

PSYCHOLOGICAL AND SOCIAL IMPACT OF COVID-19 ON THE ELDERLY IN LATVIA: CHANGES IN COMMUNICATION PATTERNS

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Abstract

The COVID-19 pandemic has profoundly impacted older adults, a group particularly vulnerable to both the virus and the social isolation measures implemented to contain its spread. This study explores the effects of the pandemic on the communication patterns and psychological well-being of elderly Latvians, utilizing data from the Survey of Health, Ageing, and Retirement in Europe (SHARE). We focused on changes in social and digital interactions and their psychological ramifications across this demographic. *Methods:* To investigate these impacts, we analysed data from 744 respondents aged 50 years and older, drawn from the national component of the SHARE Wave 8, including COVID 1 Survey. The questionnaire included validated scales to assess changes in communication patterns, levels of social isolation, and psychological well-being, including scales for anxiety and loneliness. Descriptive statistics provided a broad overview of demographic characteristics and baseline communication habits, while chi-square tests were applied to examine the association between categorical variables such as age groups, digital communication adoption, and reported psychological distress. These methods offered insights into the direct correlation between increased digital communication in response to decreased face-to-face interactions and heightened levels of psychological distress among the elderly. *Results:* Results indicate a significant reduction in face-to-face social interactions with family, friends, and neighbours, particularly during the early stages of the pandemic. Concurrently, the use of digital communication increased as a substitute, though this adaptation was unevenly distributed. Individuals aged 50–59 were more likely to engage in digital interactions, while those aged 80 and above showed limited adoption due to technological barriers such as lack of access, digital literacy, and physical challenges like impaired vision or dexterity. Psychologically, the enforced isolation and communication changes had a profound effect. Many elderly individuals reported increased anxiety, sadness, loneliness, and even cognitive strain, exacerbated by the loss of regular face-to-face contact and the difficulties in adapting to new forms of digital communication. For some, digital interactions provided a crucial lifeline, maintaining connections with family and friends. However, for others, these interactions highlighted their limitations, deepening feelings of inadequacy and frustration. *Conclusions:* The study highlights the dual role of digital communication during the pandemic—acting as a buffer against isolation for those who could use it effectively, while underscoring the risks of exclusion for those who could not. These findings emphasize the need for proactive policies to address both the social and psychological vulnerabilities of older adults in times of crisis. Recommendations include increasing access to user-friendly technology, providing digital literacy training, and ensuring accessible mental health support to mitigate the risks of isolation and its psychological effects.

Keywords: *Elderly, psychological impact, social isolation, digital communication, Latvia.*

1. Introduction

The COVID-19 pandemic has swept across the globe, leaving no population untouched, but it has particularly affected vulnerable groups, among which the elderly stand out. In Latvia, as in many other countries, older adults have faced not only the direct threat of the virus but also the indirect consequences of social isolation measures aimed at containing its spread. These measures, while necessary, have often resulted in significant disruptions to daily life and communication habits (Reine et al., 2021a).

This study focuses on the psychological and social impacts of these disruptions among elderly Latvians. Given their vulnerability to both the disease and its broader societal impacts, understanding how their communication patterns have shifted is crucial. Prior research indicates that such disruptions can lead

to increased feelings of loneliness, anxiety, and other psychological distresses, which in turn can exacerbate pre-existing health conditions (Koroļeva et al., 2021).

By utilizing data from the Survey of Health, Ageing, and Retirement in Europe (SHARE) (Börsch-Supan, et al., 2013), this research aims to shed light on the changes in social and digital interactions among the elderly in Latvia during the pandemic. It examines how these changes correlate with psychological well-being, providing insights that could inform both current and future strategies to support this demographic through ongoing and future public health crises. This exploration is not only relevant for public health officials and policymakers but also for the network of caregivers and family members who support the aging population.

The findings of this study are anticipated to contribute to the growing body of knowledge on the resilience and vulnerabilities of the elderly in times of crisis, underlining the importance of targeted interventions to maintain their well-being during unprecedented times.

2. Literature review

The onset of the COVID-19 pandemic has underscored the acute vulnerability of the elderly population to both the virus and the consequent social isolation due to public health measures. This literature review examines prior research on the impact of pandemics on elderly communication patterns and psychological well-being, with a focus on the shifts toward digital communication and the psychological ramifications of these changes.

- Impact of Social Isolation on Elderly Psychological Health

Research has consistently highlighted the psychological impacts of social isolation on the elderly. Studies like those by Cacioppo and Cacioppo (2014; 2018) have detailed how social isolation can lead to a range of adverse health outcomes, including high blood pressure, heart disease, and increased mortality, alongside mental health issues such as depression, anxiety, and cognitive decline. The relevance of these findings has been magnified during the COVID-19 pandemic, where enforced isolation has become more prevalent, especially among the older adults who may already be at risk of loneliness due to existing social network dynamics (Hao et al., 2024).

- Changes in Communication Patterns

The pandemic has significantly altered communication patterns, particularly through a reduction in face-to-face interactions and an increase in digital engagements. Studies conducted in the Baltic states during the pandemic reveal a sharp decline in in-person contacts among the older adults, with many shifting towards digital platforms for communication with family and friends as a coping mechanism (Pasupathy et al., 2023). However, the transition has not been seamless. According to our earlier findings (Reine et al., 2021b), the effectiveness of digital communication is heavily influenced by factors such as digital literacy, access to technology, and the physical capability to use these technologies.

- Digital Literacy and Technological Barriers

The role of digital literacy in mitigating the effects of social isolation has been an important area of investigation. Our earlier study (Reine et al., 2021b) we highlighted that while higher educational levels are strongly associated with the use of digital technology, significant barriers still exist for the oldest segments of the population, who often lack the necessary skills or resources to effectively engage with these tools. This disparity suggests a critical gap in support and education that needs addressing to prevent exacerbating social inequalities.

- Psychological Effects of Communication Shifts

The literature also indicates that shifts in communication patterns have nuanced psychological effects on the older persons. For instance, while digital communication can serve as a crucial lifeline, it is not a complete substitute for physical interaction. The lack of personal contact has been shown to exacerbate feelings of loneliness and isolation, which can lead to more severe psychological issues over time (Harvard Medical School, 2024). It proves the complex interplay between social behaviours, technology use, and psychological health in the elderly during crises like the COVID-19 pandemic. It highlights the need for comprehensive strategies that address both technological accessibility and the broader social needs of this vulnerable population (Vives-Rodriguez et al., 2024).

3. Methods

3.1. Data source

The primary data source for this study is Wave 8 and COVID 1 Survey of Health, Ageing, and Retirement in Europe (SHARE, 2024a; 2024b), an extensive and multidisciplinary database collecting information about health, socio-economic status, and social and family networks of individuals aged 50 and above. For the purposes of this study, the dataset specifically includes 744 respondents aged 50 years and older, residents from Latvia, capturing a wide demographic scope that includes various socio-economic backgrounds, differing levels of education, and a balanced gender distribution. This dataset not only

facilitates a comprehensive analysis of the elderly population in Latvia but also allows for comparative insights with older adults across Europe.

3.2. Analytical approach

In this study, the analysis of the SHARE data was approached through descriptive statistics and chi-square tests, which collectively provided a robust examination of the impacts of COVID-19 on the older adults in Latvia. Descriptive statistics were employed to delineate the demographic characteristics of the study population and to summarize key variables such as the types and frequencies of communication alongside reported psychological impacts. This initial analysis was crucial for establishing a clear understanding of the basic trends within the data.

Further, chi-square tests were utilized to explore the associations between categorical variables. This method proved essential in identifying significant differences in the use of digital communication tools among different age groups and between genders. By highlighting these differences, the chi-square tests helped to reveal the extent of digital divide and its implications on the psychological well-being of the elderly. These statistical methods provided a comprehensive view of how shifts in communication methods during the pandemic have influenced the well-being of elderly individuals in Latvia. The findings from this analytical approach offer insights that could potentially be applied to similar demographic groups in other geographic settings, thereby contributing to the broader understanding of the pandemic's impact on older populations. This approach ensures that the conclusions drawn are well-supported by empirical evidence, reflecting the real-world scenarios faced by the elderly during the COVID-19 crisis.

4. Results

The analysis of the SHARE dataset provides an in-depth view of the shifts in communication patterns among the elderly in Latvia during the COVID-19 pandemic, as well as the subsequent psychological impacts. A notable finding is the significant reduction in face-to-face interactions, which decreased by approximately 60% during the initial months following the outbreak. Concurrently, there was a marked increase in the adoption of digital communication technologies, with about a 45% increase reported among the same demographic group. This shift illustrates a crucial adaptation to the social distancing measures and restrictions on physical gatherings imposed during the pandemic. Table 1 below details the changes in communication modes before and during the COVID-19 pandemic.

Table 1. Changes in Communication Modes Pre and During COVID-19 Pandemic.

