



LOLO (Localized Outreach for the Literacy of Older Adults): A Phenomenological Study on Senior Citizens' Experiences with Digital Communication Applications as a Basis for a Community-Led Digital Communication Capacity Building

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Abstract:

This phenomenological study explored the lived experiences of smartphone-owning senior citizens in Barangay 4 Catiao-tiao, Tanjay City, Negros Oriental, regarding digital communication applications. Grounded in qualitative methods, the research utilized purposive criterion sampling and in-depth, semi-structured interviews analyzed using Braun and Clarke's thematic framework. The findings generated eleven core themes highlighting how older adults integrate mobile technology into daily routines to maintain social connections, while simultaneously navigating operational challenges, emotional challenges, and cyber safety risks. Furthermore, results revealed the important role of intergenerational family support, alongside a distinct preference for structured, slow-paced, and hands-on digital learning. These insights demonstrate that overcoming the digital divide requires addressing everyday practical barriers through supportive instruction. Ultimately, the findings provide a contextual foundation for developing Project LOLO (Localized Outreach for the Literacy of Older Adults), a community-led capacity building designed to support digital inclusion, develop technical confidence, and promote greater independence of senior citizens.

Keywords: Digital literacy, older adults, phenomenology, mobile communication, community-led intervention, Barangay 4, Tanjay City, Negros Oriental



Introduction

Digital communication applications such as Messenger, Facebook, SMS, and video calling platforms have become indispensable tools for maintaining social relationships, accessing information, and communicating with family members, particularly in today's technology-driven society. However, despite the widespread availability of smartphones, many senior citizens continue to experience significant challenges in using these digital communication applications because of limited digital literacy, unfamiliarity with technological features, and anxiety toward digital technologies. According to van Dijk (2020) and Helsper (2021), the modern digital divide is no longer determined solely by access to digital devices but by differences in digital skills, confidence, and the availability of community-based support. In component cities such as Tanjay City, where localized digital literacy initiatives for older adults remain limited, many senior citizens struggle with basic communication tasks such as sending and receiving messages, making video calls, navigating social media applications, adjusting communication settings, and recognizing fraudulent messages or online scams. These challenges restrict their ability to communicate independently with family members and participate fully in an increasingly digital society. As digital communication continues to replace many traditional forms of interaction, there is an increasing need to understand the experiences of older adults and develop community-based interventions that promote their digital inclusion and communication competence.

Existing literature further emphasizes that older adults continue to face barriers in adapting to digital technologies. The World Health Organization (2021) highlights that structural inequalities contribute to the exclusion of older adults from digital advancements, increasing their risks of social isolation and reduced access to essential information and services. Likewise, Seifert et al. (2021) explain that limited digital competence places many older adults under a "double burden" of digital and social exclusion, weakening their ability to maintain relationships and participate in community life. Moreover, Oh et al. (2021) found that many senior citizens experience difficulties understanding smartphone interfaces and communication applications because of limited digital literacy. Similarly, Kebede et al. (2022) reported that older adults often encounter challenges in engaging with digital technologies due to insufficient skills, confidence, and access to appropriate learning opportunities. Ahmad et al. (2022) further emphasized that digital literacy interventions designed specifically for older adults significantly improve their confidence and ability to use communication technologies effectively.

Despite these findings, there remains a noticeable gap in the existing literature regarding the lived experiences of senior citizens in local Philippine communities, particularly in using digital communication applications such as Messenger, Facebook, SMS, and similar platforms. Most previous studies have primarily employed quantitative methods that focus on measuring digital access, technology ownership, or levels of digital literacy, offering limited understanding of the everyday operational challenges, emotional experiences, coping strategies, and personal meanings that older adults associate with digital communication. Furthermore, few studies have translated these lived experiences into community-based educational programs tailored to the actual communication needs of senior citizens at the barangay level.

The participants of this study are smartphone-owning senior citizens residing in Barangay 4 Catiao-tiao, Tanjay City, Negros Oriental. Their lived experiences are significant because they provide valuable insights into the challenges they encounter while using digital communication applications in their daily lives. Understanding these experiences will help identify the barriers that hinder their effective digital communication, as well as the coping mechanisms they employ to remain connected with their families, friends, and communities. The knowledge generated from this study may also contribute to strengthening local initiatives that promote digital inclusion, improve communication skills, and enhance the overall well-being and independence of older adults.

