

Disparity Between the Mental and Self-Rated Health of Teleworkers and Non-Teleworkers in the United States

Joseph Jaiyeola¹

1. *Department of Sociology & Demography, University of Texas at San Antonio*

PhD Student, Applied Demography

Abstract:

In response to the outbreak of the coronavirus, there was a surge in the number of people working from home (teleworking), yet the effect of this measure is understudied. Utilizing data from the U.S. Census Bureau's Household Pulse Survey (HPS) from August 2020 to December 2020, this study examines the sociodemographic factors associated with teleworking and the effects of teleworking on individuals' mental and general health outcomes. The results indicate that almost two-thirds (61.9%) of U.S. households had at least one adult teleworking during the pandemic, as educational attainment and household income emerged as key differentiating factors in the share of households with teleworkers. The result also shows that those associated with teleworking experience poorer mental health compared to those who are not associated with teleworking. However, individuals who do not telework and whose household members do not telework experience poorer general health than those who do, and this differs by gender, with females being at higher risk of experiencing poorer mental and general health outcomes. This study not only enriches our comprehension of the disparities between teleworkers and non-teleworkers but also beckons policymakers and advocates to fashion tailored interventions and policies that can support the mental health and the overall well-being of the workforce.

Keywords: Teleworking; Health disparity; Mental health; Self-rated health; Policy; COVID-19

INTRODUCTION

The action or practice of working from home is one of the measures taken to reduce the spread of coronavirus. This measure has led to an unprecedented increase in the number of people teleworking [1,2]. In total, almost 2.7 billion workers worldwide were affected by the exceptional measures implemented to control the health crisis [7]. According to the U.S. Bureau of Labor Statistics, the percentage of employed persons working at home on days they worked nearly doubled during the COVID-19 pandemic in 2020, rising to 42 percent [1]. Apart from taking measures to reduce the spread of the virus, it is imperative to know how people experience teleworking. The understanding of this experience can provide insights into how to organize and manage distance work in the future. This brief discusses the mental and general health disparities of teleworkers and non-teleworkers. I conclude with policy recommendations for improving the mental and general health of teleworkers and non-teleworkers.

