

HAWORTH

# Stress and Resilience in the Global Workplace

November 2023



**Abstract**

Workplace stress takes a substantial toll on both employee performance and well-being—around the globe. Productivity, as well as physical and mental health, can decline if chronic stress is left unchecked. Employees who demonstrate resilience under stressful conditions are better able to withstand the ups and downs of work life. But how can the workplace build resilience in employees, rather than being a stressor in itself?

At Haworth, we set out to conduct a series of three studies—across nine countries and over three years—to discover the impact of workplace resources on stress and performance. Resources include not only policy and organizational culture, but aspects of the built environment that facilitate a less stressful workday: user control, ambience, and a variety of spaces, to name a few. Cultural and environmental conditions, as well as changing times, can affect which workplace resources employees most value. While these differences have an impact, some workplace resources show a universal ability to improve performance and mitigate stress.

**Keywords**

- Built environment
- Burnout
- Chronic stress
- Culture
- Global
- Performance
- Policy
- Resilience
- Resources
- Social support
- Stress
- Well-being
- Workplace

**Takeaways**

Stress and burnout continue to be a pervasive issue after the pandemic, especially work-related stress.

Both well-being and performance are impacted by chronic work-related stress.

Building resilience in the workforce through workplace improvements can help combat stress and enhance performance.

Resources such as culture, policy, and aspects of the built environment can help to mitigate stress and improve performance.

Cultural and societal differences around the world, as well as the changes in work culture over time, can impact which resources are most valuable for stress reduction and performance improvement.

Despite differences across location and time, some resources are universally seen as valuable, and should warrant continued investment.

Stress, or a physical, emotional, or psychological strain caused by change,<sup>1</sup> reached soaring levels during the last three years. Widespread uncertainty and anxiety contributed to a pervasive state of hardship. While the dust has settled in the wake of the COVID-19 pandemic, stress continues to plague people around the globe, though for other reasons.

For instance, job-related stressors are a persistent concern, and the ramifications of chronic stress—continuous stress over long periods of time—in the workplace are clear. In the US alone, around one million people miss work each day due to stress.<sup>2</sup> This absenteeism, along with the impact of stress on health costs and poor performance, has tremendous costs both financially and in terms of well-being.<sup>3</sup>

That is not to say stress is all bad; in fact, some level of stress is critical for motivation and peak performance.<sup>4</sup> While a certain type of stress can be beneficial, the above statistics suggest that it is negatively impacting both people and organizations.

## But what if there were a practical response to this problem?

What if people could leverage the resources offered by the workplace to mitigate stress (rather than increase it), and thereby improve their well-being and performance? This ability to adapt, withstand, and respond favorably to stressful situations is called *resilience*.

One key to being resilient at work is to perceive and leverage the support offered by available resources. Workplace resources come in a variety of forms, such as social support (including organizational culture and work policies) and aspects of the built environment (e.g., user control and space variety).

Findings from the 2020 Haworth research study, *Resilience at Work*, showed that as stress increased, the perception of resources as beneficial also increased, meaning that resources become increasingly valuable to employees as they become stressed.<sup>5</sup> The perceived benefit of resources was also related to improved worker performance.

That study amassed responses from a survey of over 300 knowledge workers from the United States during the height of COVID-19. It provided valuable information about

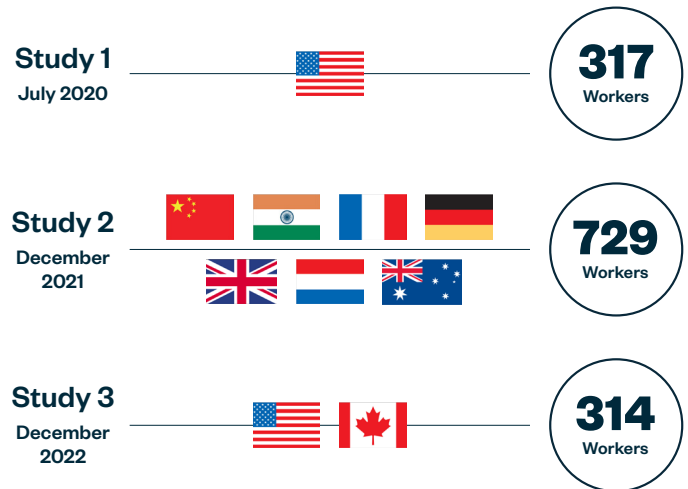
the impact of resources on how people work. However, other cultures around the world might leverage different workplace resources, or even the same resources but to different degrees. Further, just as some stressors from that period (e.g., sheltering in place) have largely subsided, so might the resources that best mitigate stress and improve performance.