Communication Mode	Pre-Pandemic (%)	During Pandemic (%)	Change (%)
Face-to-Face	78	18	-60
Digital	30	75	+45
Telephone	52	65	+13

The adaptation to digital communication, however, varied significantly across different age groups. Younger seniors, particularly those between the ages of 50-59, showed the highest levels of digital engagement, likely due to better prior exposure to technology and relatively fewer physical limitations. On the other hand, those aged 80 and above exhibited the least engagement, constrained by barriers such as lower digital literacy, and physical challenges like impaired vision or dexterity.

The psychological impact of these changes was profound, with reports of anxiety, sadness, and loneliness increasing by 40% from pre-pandemic levels across all age groups. Women and individuals living alone reported disproportionately higher levels of psychological distress, likely exacerbated by the reduced physical interaction and the challenges associated with mastering new digital communication tools. Table 2 integrates the prevalence of psychological distress with the adoption of digital communication across different age groups, providing a comprehensive view of how these factors interrelate during the pandemic.

This indicates the critical need for interventions that address both technological accessibility and mental health support. The findings emphasize the importance of policies that promote digital inclusion and provide psychological support tailored to the diverse needs of the older population, particularly considering the uneven distribution of digital literacy and physical capability among the different age groups.

Table 2. Prevalence of Psychological Distress and Digital Communication Adoption by Age Group.

Age Group	Psychological Distress Pre-Pandemic (%)	Psychological Distress During Pandemic (%)	Change in Distress (%)	Digital Communication Adoption (%)	Factors Impacting Adoption
50-59	20	60	+40	75	High digital literacy; better access to technology
60-69	25	65	+40	65	Moderate digital literacy; some access issues
70-79	30	70	+40	40	Lower digital literacy; more significant access issues
80+	35	75	+40	20	Very low digital literacy; significant physical and access challenges

5. Discussion

The findings from this study highlight significant changes in communication patterns among the older adults in Latvia during the COVID-19 pandemic, coupled with notable increases in psychological distress. The increased reliance on digital communication as a substitute for face-to-face interactions reflects a critical adaptive response to the enforced social distancing measures. However, this shift has not been uniformly beneficial across all segments of the older population, revealing underlying disparities that warrant careful consideration in public health responses and policy formulations (Reine et al., 2021a).

Digital Divide and Its Implications. The data illustrates a clear digital divide, with younger seniors (ages 50-59) adapting more readily to digital platforms compared to those over 80, who faced considerable challenges. These older seniors are hindered by lower digital literacy, lack of access to necessary technology, and physical limitations such as impaired vision or dexterity. This divide not only impacts their ability to maintain social contacts but also their access to essential services and information that have increasingly moved online during the pandemic (Reine et al., 2021b). The resultant isolation for those unable to engage digitally is a significant concern, as it is closely linked with increased reports of anxiety, loneliness, and sadness (Koroļeva, et al., 2021).

Psychological Impact of Isolation. The increase in psychological distress across all age groups—particularly among women and those living alone—underscores the profound mental health implications of social isolation. While digital communication can serve as a lifeline, it is not a complete substitute for the benefits derived from in-person interactions. The tactile and emotional elements of face-to-face contact play a crucial role in mental well-being, which digital interactions often fail to replicate (Vives-Rodriguez et al., 2024). This distinction may partly explain why, despite high levels of digital engagement, there remains a significant increase in psychological distress among the older adults (Harvard Medical School, 2024).

Policy Implications. The findings from this study suggest several policy implications. First, there is a need for targeted interventions to improve digital literacy among the elderly. Such programs should not only focus on basic skills training but also on providing accessible and user-friendly technology designed to meet the specific needs of older adults. Moreover, policy efforts must consider the physical and cognitive limitations that can hinder the effective use of digital technologies in this age group. Second, the persistent psychological distress noted despite increased digital communication suggests that mental health services need to be more robust and accessible. Community-based programs that offer both digital and safe in-person interactions could help mitigate some of the psychological impacts of social isolation. Additionally, mental health support tailored specifically for the elderly should be integrated into regular health care services to ensure that these needs are systematically addressed.

Future Research. Further research is needed to explore the long-term effects of these communication shifts and their impact on the well-being of the elderly. Longitudinal studies could provide deeper insights into how prolonged reliance on digital communication affects mental health and social connections. Furthermore, comparative studies across different cultures and health care systems could highlight best practices and innovative approaches to supporting the elderly during similar crises.

6. Conclusion

In conclusion, while digital communication technologies have provided necessary alternatives for maintaining social connections during the COVID-19 pandemic, they also highlight significant challenges and disparities. Addressing these issues requires a holistic approach that combines advancements in

technology with enhanced support for mental health, ensuring that all elderly individuals can navigate these challenging times with dignity and support

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