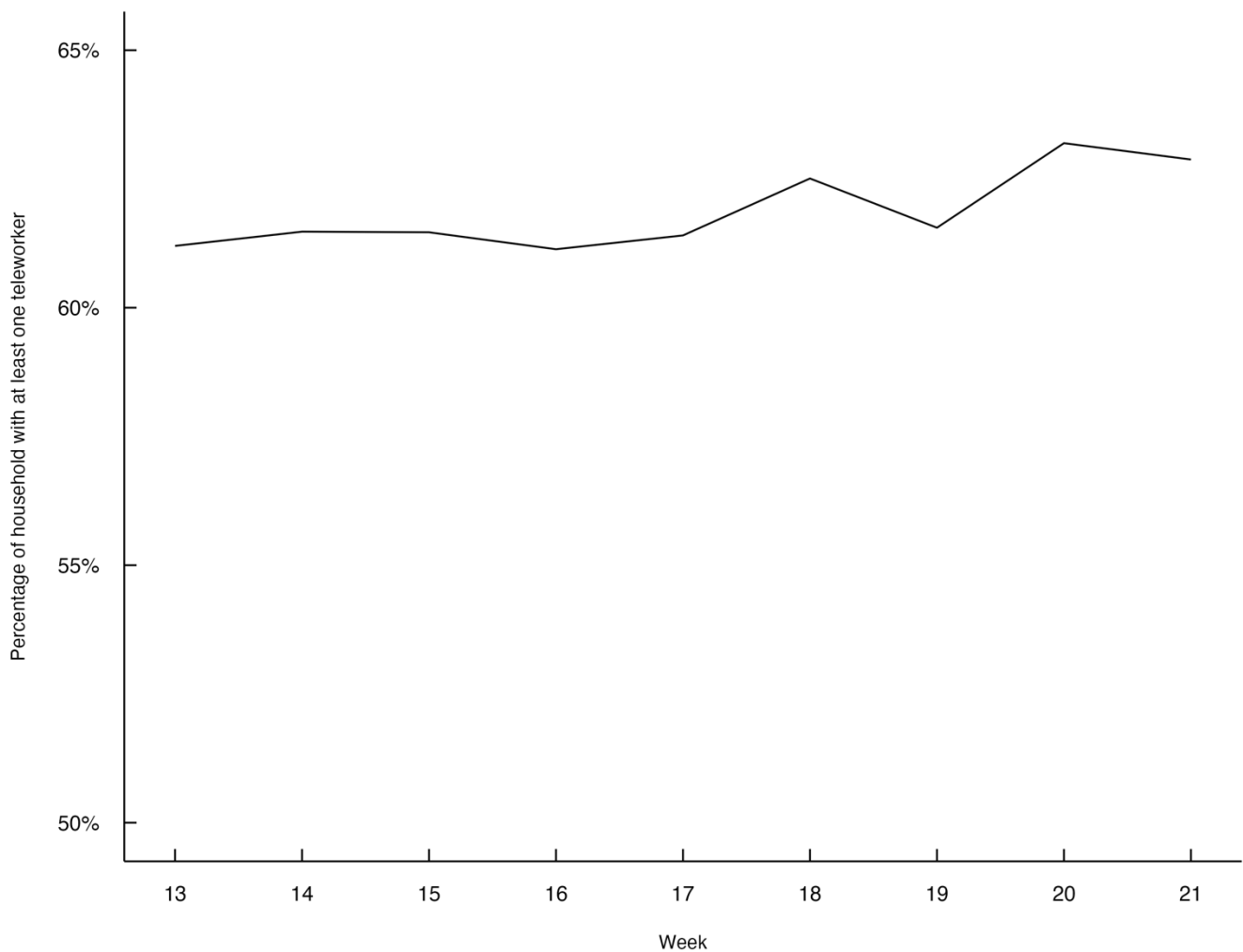
KEY FINDINGS

- About two-thirds of U.S. households have at least one adult teleworking
- Educational attainment and household income are differentiating factors in the share of households with teleworkers.
- Those teleworking or those who have at least one household member teleworking have poorer mental health compared to those who do not telework or have any household member teleworking.
- Individuals who do not telework and whose household members do not telework experience poorer general health than those who do.
- Females, irrespective of their working mode or that of their household, have poorer mental and general health than men.

The majority of U.S. household has at least one adult working from home (teleworking)

Survey results indicate that about two-thirds (61.9%) of U.S. households have at least one adult teleworking. **Figure 1** shows the trend of the United States household teleworking rate between August 2020 and December 2020. These data are collected with the question, "Did any adults in this household substitute some or all of their typical in-person work for telework because of the coronavirus pandemic, including yourself?" Throughout this period, the percentage of households with at least one teleworker was relatively stable, ranging from 61%-63%.

Figure 1: Trend of Household with Teleworker(s) from August 2020 to December 2020