Considering these factors, we extended *Resilience at Work* (Study 1) to encapsulate nine countries and two additional time points:

- A global study (seven countries from four continents) carried out in December 2021 as the pandemic was still heavily influencing work processes (Study 2), and
- A North American study in December 2022 to compare with the baseline, early pandemic study (Study 3)

As a collective, we call the study Global Resilience.

### Global Resilience



After completing the three studies, we concluded that while the relative importance of workplace resources has changed, they are still critical to combating stress and improving performance. By understanding resource-related differences and similarities between geographic regions, as well as how importance has shifted over time, organizations can tailor their work environments and resources accordingly to promote sustained well-being and performance.

Before exploring these findings, we need to lay out the problem: excessive stress in the workplace.

1. American Institute of Stress, 2020  
2. American Institute of Stress, 2022

3. Gallup, 2022  
4. Johnson, 2017; Selye, 1987

5. Haworth, Inc., 2021

## Stress: The Good, the Bad, and the Burned Out

Stress is an inevitable part of life. When changes in our daily environment demand action, stress appears via our bodies and minds as the manifestation of this demand. How we interpret pressing demands can take the form of either a challenge or a threat.

Challenges are motivational,  
creating a goal to work toward.

Positive levels of stress (eustress) act as the tension we seek to alleviate via the completion of the goal.<sup>6</sup> For example, the tension one feels before an important work presentation can motivate them to prepare meticulously, improving performance when the big day comes.

Conversely, demands can be interpreted as threats—obstacles to our goals that are perceived negatively and from a place of anxiety/dread.<sup>7</sup> Being let go from a job, knowing you have a mortgage and other bills to pay, could create this sense of peril. Tasks and responsibilities often accumulate in our minds, creating mental blockages and physical sensations of tension, including headaches, shortness of breath, and stomach pains.

It is this second type of stress (distress) that, when unchecked for a long period of time, can result in *burnout*—a combination of exhaustion and disengagement toward one's occupation or tasks.

According to a 2022 Gallup poll, about 30% of American employees experienced frequent or constant burnout over the last year. Burnout costs companies an estimated \$322 billion yearly in turnover and lost productivity costs.<sup>8</sup>

The people most susceptible to burnout are those with sensory processing sensitivity (SPS), or a hypersensitivity to environmental stimuli such as light, noises, textures, and smells. Reactivity to these stimuli can increase the stress high SPS employees feel in the workplace. High SPS individuals make up about 30% of the population and have desirable traits from a managerial standpoint, including high empathy.<sup>9</sup> Providing resources from policies and the built environment that can allow this population to thrive are thus critical to understand.

Haworth's *Resilience at Work* study demonstrated that the workplace can be a channel for stress mitigation and, subsequently, improved work performance. By offering amenities such as adjustable workstations, a variety of space types, and invigorating ambience, workers can perceive the workplace as a source of positivity and relief.

Let's take a deeper look at the nature of resources and how they can help manage stress.

## Leveraging Resources to Manage Stress

According to the Conservation of Resources theory,<sup>10</sup> a primary behavior of humans is to strive to obtain and protect things we value, namely, resources. Stress occurs when we either lose resources, perceive the threat of losing resources, or do not acquire them in the first place. For example, an employee who previously had an assigned workstation might become stressed when learning that they are going to lose that resource.

