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18 Internet use during the pandemic

Key points
- We analyse whether and, if so, how the COVID-19 pandemic affected the digital activities of Europeans aged 65+.
- The frequency of individuals' online activities increased during the pandemic.
- The use of the internet to search for health-related information and to purchase goods and services increased more than other types of online activities.

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1 Introduction

The COVID-19 outbreak changed several aspects of our everyday lives. During the widespread lockdowns, the internet came to play a crucial role, as many activities that used to be carried out in person had to be moved online, including working, shopping, accessing services, and talking to family and friends.

While information technology helped to mitigate the negative consequences of the outbreak for the general population; for the elderly population, the use of the internet represented a challenge. According to data from Eurostat (2021), internet use is less popular among the older than the younger generations: before the COVID-19 outbreak, 98% of individuals aged 16–24 used the internet, compared to 61% of individuals aged 65–74. However, this figure varied across the EU member states. The countries with the highest shares of individuals aged 65–74 using the internet were Denmark (94%), followed by Luxemburg and Sweden (91%); while the countries with the lowest shares of individuals aged 65–74 using the internet were Bulgaria (25%) and Croatia (28%).

There are at least two main reasons for these geographical and generational disparities in internet use. First, there are important differences in the main types of production across European regions. The North-South digital divide in Europe is partly due to the greater weight of personal and leisure services in the Mediterranean economies, compared to the more technologically oriented industrial activities of, for example, the Nordic countries. Second, the level of IT training of the older workforce depends on the institutional setting in terms of the retirement age. The existence of financially advantageous early retirement schemes in countries like Italy and France has reduced the incentives for employers to train older work-

ers (Hairault et al. 2010). The IT skills of older individuals reflect both their computer use prior to retirement and the geographical digital divide (Friemel 2016, Berkowsky et al. 2018). A comprehensive review of this literature is provided in Hunsaker and Hargitta (2018).

In this chapter, we analyse whether and, if so, how the COVID-19 pandemic affected the digital activities of Europeans aged 65+, who are arguably the demographic group least familiar with the internet.

2 Data and variables of interest

We use data on individuals aged 65+ who took part in both SHARE COVID-19 surveys in June–July 2020 and May-July 2021. We combine data from these COVID-specific waves with information from previous SHARE waves on the respondents' socio-demographic characteristics, health-related information, and employment histories. Our main variables of interest are the frequency of internet use since the start of the pandemic for the following online activities: (i) finding information on health-related issues; (ii) getting information about government services, (iii) managing finances, and (iv) buying/selling goods and/or services.

Figure 1 shows the frequency of responses for the four abovementioned categories. The omitted category is "never used". For instance, around 75% of respondents reported that they used the internet to gather health information, while the remaining 25% said that they never used the internet for this purpose. Among the respondents who indicated that they used the internet, roughly 25% said they used it more often, 10% said they used it less often, and the remaining share said they used it about as often as they did before the outbreak. Larger shares of respondents reported using the internet for health information and for home banking than for government services and the purchase/sale of goods and services.

When we look at changes in internet use, we see that the use of the internet to search for health information and to purchase goods and services increased more than it did for other types of online activities. These results might be attributable to the pandemic itself, or to the implementation of lockdowns and other measures to reduce personal contacts that induced people to stay home more. Note that the data we use refer to a period well before the availability of COVID-19 vaccines.
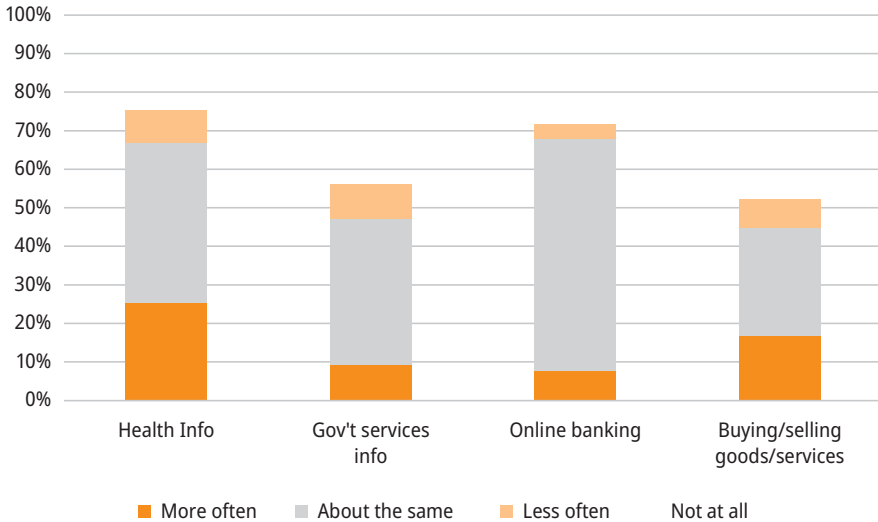
Figure 1: Frequency of internet use by task.
Source: SHARE Corona (W1), release 8.0.0.