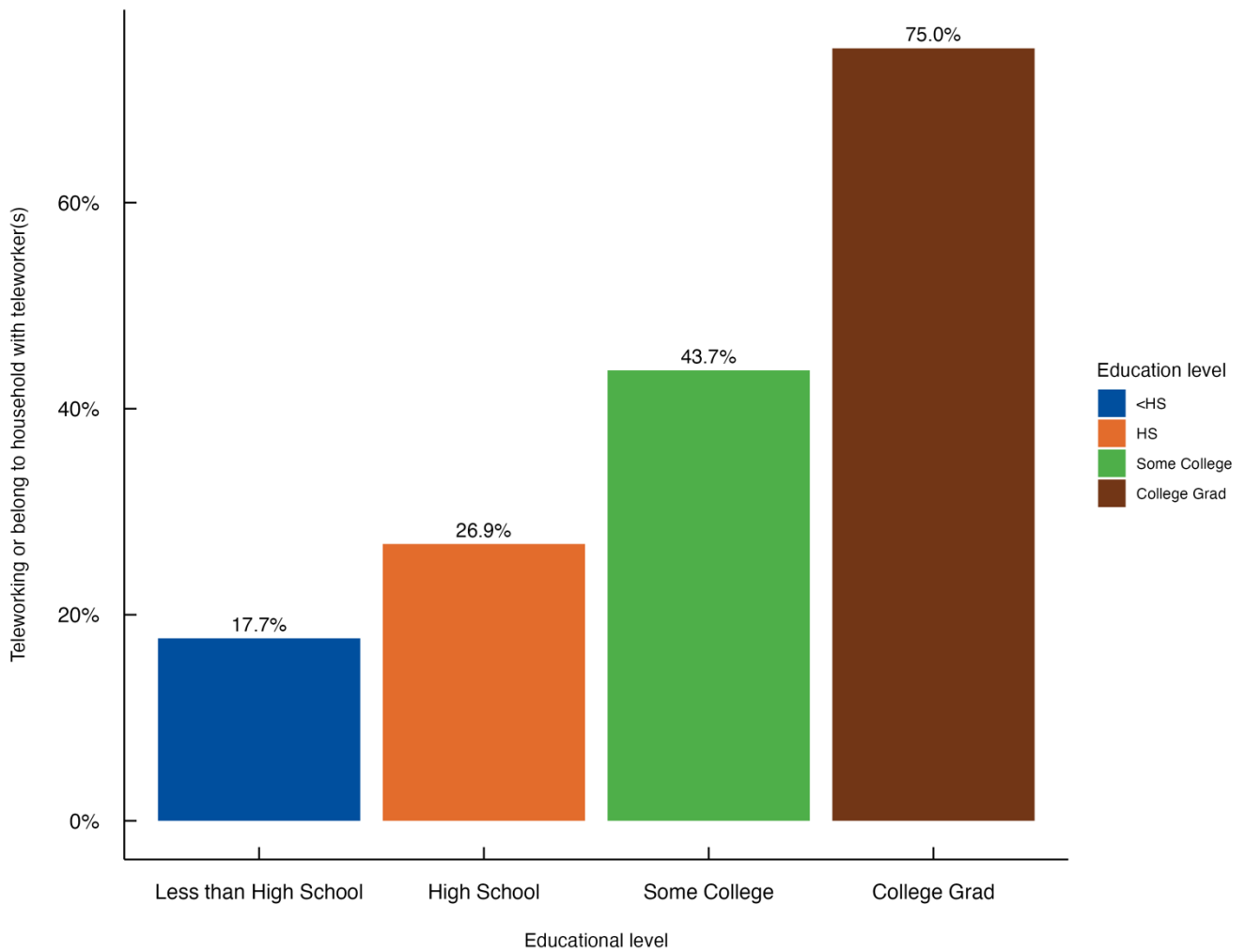


Source: U.S. Census Household Pulse Survey, Week 13-21: Aug. 19th, 2020 - Dec. 22, 2020.

Educational attainment and household income are differentiating factors in the share of households with teleworkers.

While some households have at least one member teleworking, others maintain their usual presence-based working conditions. It is essential to note that not all employed adults have the option of teleworking. **Figure 2** shows the percent of individuals associated with teleworking by educational attainment. The result indicates that