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Natalie Campbell
Duquesne University

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Natural is the New Fluorescent: Shedding Light on the Way We Illuminate Our Spaces

By Natalie Campbell

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Have you ever heard the saying, ‘natural lighting is the best kind of lighting’? Well, science is proving it to be true, and I don’t just mean for taking pictures.

Dr Arsalan Heydarian and his team at the University of Southern California are finding that we may be able to “preset” our behavior in our everyday spaces (research article [here](#)). Sounds a little like mind control, but it actually has something to do with the way we illuminate our rooms.

With the help of cutting-edge technology, Heydarian and his team created an office space to test their idea—in the virtual world. This room was completely interactive. Participants could open or close the blinds to let in natural light, and turn the overhead artificial lights on or off if they preferred fluorescent ones. But here’s the twist. Each room had a different preset lighting setting that was natural, artificial, or a combination of the two. Heydarian and his team observed participants’ reactions to the preset lighting and their tendencies to change that lighting. They may have been in the virtual world, but their behavior was certainly not simulated.

Here’s what they found. When it came to natural lighting, participants were much less likely to shut the blinds or flip on the artificial lights. If they found the room to be too dark, they were more likely to fix it by letting in some natural light. As it turns out, those LEDs with all their rave reviews have nothing on pure sunlight.

If that isn’t enough to convince you, I’m not done yet. Participants were also asked to do some reading work right there in the virtual office space. Heydarian and his team found that people with more natural lighting in their spaces performed better than those who did not. They also identified something they called a “stickiness” of the preset lighting, whether natural or artificial. No, this has nothing to do with syrup or spider’s webs. It means participants tended to keep at least some similarity between their final lighting choice and the original. So it looks like default settings can influence someone’s behavior even as they walk into a room. It just goes to show how important first impressions can be.

In terms of money, these findings could be a real saver. Building managers can suggest good lighting in their office spaces just by presetting them. Less use of electrical lighting means an overall more cost-effective building. The environment will be thankful too with the reduction in energy usage. For the office building managers, this could mean no more outrageous energy bills. For the rest of us, it means no more awful light bulb jokes.

While this may be good news to desk jockeys nationwide, let's not limit ourselves to office spaces. Next time you're doing work at home or in your dorm, try it out. Turn off the lights and open the up blinds for some natural illumination that's easy on the eyes and the wallet.

Heydarian, A., Pantazis, E., Carneiro, J. P., Gerber, D., & Becerik-Gerber, B. (2016, December). Lights, building, action: Impact of default lighting settings on occupant behaviour. *Journal of Environmental Psychology*, 48, 212-223. Retrieved December 3, 2016, from ScienceDirect.

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