Telecommuting and Work in the COVID-19 Pandemic

Are Workers Returning to the Workplace or Staying in Their Home Offices?

Philip Armour, Katherine Grace Carman, Kathleen J. Mullen, Shanthi Nataraj

RESEARCH Published Dec 3, 2020

Photo by len4ik/Adobe Stock

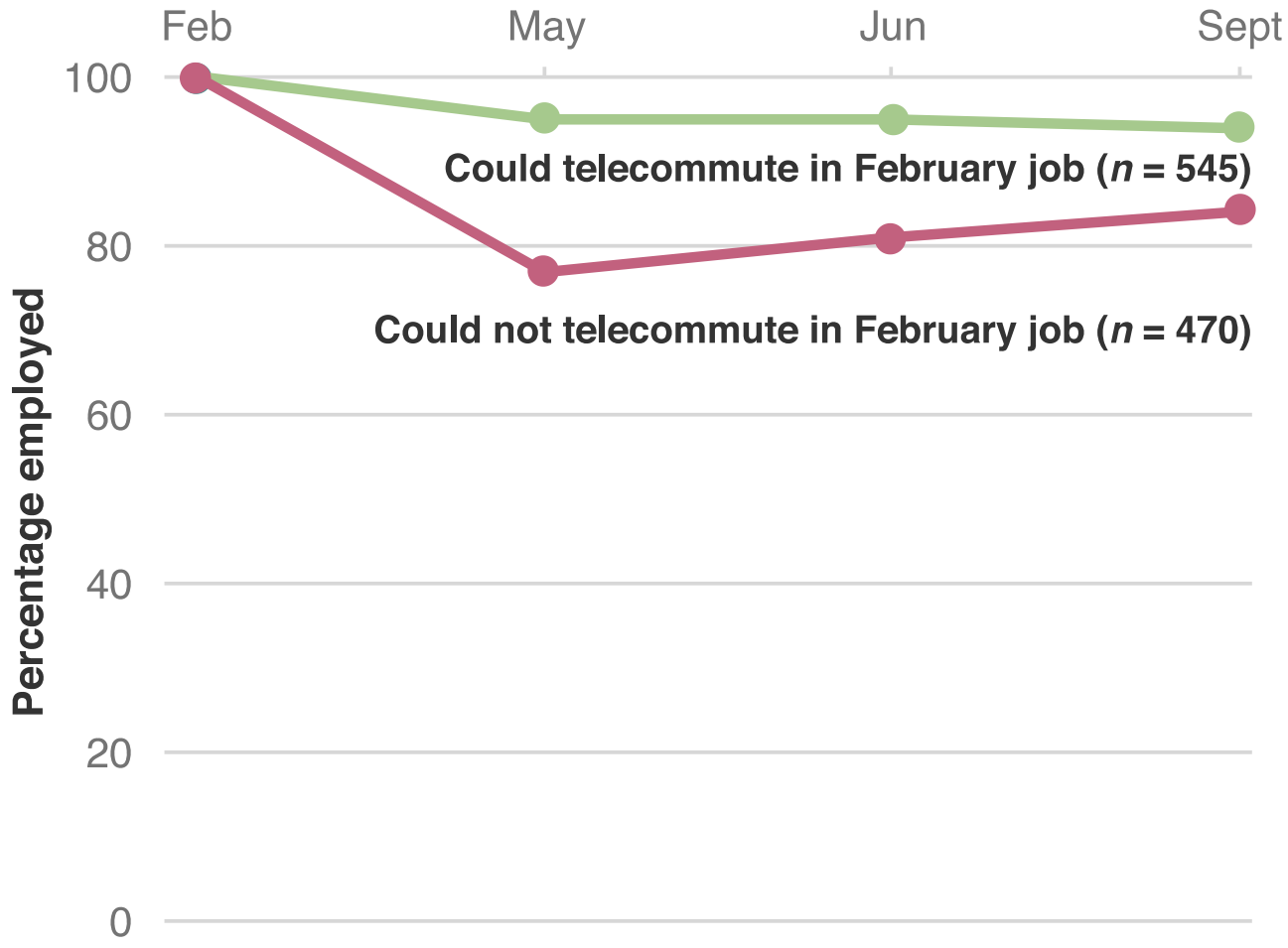
We know from previous RAND Corporation research that the ability to work from home protected jobs at the onset of stay-at-home orders in early spring 2020; by May, only 6 percent of workers who had the option to telecommute prior to the onset of the coronavirus disease 2019 (COVID-19) pandemic had lost their jobs compared with about 25 percent of workers who did not have that option. But is telecommuting still protective of employment months later? And is the nature of telecommuting changing? Answers to these questions depend on what kinds of jobs workers had before the pandemic.