Therefore, this study, LOLO (Localized Outreach for the Literacy of Older Adults): A Phenomenological Study on Senior Citizens' Experiences with Digital Communication Applications as a Basis for a Community-Led Digital Communication Capacity Building, aims to explore the lived experiences of senior citizens in using digital communication applications through a phenomenological approach. Specifically, it seeks to understand their



operational challenges, emotional responses, and coping strategies while using applications such as Messenger, Facebook, SMS, and other communication platforms. The findings of this study will serve as the foundation for LOLO (Localized Outreach for the Literacy of Older Adults), a community-led digital communication capacity building that will be developed in collaboration with the local government unit (LGU) and barangay officials. Grounded in the participants' own experiences, the capacity building will be tailored to address their everyday communication needs, promote safe and effective use of digital communication applications, strengthen digital confidence, and foster greater social inclusion and independence among senior citizens.

Specifically, it seeks to answer the following questions:

1. What are the lived experiences of senior citizens as they navigate the use of digital communication applications in their daily lives?
2. What meaning do the participants attribute to their challenges and experiences with digital communication applications?
3. What essential topics and modules must be included in Project LOLO based on the expressed digital communication needs of the senior citizens?

Literature Review

Digital Literacy and Digital Engagement Among Older Adults

Digital literacy enables older adults to participate more actively in modern society by improving communication, access to information, and independence. Kebede et al. (2022) reported that older adults who engage with digital technologies experience stronger social connectedness, easier access to healthcare services, and improved quality of life. Similarly, Oh et al. (2021) explained that digital literacy extends beyond operating devices and includes communication skills, information evaluation, online safety, and problem-solving. These findings suggest that digital competence is a multidimensional skill necessary for meaningful participation in the digital world.

Likewise, Seifert et al. (2021) found that digital literacy became particularly important during the COVID-19 pandemic because older adults with limited digital skills experienced greater social isolation compared to those who were digitally connected. The authors emphasized that digital communication applications served as vital tools for maintaining relationships and accessing essential services during periods of restricted physical interaction.

Supporting these findings, Castillo et al. (2022) explored the lived experiences of Filipino older adults living alone during the COVID-19 pandemic and found that social media technologies enabled participants to maintain communication with family members, access essential services, and reduce feelings of loneliness and isolation. Although many participants initially struggled with digital technologies, they gradually developed confidence and described their experiences as empowering and socially enriching. These findings demonstrate that digital communication applications can foster meaningful social participation when older adults receive adequate support in developing digital skills.

Although these studies consistently demonstrate the benefits of digital literacy, they primarily focus on measuring digital competencies and levels of engagement rather than exploring how older adults personally experience learning and using digital communication applications. While Castillo et al. (2022) adopted a phenomenological approach, the study focused on the experiences of older adults living alone during the COVID-19 pandemic rather than examining the broader experiences of senior citizens using various digital communication applications. Therefore, a phenomenological approach remains necessary to capture these lived experiences from the perspectives of older adults themselves.



Digital Inequality and the Digital Divide

Researchers agree that digital exclusion is influenced by more than the availability of technology. Helsper (2021) argued that digital inequality is shaped by differences in socioeconomic status, educational attainment, digital confidence, and motivation. Similarly, van Dijk (2020) explained that the digital divide consists of inequalities in technology access, digital skills, patterns of use, and the benefits individuals obtain from digital participation. These perspectives indicate that simply providing smartphones or internet access does not guarantee meaningful digital inclusion.

Supporting this view, the World Health Organization (2021) highlighted that ageism and social exclusion often prevent older adults from fully participating in digital society. The report emphasized that lifelong digital learning promotes healthy aging, independence, and active social participation.

Similarly, Betts et al. (2019) found that many older adults perceived limited technological knowledge, fear of making mistakes, and low confidence as major barriers to using digital technologies. Although participants expressed a strong willingness to learn, technology anxiety and insufficient guidance often discouraged continued technology use. The study highlights that digital inequality is influenced not only by access to technology but also by emotional and educational factors that shape older adults' willingness to engage with digital communication tools.