6. LaFevre et al, 2003; Selya, 1987

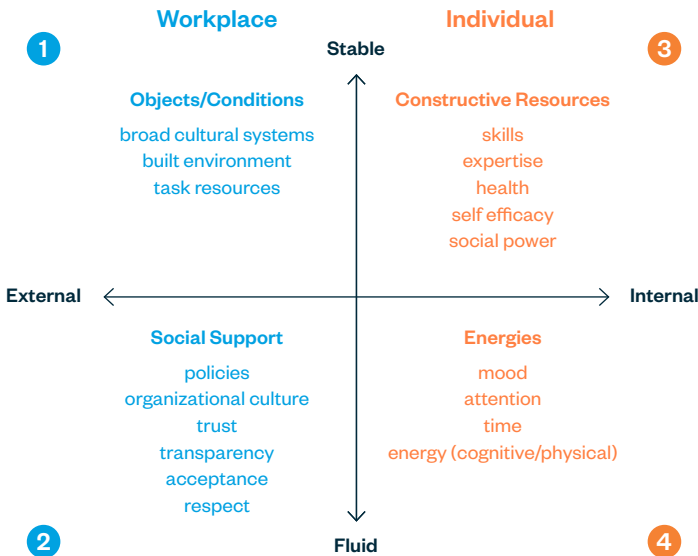
7. Johnson, 2017; Simmons & Nelson, 2007

8. Gallup, 2022  
9. Acevedo et al., 2018

10. Hobfoll, 1989

To understand these principles, it is helpful to know the forms that resources can take. Resources can be categorized as external or internal to the person, as well as stable or fluid.

**Resource Categorization**



The first quadrant, External and Stable, represents Objects and Conditions, including both physical and conceptual aspects of one’s environment. At work, examples include the built environment, task resources, and the way in which geographic culture can shape norms.

The second quadrant, External and Fluid, represents resources that are external to the individual but fluctuate over time. This category includes social support resources like trust, acceptance, and respect.

The third quadrant, Internal and Stable, represents Constructive Resources. These resources are intrinsic to the person and do not change quickly, and include traits such as self-efficacy, expertise, and job-related skills.

Lastly, the fourth quadrant, Internal and Fluid, represents individual qualities that are fleeting, such as attention, mood, and cognitive or emotional energy.

As the figure shows, quadrants one and two are labeled as Workplace, as these resources can be shaped most directly by alterations to policies and workplace environments, including remote work environments. In the current research, we focus on these two quadrants as resources businesses can target to reduce stress and boost performance.

Specifically, we investigate the value of the following workplace resources:



**Objects & Conditions**

**User control**

The ability to adjust aspects of one’s environment, including work surface, task chair, lighting, vertical screens, and speech privacy

**Accessibility of coworkers**

Physical proximity to coworkers and the time for interactions to occur

**Tools and technology**

Task-specific tools and collaborative technology

**Variety of spaces**

Choice of work environments; access to restorative, social, and collaborative spaces

**Ambient qualities**

Air quality, access to daylight and natural elements, thermal comfort, and low noise level

**Legibility**

Ease of navigating a workspace; visual access to coworkers



**Social Support**

**Culture**

Trust in teammates and leaders; feeling supported by one’s team; ability to enlist help from coworkers

**Policies**

The opportunity to have a flexible schedule, to work remotely, or to receive accommodations for doing one’s work

The relative value of these resources is shaped by many factors, some of which we highlight below.

### Factors Shaping the Value of Resources

At the peak of the pandemic, we learned from our first Resilience at Work study (Study 1) which resources US knowledge workers saw as beneficial during that stressful time. These included ambient qualities, legibility, and culture for on-site workers; and user control, ambient qualities, and accessibility of coworkers for off-site (remote) workers.<sup>11</sup> With the follow-up studies, we additionally explored the influence of geographic region (Study 2) and time (Study 3) on resources' impact on stress and performance.

### Geographic Region (Study 1 vs. Study 2)

Study 2 replicated and extended Study 1 utilizing a global participant pool. Haworth's reach is global, and to reflect the breadth of our customers, it is appropriate to capture the attitudes of a global sample. We predicted that regions would differ in resource preferences because they differ in cultural norms, workplace norms, and societal events impacting their area. Recently, we found this to be the case in a multi-location study on hybrid work,<sup>12</sup> where we learned that social and cultural flavors shape how different cities approach hybrid work: from office-centric, socially focused attitudes to remote-first, out-of-the-city preferences.

