N. & Cordon, C.** (2008) Five Ways to Wellbeing. New Economics Foundation [pdf] [http://b.3cdn.net/dation/8984c5089d5c2285ee\\_t4m6bhqq5.pdf](http://b.3cdn.net/dation/8984c5089d5c2285ee_t4m6bhqq5.pdf) [Accessed 4 March 2015]
- Verbeek, P. P.** (2013). Resistance is Futile: Toward a non-modern democratization of technology. *Techné: Research in Philosophy and Technology*, 17(1), pp.72-92
- Vischer, J.** (2008) Towards an Environmental Psychology of Workspace: How People are affected by environments for work. *Architectural Science Review* Volume 51.2, pp 97-108. <http://www.seedengr.com/An%20Environmental%20PsychologyOf%20Workspace.pdf> [Accessed 4 March 2015]
- Vizard, T. & Rusgys, T.** (2014) Personal Well-being Survey User Guide: 2013-2014 Dataset. [pdf] Office of National Statistics. <http://www.ons.gov.uk/ons/guide-method/method-quality/specific/social-and-welfare-methodology/subjective-wellbeing-survey-user-guide/personal-well-being-survey-user-guide--2013-2014-dataset.pdf> [Accessed 11 March 2015]
- Warwick Medical School** (2015) Warwick Edinburgh Mental <http://www2.warwick.ac.uk/fac/med/research/platform/wemwbs/> [Accessed 30 March 2016]
- UK National Work-Stress Network** (2012) <http://www.workstress.net>

# Acknowledgements

## Research Team

The research team at the Helen Hamlyn Centre for Design, Royal College of Art and Gensler would like to thank the many organisations and individuals who have contributed to this report: the industry consortium partners Bupa, Kinnarps, Milliken and RBS; participants from the four organisations partnered in the study; Boskke, for its technical advice and contributions to the design intervention; the facilities and maintenance team at Bupa House in supporting the installation and facilitation of chosen design interventions; Claire Baker and her colleagues at Bupa for helping to coordinate phase two of the project with participants; and Catherine Greene, Dr Alma Erlich, Dr Jo-Anne Bichard and Margaret Durkan at the Royal College of Art for their help in formulating the results.

## The Helen Hamlyn Centre for Design

The Royal College of Art is one of the world's most influential universities of design. It is wholly postgraduate and has a proud history of national and international collaboration with industry. The Helen Hamlyn Centre for Design provides an interdisciplinary focus for inclusive and sustainable design research within the RCA. Since their inception in 1991, the centre's research programmes have built an impressive track record of partnership with a wide range of organisations worldwide. The centre has three research labs: Work & City, Healthcare, and Age & Ability.

## Gensler

As architects, designers, planners and consultants, Gensler partners with its clients on some 3,000 projects every year. With more than 4,000 professionals networked across 46 locations, Gensler combines localized expertise with global perspective wherever new opportunities arise. Its work reflects an enduring commitment to sustainability and the belief that design is one of the most powerful strategic tools for securing lasting competitive advantage. Its London office has a particular consulting expertise in design for workplace and health and wellbeing centres.

## RCA:

Jeremy Myerson  
Catherine Greene  
Imogen Privett  
Gail Ramster  
Andrew Thomson

## Gensler:

Philip Tidd  
Ankita Dwivedi  
Namrata Krishna  
Zsuzsa Nagy



Royal College of Art  
**THE HELEN HAMLYN  
CENTRE FOR DESIGN**

# Gensler