3 Empirical specification and results

We use a linear probability model to estimate the association between the use of the internet since the start of the pandemic and a number of individual and household characteristics. In doing so, we distinguish between four groups of co-variates: socio-economic characteristics; employment status; health and personality traits; and dummies to proxy the subjective COVID-19 experiences of the respondents: namely, whether someone in the respondents' social network died or was hospitalised due to a COVID-19 infection.

Figure 2 shows the estimates (and their 95% confidence intervals). The dependent variable takes a value of one if the respondent had used the internet since the outbreak, and a value of zero otherwise. The top of the panel shows that women were less likely than men to use the internet. While income and education were among the most important variables explaining online behaviours, individuals living in larger households were less likely to use the internet, possibly because of information sharing among household members. To examine the role of employment status, we use dummy variables for the respondents' type of occupation based on

their current job or the last job they held before retirement.[1] Individuals who had worked in high-skilled white-collar jobs were more likely to use the internet. Notably, having held a job requiring PC skills before the outbreak was the largest predictor in terms of magnitude. Concerning health status and personality traits, Figure 2 shows that there was a negative association between self-reported health status (SRHS, with a value of one denoting excellent health, and a value of five denoting poor health) and internet use; while among the Big 5 personality traits, agreeableness and openness had a statistically significant association with the outcome.
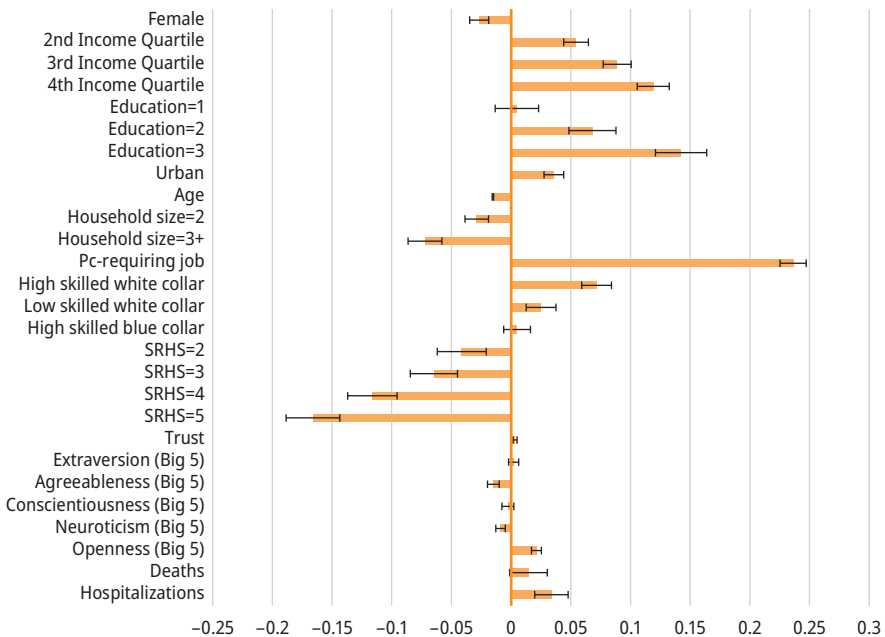

Figure 2: Linear probability model for internet use.
Source: SHARE Corona (W1), release 8.0.0 and SHARE Waves 4–7, releases 8.0.0.

We now focus on the geographic association between the incidence of COVID-19 cases and the increase in internet use among Europeans aged 65+. We provide graphical evidence at the national level in Figure 3.

