

Change of Technology Use Among Community-Dwelling Older Adults During the COVID-19 Pandemic

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Abstract. Older adults are at increased risk of loneliness, even more so in times of a pandemic. Technology can be one way to support people to stay connected. This study examined how the Covid-19 pandemic affected technology use of older adults in Germany. A questionnaire was sent to 2,500 adults aged ≥ 65 . Of 498 participants included in this study sample, 24.1% (n=120) reported an increased technology use. Feeling lonely often or sometimes was reported by 27.91% (n=139). Overall, people who were younger and lonelier were more likely to increase their technology use during the pandemic.

Keywords. COVID-19, technology use, loneliness, older adults

1. Introduction

Physical distancing became paramount during the Covid-19 pandemic. When in-person visits need to be restricted and feelings of loneliness increase, people can benefit from technology that helps to stay connected and independent [1]. Older adults have been lacking behind in terms of digital inclusion [2] and are particularly vulnerable to feelings of loneliness [3]. A cross-sectional study was conducted to investigate the association of the pandemic with the technology use of older adults.

2. Methods

A paper-based questionnaire was developed and sent to 2,500 community-dwelling adults aged ≥ 65 in April 2021 with a cover letter and a stamped return envelope. Returned questionnaires were scanned and automatically recorded using the software QuestorPro (Blubbsoft GmbH). Free text was manually entered. An ethics approval was obtained from the Joint Ethics Committee of the Bavarian Universities of Applied Sciences (GEHBa-202101-V-014, 5 Feb 2021).

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3. Results

A total of 619 people with a mean age of 74.3 (± 7.1) responded (response rate 24.8%). In a sample of 498 (80.45%) participants with no missing data, mean age was 73.74 (± 6.7) with equal distribution of gender (249 women, 249 men). 65.86% (n=328) did not change their technology use since the outbreak of COVID-19. Increased use was reported by 24.1% (n=120); 10.04% (n=50) reported a decrease in technology use. Of those that reported an increase in technology use, only 8.33% (n=10) were >80 years. Age ($X^2(4, 498) = 19.522, p < .001$) and loneliness ($X^2(4, 498) = 27.698, p < .001$) were positively associated with the technology use since the pandemic (table 1).

Table 1. Association of age and loneliness with the technology use since the COVID-19 pandemic.

Variable	Total n(%)	Technology use since Covid-19 n(%)			p
		More	Same	Less	
Total	498	120(24.1)	328(65.9)	50(10.0)	
Age group (years)					<.001 ¹
65-70	199(40.0)	61(50.8)	122(37.2)	16(32.0)	
71-80	209(42.0)	49(40.8)	143(43.6)	17(34.0)	
>80	90(18.1)	10(8.3)	63(19.2)	17(34.0)	
Feeling lonely					<.001 ¹
Often	17(3.4)	6(5.0)	7(2.1)	4(8.0)	
Sometimes	122(24.5)	48(40.0)	64(19.5)	10(20.0)	
Never	359(72.1)	66(55.0)	257(78.4)	36(72.0)	

¹Pearson's Chi-squared Test

4. Discussion and Conclusions

About 25% of the participants increased their use of technology since the pandemic. The findings suggest that older adults who are younger and lonelier were more likely to increase their technology use during the pandemic. This was especially pronounced in those >80 with less than 10% reporting an increase versus 40 and more percent in the two younger age groups. Other studies confirm the association of technology uptake during the pandemic with age [1],[4]. Overall, many older adults did not increase technology use during the pandemic, despite experiencing feelings of loneliness. Barriers and reasons for this need to be determined to establish new ways to reach this group. The current momentum of digitalization driven by the pandemic could be an ideal phase to foster digital inclusion of older adults.

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