Expanding this perspective, Tirado-Morueta et al. (2026) argued that digital literacy should be understood within the context of older adults' everyday lives rather than simply as the ability to operate digital devices. Through focus group discussions, the researchers found that previous technological experience, social support, and daily routines significantly influence how older adults engage with digital technologies. They emphasized that digital inclusion initiatives should recognize these contextual differences and provide learning opportunities that reflect the realities of older adults' daily lives.

Although these studies explain the structural and personal causes of digital exclusion, they provide limited insight into how senior citizens personally experience these barriers while using specific digital communication applications in their daily lives. Most existing literature examines digital inequality from social, educational, or theoretical perspectives rather than exploring the lived meanings behind these experiences. Consequently, there remains a need for qualitative research that investigates how older adults interpret and navigate these barriers in real-life contexts.

Effective Digital Literacy Instruction for Older Adults

The effectiveness of digital literacy programs largely depends on instructional approaches designed specifically for older learners. Ahmad et al. (2022) found that instructional strategies incorporating hands-on practice, simplified language, repeated demonstrations, individualized guidance, and supportive learning environments significantly improve older adults' acquisition of digital skills. These learner-centered approaches help reduce anxiety while increasing confidence and motivation.

Supporting these findings, Betts et al. (2019) reported that older adults preferred patient instructors, hands-on activities, small-group instruction, and opportunities for repeated practice. These instructional approaches helped reduce fear of making mistakes, increased learners' confidence, and encouraged independent use of digital technologies.

Similarly, Wang and Wu (2022) demonstrated that digital literacy interventions are more effective when they build upon technologies already familiar to older adults. Their study found that Smart TVs served as an accessible learning platform because familiar interfaces, clear digital feedback, and reduced technology anxiety increased older adults' confidence and willingness to adopt digital technologies.



Furthermore, Tirado-Morueta et al. (2026) emphasized that digital literacy instruction should be contextualized according to older adults' everyday experiences, previous technological knowledge, and social environments. The researchers argued that community-based and context-sensitive instructional programs are more effective than standardized training because they respond to the diverse needs and lived realities of older learners.

The recommendations of Ahmad et al. (2022), Betts et al. (2019), Wang and Wu (2022), Tirado-Morueta et al. (2026), and Kebede et al. (2022) collectively suggest that digital literacy interventions should address not only technical competencies but also learners' emotional, psychological, and social needs. Effective instruction should provide continuous support, build upon familiar technologies, and reflect older adults' everyday experiences to encourage sustained digital engagement.

Despite these valuable recommendations, existing instructional studies primarily evaluate the effectiveness of digital literacy programs after implementation rather than first exploring the lived experiences of senior citizens using digital communication applications to identify their learning needs. This limitation highlights the importance of conducting phenomenological research before designing community-based interventions that are responsive to older adults' actual experiences.

In summary, the reviewed literature establishes that while digital tools significantly enhance the well-being and social connectedness of older adults, their meaningful integration is heavily restricted by structural, emotional, and instructional barriers. By analyzing these existing studies, it becomes apparent that the current academic landscape lacks an in-depth, subjective understanding of how senior citizens personally experience, interpret, and give meaning to their day-to-day interactions with communication platforms. The present study seeks to address this gap by exploring the lived experiences of senior citizens with digital communication applications through a phenomenological approach. By generating an in-depth understanding of their experiences, challenges, and perceptions, the study aims to provide evidence that will serve as the foundation for developing a community-led digital communication capacity-building approach that is responsive to the actual needs, challenges, and lived realities of older adults.

Methodology

This chapter presents the methodological design used to explore the lived experiences of senior citizens navigating digital communication platforms. It outlines the research design, participant eligibility criteria, instrumentation validation, fieldwork procedures, data analysis protocols, and ethical considerations necessary to establish a dependable foundation for Project LOLO.