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1 The type of occupation is defined according to the International Standard Classification of Occupations (ISCO): high-skilled white-collar (ISCO codes 1,2, and 3); low-skilled white-collar (ISCO codes 4 and 5); high-skilled blue-collar (ISCO codes 6 and 7); low-skilled blue-collar (ISCO codes 8 and 9).
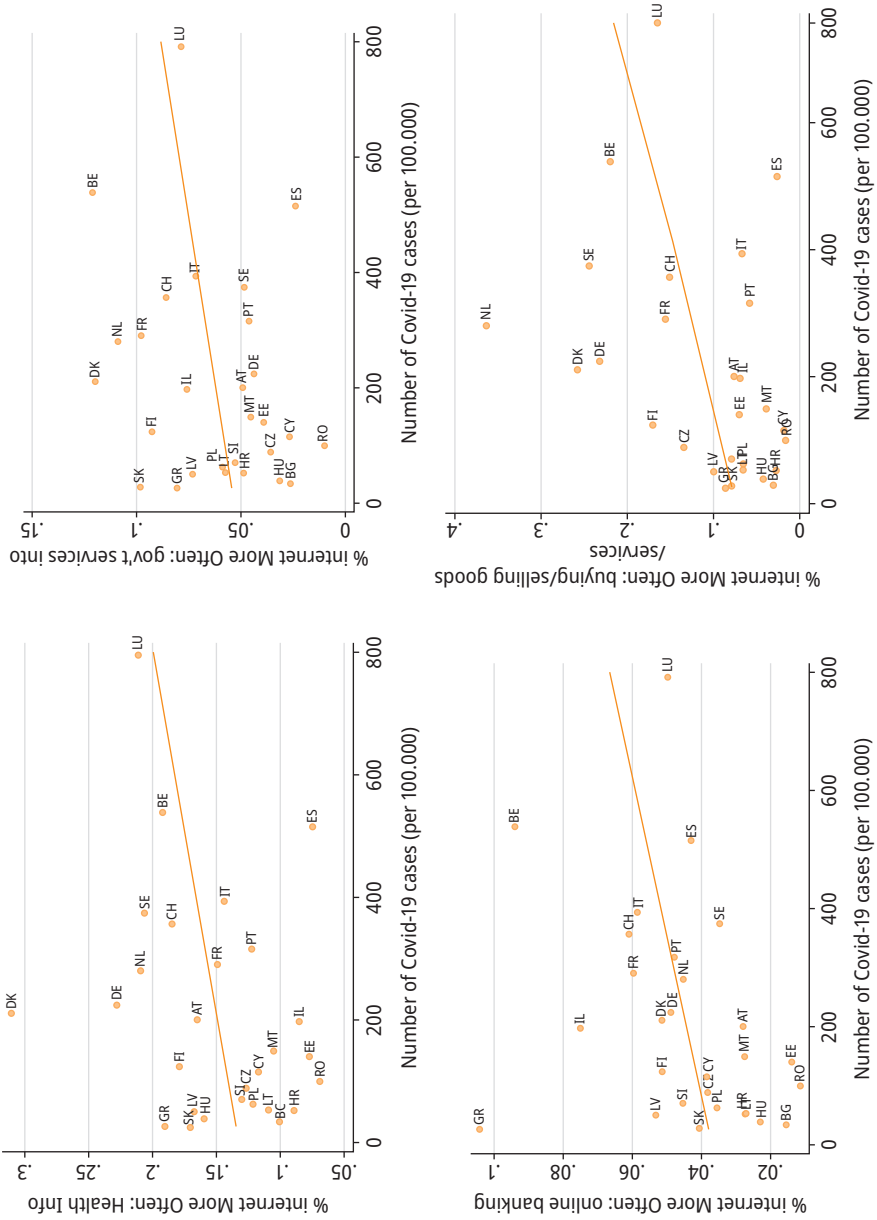
Figure 3: Internet use and the number of COVID-19 cases by country.
Source: SHARE Corona (W1), release 8.0.0 and European Centre for Disease Prevention and Control data.

In the figure, we plot the country-specific intensity of the COVID-19 outbreak, expressed as the number of confirmed cases (per 100,000 inhabitants) on 30 May 2020, against the increase in the four uses of the internet analysed in this chapter. Overall, the results show that the increase in online activities was positively related to the number of infections. This positive association was found consistently across all outcomes.

4 Conclusions

This chapter provided the first empirical evidence on whether and, if so, how the COVID-19 outbreak changed the digital habits of Europeans aged 65+. Overall, we showed that the frequency of individuals' online activities increased in all European countries during the pandemic, irrespective of the large cross-country differences in the prevalence of internet use before the pandemic. The use of the internet to search for health-related information and to purchase goods and services were identified as the online activities that increased the most.

We can tentatively conclude that in addition to having obvious negative effects, the pandemic had positive indirect effects on the use of the internet by a demographic group who would have otherwise remained less familiar with this technology.

Our results also highlight the importance of policies to improve the digital skills of the population. While the digital divide in the elderly population is undoubtedly a long-standing issue, the COVID-19 outbreak caused the role of new technologies in everyday life to increase, and thus underlined the need to take action to promote their use.

References

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