In the first week of May, the middle of June, and the middle of September 2020, we fielded surveys in the nationally representative RAND American Life Panel (ALP) to explore how workers' lives changed as a result of the pandemic. We focus on the 1,015 individuals who were working for pay or profit in February 2020 and who responded to all three survey waves.

Being Able to Telecommute Still Protects Employment, but the Gap Is Narrowing

The ability to make an immediate shift to telecommuting varied widely by occupation: Those in legal, scientific, arts, or media professions mostly telecommuted in May, while those in protective services, maintenance, construction, food preparation, and transportation had to leave home to keep working or lost their jobs. However, this difference is narrowing (see Figure 1).

Figure 1. Ability to Telecommute Pre-Pandemic Affected Employment



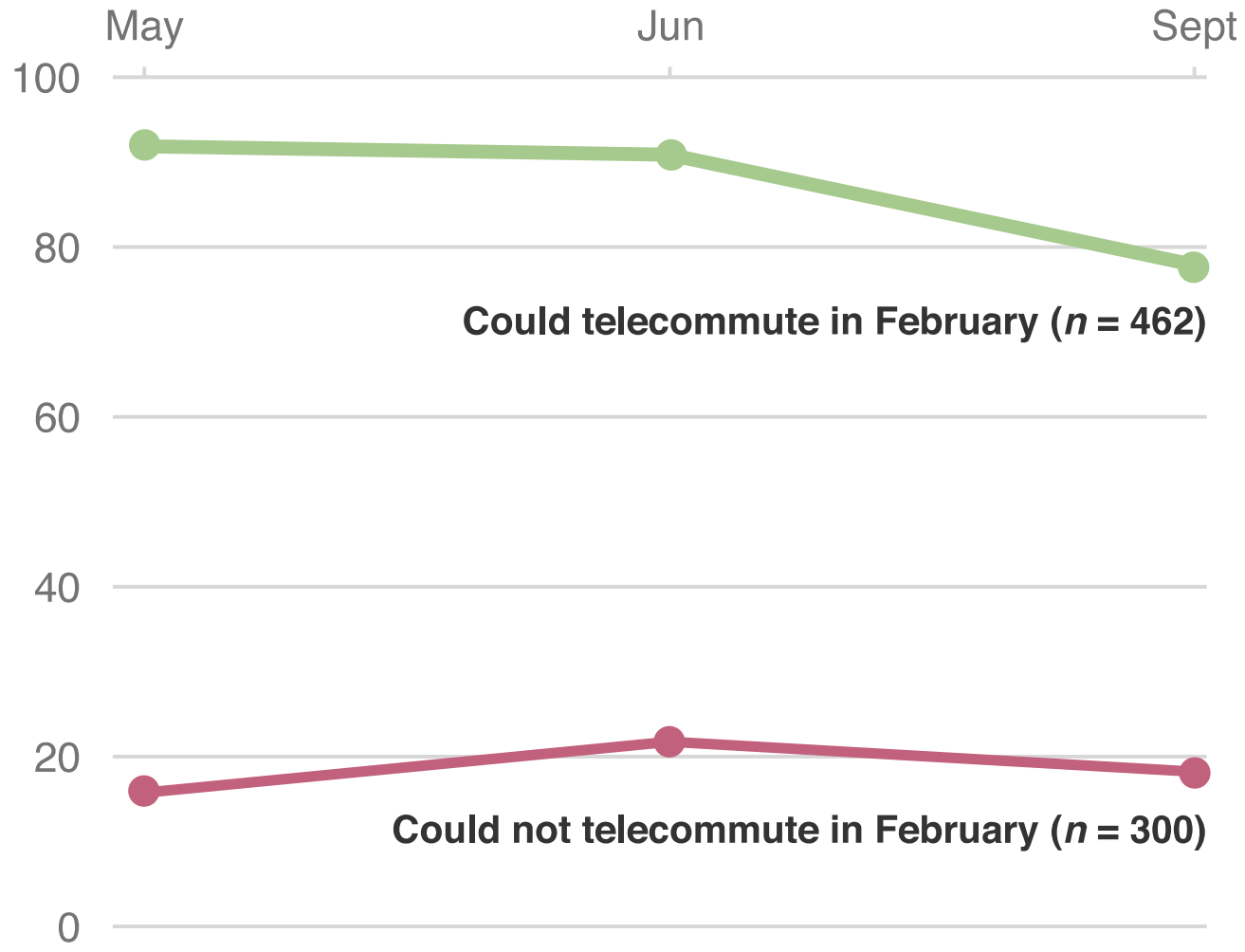
SOURCE: Authors' analysis of ALP data. The sample was limited to the 1,015 respondents who were working in February 2020 and who responded to the May, June, and September survey waves. Responses are weighted using sampling weights as described in Carman and Nataraj, 2020.

