

UC San Diego

UC San Diego News Center

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A Brave New Virtual World of Work?

People are working remotely on a large scale during the pandemic. UC San Diego expert on teleworking discusses impacts of this unprecedented experiment.

The COVID-19 pandemic has ushered in remote work on an unprecedented scale. UC San Diego, like other employers and organizations around the globe, has had to pivot toward telework for staff and faculty members alike. Will this sudden transition shape the future of a new world of work? Will things ever go back to “normal,” or will we enter a “new normal”? Elizabeth Lyons, an assistant professor of management at UC San Diego’s School of Global Policy and Strategy, predicts the latter, while noting both its benefits and drawbacks.



Elizabeth Lyons

“Many organizations have now made large investments in both physical capital for employees to work from home (e.g. laptops, software), and organizational capabilities required to facilitate this as a result of the pandemic,” said Lyons, an expert on teleworking best practices. “Because the pandemic forced this large, fixed-cost investment required for remote work that many organizations were not otherwise able or willing to make or were putting off, remote work will be easier to facilitate going forward.”

However, to be clear, she said, remote work during the pandemic should not be indicative of what it might look like post-pandemic. “With schools closed and other challenges we face, productivity is suffering,” Lyons said. “Decisions on remote work capabilities should not be made without taking these factors into consideration.”

Lyons, who has 5-month old and 4-year old daughters at home, knows first-hand the predicament many parents are in. “It’s hard because this is not the norm, and I have to remind myself of this too while juggling trying to be productive and responsive to my children,” she said.



Lyons with daughters Nia (right) and Rebecca (left)

While we are not in the “norm,” there are many unknowns as to when it will be safe for offices and buildings to begin filling up again with workers. So, what can we expect in the short-term?

Remote work requires adaptation

Lyons believes that if employees are provided with good training and managerial direction on how to work productively from home, it is reasonable to expect workers will become better at it over the course of the

pandemic. A recent experimental study shows remote working in a life sciences firm improved performance, with bigger gains as time passed, suggesting people can become better at it over time.

Key to maintaining performance is communication, says Lyons, who has done fieldwork on the subject. A study she conducted with employees in Kenya who perform physical task work, found increased performance when managers checked in with employees to provide performance feedback over the phone every five days.

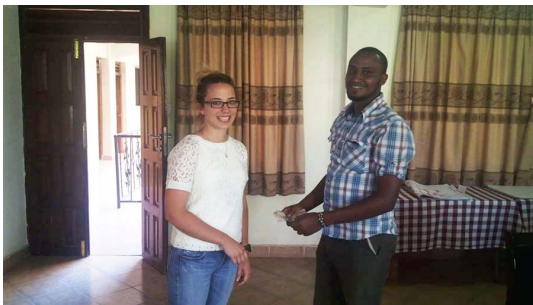
“Remote work often demands different managerial and organizational practices than on-site work because, for instance, managers cannot as easily observe what employees are doing and collaboration between workers happens differently,” Lyons said.

Lyons’ research suggests managers should give more frequent feedback in remote work than perhaps they would in person. And, she is heeding her own advice.

“I try to stay engaged with my co-authors and research assistants with more frequency than I would otherwise,” she said.

Lyons uses a variety of mediums to communicate while working from home, which has been especially helpful while balancing parenting duties.

“I’m aware of the perception that people may think I’m too busy to be engaged,” she said. “So, I text and I use WhatsApp. I’ll ask research assistants to send me pictures of their work for when I can’t be at a computer. You want to check in and make sure things are progressing.”



Lyons doing field work in Isiolo, Kenya on remote work training programs.

In addition to feedback from managers and colleagues, digital professional training can also help remote workers succeed. In a separate [study](#) conducted with insurance sales people in Kenya, Lyons finds that providing remote workers with training programs through mobile phone applications increases productivity, demonstrating that digital technologies can help substitute for in-person management, though some adaption is required.

Organizations and firms that do not learn to make such adjustments to their practices in order to get the most out of remote work will see productivity declines as a result, she predicts.

“Particularly in this time of economic uncertainty, I think that how well firms manage remote work now, will have implications for how likely they are to survive the next year or two,” Lyons said.

Cost savings

Remote work had been growing in popularity in recent years even before the pandemic spurred employees to work from home en masse. A [special analysis](#) done by FlexJobs and Global Workplace Analytics found that in the span of one year, from 2016 to 2017, remote work

grew by 7.9 percent. Over the last five years, it grew by 44 percent, and over the previous 10 years, by 91 percent.

Reduced costs to companies and organizations has been a major driver of such trends, as remote work lowers costs for organizations by lowering utility bills and reducing the amount of office space they need to provide. For example, in 2011, Sharp HealthCare in San Diego transitioned about 1,100 administrative and other employees to remote work for such reasons.

More women in the work force

There is evidence that more flexible work arrangements, such as allowing work-from-home, would increase female labor force participation.

