Measuring the impact of health and wellbeing in the workplace

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WORKPLACE HEALTH & WELLBEING

Subtitle
Health and Wellbeing in the Workplace

**1 in 4** of UK employees reported having a physical health condition.

**1 in 5** of those employees with physical health conditions, also reported having a mental health condition.

**42%** of employees with a health condition felt their condition affected their work ‘a great deal’ or ‘to some extent’.

Employees with mental and physical health comorbidity were much more likely to see their health as affecting work.

**29%** were affected ‘a great deal’.

Source: Public Health England
Health and Wellbeing in the Workplace

131m
working days are lost to sickness absence every year

4.4 days are lost on average for each worker due to sickness absence

Main causes for lost working days in 2013

<table>
<thead>
<tr>
<th>Cause</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Musculoskeletal conditions</td>
<td>31m</td>
</tr>
<tr>
<td>Minor illnesses (coughs and colds)</td>
<td>27m</td>
</tr>
<tr>
<td>Stress, anxiety or depression</td>
<td>15m</td>
</tr>
</tbody>
</table>

Employers spend £9bn each year on sick pay and associated costs

Costs of presenteeism £30bn annually

Source: Public Health England
Health and Wellbeing in the Workplace

1. ASSESSMENT
   - INDIVIDUAL (e.g., demographics, health risks, use of services)
   - ORGANIZATIONAL (e.g., current practices, work environment, infrastructure)
   - COMMUNITY (e.g., transportation, food and retail, parks and recreation)

2. PLANNING & MANAGEMENT
   - LEADERSHIP SUPPORT (e.g., role models and champions)
   - MANAGEMENT (e.g., workplace health coordinator, committee)
   - WORKPLACE HEALTH IMPROVEMENT PLAN (e.g., goals and strategies)
   - DEDICATED RESOURCES (e.g., costs, partners/vendors, staffing)
   - COMMUNICATIONS (e.g., marketing, messages, systems)

3. IMPLEMENTATION
   - PROGRAMS (e.g., education and counseling)
   - POLICIES (e.g., organizational rules)
   - BENEFITS (e.g., insurance, incentives)
   - ENVIRONMENTAL SUPPORT (e.g., access points, opportunities, physical/social)

4. EVALUATION
   - WORKER PRODUCTIVITY (e.g., absenteeism, presenteeism)
   - HEALTHCARE COSTS (e.g., quality of care, performance standards)
   - IMPROVED HEALTH OUTCOMES (e.g., reduced disease and disability)
   - ORGANIZATIONAL CHANGE, “CULTURE OF HEALTH” (e.g., morale, recruitment/retention, alignment of health and business objectives)
Built Environments

Frameworks
PROWELL©
: Workplace Health & Wellbeing Analytics

- Open source analytics for workplace health+ wellbeing performance assessment
- Workplace performance metrics for health & wellbeing beyond the conventional metrics of cost per SF
- Collective efforts with industry leaders in architecture, design, facility management, workplace strategy and academic research to move forward evidence-based practice
- Complementary assessment tool to existing health & wellness standards
- Funded by the ASID
1. Exterior Active Design
2. Active Transportation
3. Interior Active Design
4. Policy & Benefit Support

1. Ergonomics
2. Auditory Comfort
3. Visual Comfort
4. Thermal Comfort
5. Olfactory Comfort
6. Post Occupancy Evaluation

1. Healthy Food & Hydration
2. Health-Conscious Habits & Behaviors
3. Healthy Food Amenities

1. Indoor Air Quality
2. Water Quality
3. Chemical Control
4. Cleanliness & Maintenance

1. Types Of Spaces
2. Flexibility & Flow Of Spaces
3. Technology & Equipment Accessibility
4. Cognitive Ergonomics

1. Biophilic Design
2. Art & Design Elements
3. Personalization & Control of Spaces

1. Social Connectivity
   a. Social Spaces
   b. Visual Connectivity
   c. Core Interaction Networks
   d. Cross-Pollination Space Planning

