

OPINION | COMMENTARY

Why Zoom Meetings Can Exhaust Us

Being gazed at by giant heads can take a mental toll. New technologies may remedy that problem.

By Jeremy Bailenson

April 3, 2020 6:35 pm ET



A student takes notes during an online class over Zoom in El Masnou, Spain, April 2.

PHOTO: REUTERS

After a few weeks of sheltering in place, Zoom is becoming a household verb. There is little doubt the software is helping us through this crisis. But many of us are getting mentally exhausted from videoconferencing—whether for a work meeting, an online dance class, or a virtual happy hour. Some argue the cause of this weariness is the starkness of online interaction, compared with being together in person. In fact, the opposite is true. My two decades studying people who communicate virtually suggest we are experiencing nonverbal overload.

Behavior ordinarily reserved for close relationships—such as long stretches of direct eye gaze and faces seen close up—has suddenly become the way we interact with casual acquaintances,

coworkers and even strangers. Software like Zoom was designed to do online work, and the tools that increase productivity weren't meant to mimic normal social interaction.

In any social context, our cultures have established an acceptable level of intimacy we can display to others: It is OK to touch a family member, but not a coworker. In an elevator, people are forced to stand very close to one another. These forced violations of personal space upset the equilibrium of intimacy. But humans are nothing if not adaptive. On elevators, we rarely stand face-to-face with other riders and often look down for a large portion of the ride to create nonverbal balance.

In a normal work meeting of about 10 people, everyone is talking, looking at notes, perhaps typing. But the time spent in mutual gaze—looking directly into the eyes of one another—is tiny. When it occurs, it lasts only a few seconds.

With Zoom, a 10-person meeting is often set up in a grid that reminds us of “The Brady Bunch.” Each person stares right at you from the screen for the entire meeting. This has advantages—people are forced to pay attention. But it is also draining.

In an experiment at Stanford, my colleagues and I studied the consequences of this “constant gaze,” using virtual classrooms with one teacher and two students. For some students, the teacher’s gaze moved from student to student, as in the real world. For others, we rigged the technology so that each student experienced being stared at by the teacher for the entire lesson. Under those conditions, students paid more attention to the teachers. But the productivity gains came at a cost—the learners reported being very uncomfortable getting stared at for an entire lesson. Just like you might be feeling on Zoom.

Another thing about real meetings: We can control our personal space. We choose seats, move chairs, and adjust our distance to stay comfortable. On computer screens, “personal space” is determined by the size of the face image and how far you sit from the screen. The default settings on most Zoom sessions show a huge face of the person speaking. The brain is particularly attentive to faces, and when we see large ones, we interpret them as being close. Our “fight or flight” reflex responds.

One study we ran at Stanford showed that when people are exposed to large virtual faces, they flinch physically. This may be part of the reason Zoom is so exhausting—for every minute we are in Zoom, we have staring faces inches from our own. But if we move too far back from the screen, our colleagues might think we are disengaged.

In Silicon Valley, companies are working on technologies to maximize social connectedness while minimizing nonverbal overload. Apple’s Animoji and Samsung’s AR Emoji are small steps in that direction. Philip Rosedale, the founder of the avatar-based online virtual world Second

Life, is working to develop a comfortable virtual place that would allow people to gather and interact without the awkwardness of video chat. Other startups such as loom.ai and itSeez3D are designing platforms that convey emotions but don't overwhelm the senses.

In the meantime, we can adapt by changing the way we conduct videoconferences. One of my weekly meetings lasts two hours, and after the first few, which left us exhausted, we decided to stream video only for the person talking. It helped. Camera feeds can be turned off. Highlighting our pets and furniture décor is not critical to most meetings. To its developers' credit, Zoom gives us control over the positioning and size of the windows that show other people's faces. Play around with these settings to find one that creates the right balance for your meeting. Another option is to set up an external webcam instead of the laptop camera. By keeping the webcam near your face and the laptop farther away than normal, you can still be fully framed in your own camera feed while getting some space from all the other faces.

And don't be afraid to forgo Zoom every once in a while. The phone still works pretty well.

Mr. Bailenson is founding director of Stanford University's Virtual Human Interaction Lab.