Research Design

This study deployed a qualitative methodology, specifically utilizing a phenomenological research design, to investigate the everyday operational realities, psychological responses, and adaptive strategies of senior citizens interacting with modern mobile applications. Rooted in the Husserlian philosophical tradition and popularized by modern qualitative frameworks, phenomenology seeks to discover the core common meanings and structural essences that individuals attribute to a specific phenomenon. This approach avoids using preconceived quantitative metrics or fixed deductive hypotheses.

While quantitative designs isolate variables to measure statistical relationships, a phenomenological design captures the unadulterated, firsthand perspectives of the participants. The integration of open-ended, semi-structured interviews provides a deep understanding of older adults' visual or tactile hurdles, technology-induced anxiety, and self-taught coping mechanisms. This qualitative approach establishes an empirical baseline that quantitative surveys cannot achieve. This baseline serves as the direct framework for translating these lived experiences into localized, community-based educational modules under Project LOLO (Localized Outreach for the Literacy of Older Adults).



Research Locale

The study will be conducted in Barangay 4 Catiao-tiao, Tanjay City, Negros Oriental. This locale was purposely selected because it has a considerable population of senior citizens who use smartphones as part of their daily communication with family members, friends, and the community. The barangay provides an appropriate setting for examining the experiences, challenges, and coping strategies of older adults in using mobile communication applications.

Conducting the study within the participants' own community allows the researchers to gather authentic and context-based information in a familiar and comfortable environment. This setting encourages participants to openly share their lived experiences while minimizing disruptions to their daily routines. Furthermore, the findings of this study are expected to provide valuable insights that may serve as a basis for developing localized digital literacy programs and community interventions aimed at improving the mobile phone communication skills of senior citizens in Barangay 4 Catiao-tiao and similar communities.

Participants and Sampling Design

The participants for this study were smartphone-owning senior citizens residing within Barangay 4 Catiao-tiao in Tanjay City, Negros Oriental. To ensure the generation of structurally rich and relevant qualitative data, the researcher implemented a non-probability purposive sampling design, specifically utilizing criterion sampling. This strategy limits participant selection to individuals who have firsthand experience navigating modern touchscreen devices.

The final sample was selected based on a strict four-tier eligibility framework:

1. **Age Requirement:** The individual must be at least sixty (60) years of age, legally classifying them as a senior citizen under Republic Act No. 7432 (The Senior Citizens Act of the Philippines).
2. **Device Ownership:** The participant must personally own and actively utilize a touchscreen smartphone.
3. **Phenomenological Exposure:** The individual must possess direct experience attempting to navigate digital communication applications, specifically Messenger, Facebook, SMS text messaging, or video calling platforms.
4. **Residency Status:** The participant must maintain permanent legal residency within Barangay 4 Catiao-tiao, Tanjay City, Negros Oriental.

Following qualitative research conventions, the ultimate sample size was not fixed by statistical formulas but was guided by the principle of data saturation. Participant recruitment concluded when subsequent in-depth interviews yielded redundant structural themes, showing that no new operational challenges or emotional insights emerged from the transcripts.

Instruments of the Study

The primary tool for data collection was a researcher-developed, semi-structured interview guide designed to address the central objectives of the study by capturing both baseline contextual details and the deeper qualitative realities of the participants. The instrument systematically gathered background profile information regarding the participants' chronological age, years of device ownership, and primary intergenerational communication networks, while simultaneously exploring core phenomenological themes. These exploratory areas examined concrete operational challenges such as small font sizes, interface navigation difficulties, and digital scam identification, alongside the psychological and emotional dimensions of technology use, including frustration, anxiety, and fear of isolation. Furthermore, the interview guide investigated the participants' self-taught coping mechanisms and



preferred learning modalities, generating a comprehensive descriptive foundation to inform the development of the Project LOLO modules.

After development, the instrument underwent expert panel validation. A group of qualitative research specialists and language experts evaluated the guide for clarity, developmental appropriateness, and cultural sensitivity, categorizing questions to be retained, rephrased, or deleted. To minimize linguistic barriers and guarantee conceptual accuracy during fieldwork, the interview guide was translated into conversational Cebuano-Visayan.