YOUNG LEE, Ph.D. LEED, WELL, FITWELL, PROWELL
### WELLBEING DOMAINS

<table>
<thead>
<tr>
<th>PHYSICAL</th>
<th>MENTAL</th>
<th>SOCIAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MASLOW’S HIERARCHY OF NEEDS</strong></td>
<td><strong>WELLBEING DOMAINS</strong></td>
<td><strong>IMPACT OF WELLBEING</strong></td>
</tr>
<tr>
<td>• Biological &amp; Physiological Needs: air, water, food, shelter, sleep &amp; rest, clothing, reproduction</td>
<td>• Security Needs</td>
<td>• Belongingness &amp; Love Needs: intimacy, friendship, family, sense of connection</td>
</tr>
<tr>
<td>• Safety Needs: personal security, employment, resources, health, property</td>
<td>• Esteem Needs: dignity, achievement, mastery, independency; respect, status, recognition, prestige</td>
<td></td>
</tr>
<tr>
<td>• CGNITVE Needs: Knowledge, curiosity, exploration, need for meaning &amp; predictability</td>
<td>• Cognitive Needs</td>
<td></td>
</tr>
<tr>
<td>• Aesthetic Needs: Appreciation &amp; search for beauty, balance, form</td>
<td>• Self-actualization Needs: Realizing personal potential, self-fulfillment, personal growth &amp; peak experiences</td>
<td></td>
</tr>
<tr>
<td>• Transcendence Needs: Pursuing values beyond personal self, religious faith, pursuit of science, service to others</td>
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</tbody>
</table>

### LEE’S PROWELL MODEL

<table>
<thead>
<tr>
<th>PHYSICAL</th>
<th>MENTAL</th>
<th>SOCIAL</th>
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</thead>
<tbody>
<tr>
<td>• <strong>Physical Fitness</strong>: Exterior active design, active transportation, interior active design, policy &amp; benefit support</td>
<td>• <strong>Cognitive Wellbeing</strong>: Types of spaces, flexibility &amp; flow of spaces, technology &amp; equipment accessibility, acoustical privacy</td>
<td>• <strong>Social Wellbeing</strong>: Social connectivity</td>
</tr>
<tr>
<td>• Physical Comfort: Ergonomics, visual comfort, thermal comfort, olfactory comfort, POE</td>
<td>• Emotional Wellbeing: Biophilic design, art &amp; design elements for human delight, personalization &amp; control of spaces</td>
<td></td>
</tr>
<tr>
<td>• Environmental Wellbeing: Healthy food &amp; hydration, health-conscious habits &amp; behaviors, healthy food amenities</td>
<td></td>
<td>• Healthy organizational culture: Engagement &amp; morale, increased participation in organizational pursuits, retention, turnover, job satisfaction, customer satisfaction</td>
</tr>
<tr>
<td>• Indoor air quality, water quality, chemical control, cleanliness &amp; maintenance</td>
<td></td>
<td>• Enhanced company reputation: External image of company, recruitment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Higher employee productivity/ performance: Sickness absenteeism, presenteeism, overtime to cover absent employees, numbers of innovative products, process, marketing strategies, business methods, intellectual properties, focus/ attention/ memory retention, physical fatigue, mental stress</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Financial savings: Cost of absenteeism, presenteeism, to cover absent employees, turnover, healthcare premium, innovative items produced</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Improved individual health &amp; safety: Worker compensation claims, visits to Employee Assistance Program for mental health, ER visits, Vital signs/ fitness measures (Resting heart rate, heart rate, pulse rate velocity, recovery time, CO2 Max. movement, sleep, weight, fat mass, hydration, blood pressure &amp; skin temperature)</td>
</tr>
</tbody>
</table>
Physical Comfort (PC)

PC 1-1 Individual workstations in open offices with the following ergonomic sizes and clearances (Check all that apply)

- None
- Desk surface is minimum 20 inches [50 cm] deep between a seated person and a monitor; and minimum 30 inches [76 cm] between a seated person and a monitor (This does not apply to laptop use designated individual workstations)
- Desk height is adjustable between 20 inches [50 cm] and 28 inches [72 cm] for seated tasks
- Desk height is adjustable to accommodate standing tasks or a desktop height-adjustable stand is provided
- Under-desk clearance spaces are sufficient with minimum clearance depth of 15 inches [38 cm] for knees and a minimum clearance width of 20 inches [50 cm]

PC 1-2 Individual workstation conditions in open offices (Check all that apply)

- None
- Desks are placed perpendicular to window panes
- Desk surface has a matte finish
- Desk surface edge is 24 - 27 inches [60 - 68 cm] wide to accommodate armrests in chairs
- Desk front edge is round to avoid contact stress of wrists

Emotional Wellbeing (EW)

EW 1 Biophilic Design

- EW 1.1 Sensory stimulation by nature in the primary workspaces (Check all that apply)
  - None
  - Presence of vegetation (green wall, plants, garden, or similar items)
  - Presence of water (water wall, waterfall, fountain, or similar items)
  - Presence of 2D or 3D artwork depicting natural elements or scenes
  - Sounds of nature (sounds of birds, water fall, or similar items)
  - Smells of nature (smells of herbs, plants, or similar items)