Data from the Pew Research Center and UC San Diego research shows women leave the workforce due to family-related concerns at much higher rates than men. Additionally, a survey run on the UK job platform Jobsite shows 76 percent of women in tech say the option to work remotely was a major determinant of whether or not their company could retain them.

Increases in productivity

Remote work also improves performance more among mothers than it does fathers and non-parents, according to a study performed at a life sciences firm, but those other groups also had improved performance.

Other research on working from home has also documented increased productivity. One study found interesting performance results in comparing employees who wanted to telecommute and were allowed, to those who desired to work from home and were not allowed. The employees of a call center for the company Ctrip who were permitted to work from home made 13.5 percent more calls than their co-workers in the office. In addition, they were 50 percent less likely to quit their jobs, which saved the firm money.

Environmental and public health benefits

Lyons also points to indirect benefits of teleworking on both the environmental and public-health fronts. Since the onset of the pandemic, CO2 emissions have had a historic drop and air quality has improved. Additionally, UC San Diego research from Lyons' colleague Joshua Graff Zivin, a professor of economics at the School of Global Policy and Strategy, has found better air quality leads to increased worker productivity.

Xerox touts its [virtual workforce program](#), claiming that with 11 percent of its employees working virtually, it was able to reduce greenhouse gas emissions by 40,894 metric tons.

On the health front, people are less likely to catch viruses while working from home, which is why emptying office spaces has been chief among COVID-19 preventative strategies. There are also fewer car accidents with fewer people on the road—all of which could lower health costs and time off work, Lyons said.

Downsides? Remote work can be stifling for creativity

But remote work has downsides, especially when it comes to spurring creative group work.

“The sharing of ideas, experiences and approaches to problem-solving tends to be very important for high-quality innovative output,” Lyons said.

Webinar Series on the Impacts of COVID-19 on Labor

Lyons and Graff Zivin will discuss the global impacts that COVID-19 will have on labor as part of a School of Global Policy and Strategy webinar to be held at noon on May 21. The discussion is part of a webinar series focusing on the virus’ impacts on various segments of society. For more information, or to register, go to the [event website](#).

This sharing requires collaboration, and research has shown that a lot of idea sharing that ends up generating very novel solutions and innovations is not planned, whereas most electronic communication is.

“I think we can all acknowledge that we have different conversations with colleagues when we bump into them in the hallway, the kitchen or when we go for coffee with them than we do over email or even Slack,” Lyons said. “This informal conversation that happens face-to-face is difficult to replicate with remote work, and without it, innovative performance would likely decline.”

Sectors such as research and development, which require “out-of-the-box” thinking to seed innovation, also benefit from [in-person interaction](#). And, jobs like these, which also require onsite work in labs, should not eliminate face-to-face work all together, Lyons recommends. “I think there’s something about knowing what you are saying is being recorded or will be saved, even on platforms like Zoom, that makes people more inhibited to throwing out ideas, and more averse to risk,” Lyons said.

Moreover, research from Graff Zivin outlines how risk is critical in R&D's ability to enhance scientific discovery and economic prosperity.

Academia requires similar novel output and many academics and researchers work remotely, but not exclusively remotely. With high-quality research requiring collaboration from experts around the world, it translates to the majority of collaboration between co-authors occurring online.

"While, we see each other occasionally at conference and in-person writing sessions, the main ways I communicate with co-authors are through email, Skype or Google Hangouts, text and phone calls," Lyons said. "For co-authors in very different time zones, email and text are particularly important."

In today's era, where most face-to-face interactions for employees are not an option because of the public health crisis, Lyons recommends that the best way to overcome this obstacle is being reachable online whenever it's not harming productivity, and encouraging people to ping each other for idea-sharing and feedback.

"Establishing a culture of non-judgment is even more important in online work because ideas are written down and can be easily recalled (relative to a hallway conversation), and people are more hesitant to say something embarrassing as a result," she said. "You don't want so much thought-sharing that no one gets work done, but you want to set up the culture and infrastructure that allows for spontaneous throwing around of ideas at unscheduled times."

Increased loneliness

The same call center for Ctrip that showed increased productivity among staff who both wanted to telecommute and were allowed also revealed another side effect of remote work: increased loneliness.

Half of the employees in this group decided to return to the office because of the lack of social contact.

"We know for adults, work is a primary place where they get social interactions, so policymakers may want to consider these psychological effects," said Lyons.

Meanwhile, employees missing their co-workers during the pandemic can still connect. Zoom "happy hours" or "coffee chats" are useful for maintaining good relationships between co-workers, ensuring they keep up their knowledge of each other and ability to communicate,

according to Lyons.

Resources for remote work at UC San Diego

What are some other ways employees can thrive?

The campus remains open and operational and has made adjustments to normal activities in order to increase social distancing in the workplace. [Resources](#) for the UC San Diego community to facilitate remote work include virtual discussions groups for managers, online courses for professional development, Zoom training resources, tech [tools](#) offered by Informational Technology Services (ITS), as well as ergonomic [tips \(PDF\)](#), and resources for home offices.

In addition, IT has been providing faculty and staff with [critical support](#) throughout spring quarter.