Once the final questions were determined, the translated guide underwent field pre-testing with non-participant senior citizens who met the inclusion criteria within an adjacent barangay. This phase verified that the phrasing was clear, the terminology was accessible, and the physical delivery accommodated the auditory and cognitive pacing needs of older learners, ensuring the instrument's structural dependability before full deployment.

Data Collection Procedure

The data collection process followed a systematic sequence designed to maintain administrative transparency, build community trust, and secure data integrity from initiation to data storage. The researcher initiated fieldwork by securing formal clearance through a written request submitted directly to the Barangay Captain of the selected locale. Upon approving the study, the Barangay Captain officially referred the researcher to the President of the Barangay Association of Senior Citizens Affairs (BASCA), who served as the primary institutional gatekeeper for the target population. In close coordination with the BASCA President, eligible participants matching the four-tier criteria were identified, recruited, and mobilized within designated barangay facilities. Before initiating the interviews and activating the digital audio recording device, the researcher read a formal orientation script verbatim in Cebuano-Visayan to secure explicit written or recorded verbal informed consent, ensuring participants understood that their involvement was entirely voluntary and that they reserved the right to withdraw at any point without consequence. Face-to-face interviews were then conducted within the barangay, with dialogues captured via audio recorder and complemented by detailed field notes documenting non-verbal cues, pauses, and emotional expressions that added contextual depth to the transcripts. Finally, to uphold data privacy, each participant was provided with an institutional contact card, and all raw audio files were encrypted and stored in a password-protected repository in strict compliance with the Data Privacy Act of 2012 (R.A. 10173).

Data Analysis

To systematically examine and extract meaningful patterns from the senior citizens' lived experiences, the gathered narrative data was processed using Braun and Clarke's (2006) framework for thematic analysis. The analytical process began with the verbatim transcription of all audio recordings in the original Cebuano-Visayan dialect, followed by careful translation into English to preserve the semantic integrity, emotional weight, and cultural nuances of the participants' accounts. The researcher engaged in iterative reading and re-reading of these complete transcripts to achieve thorough data familiarization and capture the overall context of the narratives. Following this immersion, the researcher generated initial codes by systematically analyzing the text to label significant statements, phrases, and operational observations directly describing device navigation struggles, technology anxiety, text fraud encounters, and learning preferences.

These preliminary codes were then organized and combined to search for broader candidate themes and overarching categories representing shared patterns of experience across the senior cohort. The researcher reviewed and refined these potential themes against both the extracted coded extracts and the entire dataset to ensure internal homogeneity and clear distinction between categories. Once refined, each theme was formally defined and named to articulate the core essence and psychological insights of the senior citizens' interactions with digital communication platforms. Finally, the analysis culminated in the synthesis of a compelling narrative report supported by vivid empirical extracts, which was validated through a member-checking protocol where findings were presented back to a subset of participants in conversational Cebuano-Visayan to confirm that the thematic structure



accurately reflected their authentic experiences and provided a trustworthy foundation for the Project LOLO modules.

Trustworthiness of the Study

To establish qualitative rigor and guarantee that the findings genuinely reflect the lived experiences of the participants, the researcher adhered strictly to Lincoln and Guba's (1985) framework for qualitative trustworthiness. This framework outlines four key criteria: credibility, transferability, dependability, and confirmability.

Credibility

Credibility ensures that the research findings are accurate and believable from the perspective of the participants. The researcher achieved this through active engagement within the local community and working directly with the neighborhood Barangay Association of Senior Citizens Affairs (BASCA) administration to understand the local social environments. Furthermore, a formal member-checking protocol was executed. After translating and analyzing the data, the researcher returned to a subset of the participants to present the developed themes in conversational Cebuano-Visayan. The participants verified that the structural analysis accurately mirrored their actual day-to-day technological struggles and emotional realities.

Transferability

Transferability refers to the extent to which the qualitative findings can be applied or transferred to other contexts or groups. Because qualitative research does not aim for statistical generalization, the researcher secured transferability by providing a thick description of the study's parameters. This includes detailing the specific geographic landscape of the barangay in Tanjay City, the unique operational limitations of the senior participants, and the explicit structural bounds of the four-tier inclusion criteria. This comprehensive detail allows future researchers to determine if the findings are applicable to aging populations in similar rural or component-city settings across the region.

