

## A Holistic View: Body Mind Environment

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When businesses turn their attention to the assault on their employees' wellbeing, it's not surprising they often begin with physical health and ergonomics. In addition to the focus on employee health factors such as obesity, smoking cessation and exercise, many organizations are also focused on workplace ergonomics to prevent injury.

The ascent of ergonomics in the 1980s resulted in deep understandings of biomechanics and the importance of providing posture support for workers. In the 1980s when the focus was on maintaining a static, neutral posture for office workers using desktop computers, Steelcase breakthrough research established the importance of dynamic support that mimicked the movement of the spine and set a new industry standard for ergonomic seating.

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Steelcase researchers went on to study the importance of movement, and began encouraging workers to intersperse standing and walking with sitting throughout the day. Recent studies performed by Marc T. Hamilton (2007), Pedersen (2009) and Stephens (2010) have shed new light on the relationship between long periods of sedentary behavior and pervasive health problems such as weight gain, metabolic syndrome and diabetes. Prolonged static sitting is now known to be physically demanding in its own way — disrupting metabolic functions and weakening the body's defenses. Even working out in a gym after sitting all day won't reverse its negative effects.

Meanwhile, technology devices are tempting people to sit even longer in chairs that were designed before tablets and other handhelds came into the office mainstream. This is leading to new work postures, some of which are leading to more pain.

“Ergonomic issues should always be top of mind for employers,” says Kevin Butler, a senior ergonomist at Steelcase. “Upper-extremity issues, especially pain in the neck and shoulders, are becoming more common all the time as a result of people constantly peering down at their handheld devices.”

Butler points out the need for workplaces to be designed for a palette of postures – a variety of work settings where people can choose to sit, stand, walk, perch or even squirm. But Butler warns that not all postures are created equal.

“Some postures are inherently bad for the body and should not be encouraged,” he notes. “I’ve seen workplaces that are designed to be fun, creative and have a great vibe, but sometimes they have terrible ergonomics. That’s not a solution that’s good for individuals or organizations.”

People need a range of choices and ergonomic supports. It’s important they have an environment they can move around in since movement throughout the day is important; and when they’re seated it’s equally as important that the chair they sit in supports them in the ways they work today.

Researchers and designers at Gensler, a leading global architecture, design, planning and consulting firm, agree: Wellbeing is multifaceted. Unfortunately, many employers still make sizeable investments in physical wellbeing and then consider the problem solved, says Nila R. Leiserowitz, FASID, IIDA, Gensler’s regional managing principal in Chicago who spearheads the firm’s global endeavors in the health and wellness sector. “People think that if they have fitness centers, they’ve taken care of all the aspects of wellbeing. But that’s just one piece of what you need to consider. It’s not just a fitness center or a chair you can adjust. It’s not just about looking at your physical space. Wellbeing cuts across your culture, your HR strategies and the environment. It’s a symbiotic ecosystem.”

## **THE MIND/BODY CONNECTION**

As organizations face increasingly complex problems, they are recognizing that wellbeing is multifaceted and seeing a link between body and mind. Today scientists are studying the interdependence of our physical and mental states, and how our senses impact cognition.

Researchers are finding that our sense of touch — whether a surface is hard or soft, rough or smooth, for example — can impact how we perceive an unrelated interpersonal interaction. Another factor that significantly impacts cognitive wellbeing is noise. It can have undesirable physiological, psychological and behavioral effects, according to Julian Treasure, chairman of a United Kingdom-based consultancy, The Sound Agency. Background noise in the workplace has been found to increase employees’ stress hormone levels and undermine short-term memory, reading comprehension and willingness to engage with others, he says.

In workplaces, irritating noise can come from all kinds of sources: air conditioning, obnoxious ringtones, traffic, nearby construction, “pink noise” sound-masking and – especially – from other people’s voices.

“Cognitively, there is plenty of research now that shows that in loud offices in particular the most destructive sound of all is other people’s conversations,” says Treasure.

Noisy environments tend to only get worse over time, because people start speaking louder as it gets noisier around them (the Lombard effect). As a result of too much noise in the workplace, health and productivity can suffer— the latter by as much as 66%, according to one study that Treasure cites.

At the same time, he says, open-plan environments can be very good for many types of work. “It’s one way of working, but it’s not the only way. We need to give people spaces that match what they need to do.” And, conversely, the sounds of silence in the workplace can be too much of a good thing. Pin-drop-quiet places are intimidating, he says, because you can clearly hear every sound in them.

The solution, says Treasure, is a variety of workplace environments, each designed with consciousness of sound for the task and the people using the spaces. Work environments need to be designed not just for appearance, but for experience in all the senses.

In a time where the term “cognitive overload” has gone mainstream, researchers at The University of California and other institutions are studying how cognitive processes are linked to the body’s interaction with its surroundings. Their work shows how people do better when they can offload cognitive work onto the environment because of limits on attention or memory. At its most basic level, physical environments equipped with whiteboards make it easier for people to offload information by giving them a place to make their work visible. Going further, researchers at Steelcase are exploring how technology-enabled architectural elements and furniture allow the physical environment to take on routine tasks, such as anticipating when to turn on equipment. Being able to offload some functions onto the environment can free up brain capacity to tackle complex problems.