- EW 1.2 Views to outdoors in regularly occupied spaces: Direct line of sight to the outdoors for 75% of regular employees (Check all that apply)
  - None
  - Non-obstructive views and no blinds or doors on the windows
  - At least 2 lines of sight to vision glass that is between 30 inches and 90 inches (between 0.8 meters and 2.3 meters) at least 75% of individual workspaces
  - Views of natural elements such as plants, trees, sky or similar items
  - Non-obstructive views with the distance of the trees, bushes, or height
PROWELL® Basic

Overview

Physical Fitness
- PF 9

Physical Comfort
- PC 16

Health + Wellbeing Performance
- HWP 98

Score Range:
- Top Tier: 75-100
- 2nd Tier: 63-74.99
- 3rd Tier: 55-62.99
- 4th Tier: 47-54.99
- 5th Tier: 39-46.99
- Bottom Tier: 0-39.99
Seven Dimensions of the Workplace Health+Wellbeing Scores

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</tr>
</thead>
<tbody>
<tr>
<td>Benchmark</td>
<td>6.16</td>
<td>10.81</td>
<td>3.93</td>
<td>13.22</td>
<td>9.55</td>
<td>10.54</td>
<td>8.78</td>
</tr>
<tr>
<td>Ratio</td>
<td>39.81%</td>
<td>40.54%</td>
<td>43.42%</td>
<td>45.42%</td>
<td>45.45%</td>
<td>45.39%</td>
<td>45.36%</td>
</tr>
</tbody>
</table>

Please click a project name in the legend to display or hide the result/value of a particular project in the chart.
PC 73

Physical Comfort

PC1. Ergonomics
PC2. Auditory Comfort
PC3. Visual Comfort
PC4. Thermal Comfort
PC5. Olfactory Comfort
PC6. Post Occupancy Evaluation

Benchmark
Pilot

PC6
PC5
PC4
PC3
PC2
PC1

0% 20% 40% 60% 80% 100%
PORTFOLIO MANAGEMENT & SPECIFIC TOPICS

1. Dallas
2. Minneapolis
3. Durham
4. Chicago

PC 3-1 Lighting level control
PC 3-2 Glare control for interior ambient lighting
PC 3-3 Solar glare control for vision glass
PC 3-4 Quality of lighting

EW 1-3 Circadian lighting support
EW 1 2 Views to outdoors
FLOURISH
Subtitle
WHY ARE WE BOTHERING WITH HEALTH AND WELLBEING?

MEDICAL ABSENCE and PRESENTEEISM COST £100bn + per year

HWB is root of Human Energy and Productivity

HWB affects physical, social and mental wellbeing

Healthier people are happier people
WORK ENGAGEMENT

- Only 24% of workers deeply engaged and focused
- Study the Engagement Bridge

(Harvard Business Review 2014; Elliott and Corey 2018)
Did we learn the basics of the Bridge™ at childhood?

- Recognition
- Job Design
- Leadership
- Purpose, Mission and Values
- Open & Honest Communication
- Pay & Benefits
- Workspace
- Wellbeing

It's the thought that counts, not the gift

- Treat others as you would like them to treat you
- Admit when you're wrong, say sorry
- Treat people, assume good intentions
- Be honest; tell the truth
Engagement Bridge

Workplace and Wellbeing are the foundation
Environmental Design Affects Health and Well-Being of People Physically, Mentally and Socially
Body, Brain and Mind

- Blood circulates the oxygen
- Nervous system gives connectivity for actions
- Hormone system affects feelings and emotions
Multisensory Dining

- Presentation
- Colours
- Smell
- Taste
- Touch
- Contrasts

Professor Charles Spence at Oxford University
Multisensory Experience in a Building

- Look and Feel
- Environment
- People
- Work
- Utilities
Amanda Levete (architect)

To live in a great space inspires you and lights your spirit. The environment in which you live and work has a tremendous capacity to change your mood and affect the way you live your life. Space, volume and natural light are vital for good living.

Levete, A, Architecture at Future Systems, To live in a great space that inspires you, Financial Times, 16.02.08
WELLNESS MATTERS
Health and wellbeing in offices and what to do about it
Wellness Matters Conclusions

- Multi sensory approach using Flourish
- HWB is not a luxury it is an investment
- Planning, design, management and operation has HWB as a primary issue
- Use HWB interventions
- Board level commitment essential
- Monitor buildings, systems and people
- Support systems must be reliable
HVB Assessments

- Assessing health and wellbeing is as important as energy, water, waste or pollution
- There are indirect interactions between HVB and sustainability
- Pollution is an example of a direct impact on HVB
- WELL v2; Fitwel and Flourish are examples of assessment approaches
THANK YOU

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