those with an education less than a high school degree (17.7%) are less likely to be associated with teleworking compared to college graduates (75.0%). Overall, the result shows the education gradient in the share of individuals associated with teleworking. This result supports existing findings that those with higher educational attainment have the strongest inclinations towards the belief that the responsibilities of their job can be done from home [6].

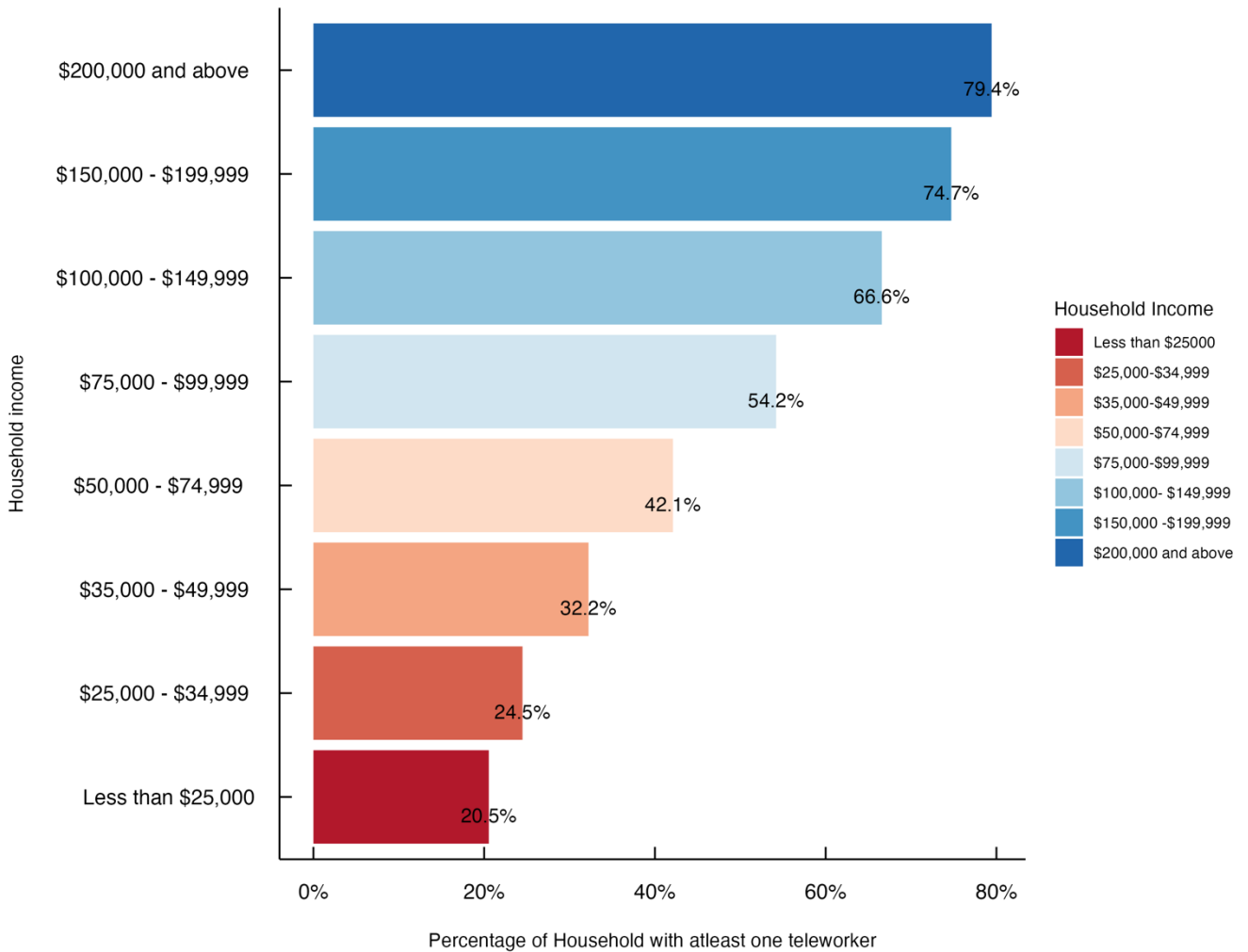
Figure 2 Percent of Individuals Associated with Teleworking by Educational Attainment



