## Pandemic lab: 'Zoom fatigue' hits women harder than men – The Washington Post

You're not imagining it: Being on camera for hours a day takes a toll.

The Zoom Video Communications Inc. logo on a laptop computer arranged in Dobbs Ferry, New York, on Saturday, May 29, 2021. (Tiffany Hagler-Geard/Bloomberg)



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During the early days of the pandemic, which were (naturally) packed with videoconferencing calls, Géraldine Fauville and her colleagues noticed that they ended their days more tired than usual. At about the same time, the phrase "Zoom fatigue" started to appear in the media. Fauville and several other researchers at Stanford University, where she was then a postdoctoral fellow in the department of communication, set about studying this new phenomenon. In a recent working paper, involving an online survey of more than 10,500 people, they reported that Zoom fatigue is real and that women are more susceptible to it than men, and they identified several factors that explained that difference. Fauville talked about her work (over Zoom, of course) from Sweden, where she now teaches at the University of Gothenburg. The interview has been edited for length and clarity.

**Q:** How much videoconferencing did you find the people that you surveyed were doing?

**A:** We looked at the frequency, we looked at average duration, and we also looked at how much time people had between meetings. The mean for frequency was a bit less than four meetings per day. The mean duration was around 45 minutes to an hour. And they had about half an hour between meetings — a measure we call "burstiness."

**Q:** Women reported roughly the same number of Zoom meetings as men, but women's meetings tended to last longer, and women had less time between meetings. Yet one key finding was that women reported being more tired even after equal amounts of meeting time.

**A:** Exactly. About 14 percent of the women reported feeling "very" or "extremely" fatigued, while only 5.5 percent of the men reported the same level of fatigue. Overall, women scored 14 percent higher on Zoom fatigue.

**Q:** How did you quantify their exhaustion?

**A:** We asked people 15 questions on a five-point scale that were distributed around five aspects of fatigue. The first questions had to do with general fatigue. For example: "How tired do you feel after videoconferencing?" And then there is visual fatigue, with questions such as, "How blurry does your vision get after video

conferencing?" And social fatigue: "How much do you tend to avoid social situations after video conferencing?" And motivational fatigue: "How much do you feel like doing nothing after video conferencing?" Finally, there were questions about emotional fatigue. When you combine the 15 questions and take the mean or the average, you have what we call the ZEF score — for Zoom Exhaustion and Fatigue.

Q: Overall, you found that something called "mirror anxiety" accounted for much of the gender difference. Explain that.

**A:** We know from previous research that people will more likely evaluate themselves when they see a mirror image of themselves. A mirror makes you more susceptible to comparing yourself with others — or with some ideal of how you should look, which can lead to negative effects, such as bad mood, anxiety or depression. We also know from prior research that this tendency for self-awareness in front of a mirror is greater among women. Most of that earlier research involved short-term exposure to a mirror. But now with videoconferences, we're in front of ourselves for hours per day.

**Q:** Mirror anxiety produced the strongest effects. But you found that other issues were also correlated with fatigue. What were they?

**A:** Another one — in order of importance for gender difference — was a feeling of being physically trapped. During in-person meetings or phone calls, people have the option of moving around. In face-to-face meetings, people would stretch or, you know, go and stand up and write on their whiteboard or go get a drink. During a phone call, you can actually be engaged in other tasks. Research has shown that motion and movement are very important for learning, for creativity, and for collaboration and cognitive performance. But during a videoconference, there is this expectation that you will stay in the camera view, facing the screen, which really limits your range of motion.

The third has to do with these large faces staring at you. During an in-person meeting, people will stare at you when you're the speaker. When someone else takes over, you're not the center of attention anymore. But during a videoconference, regardless of if you are the speaker or not, it feels like you're constantly in this stressful position of being watched, which can be very intense. Another aspect - and this depends on the size of your screen and the settings of your computer — but the other participants' faces appear to be very large. It's the digital-world equivalent of someone standing uncomfortably close to you, invading your personal space. Finally, there's the difficulty with nonverbal communication. When you're interacting with people in person, most of us have an instinctive understanding of these nonverbal behaviors that can be very complex — intonation, the orientation of a body and so on. These are very important cues in conversation. But during a videoconference, you only see the head and shoulders of the other participants, so a lot of this nonverbal communication is lost. You need to consciously monitor the signals they are sending — in a much more active way than you would do face to face. And you also need to send those signals. If I agree with you, I will have this tendency to nod more vigorously and for longer than I would do if we were sitting in the same

**Q:** The study was designed to be about gender — but you were also surprised that race appeared to matter, too.

**A:** Yeah. We saw that participants of color reported greater Zoom fatigue than White participants. To put it into perspective, the gender effect is 10 times the size of the race effect. Still, it's extremely important to look into that and to study this potential race effect in much more depth.

I hid my personal life from my students. Now they see it all — and I love it.

**Q:** How much does it matter that your sample was not representative of the general population? People responded to open invitations to take part in this survey, so they were likely to be already interested in Zoom fatigue.

**A:** This is a limitation of our study. But to address that in part, we ran a second study, using Amazon's online platform Mechanical Turk. [Amazon chief executive Jeff Bezos owns The Washington Post.] That's a platform where people are assigned various tasks and are paid for completing them. We created a task where participants were asked to complete our survey. We collected data from a random sample of 788 people, and they showed the same effects as the one on the main sample.

**Q:** Is there something that companies should be doing to alleviate Zoom fatigue — or that individuals can do?

**A:** One way to reduce fatigue is to shrink the size of the videoconference window, so you don't have these large faces staring at you. As for the mirror effect, you can disable the "self view" so you won't see yourself anymore. Your camera is still on. Everyone sees you, you see everyone, but you don't see yourself. To help with mobility, we suggest trying to increase the distance between yourself and the camera, which gives you a bit more room to move. And standing desks are helpful because they you allow to be more mobile during your videoconferences.

**Q:** And I guess companies could spread the word about the value of doing these things.

**A:** The responsibility for addressing Zoom fatigue should not be placed on individuals, since this could just intensify inequities. Not everyone can afford a standing desk, for example. One way companies can address it would be simply to have fewer videoconferences or fewer back-to-back meetings. And they might experiment with approaches like videoconferences where the video is not allowed, which would eliminate some of the sources of fatigue. It's very important for us that our findings can inspire companies to be aware of this issue, to think about it and to have a discussion about their videoconference policies and culture.

**Q:** I should point out that in this interview you are using a standing desk, and you're quite a ways back from the camera.

**A:** I definitely implement all the tips that I'm giving you, and that has definitely reduced my level of fatigue. The standing desk was the biggest improvement for me. It's kind of a cheap one from Ikea.

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