Another condition in which geographic regions differ is individualism-collectivism, which is the degree of emphasis a culture places on the individual versus the group.<sup>13</sup> This factor can shape which resources are perceived as most valuable, which in turn can impact responses to stress.<sup>14</sup> For example, an individualist might prefer resources like autonomy and feedback from managers, whereas a collectivist prefers resources that encourage social bonding, such as social support with colleagues.<sup>15</sup>

Moreover, each geographic region may have unique stressors. Some Asian countries have cultural stigmas against mental health treatment, which could exacerbate stress and burnout.<sup>16</sup> Socially supportive resources like an encouraging organizational culture could prove to be more valuable in these regions. In Study 2, we examined differences among the broad regions of Asia-Pacific (China, India, Australia) and Europe (France, Germany, Netherlands, UK) in terms of resources and their relationship to stress and performance.

Finally, the geographical component was important for us to address because there are so many global corporations that strive to address resource needs across their real estate platforms. To investigate the impact of geographical region on resilience, we observed how the perceived value of resources related to both stress and performance, and how this differed among regions.

### Findings: Resources, Stress, and Performance across Regions

We found significant relationships between the importance of resources and stress. For both the AP and US regions, the value of resources increased as stress increased, to the order of one to five percent per category. This means that for these regions, resources became more valuable for every little increase in stress a person experiences. Interestingly, for the EU region, most resource categories tended to decrease in importance as stress increased, indicating that Europeans might leverage resources more when they are in low stress states.

For all regions, the value of resources was positively related to performance. As workers perceived that the value of their workplace resources was more beneficial, they rated their own performance at work better in terms of both quality and quantity of output.

In sum, the impact of stress on resource value tends to differ among regions, but the impact of resource value on performance is consistently positive across regions.

11. Johnson et al., 2020

12. Haworth & Novotny, 2023

13. Oyserman et al., 2002

14. Jang et al., 2016

15. Jang et al., 2016

16. McKinsey, 2022

**Remote Resources**

Regarding remote resources specifically, we saw that control over the user’s environment, ambient qualities of the home office, as well as organizational culture were predictive of performance. Having a sound working environment and a supportive culture were thus critical at the beginning of the pandemic to allow workers to perform their best.

We saw some overlap globally with the pre-test US group:

- Europeans prioritized ambient qualities and culture, as well as tools and technology instead of user control.
- AP prioritized user control and ambient qualities.

Clearly ambience was a large predictor of performance during COVID-19.

**On-Site Resources**

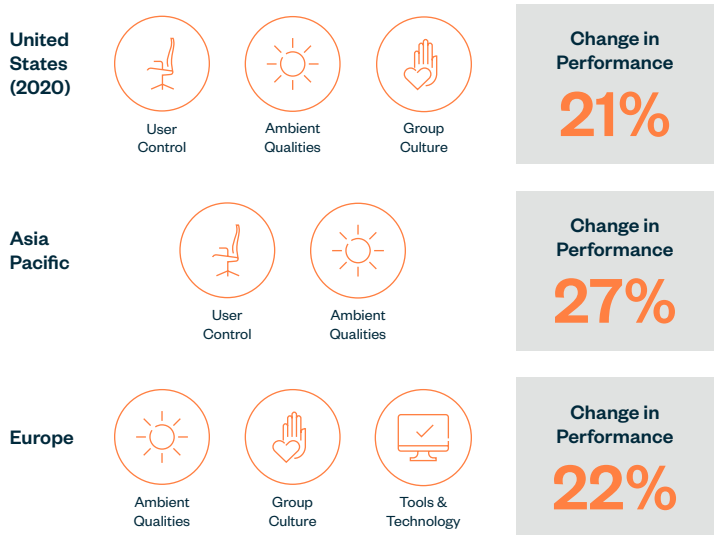
For on-site work, tools and technology and group culture were critical for both US and AP during the pandemic. The ability to access colleagues virtually, as well as a supportive organizational culture, allowed workers to perform during the peak of COVID-19.

Europeans prioritized more the physical aspects of the environment, such as user control and legibility, for performance. The ability to exert control over one’s environment and navigate spaces seamlessly were thus important for Europeans to perform in the office.

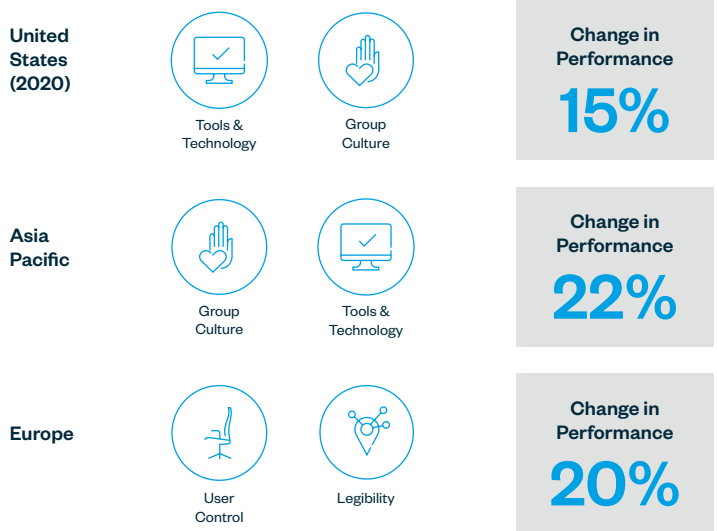
Overall, the comparison between Study 1 and Study 2 showed us that locations across the globe don’t all place equal value on the same workplace resources.

This is demonstrated by how different resources were preferred as stress increased, and how a higher value of preferred resources improved performance. There are many pieces to the resilience puzzle, and understanding locational trends is one way to assist workers.

**Most Influential Resources for Remote Performance**



**Most Influential Resources for On-Site Performance**



**Time Period (Study 1 vs. Study 3)**

Beyond regional differences, we sought to uncover how the passage of time might have shaped resilience and resource preferences over the past three years. In 2020, restrictions induced by the pandemic upturned the way many people work. No matter how and where they work, there are still life stressors that should be mitigated by providing the right resources.

Changes over time and shifts in where we work may have caused workers to prioritize different resources compared to pre-COVID-19. This could manifest as resources that were previously seen as threats now being perceived more favorably. For instance, physical proximity to coworkers and indoor air quality were seen as threats by the Study 1 sample; this makes sense given the contagious nature of COVID-19 and its prevalence at that time. In Study 3, we investigated whether this remains true, as physical co-location is much more common in today’s work world compared to three years ago, and fear of virus-spreading is more muted.

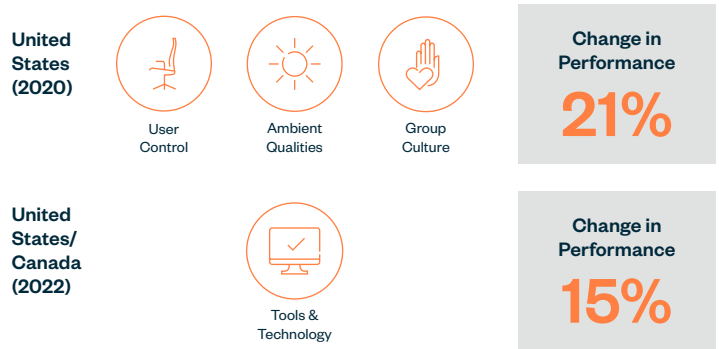
Conversely, some resources that were imperative during the height of COVID-19 may be less impactful today. For example, Microsoft’s 2022 Work Trend Index found that most workers (53%) are more likely to prioritize well-being now compared to work performance, which may correspond to their preferences in human-focused versus work-focused resources. A culture that encourages healthy behavior and psychological well-being is now a priority rather than a privilege.<sup>17</sup>

In sum, we wished to uncover how leveraging resources has dynamically shifted over a span of three years, given the major changes to work during that timeframe.

**Remote Resources**

Despite the importance of user control, ambient qualities, and group culture for predicting remote worker performance in 2020, none of these resources significantly impacted performance in 2022. Instead, having access to collaborative technology and the right tools at home were driving performance for the US and Canada in 2022. We can surmise from these results that workers optimized their home offices in 2022 in terms of user control and ambient qualities, and now rely mainly on tools and technology as a workplace resource that drives performance.