## **FEELING GOOD AT WORK**

Gallup’s global wellbeing study explored a powerful body/mind connection: engagement. Being disengaged, they found, is a leading indicator for a subsequent diagnosis of depression, as well as an increase in total cholesterol and triglyceride levels. Perhaps even more alarming for businesses is that Gallup found more than two-thirds of workers around the world are simply waiting for the workday to come to an end; they become increasingly happier the closer they get to leaving work. So not only are disengaged workers not as productive, they’re likely to cost an organization more because of the physical and mental health issues associated with stress. Everyday stressors can create negative emotions that put humans in a constant state of being on guard, conditioned for a “fight or flight” response. Ultimately, cortisol and other hormones that are released during stress tire and deteriorate the body and mind.

“Western culture typically views the mind, the body and the environment separately, but science is showing that they are intricately linked, as Eastern cultures have long known,” says Arantes. “This means that wellbeing is more than ‘wellness,’ which is just concerned with physical health. Wellbeing is also not the same thing as happiness, which is a transitory emotion that comes and goes. As a result of our work, we define wellbeing as sustaining a healthy physical and mental state over time, in a supportive material and social environment.”

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## **THE BIOLOGICAL DRIVE OF EMOTIONS**

Given the vast amount of attention that has been given to physical dimensions of wellbeing, Steelcase researchers decided instead to focus their attention on the aspect of wellbeing at work that many organizations feel uncomfortable talking about – emotion. How people feel has a significant impact on both their health and their work.

“In the simplest sense, work is action—doing something. Emotions prime our bodies and minds for action,” says Arantes. “The link between the mind and the body is emotion. Humans are biological organisms that evolved in nature. Our survival has depended on our ability to interpret situations around us as safe or dangerous, and then react appropriately. Sensing danger prepares the body to either run or fight. On the other hand, if we are in a safe, supportive environment, our bodies relax and our minds start to wonder about other things.”

An important emphasis, she says, is “how biologically driven this is, because our survival as a species has depended on taking appropriate actions that are triggered by our emotions. We’re constantly evolving organisms that need to be constantly repaired. And when we’re in a negative state of mind, we can’t repair ourselves. While negative emotions are a normal part of life, it’s important that they are appropriate in duration and overbalanced with positive emotions. When people are in environments that support positive emotions, they’re free to be productive, collaborative and creative.”

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## **SHIFTING TO CREATIVE WORK**

As people’s work changes, their needs change. And as needs change, work environments also need to change to remain supportive. The evolution of offices as places primarily for process work to places for creative work has profound implications for wellbeing. Creative work is all about making connections, being open to new ideas, taking risks and experimenting. These behaviors are impossible in a stressed state of mind. For creative work to thrive, the workplace needs to be a supportive and positive environment. For creative work, the workplace matters more than ever, and it needs to do more than ever.

“Companies like Zappos and Google have been capitalizing by taking a more emotional approach to wellbeing and promoting their organizations as fun, creative workplaces,” says Arantes. “They are reaping the benefits in their results and also realizing positive employee morale is an added recruitment incentive.”

Most companies, however, still rely mostly on hunches or trial-and-error approaches to workplace wellbeing. A gap in wellbeing research has been information on the impact of the work environment beyond ergonomics, air quality and other obvious factors. Lacking has been a coherent set of insights into the factors that are important for wellbeing and a plan of action for how organizations can give those factors substance in their spaces. The Steelcase team’s objective was to help fill that gap.

“The premise of our research has been that we don’t want to just understand wellbeing; we want to improve it,” explains de Benoist.

## DOES YOUR WORK ENVIRONMENT UNDERMINE WELLBEING?

At a recent roundtable conversation on the topic of about the future of work, PopTech curator Andrew Zoli asked a packed room of people where they do their best work. The answer: not at work. People described great cafés, home offices and libraries that helped them to feel energized, focused and engaged. Only one person in the group praised her company's recently redesigned office as a place where she felt a sense of purpose and vitality.

This conversation echoes many other discussions that are taking place online and in a variety of forums where people are passionately debating what the best work environment is for actually getting work done. Authors Jason Fried and David Heinemeier Hanson recent book "Remote" suggests people don't need offices at all.

Business leaders disagree. While working remotely is a viable option for some workers, business leaders understand that it's important for employees to feel connected to each other and with the purpose of their organization. Coming together in the workplace is what allows them to do that. The key is to create workplaces that are designed to be destinations that people want to be in because it helps them do their best work.

Steelcase's ongoing research sheds light on what workers need to be creative and productive, and identifies some of the most frequent workplace culprits.

Leading organizations can make a significant impact – or hinder – their employees' wellbeing by focusing attention on the physical environment. With a little effort, people can actually leave work feeling as well, or even better, than when they came in.

### Privacy

95% say they need quiet, private spots for confidential conversations

40% say they don't have them

### Focus

95% of workers say having access to quiet, private places for concentrated work is important

41% workers say they don't have access to quiet spaces

### Getting the basics right

50% of workers report that they don't have pleasing views

40% say they don't have access to natural light

over 30% say their air quality is bad

37% workers lose up to 30 minutes a day dealing with physical discomfort

### Respite

91% of people say they need casual spaces to re-energize

and yet more than half (51%) have no place to go within their workplace.

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