Although 77 percent of those who could not telecommute in February were working in May, this number rose to 84 percent in September. Meanwhile, there has been little change in employment among those who could telecommute before the pandemic: Nearly 95 percent of workers who could telecommute before the pandemic were employed in both May and September.

Telecommuting Patterns Are Shifting, but the Nature of the Shift Depends on the Type of Job a Worker Has

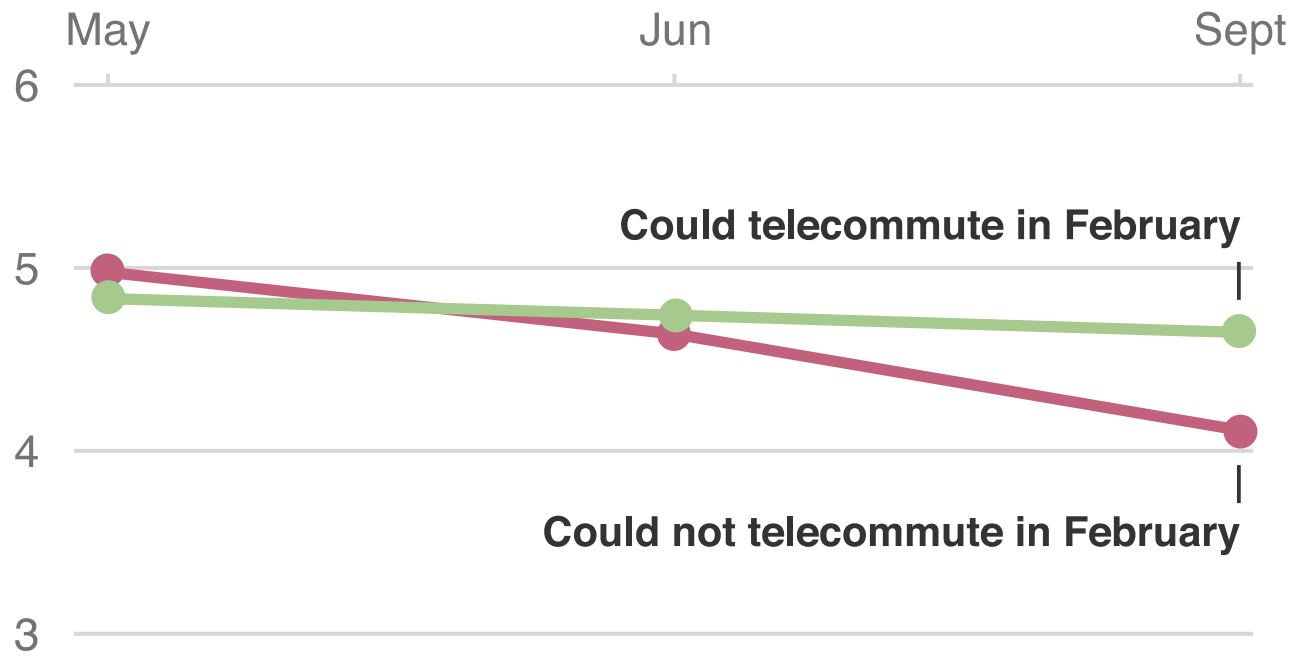
How has telecommuting changed over the course of the pandemic? To understand how telecommuting has changed *within* existing jobs, we focused on workers who still hold the same jobs that they had in February. In Figures 2 and 3, we break down trends in telecommuting across two measures: (1) whether workers are telecommuting at all (i.e., at least one day per week) and (2) how many days workers are telecommuting if they are telecommuting at all.

Figure 2. Percentage of Employees Telecommuting at Least One Day in the Past Week



SOURCE: Authors' analysis of ALP data. The sample was limited to the 762 respondents who were working in February 2020; who responded to the May, June, and September waves; and who were working in their February jobs during all three waves. Responses are weighted using sampling weights as described in Carman and Nataraj, 2020.

Figure 3. Average Number of Days Spent Telecommuting in the Past Week for Those Who Telecommuted at Least Once During the Week



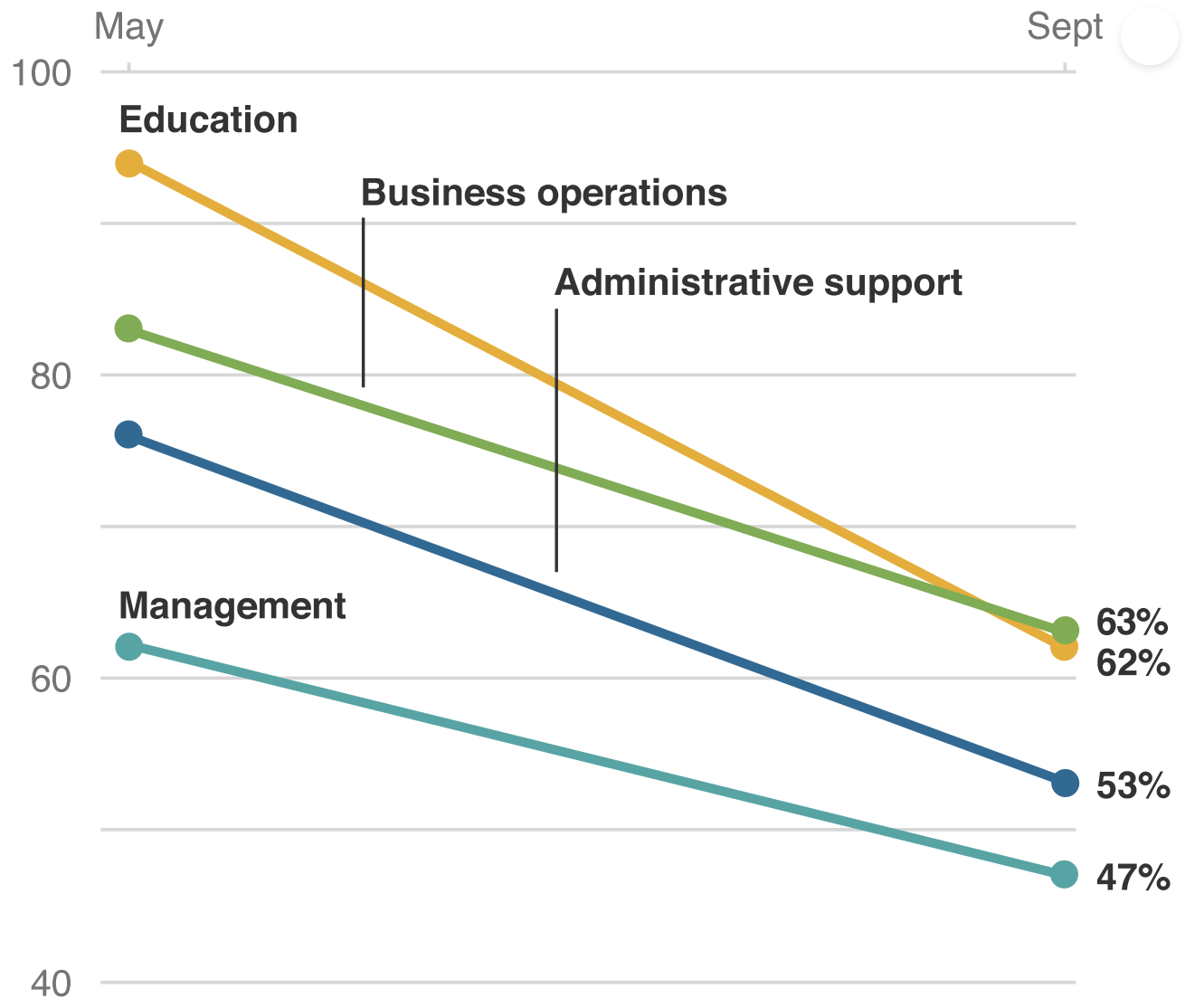
SOURCE: Authors' analysis of ALP data. The sample is further limited from that in Figure 2 to those who were telecommuting in any given month (among those who could not telecommute in February, *n* = 48 in May, *n* = 63 in June, and *n* = 62 in September; among those who could telecommute in February, *n* = 414 in May, *n* = 382 in June, and *n* = 363 in September). Responses are weighted using sampling weights as described in Carman and Nataraj, 2020.

Figures 2 and 3 tell contrasting stories about trends in telecommuting for those with jobs that previously allowed telecommuting versus those with jobs that did not have this option. In Figure 2, we see that for those who could not telecommute in February, but who kept their jobs during the pandemic, only one in five telecommuted at all in May—and that number stayed the same in September. In contrast, those who already had the option to telecommute had a different experience: More than 90 percent of these respondents were telecommuting in May, but more and more are returning to the workplace; only 78 percent telecommuted at least one day per week in September.

Figure 3 shows that the workers who were able to telecommute in February and who continue to work from home work remotely essentially full time, or five days per week, on average. Those who could not telecommute in February saw a slight decline in the number of days they spent telecommuting as the pandemic progressed, although it is not clear whether this trend indicates that the increase in telecommuting for this group was temporary and the number of days spent telecommuting will decline over time or that they will continue to work at home several days per week.

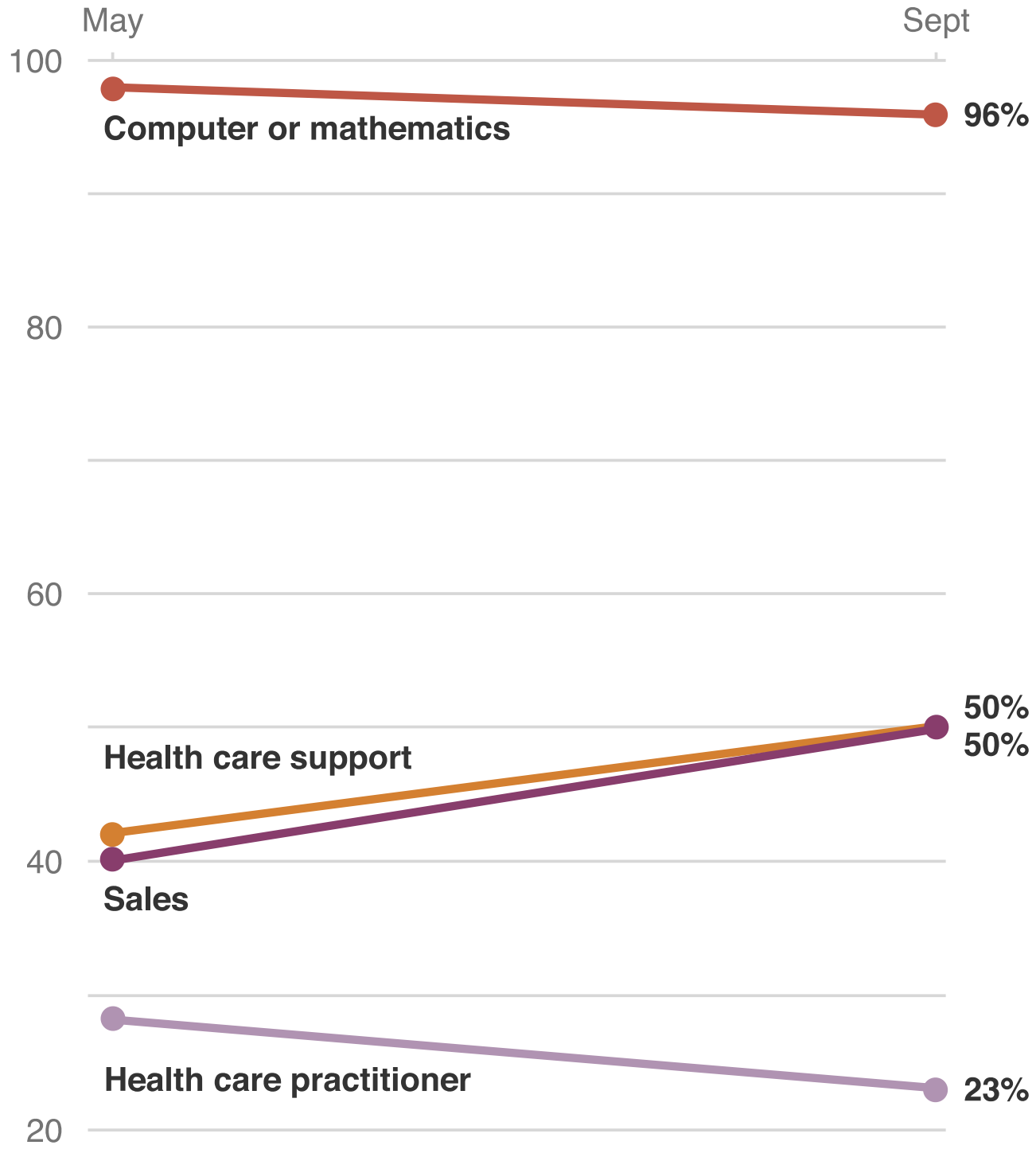
In Figures 4 and 5, we delve into how telecommuting has changed by occupation. We limit this analysis to those who remained in their February jobs in both May and September. Figure 4 shows rates of telecommuting at all in May and September for the occupations with decreasing rates of telecommuting, while Figure 5 shows occupations with increasing rates of telecommuting or experiencing only small changes in rates of telecommuting.

Figure 4. Percentage of Employees Telecommuting at Least One Day in the Past Week, by Occupation: Decreasing Rates



SOURCE: Authors' analysis of ALP data. The sample was limited to the 768 respondents who were working in February 2020; who responded to the May, June, and September waves; and who were working in their February jobs in both May and September. Only occupations with at least 25 respondents are shown. This figure shows occupations for which the decrease in the percentage of respondents reporting any telecommuting between May and September was statistically significant at the 5-percent level. Responses are weighted using sampling weights as described in Carman and Nataraj, 2020. These occupational classifications are from the U.S. Bureau of Labor Statistics, 2020.

Figure 5. Percentage of Employees Telecommuting at Least One Day in the Past Week, by Occupation: Steady or Increasing Rates



SOURCE: Authors' analysis of ALP data. The sample was limited to the 768 respondents who were working in February 2020; who responded to the May, June, and September waves; and who were working in their February jobs in both May and September. Only occupations with at least 25 respondents are shown. This figure shows occupations that did not exhibit a statistically significant decrease in telecommuting. Responses are weighted using sampling weights as described in Carman and Nataraj, 2020. These occupational classifications are from U.S. Bureau of Labor Statistics, 2020.