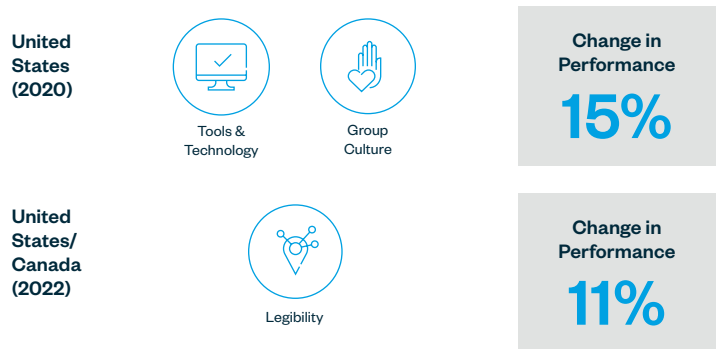
**Most Influential Resources for Remote Performance**



**On-Site Resources**

While tools and technology and group culture were imperative for US on-site workers in 2020, in 2022 only legibility significantly predicted performance for US and Canada. Similar to European workers in 2021, legibility is an aspect of the built environment that can facilitate workers to perform their best; the ability to see coworkers can drive collaboration, and well-designed offices can reduce stress of workers to perform their best.<sup>18</sup>

**Most Influential Resources for On-Site Performance**



The recent increase in the importance of legibility could be attributed to an uptick in activity-based and neighborhood-based floor plans,<sup>19</sup> which could all result in complex layouts and navigation if not properly legible. As such, it is important for modern office space designers to be aware that legibility is something workers are relying on to perform at their peak.

17. Gensler, 2023

19. Haworth & Novotny, 2023

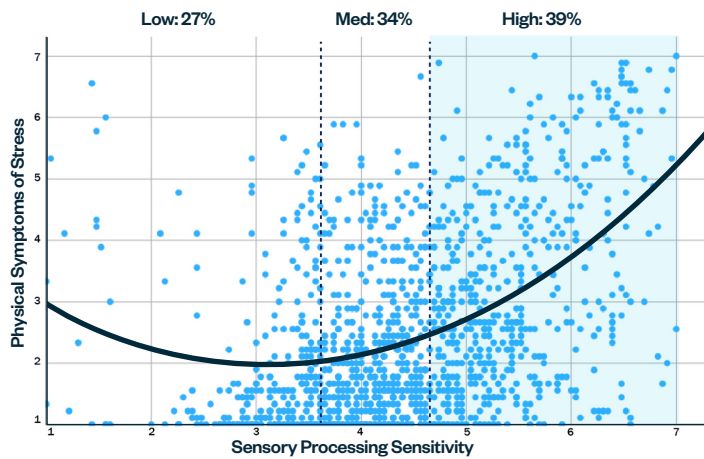
18. O’Neill, 2016



**Sensory Processing Sensitivity (All Studies)**

As we noted, previous research shows that high sensory processing sensitivity (SPS) is positively related to burnout.<sup>20</sup> Due to the prevalence of high SPS individuals in the population (30%) and their workplace capabilities (tending to exude more empathy and creativity than the general population), it is beneficial for organizations to understand how aspects of the built environment can support these individuals in their efforts to get their best work done with minimal stress.

Our findings align with the literature: As sensory processing sensitivity scores increased, so did physical symptoms of stress. While the low and medium SPS groups were relatively equal, we observed that the high SPS group was significantly more stressed than the other groups.



In terms of performance, people with low, medium, and high SPS scores differed in terms of which resources they most valued.

**Remote Resources**

- Low SPS workers valued ambient qualities and tools.
- Medium SPS participants valued these two as well, with the addition of culture.
- High SPS individuals valued culture and user control.