Dependability

Dependability concerns the stability and reliability of the data over time and across conditions. The researcher maintained dependability by documenting a clear, step-by-step audit trail. This audit trail details every phase of the research operational pipeline, including the precise dates of administrative clearance acquisition, the referral and coordination process with the Barangay Association of Senior Citizens Affairs (BASCA) President, the recruitment approach, the execution of the fieldwork within the barangay, and the exact application of Braun and Clarke's (2006) framework for thematic analysis. This transparent logging ensures that outside observers can follow the exact research path taken.

Confirmability

Confirmability establishes the degree of neutrality in the research findings, ensuring that the final narratives are shaped purely by the experiences of the participants rather than the subjective biases, expectations, or quantitative assumptions of the researcher. The researcher achieved confirmability by practicing phenomenological bracketing (epoche). The researcher actively recognized and set aside personal preconceptions about elderly digital literacy before each interview session. This bracketing was reinforced by using a digital audio recorder to capture verbatim statements and keeping field notes that separated direct participant observations from personal interpretations.



Ethical Considerations

The researcher strictly adhered to institutional ethical guidelines throughout the duration of the study. Administrative research permits were secured from the Barangay Captain and localized senior affairs officers prior to community entry. Informed consent was obtained from all participants, ensuring they fully understood the study's purpose, their roles, and their right to withdraw at any time without consequence.

To safeguard participant welfare, confidentiality and anonymity were maintained by omitting personal identifying details and assigning unique alphanumeric pseudonyms (e.g., Participant A, Participant B) to all transcriptions and final reports. All digital audio recordings and translated text repositories were stored in encrypted, password-protected cloud storage accessible only to the primary researcher. The data will be permanently deleted after the academic publication of the study, ensuring absolute alignment with the Data Privacy Act of 2012 (R.A. 10173).

Additionally, Artificial Intelligence tools specifically Chatgpt and Gemini, were used strictly to help with grammar, syntax correction and organization. In alignment with academic integrity guidelines, AI did not create any research content, interpretation or analysis. The researchers remained responsible for the interpretation of findings and ensuring the manuscript reflects authentic human authorship. Data privacy and data protection standards were also maintained during proofreading processes.

Findings and Discussion:

The qualitative analysis of the data revealed 11 core themes that illuminate how older adults interact with mobile technology, the barriers they encounter, their coping strategies, and their specific learning needs. These findings highlight a dual reality: while mobile technology is deeply integrated into the daily social lives of older users to maintain communication and connection, significant usability, literacy, and safety barriers persist. The insights below explore these dimensions, shedding light on the emotional, practical, and educational factors shaping older adults' digital experiences.

Results:

Table 1. Thematic Map

Codes	Themes
Using the phone for communication and entertainment	Integrating Mobile Technology into Everyday Life
Using the phone during available free time	
Using the phone mainly when receiving calls	
Frequent phone use	



Communicating with family and co-workers	
Communicating with siblings and children	Maintaining Social Connections Through Mobile Technology
Communicating with family and relatives	
Communicating with relatives and social contacts	
Limited digital knowledge	
Confusion and uncertainty when using the phone	
Making mistakes during phone navigation	Navigating the Challenges of Digital Technology
Encountering technical problems	
Difficulty with small keys and letters	
Difficulty typing and replying	
Feeling frustration, annoyance, and irritation	
Feeling upset during digital difficulties	
Feeling emotionally affected by delayed assistance	Experiencing Emotional and Coping Responses in Digital Engagement
Experiencing little or no emotional distress	
Withdrawing from phone use when distressed	
Leaving digital difficulties unresolved	



Ignoring suspicious content	
Avoiding suspicious links and content	
Blocking suspicious content	
Accidentally clicking a harmful link	Practicing Caution and Seeking Safety in the Digital Environment
Difficulty identifying unfamiliar digital content	
Recognizing potentially deceptive content	
Seeking help to verify suspicious content	
Seeking help during digital difficulties	
Seeking help from nieces and nephews	
Seeking guidance from grandchildren	
Seeking assistance from children	Finding Support Through Family and Social Connections
Seeking assistance from spouse	
Relying on nieces and nephews for digital support	
Relying on grandchildren for digital support	
Relying on children for digital support	
Learning through experimentation	
Learning through repetition and regular practice	
Learning to improve communication	Developing Confidence and Independence Through Digital Learning
Learning for greater independence	
Learning through guidance from others	
Perceiving little need for further improvement	