Source: U.S Census Household Pulse Survey, Week 13-21: Aug. 19th, 2020 - Dec. 22, 2020.

Figure 3 shows the percent of individuals associated with teleworking by household income. The result indicates that higher-income households have a higher likelihood of having at least one teleworker. Specifically, the result shows that households with \$200,000 and above yearly income are about four times (79.4%) more likely to have at least one teleworker compared to households that earn less than \$25,000 yearly. Ultimately, household income is a good indicator of the share of those who can and cannot telework.

Figure 3 Percent of Individuals Associated with Teleworking by Household Income



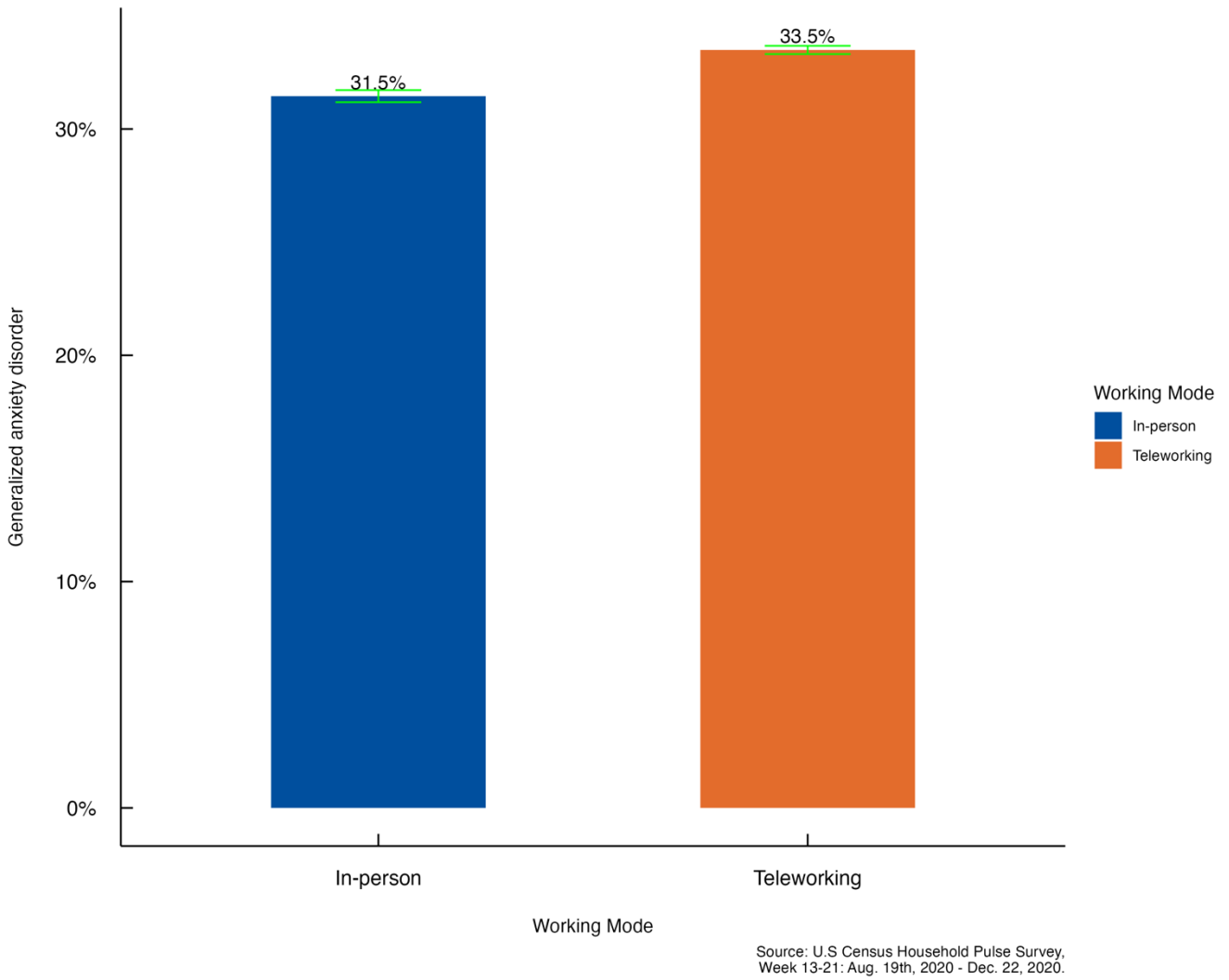
Source: U.S Census Household Pulse Survey, Week 13-21: Aug. 19th, 2020 - Dec. 22, 2020.