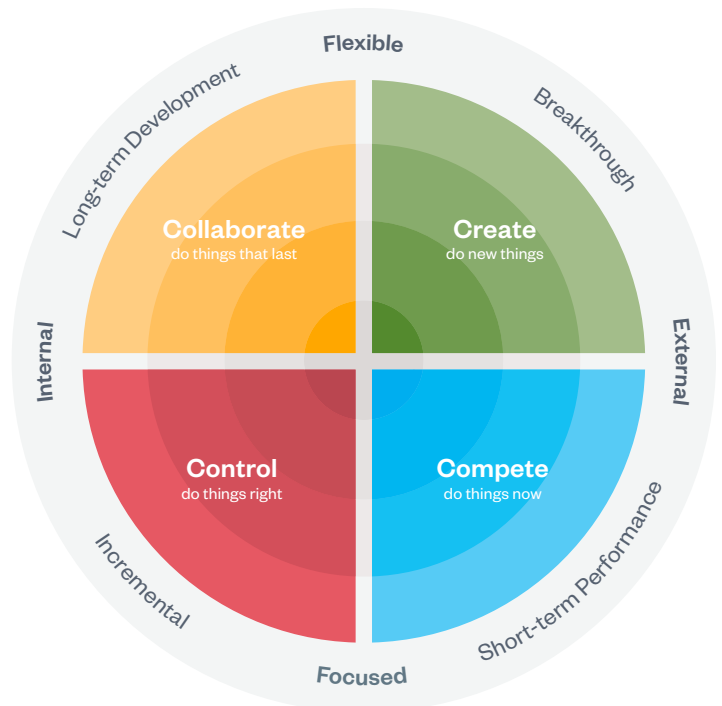
**On-Site Resources**

- Low SPS workers valued legibility, user control, and tools/technology. Medium SPS participants valued tools/technology and ambient qualities.
- High SPS individuals valued legibility and culture.

**Applying the Knowledge to the Workplace**

With the understanding of the impact of geographic region and time, it is then critical to apply the knowledge of resources to the workplace. Haworth utilizes a framework for understanding the macro or micro cultures present within organizations and work groups, known as the Competing Values Framework.<sup>21</sup> This foundational knowledge delineates four orientations of work culture, each of which emphasizes different values.

**Competing Values Framework**



- First is the **Collaborate** culture, which focuses on long-term development and doing things together. Their processes typically happen with teamwork and consensus.
- Second is the **Create** culture, which emphasizes breakthroughs and doing things first. They pursue innovative ideas to attain these breakthroughs.
- Third is the **Compete** culture, which emphasizes short-term performance and doing things fast. Their team dynamic is competitive and motivated toward profit.
- Fourth is the **Control** culture, focused on doing things incrementally and doing them right. Their processes are stable, efficient, and well organized.

20. Golonka & Gulla, 2021  
 21. Cameron & Quinn, 2006

The culture type of a group will determine its metrics of effectiveness. For example, a Create culture may measure their success by how they stay on top of innovation and trends.

Just as culture type can determine effectiveness, it can also guide the emphasis employees place on resources, in service of both reducing stress and improving performance. Below, we explore how culture shaped on-site resource preferences from our 2022 North American sample.

### **Collaborate**

The Collaborate culture placed value on social support resources to boost performance. These included trust in leadership's decision making and trust among colleagues that work will be completed effectively. Spaces that reflect values of trust and transparency, such as access to coworkers, will help this culture type succeed.

### **Create**

The Create culture valued legibility in their on-site workspaces. Having clear visual access to coworkers and being able to understand navigational cues in the workplace became more valuable as stress increased, which in turn related to improved performance. Space variety was also valuable to Create employees' performance. Members of this culture typically engage in a balance of independent and creative work, which aligns with their desire to have both individual and collaborative workspaces for optimal performance.

### **Compete**

To manage stress, the Compete culture prefers legible workspaces. This allows them to easily see their coworkers for quick meetings where they can connect and move on with their day. User control was also important when stress increased—providing height-adjustable tables and ergonomic seating, for example, are necessary to allow Compete workers to focus. Lastly, for quick connections with coworkers (both in-person and remote), these workers seek high-quality AV conferencing technology.

### **Control**

For stress management, Control culture members value spaces characterized by pleasant ambient qualities, such as access to nature or natural elements. Legibility was also valued, including the ability to easily see one's coworkers and spaces defined by wayfinding cues (e.g., colored pillars or large bookshelves to act as dividers). Lastly, Control culture members value restorative spaces as an element of space variety that helps them to unwind and restore focus.

