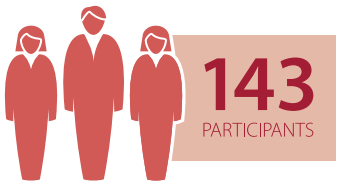
Impacts of Workspace Screens on Employee Performance and Focus: A Collaborative Study Conducted by SmithGroup and Haworth

Marta Wassenaar

Finding ways to support focus at individual workstations continues to be a challenge in open plan layouts. Can the addition of desktop screens influence employees' performance, stress levels, and well-being in positive—or negative—ways?

Haworth's Global Design and Innovation team, in collaboration with SmithGroup, set out to explore this connection to work within the office environment by studying the specific impacts of two screen applications on the performance of corporate office workers. Utilizing Haworth's HumanSpace™ survey to identify key workspace design and planning features that are most important to work performance, the team evaluated how desktop screens in the workspace influence employee performance, stress levels, and well-being.

Putting Screens to the Test

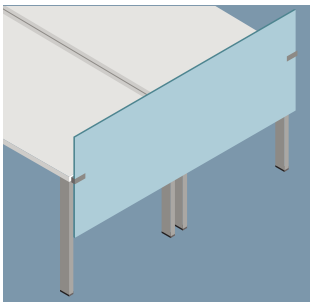


Haworth conducted a baseline survey with over half the occupants of this office using HumanSpace in October of 2017.

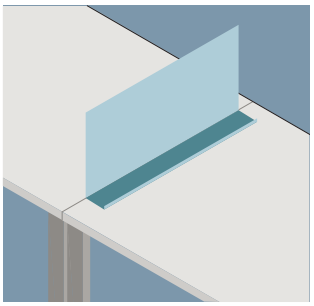
Using a mixed method approach, the study took place from October of 2017 until May of 2018 at SmithGroup's Washington DC location. The results of the survey indicated the DC office supported their occupants well and recommended minor improvements. These improvements involved providing the ability to work on confidential information, access to technology in group spaces, and supporting focus work.

Haworth suggested adding screen elements to enhance the user experience by providing more visual and user control within the occupants' workspaces, while maintaining the desired open work environment. This solution addressed the ability to work on confidential information and the need to support focus work.

To test the solution, a total of 16 employees from SmithGroup DC participated in an experiment that enhanced their workspaces with screens for eight weeks.



Screens were positioned on the aisle to support the focus of those at the end of the run.



Individual moveable desktop screens were added to create space boundaries between workstations.

The first objective was to measure employee satisfaction with the new workspace screens added. The second objective was to better understand the impact on employees' performance, stress levels, and well-being working with and without new workspace screens.

At the end of the study, 25 employees—the 16 in the test group and nine people in a control group—were asked to participate in the HumanSpace post-move survey to determine if the screens impacted their perceived performance. These findings were shared with the participants, and focus groups were hosted for verification.

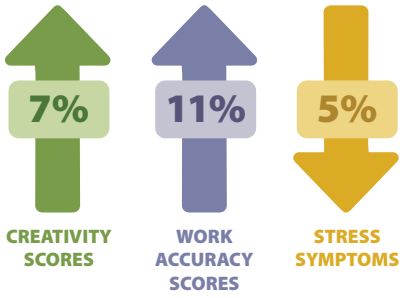
Additional reported preferences were uncovered:

Results showed preference for the end-of-run solution. All users who worked at this end location preferred the screens, citing that it helped with containment and boundary indicators. The screens did not always stop interactions or disruptions.

Responses indicated the shared desktop screens are nice to have but are not necessary for work. The only true benefit that all participants agreed upon was the screens' ability to delineate space more effectively. Participants sometimes found it useful to personalize their spaces and said the screens helped with externalization. More than half of the users wanted to keep their screens and liked the added benefit to their workstations.

When comparing post-move survey results to the pre-move survey, employees with adjustable screens in their workstation had improvements in performance and reduced stress.

Survey results indicated the test group:



Findings

In addition to the positive survey results, having screens encouraged multiple affordances, conditions that allow people to do their best work. Affordances are the characteristics of an object or space that encourage a specific behavior. They imply the relationship between the object and the person, thereby influencing the person's use. Utilizing Haworth's Affordances Framework, which speaks to the physical, cognitive, and emotional needs of the worker, let's examine each affordance in more detail.

End-of-Run Screens

Insulation – Stimulus Control: The end screens provided purposeful management of stimuli based on task, activity, and timing by helping to minimize the visual distractions of the hallway from the seated position.

Well-being – Security: End screens gave people a sense of having sufficient protection. The workstations without screens along the aisles were used to support conversation outside the huddle/conference rooms as well as a place to take things like pens and post-its and to leave unwanted things like coffee cups. The screens helped reduce the unwanted behaviors near the workstations adjacent to the aisles but did not entirely end the behaviors.

Desktop Screens

Insulation – Stimulus Control: Desktop screens provided purposeful management of stimuli based on task, activity, and timing. They also helped to minimize the visual clutter of neighbors' desks and define the personal boundaries of a bench workspace.

Externalization – Communication: Desktop screens allowed for the translation of thoughts, symbols, words, or pictures to others. Sticky notes, calendars, availability, interests, projects, and images were placed directly on the screens.

Well-being – Autonomy: With the desktop screens in place, people felt the freedom to make independent choices about personal artifacts. Desk screens helped to delineate space, which made each employee's territory known, empowering users to personalize the layout and take ownership of their workstation.

Affinity – Engagement: Higher engagement builds a stronger relationship between an employee and their organization. The desktop screens as spacial markers reduce conflict over use of the desk surface even when personal distance is minimal. This supports engagement within the workspace by allowing employees to be absorbed in and enthusiastic about their work.[1]

Conclusion

Utilization of workspace screens led to positive impacts on work accuracy, creativity scores, and stress symptoms for participants. Feedback encouraged using larger end-of-run screens and desktop screens that are not shared with other coworkers, to maximize insulation and autonomy. When used appropriately, workspace screens improve employee job satisfaction and performance, helping organizations function optimally.

As we continue to look at workplace questions and research new workspace solutions, we are thankful to collaborators, like SmithGroup, who are willing to explore and ask questions with us.

Contributor

Marta Wassenaar, LEED AP, holds a B.A. degree in Psychology and Business Administration and leads advanced research and insights for Haworth's Global Design and Innovation team. With 20+ years' experience in the contract furniture industry, she leads global market insights and research to support the advanced development of Haworth's products and solutions.

Reference

Becker, Franklin D. "Study of Spatial Markers." *Journal of Personality and Social Psychology* 26 (3) (1973): 439-455.

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 www.haworth.com.

1 Becker, 1973.