Those teleworking or those who have at least one household member teleworking have poorer mental health compared to those who do not telework or have any household member teleworking.

As there are unequal opportunities in the share of those that can telework, there are also variations in the mental health and general health outcomes by working mode (teleworking and not-teleworking).

Figure 4 shows the percent of individuals with generalized anxiety disorder by associated working mode. The result shows that those who telework or belong to households that telework (33.5%) are more likely to experience higher anxiety disorder than those who do not telework or have any household member teleworking (31.5%). Although this difference looks minute, it is statistically significant ($p < 0.05$), as the confidence intervals do not overlap.

Figure 4 Percent of Individuals with Generalized Anxiety Disorder by Associated Working Mode

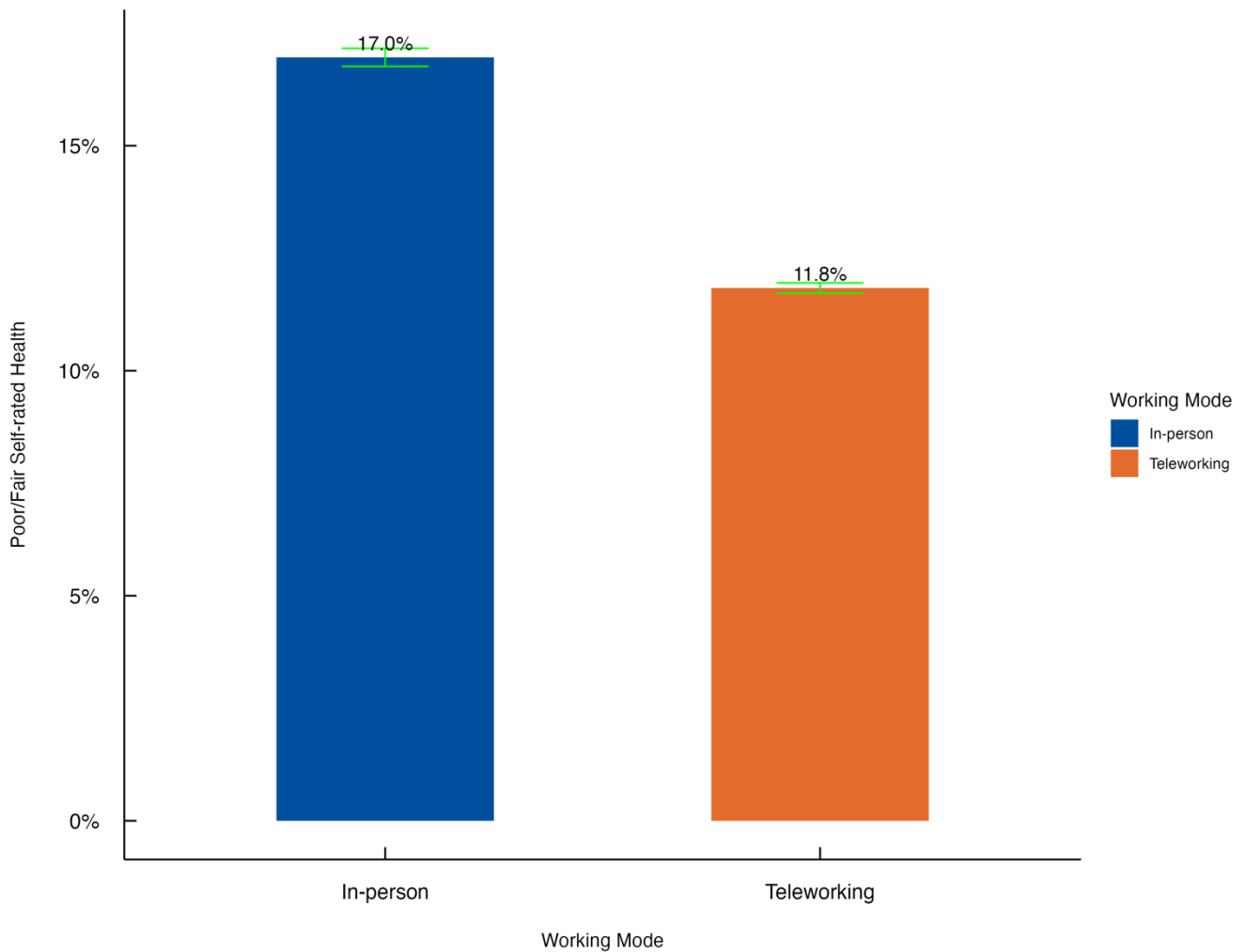


Individuals who do not telework and whose household members do not telework experience poorer general health than those who do.

Although the previous result (Figure 4) suggests that those associated with non-teleworking are less likely to experience poorer mental health outcomes than those associated with teleworking, the reverse is the case when comparing the two groups by overall general health outcome.

Figure 5 shows the percent of individuals with poor general health ratings by associated working mode. The result indicates that individuals who do not telework or belong to a household that telework (17.0%) are more likely to experience poorer general health than their counterparts associated with teleworking (11.8%).

Figure 5 Percent of Individuals with Poor General Health Rating by Associated Working Mode



Source: U.S. Census Household Pulse Survey, Week 13-21: Aug. 19th, 2020 - Dec. 22, 2020.

Likely reasons why there is a contrast between the mental and physical health status of teleworkers and non-teleworks.

The findings of this study show that those with higher household income and higher educational attainment are more likely to telework or have household members teleworking (Figures 2 and 3). Higher household income and educational attainment can also translate to better access to health care, health insurance, and healthy behavior. This could be a possible explanation for why those associated with teleworking experience better general health outcomes than their counterparts who are not associated with teleworking. In addition, non-teleworkers are at higher risk of being exposed to health hazards like COVID-19 or other diseases due to the use of public transport while commuting to work and physical interaction with other persons at work, especially if they are in the service industry.