### **Remote Workers**

Regardless of organizational culture, remote workers have their own set of specific resource needs. For example, remote workers often need to make it a priority to connect with their team. This effort is supported by quality tools and technology for collaboration. They also desire comfort and control over their workspace, classified as user control. This includes a height-adjustable desk, ergonomic chair, and quality task lighting. Finally, access to nature, including greenery and natural lighting, can bring a feeling of biophilia ("love of nature") into a remote worker's environment. Supporting remote workers with the capabilities to build these aspects into their home offices is a worthwhile endeavor for improving their work and well-being.

### **Conclusion**

Change is a constant in the workplace. Although change can cause stress, it can also spur positive action, and in doing so, build resilience. Through our three studies, we learned that there are clear connections between providing workplace resources and building resilience.

That said, workers do not all prioritize the same resources at work. Across global regions, we found differences in which resources related to performance. In Asia-Pacific, for example, resources like group culture and tools that promote collaboration were tied to performance, whereas in Europe, legibility and user control were more important. Understanding the cultural norms and events surrounding one's region will help organizations understand what their workers prioritize, and what helps them with the quality and quantity of their work. When it comes to comprehending workplace resources, location matters.

In terms of differences over time, we found that legibility was the most important on-site resource related to performance in 2022, compared to tools and technology and group culture in 2020. This could indicate that, although tools and technology and culture are of course valuable, workers who have returned to the office are seeking well laid-out spaces that are free from excessive visual obstructions or confusing labyrinths of cubicles. Office layouts need to facilitate collaboration and focus work, not impede it.

Next, high SPS individuals valued culture and user control in the remote workplace, and legibility and culture in the on-site workplace. A supportive culture, the ability to enlist help from coworkers, and trust in both coworkers and leadership were thus critical for these workers regardless of where they work.

Empathy and creativity are facilitated by such supportive cultures—traits that high SPS individuals tend to exhibit. In applying these findings to space, leaders should consider the organizational and subgroup cultures within their company. Culture types, too, can shape which resources are most useful when individuals are stressed and need to perform well. Moreover, the space itself should reflect the culture it is supporting. Workers in a Control culture, for instance, typically thrive in individual workstations separated by panels and screens to block distractions, whereas someone from a Collaborate culture tends to work better in social and team spaces with visual access.

Regardless of differences, organizations can't go wrong by providing workers with as many resources as possible. Among the most important to help people with their stress and performance are pleasant ambient qualities; legible workspaces; policies; and a culture that supports its workers by fostering alignment, transparency, and trust.

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## Contributors



**Eric Novotny** holds a PhD in Communication from Michigan State University. As a Research Specialist for Haworth's Workplace Research and Insights Team, Eric applies quantitative and qualitative behavioral science to examine the impact of workspace design on employee behavior, attitudes, and emotions. Specifically, he investigates how office space and furniture can be designed to promote well-being, performance, and belonging. This research informs our design process for future Haworth solutions and helps customers create more impactful workspaces.



**Kristin Reddick** is a Design Research Consultant on Haworth's research team. She is a certified Interior Designer and Design Consultant who focuses her research on culture, workplace performance, and well-being. Kristin believes that learning about people, making connections, and having empathy can translate into more thoughtful design outcomes. She enjoys gaining insights through research and using lessons learned to develop design concepts and best practices that create and support effective workplaces.



**Anjell Karibian** has worked in the architectural industry for several decades. She is a member of Haworth's Global Workplace Research and leads the North American team. She provides data insights that focus on worker performance and well-being for corporate markets. She is responsible for field research and manages project development for Haworth. Her goal is to align research with organizations that seek to make environmental changes in order to optimize human and organizational performance and contribute to business success.

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# HAWORTH

Haworth research investigates links between workspace design and human behavior, health and performance, and the quality of the user experience. We share and apply what we learn to inform product development and help our customers shape their work environments. To learn more about this topic or other research resources Haworth can provide, visit [haworth.com](https://www.haworth.com).