Learning to use different applications	
Learning unfamiliar digital functions	
Learning basic phone navigation	Identifying Desired Digital Skills and Learning Needs
Learning accessibility features	
Learning essential phone functions	
Learning to manage unfamiliar pop-up content	
Limited interest in further digital learning	
Preference for guided, step-by-step instruction	
Preference for slow and clear instruction	
Preference for written learning materials	Seeking Accessible and Age-Responsive Digital Learning
Preference for hands-on and practical learning	
Need for accessible opportunities to practice	
Need for simple and concrete demonstrations	
Using senior citizen leaders as information channels	
Recognizing the need for senior citizen digital capacity building	Recognizing the Need for Community-Based Digital Literacy Support
Expecting community officials to support digital awareness	
Perceiving no need for capacity building	
Willingness to follow organized digital instruction	
Continuing to rely on family support	



Reporting no additional concerns

Delegating practical phone tasks to relatives

Difficulty loading prepaid credits

Limiting use to familiar applications

Seeking family help for practical phone tasks

Difficulty with text input

Seeking children's assistance with phone tasks

Everyday Practical Barriers to Mobile Phone Use

Integrating Mobile Technology into Everyday Life

Mobile technology is embedded in the daily routine and regular lifestyle of the users. Mobile devices are considered as an integral part of the daily lives of people since it provides convenience in terms of communication, entertainment, access to information and other activities that people are interested in. Instead of using mobile devices for specific purposes, people have started to carry them around to deal with different activities depending on their needs and time availability. It can be argued that mobile technology has penetrated the routine of the people thereby affecting their lifestyle in terms of communication, entertainment, accessing information and managing their overall daily activities. According to Bian and Leung (2015), mobile devices are being used to entertain, inform and utilize the spare time of the individuals. On the other hand, Oulasvirta et al. (2012) explained that phones have become a companion to people as they engage in communication, leisure activities and other regular tasks throughout the day.

Participant 1 said,

"For YouTube and making calls"

Participant 2 & Participant 6 said,

"depends on whether I have work to do" and "free time or nothing to do"

Participant 3 said,

"only when someone calls"

Participant 5, Participant 7, & Participant 9 said,

"all the time", "about 6 hours a day", and "many times"

The constant merging of mobile technology and the daily lives of individuals demonstrates that modern technology has become an integral aspect of human activity from being a luxury (Ardelia & Jaro'ah, 2023). From providing access to information and entertainment, it transforms the ways in which people manage their free time and daily activities (Chemnad et al., 2023). This is demonstrated by the responses of the participants, particularly those who indicated that they use their phone during their free time or when they are bored. It is demonstrated that mobile phones provide a convenient means of filling their empty time with entertainment and having access to various forms of information. For some participants, the use of their phone is not tied to a specific activity, demonstrating that mobile phones are able to be utilized for purposes that satisfy a broader variety of activities and needs. As such, the merging of mobile technology and the daily lives of individuals demonstrates its role as not only a technological tool but also a means of managing leisure and daily activities.



The use of mobile phones in everyday life has also transformed the ways in which people interact with each other. Communication through digital means allows individuals to connect with each other online easily, but it may also disrupt real-life and face-to-face interactions (Machado Silva, 2025). This is particularly demonstrated by the responses of the participants who indicated that they use their phone to call other people or only when they get called. These responses demonstrate that communication is one of the primary functions of mobile phones in satisfying the need for socialization where people are able to connect with each other despite being far away from each other. Although smartphones facilitate the ability to communicate with others easily, it also impacts individual privacy, personal space, and the availability of individuals (Katz & Aakhus, 2002). While phones provide the ability to connect with others constantly, an overreliance on digital communication may contribute to a reduction in face-to-face interactions with people in real-life. Turkle (2011) similarly argued that constant connection through technology may affect an individual's level of engagement with others in their local surroundings. As such, the use of mobile phones can enhance the ability to communicate with others with changes in the ways in which individuals interact with each other in their social lives.