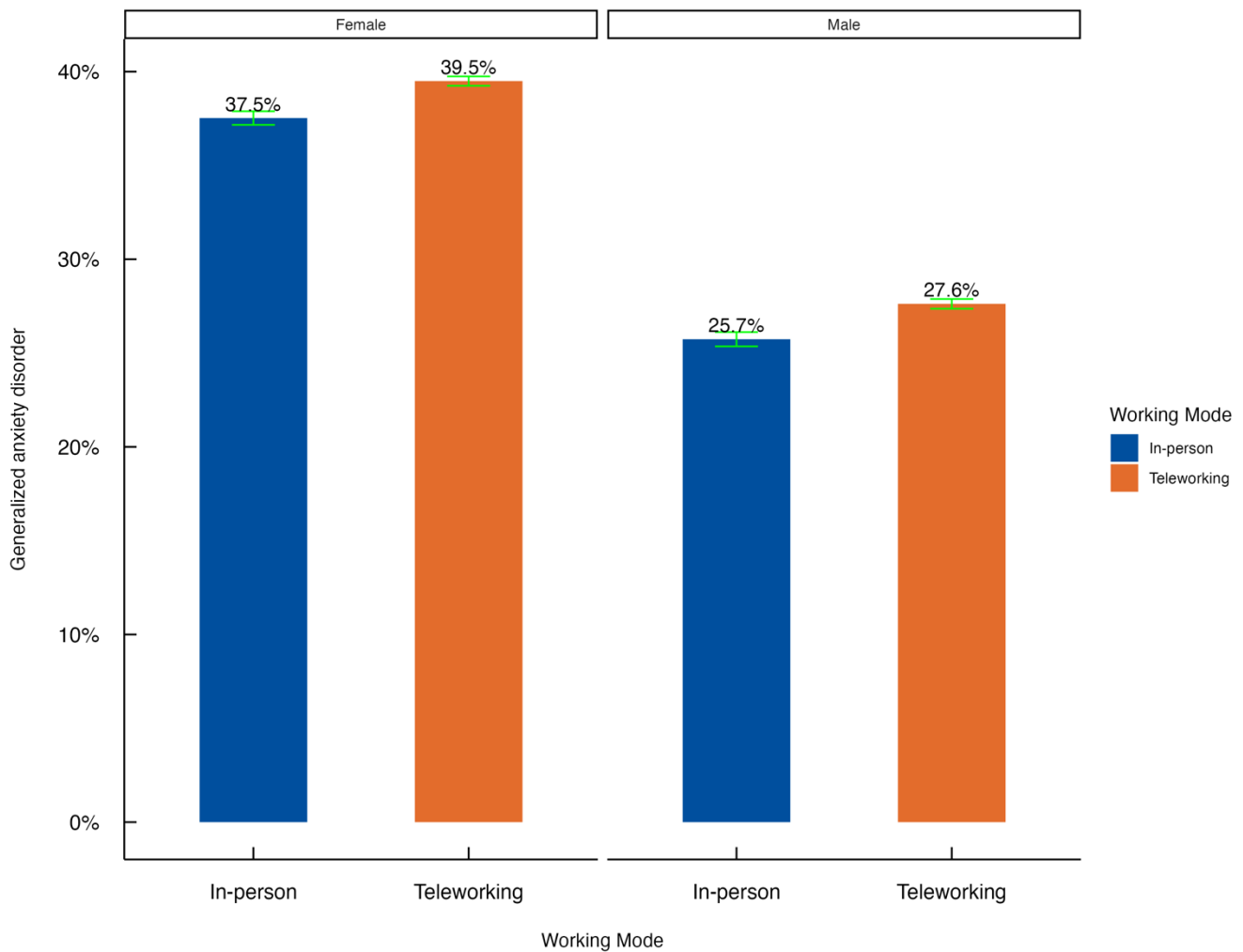
On the other hand, a possible explanation for why those associated with teleworking experience poorer mental health than those associated with non-teleworkers might be because non-teleworkers are less likely to experience social isolation and loneliness as they have co-workers to relate to at work. Another possible factor that led to this contrast in this result is that there are chances that some respondents are not teleworking but whose household member is teleworking.

However, previous findings on the mental and physical health of teleworkers and non-teleworkers vary considerably. Some studies suggested that teleworking produces effects such as irritability and worries, increased stress, anxiety, increased loneliness due to the isolation of working away from the office, and depression [8, 10]. Also, the blurring of physical and organizational boundaries between work and home can negatively affect an individual's mental health due to extended hours, lack of or unclear delineation between work and home, and limited organizational support [2]. Contrary to the above findings, some authors have found that teleworking may improve well-being, increasing the ability to reconcile family life [11]. The benefits of teleworking include a better balance of home and work life and stress reduction due to decreased travel times and irritation caused by office interruptions [8].

Females, irrespective of their working mode or household, have poorer mental and general health outcomes than their male counterparts.

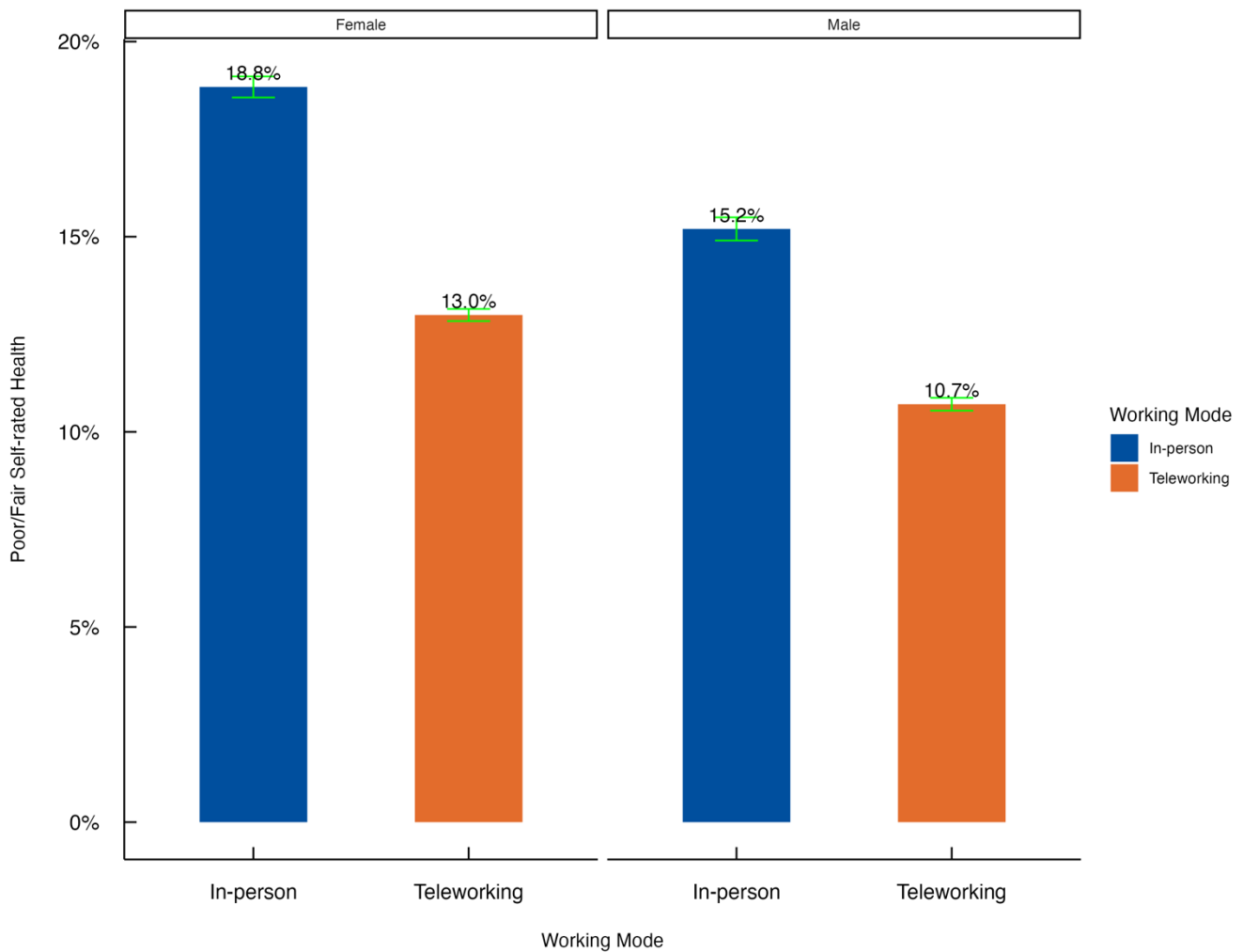
Women, irrespective of their associated working mode (teleworking or not teleworking), have poorer mental and general health than men. While women who are not associated with teleworking have poorer mental health than women who are (Figure 6), they are less likely to have poorer general health compared to women who are associated with teleworking (Figure 7).

Figure 6 Generalized Anxiety Disorder by Working Mode and Gender



Source: U.S Census Household Pulse Survey, Week 13-21: Aug. 19th, 2020 - Dec. 22, 2020.

Figure 7 Poor General Health Rating by Working Mode and Gender



Source: U.S Census Household Pulse Survey, Week 13-21: Aug. 19th, 2020 - Dec. 22, 2020.

Conclusion and Policy Recommendation

In this policy brief, I have highlighted the disparities in teleworking rate and the variation in the mental and physical health of teleworkers and non-teleworkers. While those not associated with teleworking have poorer general health than those who are, they are less likely to have poorer mental health than those associated with teleworking. As economies reopen with the resumption of some everyday activities and the acknowledgment that some workers will continue to telework because the ongoing pandemic has made teleworking a new normal, policy recommendation is needed to provide guidelines to improve the mental and physical health of workers. Some of these include:

- Policymakers should implement policies that will improve the mental health of teleworkers. This can be done by ensuring that government agencies check the activities of organizations on

their staff and ensure they are not over-worked. In Portugal, for instance, it is an offense for organizations to call on any staff member after official work hours.

- Organizations should pay more attention to the general health of their workers by providing them with more support than ever. Such can include increased pay, better health insurance, organized staff bonding activities, and a more conducive working environment.
- Initiatives to improve mental and general health should be targeted more to women by increasing maternity leave and supporting child health.

Methodology

This study used the publicly available U.S. Census Bureau Household Pulse Survey (HPS) [9]. The Household Pulse Survey is a data on the social and economic effects of coronavirus on American households and released about every two weeks from April 2020. The data include information on sociodemographic characteristics, COVID-19 vaccinations, employment, and housing. Estimates in this analysis were obtained from week 13 to week 21(August 2020 to December 2020). The reason for choosing the HPS data set from week 13 to week 21 is that information about teleworking was not included in prior weeks. Also, in the weeks after week 21, information about health status was excluded. Data are subset to contain only those respondents that are employed. The poor general health status here was derived by recoding the general health status into a dummy variable as poor and fair as 1; and excellent, very good, and good as 0. The general anxiety disorder (GAD) was used to determine poor mental health. The variable (GAD) was constructed by combining the worry and anxious responses and dichotomizing the sum to reflect at least several days of either anxiety or worry. All estimates are weighted to be representative of the U.S. household.

Acknowledgement

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