NOTE: "Computer or mathematics" refers to computer and information analysts and research scientists, database and network administrators, and software and web developers.

Unsurprisingly, there has been a dramatic reduction in telecommuting among teachers from May to September 2020, once the new school year began and many districts restarted full or partial in-person instruction. However, managers, administrative support staff, and those in business and financial operations also have exhibited substantial declines in telecommuting since May, indicating that rates of telecommuting were temporary adjustments.

However, other occupations continue to have unchanged or potentially *increasing* rates of telecommuting. Those working in computer or mathematical occupations continue to telecommute at high and persistent rates. The percentage of health care support workers and salespeople reporting any telecommuting increased, although the change was not statistically significant.

Conclusion

The ability to switch rapidly to telecommuting at the start of the pandemic saved many workers' jobs. As the pandemic continues, we are seeing evidence that some workers who were previously working from home are starting to go back to their workplaces, although most who are able to telecommute continue to do so.

To what extent are these changes likely to persist even after the need for social distancing is over? The differing changes in telecommuting across occupations suggest that there are likely to be some long-term impacts. There is some evidence that telecommuting might be spreading to such occupations as health care and sales; it was less prevalent in these occupations at the start of the pandemic. This might indicate ongoing adjustments that facilitate telecommuting, which could allow for more telecommuting over time. Our research team will continue to track the evolving nature of work in the coming months.

References

Katherine Grace Carman and Shanthi Nataraj, *2020 American Life Panel Survey on Impacts of COVID-19: Technical Documentation*, Santa Monica, Calif.: RAND Corporation, RR-A308-1, 2020. As of November 24, 2020: https://www.rand.org/pubs/research_reports/RRA308-1.html

Armour, Philip, Katherine Grace Carman, Kathleen J. Mullen, and Shanthi Nataraj, *The COVID-19 Pandemic and the Changing Nature of Work: Lose Your Job, Show Up to Work, or Telecommute?* Santa Monica, Calif.: RAND Corporation, RR-A308-4, 2020. As of November 24, 2020: https://www.rand.org/pubs/research_reports/RRA308-4.html

U.S. Bureau of Labor Statistics, "2018 Standard Operational Classification System," webpage, April 17, 2020. As of November 30, 2020: https://www.bls.gov/soc/2018/major_groups.htm

Topics

Coronavirus Disease 2019 (COVID-19)

Employment and Unemployment

Labor Markets

United States

Document Details

Availability: Web-Only

Year: 2020

DOI: https://doi.org/10.7249/RRA308-11

Document Number: RR-A308-11

RESEARCH CONDUCTED BY

RAND Education and Labor

This report describes a subset of results from three survey waves fielded in May, June, and September 2020 through the ALP to explore how workers' lives changed as a result of the COVID-19 pandemic. A technical description of the survey that includes a description of the ALP, the objectives of the survey, and information about the fielding of the survey are presented in Katherine Grace Carman and Shanthi Nataraj,

2020 American Life Panel Survey on Impacts of COVID-19: Technical Documentation, Santa Monica, Calif.: RAND Corporation, RR-A308-1, 2020.

This study was undertaken by RAND Education and Labor, a division of the RAND Corporation that conducts research on early childhood through postsecondary education programs, workforce development, and programs and policies affecting workers, entrepreneurship, and financial literacy and decisionmaking. Questions about this report should be directed to the lead author, Philip Armour, at parmour@rand.org, and questions about RAND Education and Labor should be directed to educationandlabor@rand.org.

Funding for this research was provided by unrestricted gifts from RAND supporters and income from operations.

Objective Analysis.
Effective Solutions.

RAND is a research organization that develops solutions to public policy challenges to help make communities throughout the world safer and more secure, healthier and more prosperous. RAND is nonprofit, nonpartisan, and committed to the public interest.

RAND Headquarters
P.O. Box 2138
1776 Main Street
Santa Monica, CA 90401-2138

RAND has offices across the U.S., in Europe, and in Australia
See all RAND locations