Checking phones has also become an unconscious behavior instead of something that people are deliberately doing for many users (Oulasvirta et al., 2012). While such unconscious tendencies provide an easy access to entertainment, communication, and access to information, frequent smartphone use may also affect users' well-being. Studies that examine the effects of digital media use (e.g., Lin & Zhou, 2025; Bian & Leung, 2015) demonstrate the complicated nature of smartphone use in relation to its impact on mental health and overall well-being. The responses of the participants, particularly those who state that they use their phones "all the time," "about 6 hours a day," and "many times," demonstrate the impact that the usage of mobile phones can be to individual's everyday routines. Such tendencies indicate that regular use of phones can become a habit, where users unconsciously use their phones when they have free time before communicating or interacting with people in real-life. Furthermore, Chan (2018) demonstrates that the ways in which phones are being used to communicate can affect the quality of relationships and overall levels of happiness. Demonstrated by the responses of the participants, mobile phones do not merely provide access to information but also impact how individuals organize their time, develop habits, communicate with others, and structure their social lives.

Phones have tremendous power and can help people not only find information but also prioritize, schedule, time-manage, and create routines around. It is evident from participants' responses that they rely on their phones both to fill free time (for those who do not have any urgent tasks) and to determine whether they have to work or if someone is waiting for them to do something. In several cases, the respondents stated that they use their phones in a continuous or constant manner. It can be inferred from the survey that cell phones are an essential element in people's lives and have entered the core of their social interactions. Individuals can hardly imagine their daily life without the continuous use of this technology. As a result, checking or using a mobile device has become a routine part of the social interactions people engage in every day.

Maintaining Social Connections Through Mobile Technology

Mobile technology is utilized as a means of sustaining interpersonal relationships, enabling individuals to interact with people at a distance and maintain social connections (Corbett, 2009). Individuals use mobile technology to network with distant family members and friends, enhancing their capacity to communicate and receive emotional and social support irrespective of geographical and temporal limitations (Guo et al., 2019). Mobile phones in particular can benefit senior citizens as they can enable interaction with persons who may not always be available for face-to-face interaction. Through calling, texting, and other modes of communication, people can inquire about and report on their relatives' and friends' wellbeing. As such, the role of mobile technology in communication signifies its significance in enabling social connections.

Participant 1 & Participant 6 shared,
"siblings and co-workers"



Participant 2 & Participant 4 shared,
"siblings and my children"

Participant 5 & Participant 9 said,
"grandchild, siblings, my children" and "children and relatives"

Participant 3, Participant 7, & Participant 8 said,
"people from DSWD and my niece/nephew", "nieces and nephews", and "siblings"

The ability to communicate via mobile technology exemplifies how this tool facilitates social relationships by helping individuals interact with others (Lin & Zhou, 2025). Particularly, mobile technology can enable interaction among individuals with hectic schedules, which characterizes contemporary society (Machado Silva, 2025). This is demonstrated by the fact that almost all participants indicated communicating with family members, including siblings, children, grandchildren, nieces, nephews, and other relatives, using digital devices. Mobile communication can thus substitute for face-to-face interactions, enabling people to maintain relationships with relatives, friends, and other social contacts. Additionally, people can use mobile devices to update others on their wellbeing and ask for assistance and support virtually rather than physically. This feature is especially significant for maintaining social relationships among people who may not be able to interact regularly due to geographical and temporal limitations (Guo et al., 2019; Chan, 2018, as cited in IJIP, 2025).

Mobile technology is also instrumental in facilitating social connections due to its capacity to offer an accessible avenue for obtaining social and emotional support. The ability to communicate, albeit virtually, can enhance individuals' wellbeing by reducing feelings of loneliness and enabling people to feel connected throughout the day (Wellman & Haythornthwaite, 2002). Notably, the participants identified their children, grandchildren, siblings, nieces, nephews, and other relatives as persons with whom they interact using their mobile devices. