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Adults 65 and Older Navigating the Digital World

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ABSTRACT: As society becomes more digital than ever, older adults face increasing difficulties interacting with advancing technology due to physical, cognitive, and psychological barriers. This study investigates the connection between technology design, reliance on support, and confidence among adults aged 65 and older. A survey of 123 participants identified key usability obstacles, including small text, complex interfaces, and password management. While most older adults in the study report feeling confident in using devices, most still experience significant difficulties with technology. This suggests that confidence does not always translate to ease of use. The findings underscore the importance of inclusive design and structured support systems for older users, as they may be crucial in boosting confidence and promoting digital independence. This study fills a gap in existing research by simultaneously examining design features, support structures, and user confidence. There are several actionable areas for technology developers and policymakers looking to extend their devices to older generations.

KEYWORDS: Behavioral and Social Sciences, Sociology and Social Psychology, Older Adults and Technology, Digital confidence, User Interface Accessibility for the Elderly.

Introduction

As technology continues to advance at a rapid pace, older generations face increasing challenges in keeping up with digital tools and platforms. Older adults often struggle with technology due to physical limitations, cognitive barriers, and unfamiliarity with digital interfaces. This technological gap risks isolating older individuals from essential services, digital communication, and even social engagement, reinforcing generational divides and increasing dependency on younger family members or caregivers. Despite these challenges, many older adults express a willingness to engage with technology if provided with the necessary support and accessible designs. The barriers they face—including physical impairments like hand tremors or visual difficulties, cognitive decline affecting memory and processing speed, and psychological factors such as fear of making mistakes—can make technology use daunting and frustrating. To explore these issues further, this research aims to investigate the role support systems play in helping older generations navigate technology.

This research was conducted through a survey and qualitative analysis to identify the most significant challenges preventing older adults from effectively using digital tools and how support systems, such as family members, caregivers, and community programs, can bridge this gap. By understanding these dynamics, we can develop more inclusive technological solutions that empower older adults to remain connected, independent, and active participants in an increasingly digital world. According to Michelle Faverio, a research associate at Pew Research Center, 96% of people aged 18 to 29 own a smartphone, compared with 61% of those 65 and older, yet this statistic may have changed in the past few years.[1] Furthermore, according to Monica Anderson, the director of Internet and Technology research at Pew Research Center, "just 26% of internet users ages 65 and over say they feel very confident when using computers, smartphones or other electronic devices."[2] Malihe Yazdani Darki, at the Kashan University of Medical Sciences, stated that this could be partially due to physical limitations, including visual impairments, back pain, and hand tremors, making technology difficult for the older generation.[3]

Barriers to Technology Usage:

Conducting further research in this area, Mujtaba Awan, in the Department of Software Engineering at the University of Gloucestershire, finds that technology such as smartphones may also be difficult for the older generation to manage, as they may have a hard time with small fonts, screen size, font type, buttons, and color contrast.[4] Exploring this from a different perspective, Charness and Boot, researchers in cognitive aging at Florida State University, highlight that reduced fine motor skills in aging adults make swiping or tapping on a touchscreen more challenging, increasing the risk of mistakes and, consequently, discouragement, especially since many devices have low-contrast displays or small text.[5] According to Dr. Sara Czaja, a behavioral scientist and Professor of Gerontology in Medicine, older adults' ability to operate electronics such as smartphones and tablets is significantly affected by age-related impairments in motor control and dexterity, which can cause them to feel frustrated and reluctant to use technology.[6] Additionally, Tracy Mitzner *et al.*, a senior research scientist at Georgia Institute of Technology, discovered that aging can oftentimes bring a decline in working memory and processing speed, which can make it difficult to learn and retain new technological skills.[7] Compared to younger users, who often have stronger cognitive flexibility and more prior experience with technology, older individuals need more time and repeated exposure to learning new digital technologies. As an example of Mitzner *et al.*'s findings, Daniel Morrow *et al.*, a professor of Educational Psychology at the University of

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Illinois Urbana-Champaign, find that when applications for tracking medical-related information required multiple steps and quick recall, older adults demonstrated significantly higher error rates and frustration levels than younger users.[8] Many people avoid digital tools entirely because they are afraid of making mistakes, accidentally deleting important documents, or falling victim to internet scams. Heart and Kalderon, researchers at Ben-Gurion University of the Negev, found that older adults who lacked experience with technology had increased insecurities when using devices.[9] Furthering this point, Eleftheria Vaportzis *et al.*, a senior lecturer at the University of Bradford, highlight that feelings of incompetence and exclusion can be reinforced when technology is viewed by older adults as being primarily made for younger users.[10] Overall, the older generations' adoption and use of technology are severely hampered by the aforementioned obstacles that they may encounter. Digital interactions become more difficult because of medical conditions like impaired motor control, slower processing speed, memory loss, and psychological issues, including social rejection and fear. This highlights the need for more inclusive technology design and educational programs to close the generational technology divide.

Reliance on Support:

Research indicates that this digital divide is expanding due to older adults being unable to overcome technological issues independently. According to Kathleen Schreurs *et al.*, a research and statistics expert at Western University, adults frequently depend on younger family members for digital assistance, which can affect their self-esteem and sense of autonomy.[11] Building on this research, Charlene Quinn, an Associate Professor at the University of Maryland, finds that many older adults also rely on caregivers for technological support with mobile health management and online communication.[12] This leads to older generations relying on others, as "nearly 50% of older adults 65 and older and 40% of those ages 50-64 feel they need someone to assist them in learning and using a new technology device," as stated by Deborah Vollmer Dahlke, an associate Professor at Texas A&M University.[13] This reliance is often due to a lack of digital literacy, as older adults may not have had the same exposure to evolving technologies as younger generations. Healthcare and financial management are among the most common areas where older adults require digital assistance. Nancy Gell *et al.*, an assistant professor at the University of Vermont, states that older adults with physical impairments are less likely to use technology independently, often requiring assistance for tasks such as online banking and accessing health information.[14] Guo Yin *et al.*, at the Sanquan College of Xinxiang Medical University, explore this idea and conclude that this reliance on others not only limits their independence but also creates security risks, as they may share sensitive information with family members or caregivers rather than managing it independently.[15] The combined findings of Gell *et al.* and Yin *et al.* indicate that the lack of confidence in using technology also contributes to older adults' reluctance to explore digital tools independently. Many older adults depend on family members, caregivers, or professional assistance to navigate digital technology, which can reinforce the generational digital divide that results from younger generations viewing older adults as inept with technology. Additionally, technology interfaces are often designed with younger users in mind, making them less intuitive for older generations. This ongoing reliance on others for digital navigation underscores the importance of targeted training programs and simplified user interfaces, which have been found to improve confidence, increase their likelihood of independent technology use, and reduce their reliance on others. However, according to Yvonne Barnard at the University of Leeds, programs that incorporate peer mentorship—where older adults teach each other digital skills—are more effective than traditional classroom settings.[16] Without these interventions, older adults may continue to depend on family members and caregivers, further limiting their independence in an increasingly digital world. Overall, a major obstacle to older persons' technological independence is their reliance on others for digital help. This dependence is exacerbated by low digital literacy, confidence problems, and technology designed for younger users, which limits their independence and puts them in danger of security breaches. By implementing focused training programs and peer mentorship activities, older persons can become more digitally inclusive and less reliant on family members and caregivers by learning how to use technology with confidence.

User Interface:

Many older adults also struggle with technology because of design choices that do not consider their needs. According to Sergio Sayago *et al.*, an Assistant Professor in Human-Computer Interaction at the University of Lleida, many digital devices prioritize aesthetics and innovation over accessibility, which can make them hard for older adults to use.[17] Professors of Psychology at the Georgia Institute of Technology, Rogers and Fisk, highlight some examples, such as small text, complex menus, and touchscreen sensitivity issues, which make technology challenging to use, in turn leading to frustration and a lack of desire to use.[18] Jia Zhou *et al.*, a researcher in human-computer interaction and co-chair of the International Conference on Human Aspects of IT for the Aged Population (ITAP), states that older adults are significantly less likely to use smartphones and tablets when the interface requires precise motor control or involves a lot of scrolling and tapping.[19] According to Dan Hawthorn at the Unitec Institute of Technology, many seniors benefit from larger font sizes, high-contrast displays, and simplified navigation.[20] When technology incorporates adjustable text size and voice commands, older adults are more likely to engage with digital devices and have a better user experience. According to Alisha Pradhan, an assistant professor at the New Jersey Institute of Technology, voice-activated assistants, such as Amazon Alexa and Google Assistant, can help older adults interact with technology more easily, particularly those with vision impairments or limitations with mobility.[21] A survey of technology developers, conducted by Dr. João Leitão *et al.*, an associate Professor of Economics with Habilitation at the University of Beira Interior, found that only 20% of professionals considered older adults a primary audience

when designing new digital tools.[22] Considering the current state of technology development referenced above, Siân Lindley *et al*. at Microsoft Research share that because of this, older adults often feel alienated from technology and struggle to integrate it into their daily lives.[23] The implementation of design principles, such as intuitive layouts, clear instructions, and multimodal interaction options, could help improve accessibility for older generations. By prioritizing user-friendly features, incorporating accessibility tools, and considering seniors in the design process, technology companies can create more inclusive products. Older adults face significant challenges in adopting technology due to physical limitations, cognitive decline, reliance on others, and poor design choices that fail to accommodate their needs. These barriers make digital engagement frustrating and discourage seniors from using technology independently. Many older adults risk losing access to essential services and communication tools without targeted interventions, as they increasingly shift online. To improve accessibility, technology companies must prioritize senior-friendly designs, such as larger text, voice commands, and intuitive interfaces. Additionally, structured training programs and peer mentorship can help older adults develop digital confidence and reduce reliance on family members for assistance. By addressing these issues, society can ensure that older adults remain engaged, independent, and empowered in an increasingly digital world, allowing them to benefit from technological advancements rather than being excluded. The culmination of research on technology usage amongst the older generation addresses what percentage of older adults are online, what technology they use, how they may benefit from technology, and more. While there have been studies that have explored older adults' confidence with technology, specific aspects that make it more user-friendly, and the individuals that older adults rely on for technology problems, no published studies have tried to connect all three of these factors in the same study. The lack of research around these points to the gap that this study aims to fill. With this understanding, this paper's research question is: To what extent do technology features and support systems play a role in confidence levels with digital devices among adults aged 65 and older? The researcher hypothesizes that the users who had the most ease with technology features and who relied on support systems less frequently would report higher confidence levels with technology. Participants who have more difficulty with features or regularly seek technology support would feel less confident with technology and therefore use it less frequently.

Methods

A survey was used to gather evidence about how older adults interact with technology. Participants, aged 65 and above, were selected from retirement homes using paper surveys as well as WhatsApp group chats using digital surveys (see Appendix A) to ensure a broad representation across different age groups and technology skills. Participants were recruited through two methods. First, administrators at independent-living retirement communities granted permission for the researcher to invite residents aged 65 and above to participate; residents who volunteered were then given the paper survey to complete. Second, older adults in WhatsApp community groups were sent a posted message, and those who chose to participate completed the digital version of the survey. Some participants chose to fill out the survey independently, while others received assistance with reading or writing if needed. Data collection methods include surveys to gather data on the amount of screen time, technology use, technological help, and health aspects. The researcher asked participants these specific questions, as it allowed for data to be collected to identify a potential correlation between age and confidence level specific to usability features or types of technology. The specific survey questions were selected to measure three main areas: technology usage patterns, confidence levels, and the usability barriers most frequently documented in prior research. All questions appeared on the written or digital survey for participants to answer independently; none were verbally asked. Additionally, it aims to identify the specific challenges they face when using technology, explore the assistance they rely on, to develop strategies that can enhance their ability to adapt to technological advancements. The researcher decided to specifically identify through the survey some specific features, such as small text, touchscreen sensitivity, or confusing interfaces, to confirm the findings of other researchers. However, other features, such as battery life or popups, were not expected to have as high a result but were included to determine if other factors contribute to a lack of confidence among older adults using technology. By addressing these barriers, the research aspires to improve the overall quality of life for older adults by developing technology that is easier for them to use. The researcher included children, grandchildren, technology professionals, Information Technology (IT) service providers, as well as assistants, nurses, and aides, as these are thought to be the most often sought out support when it comes to technology help for older adults. There were 123 respondents to the survey, sent to people aged 65 and older, asking how often they use technology, their confidence with it, what they struggle with, and more. In this method, 5.8% of the respondents were 90 and older, 32.2% were aged 80 to 89, 46.3% of the respondents were aged 70-79, and 15.7% of the respondents were aged 65 to 69 years old. The resulting age gap allowed the researcher to gather information from diverse ages among the older generations. A varied age group was used to determine differences between all selected age groups amongst the older generation. Participants were not given an incentive and instead participated out of the desire to increase research on technology to better accommodate the older generation. All study procedures were reviewed and approved by the Institutional Review Board (IRB), ensuring ethical oversight of research.

Results and Discussion

Paper surveys were handed out to residents at a South Florida Nursing Home, and they were given assistance by the researcher if they needed clarification on what the survey asked or needed help writing down answers. Surveys were also forwarded through WhatsApp groups digitally. This ensures

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a diverse age range, technological skill, and mental awareness level.

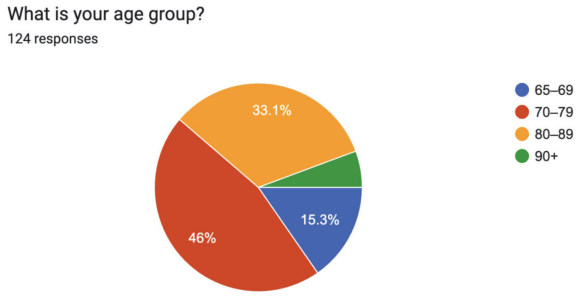

Figure 1: Age distribution of participants aged 65 and older. This figure displays the breakdown of participant ages, showing a diverse sample spanning from 65 to over 90 years, which allows for an understanding of technology use and challenges across a broad age range of older adults.

Figure 1 shows the distribution of ages among the 123 survey respondents. The majority of participants (46.3%) were between the ages of 70-79, followed by 32.2% aged 80–89, 15.7% aged 65–69, and only 5.8% aged 90 and older. The range reinforces that the study's findings are not isolated to a specific age subset but span much of the older adult population. This strengthens the study's ability to generalize findings across the older adult population and examine how older adults interact with technology and the confidence they feel in it.

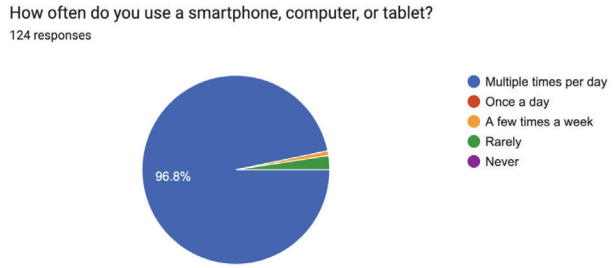

Figure 2: Frequency of electronic device use among older adults. This figure shows that the majority of older adults use digital devices such as smartphones, tablets, or computers multiple times per day, highlighting widespread daily engagement with technology.

Figure 2 illustrates how often participants use devices such as smartphones, tablets, or computers. The majority of the respondents (96.7%) use a smartphone, computer, or tablet multiple times per day. 2.4% of the respondents use an electronic device rarely, and 0.8% of the respondents use an electronic device a few times a week. This demonstrates that regular digital activity is very common among older generations, with only a very small group not using the most common digital devices. This shows that frequent digital engagement is widespread among older adults, contradicting stereotypes of digital disconnection. Despite this high usage, later figures reveal that many still experience difficulty navigating technology. This supports a core finding of the study: frequent use does not eliminate barriers such as poor technological design, a lack of confidence navigating technology, or over-reliance on support.

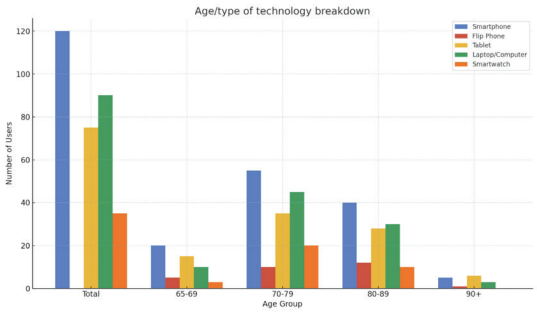

Figure 3: Types of digital devices owned by older adults. Smartphones are the most commonly used device, followed by laptops/computers, and then tablets, indicating the critical importance of mobile device usability across devices for older adults' digital experiences.

Figure 3 identifies which digital devices respondents currently own. Out of 123 responses, the total section indicates that nearly all participants (95.1%) use a smartphone. Most of the respondents have a laptop/computer (73.9%) or a tablet (63.4%). Many fewer have a smartwatch (27.6%), and barely any own a flip phone (0.8%). Based on this, the researcher can conclude that the majority own a smartphone, and within the 60s, 70s, and 80s age groups, more than 95% of the participants had a smartphone. Also, in each of these age ranges, 60% or more had a tablet and/or a laptop/computer. The 90s group also mirrors this; however, it is more difficult to be certain because this age range had the smallest number of participants. This demonstrates that smartphones are the dominant device across the older generation, with tablets and laptops also widely used. Because smartphones are the most common digital device, their design plays a crucial role in shaping older adults' digital experiences. Poor design decisions in mobile apps could therefore have a very negative effect on this demographic and confidence in these devices.

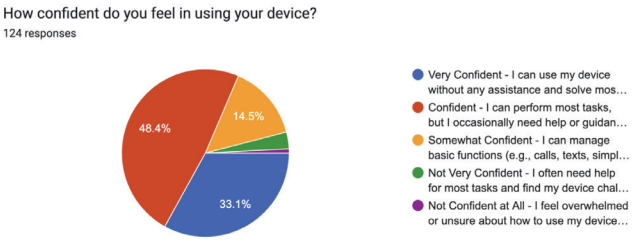

Figure 4: Self-reported confidence levels in using digital devices. Most participants consider themselves confident or very confident in using digital devices, although this confidence contrasts with reported difficulties, revealing a gap between perceived ability and actual usability difficulties.

Figure 4 highlights the self-assessed confidence levels of the participants when using digital devices. Most participants feel confident using their devices, with 48.8% saying that they are "Confident" and 33.3% saying that they are "Very Confident." A smaller group of 13.8% said that they are "Somewhat Confident," meaning they can handle basic tasks online but may struggle with more advanced ones. Few participants fall into the "Not Very Confident" or "Not Confident at All" categories, indicating that only a small percentage frequently need assistance. While most respondents can navigate their

devices well, some still require occasional help. This perceived confidence contrasts with widespread usability difficulties shown in Figure 6, where most participants reported struggling with basic features. This disconnect between confidence and actual ease of use is one of the central findings of this study, showing the need for technology with better design that may be easier to use.

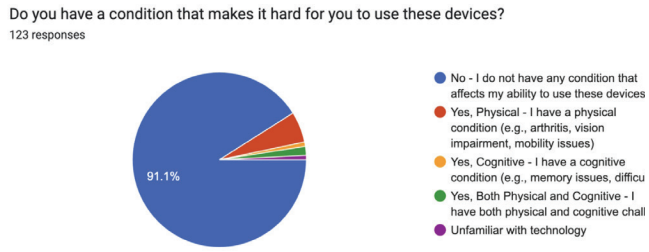

Figure 5: Health-related conditions affecting participants' technology use. The majority of participants report no physical or cognitive impairments impacting their device use, suggesting that usability and design issues, rather than health limitations, are the main barriers for older adults.

Figure 5 breaks down which participants report health-related conditions that hinder technology use. While 91.8% report no such conditions, a small subset cites physical challenges (e.g., arthritis, vision loss), cognitive decline (e.g., memory loss), or both. Some participants have both physical and cognitive challenges, making devices more difficult to use. While most participants have no accessibility barriers, a small group may need additional support or accommodations due to cognitive or physical issues. This supports the study's finding that age-related health conditions are not the main barrier to technology use among older adults. Instead, the challenges older adults face tend to stem largely from poorly designed interfaces and a lack of tailored support.

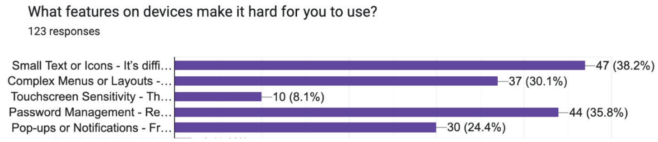

Figure 6: Health-related conditions affecting participants' technology use. The majority of participants report no physical or cognitive impairments impacting their device use, suggesting that usability and design issues, rather than health limitations, are the main barriers for older adults.

Figure 6 highlights the digital features that respondents find most difficult to use. 20.5% of respondents report no challenges; however, among the remaining 79.5%, there were a variety of features that made technology difficult to use. The results found that the most common device features that participants find challenging include small text or icons, password management, and complex menus or layouts, as well as pop-ups and technical jargon. Some of these findings, such as difficulties with small text, complex menus, and touchscreen sensitivity, mirror the findings of Rogers and Fisk.[17] An unanticipated finding was the difficulty of managing passwords (35.2%), which is not a device-specific difficulty because it relies on the user to be able to remember or recall the password. Small text, password management, and complex layouts are the leading difficulties with technology, highlighting design as a core usability barrier. These difficulties reveal that older adults have difficulty navigating technology because many digital interfaces fail to accommodate their needs. This figure directly supports the study's central call for a more inclusive, age-friendly design.

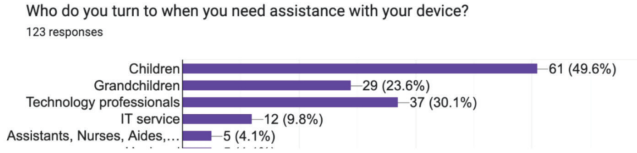

Figure 7: Sources of technology support for older adults. Nearly half of the surveyed seniors rely on their children for technical assistance, with a majority depending on family members overall, indicating strong social reliance that may affect their autonomy and privacy.

Figure 7 highlights the people that older adults turn to for tech support. Nearly half of the respondents (49.2%) turn to their children for assistance with their devices, making them the most common source of help with electronics. The combined 72.2% of children and grandchildren shows the role of family members in technology assistance for older adults. This is similar to the findings of Schreurs *et al.*, who found that older adults often turn to younger relatives for assistance.[11] Technology professionals (30.3%) are also significant sources of support, and a smaller percentage (9.8%) rely on IT services, while only 4.1% seek help from assistants, nurses, or aides. This reflects a heavy reliance on family support rather than formal services, underscoring the need for intuitive design and better training options. The heavy reliance on family reinforces the study's finding that without a more thoughtful design and structured support, many older adults struggle to engage confidently with digital technology.

Analysis:

The researcher hypothesized that those who reported difficulty with technology features would indicate lower levels of technological confidence. As demonstrated in Figures 4 and 6, although most users report confidence, many report difficulty with device features such as small text and password management. This was different from the researcher's findings since, according to Figures 4 and 6, the majority of respondents (82.1%) feel a sense of confidence using their devices; however, at the same time, 79.5% reported difficulty with features. These features include small print (37.7%), password management (35.2%), and complex menus (30.3%). This shows that confidence does not necessarily equate to ease of use, and underscores the need for a more user-friendly design. This could include voice-activated assistants, as shown by Pradhan *et al.*; however, this was not specifically investigated in my research, as it is a growing technology that fewer individuals currently have access to. Revisiting Leitão *et al.*'s findings, which showed consideration of older adults as a minority (20%), these findings indicate a significant need for the older generation's voices when designing new technology. While development is part of the issue, further consideration needs to be given

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to the personal support that older adults may need. Figure 7 illustrates this reliance clearly, with children and grandchildren being the main sources of help. These results echoed those of Schreurs *et al.*, finding that people rely more on relatives than any other group for assistance. Nearly half (49.2%) of parents turn to their kids for help, with technology workers (30.3%) and grandkids (23%), who also play important roles. Few turn to aids (4.1%) or IT services (9.8%) for assistance, indicating a preference for unofficial support. While many of the participants rely heavily on family members, there is still a greater preference for help from actual people rather than automated systems, as indicated by multiple responses to question 10 of the survey (Appendix A).

Future Directions:

The findings of this study can be used by technology companies and app developers to create more user-friendly technologies for older adults. This can be implemented in companies such as Apple, Samsung, Microsoft, and Google to develop smartphones, tablets, or even software updates that address the key challenges faced by the older generation identified in this study. Phones such as Lively's Jitterbug offer larger buttons and emergency features that could be useful for older adults; however, they still fall short with slow performance, required PINs, no biometric logins, and limited apps.[24] Since around 30% of study participants struggled with password management, my findings suggest that software-based solutions—not just physical design—are essential. To address this, technologies such as Lively's Jitterbug phone can incorporate facial or fingerprint recognition, reducing the need for memorized passwords. Additionally, the major technology companies mentioned above could make facial and fingerprint recognition setups easier to follow, reducing the reliance on PIN passwords for older adults. Greater ease of use would likely lead to a decreased reliance on other people for help, which could boost confidence when using technology. Companies can also use this feedback to understand that, despite existing options for increasing font size, older adults may need assistance and education for setup. The findings indicate that many older adults still struggle with preventable issues, which points to an existing need to guide older adults to better understand the capabilities that the technology they are purchasing may already include. Technology companies may consider design technology that incorporates step-by-step instructional guides that walk users through downloading and navigating apps during the initial setup of the device. These guides could include interactive tutorials, voice-assisted instructions, and demonstrations tailored to different skill levels, to ensure that older adults can use their devices confidently and without external assistance. Further research into the cause of a lack of confidence, especially regarding falling for scams, making mistakes, and deleting important files, may be helpful to this area of research. Technology companies can incorporate built-in fraud alerts that warn about clicking on certain links or visiting potentially fraudulent websites, to protect users from online threats and boost their confidence when using technology, as discussed by Brands and van Wilsem.[25] By implementing these recommended improvements, technology companies can help make the online world more inclusive. Improving accessibility will allow seniors to reap the benefits of the digital age and businesses to benefit from increased usability across more generations, given that it can be designed with their needs in mind. Additionally, looking ahead, future cohorts of older adults may interact with technology differently as digital tools become more deeply integrated into daily life. Because of this, usability challenges and support needs observed in today's older adults may shift significantly as future generations age. Continued research will be necessary to understand how evolving levels of digital exposure shape confidence, reliance on support, and technology engagement in later life.

Limitations:

The main limitation present in this study arose when recruiting participants to answer the survey. Some older adults may have a hard time answering a digital Google Form. To combat this limitation, the researcher printed out the surveys and handed them out at a local nursing home. The researcher helped some of the residents in the nursing home to fill in the questions or to clarify the questions if needed. Additionally, the sample size is limited and, therefore, may not capture generational trends in countries outside of the United States and among people from different socioeconomic backgrounds. Individuals' self-reported perceptions of their technological abilities may be biased and not standardized. It is important to note that the generalizability of these findings is limited by the narrow demographic information collected. Since the study focused on gathering age data, it does not account for other factors, such as education, socioeconomic status, or prior technology experience, which may influence confidence levels.

■ Conclusion

This study aimed to identify if confidence among older technology users was impacted by various technology features and the support that they received from others. The survey findings show major obstacles older adults encounter while utilizing technology, such as physical restrictions, cognitive decline, dependence on others for assistance, and subpar design decisions that do not meet their unique needs. Even though many of the participants reported feeling some level of confidence with technology, issues like small font, complicated menus, and password management still make it difficult for them to do so. Implementing more user-friendly design concepts and offering structured educational programs are crucial to ensuring older individuals stay connected and independent in an increasingly digital culture. Technology developers may help create a more inclusive digital environment and enable older generations to use technology with increased confidence and effectiveness by tackling these issues.

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Appendix A

Research on Technology Usage

Hi, I am an AP Research student, researching technology usage in society. The purpose of my research is to determine what ways technology can be changed to assist the older generation.

* Indicates required question

1. By selecting "yes", you agree to anonymously participate in the survey and have the information used in the research project. *

Mark only one oval.

- ◯ Yes
- ◯ No

2. What is your name? (Your name will not be included in the study; it is only for administrative purposes) *

_____

3. What is your age group? *

Mark only one oval.

- ◯ 65–69
- ◯ 70–79
- ◯ 80–89
- ◯ 90+

4. How often do you use a smartphone, computer, or tablet? *

Mark only one oval.

- ◯ Multiple times per day
- ◯ Once a day
- ◯ A few times a week
- ◯ Rarely
- ◯ Never

5. Do you have an electronic device? *

Check all that apply.

- ☐ Smartphone
- ☐ Flip Phone
- ☐ Tablet
- ☐ Laptop/Computer
- ☐ Smartwatch
- ☐ Other: _____

6. How confident do you feel in using your device? *

Mark only one oval.

- ◯ Very Confident - I can use my device without any assistance and solve most problems on my own.
- ◯ Confident - I can perform most tasks, but I occasionally need help or guidance for more complex issues.
- ◯ Somewhat Confident - I can manage basic functions (e.g., calls, texts, simple apps) but struggle with advanced features.
- ◯ Not Very Confident - I often need help for most tasks and find my device challenging to use.
- ◯ Not Confident at All - I feel overwhelmed or unsure about how to use my device and require frequent assistance.

7. Do you have a condition that makes it hard for you to use these devices? *

Mark only one oval.

- ◯ No - I do not have any condition that affects my ability to use these devices.
- ◯ Yes, Physical - I have a physical condition (e.g., arthritis, vision impairment, mobility issues)
- ◯ Yes, Cognitive - I have a cognitive condition (e.g., memory issues, difficulty understanding instructions)
- ◯ Yes, Both Physical and Cognitive - I have both physical and cognitive challenges
- ◯ Other: _____

8. What features on devices make it hard for you to use? *

Check all that apply.

- ☐ Small Text or Icons - It's difficult to read or see due to small text or icons.
- ☐ Complex Menus or Layouts - The navigation or organization of features is confusing or overwhelming.
- ☐ Touchscreen Sensitivity - The touchscreen is too sensitive or not responsive enough.
- ☐ Password Management - Remembering and managing passwords is challenging.
- ☐ Pop-ups or Notifications - Frequent pop-ups or notifications are distracting or confusing.
- ☐ Limited Physical Accessibility - Buttons or other controls are hard to use due to physical limitations (e.g., arthritis).
- ☐ Short Battery Life - Devices require frequent charging, making them inconvenient.
- ☐ Technical Jargon - Instructions or settings use terms that are hard to understand.
- ☐ None - I do not experience any difficulties with device features.
- ☐ Other: _____

9. Who do you turn to when you need assistance with your device? *

Check all that apply.

- ☐ Children
- ☐ Grandchildren
- ☐ Technology professionals
- ☐ IT service
- ☐ Assistants, Nurses, Aides, etc
- ☐ Other: _____

10. What's your biggest struggle with technology and how do you think it can be fixed? *

_____

_____

_____

_____

_____

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