# Do Unconventional Workspaces Promote Creativity?



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It is widely assumed that unconventionally-designed offices stimulate creativity. But that isn't always the case - sometimes they may even impede innovation.

Google and Facebook are famous for their unique workspaces, with design features including open floorplans, themed breakout pods and meeting rooms, playgrounds, games rooms and even sleeping pods. But the tech giants are not the only companies to have ditched traditional desks and cubicles for unusual workspaces.

The unconventional office trend is rising, driven by the belief that alternative working areas stimulate creativity. Such workspaces are also thought to attract certain employees, especially those who are inherently more creative. But can these alternative spaces inspire creative thinking, or do they just attract divergent thinkers?

While research has shown that <u>distractions facilitate creative problem</u> <u>solving</u> and <u>mood states influence creativity</u>, there is no empirical evidence on the direct effect of unconventional workspaces on creativity.

To investigate how workspaces affect performance in creative tasks, we conducted controlled experiments in physical and online settings. Contrary to our initial expectation, we found that unconventional spaces did not always facilitate creative thinking, and even inhibited creativity under certain circumstances.

## What makes a workspace unconventional?

In our study we made use of the <u>Creative Garage</u>, a space designed to channel innovation on INSEAD's Singapore campus. Much like modern technology firms with unconventional workspaces, this room features high worktables and metal stools, whiteboard walls covered in colourful scribbles, bright floor cushions and unfinished ceilings.

Unconventional workspaces can come in many different shapes and sizes — there is no fixed formula. The most important feature, however, is its perceived unconventionality by its occupants, i.e., the individuals that carry out creative tasks in the space. The Creative Garage was unconventional to the participants in all three of our experiments – on average they reported that the physical environments that they normally work in was significantly different from this space. As a result, we initially expected this non-typical work environment to stimulate higher divergent thinking performance, that is, the process of generating many and distinct ideas to solve a task at hand.



In our first study, participants completed an idea generation task in either the Creative Garage or a conventional business workspace with monocoloured walls and standard office furniture and equipment.

Participants were given a sheet with 40 circles and asked to draw as many real-world objects as possible, using the circles as an integral part of the objects. Unexpectedly, participants in the Creative Garage drew fewer objects and their drawings were less unique than those in the conventional space. In other words, individuals had higher divergent thinking performance in the conventional space.

# Clues, cognitive fixation and creativity

In investigating the results, we found that individuals in the unconventional space searched for circular objects in their immediate environment – such as a Mickey Mouse drawing on the wall – and became fixated on these ideas. This cognitive fixation limiting their ability to come up with unique solutions.

To explore this further, we replicated the study in a virtual setting using participants recruited from Amazon Mechanical Turk. Individuals watched a short video tour of either the Creative Garage or a conventional space and were asked to complete the same circle task. Participants had an image of their assigned room in the background while they completed the task. There were circular objects on the whiteboard in the unconventional space, while the control room offered no direct clues.

Much like in the physical setting, individuals in the virtual unconventional room had significantly lower divergent thinking performance in terms of the total number and originality of solutions. These results suggested that cognitive fixation also occurred in a virtual setting, meaning participants focused on salient features in the background and were less able to come up with their own ideas.

Next, we wanted to test what happened when individuals didn't have direct clues in their environment when solving a creative task. We used the same virtual settings and asked participants what they would do if they needed to enter a store to buy an essential product but didn't have a surgical mask (as mandated in many places during the Covid-19 situation). Respondents were asked to list as many ideas as possible to deal with such a scenario.

For this brainstorming task, participants in the unconventional virtual space came up with more solutions and a higher number of unique solutions than those in the conventional space.

# Unconventional isn't a silver bullet for creativity

Our results demonstrate that the effect of unconventional workspaces on creativity is much more nuanced than widely believed. Atypical workspace designs are not silver bullets for fostering creativity and can have dual effects on individuals' idea generation.

For example, working in an unconventional space can have a negative effect on creative thinking when solutions to any given creative task can be inspired by salient features of the space. On the contrary, such spaces can have a positive effect when ideas cannot be drawn from the immediate environment.

Therefore, companies should not blindly copy the alternative workspaces of other organisations because a particular design could be a source of creative inspiration for one firm, but a source of cognitive fixation for another.

Managers need to imagine the kinds of workspace designs that would be perceived as unconventional by employees and are not directly related to the tasks that employees carry out. Such designs would be good starting points for creating unconventional workspaces that inspire creative thinking.

Again, it is worth noting that an unconventional space is relative to what an individual is used to. Someone from Google or Facebook, for example, might not find the workspace we used in our experiments to be unconventional if their normal work environment is designed in a similar way.

Importantly, it is possible that the unconventionality of the space can wear off over time as individuals adjust to their environments. An alternative solution to redesigning an entire office could be to have an unconventional space that is accessible on a temporary basis when teams need to brainstorm or solve a problem. This could be a manager's office or even an external location.

As collaborative problem solving increasingly moves online, our results indicate that it is possible to replicate unconventional spaces in virtual settings. This has important implications for fostering creativity online.

In a situation where a manager needs to host an online problem-solving session with remote participants, doing it from an unusual and inspiring space may trigger the right mindset to engage in creative thinking. This can be reinforced by providing a short virtual tour of the space to the remote participants (as we did in our experiments) so that they can experience the unconventionality of the space. Hosting a session from an unconventional space or experimenting with immersive backgrounds could be a simple, but effective way to push people from staring at a box on a screen to thinking outside of the box.

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#### **About the research**

"Spaces for Creativity: Unconventional Workspaces and Divergent Thinking" is a working paper.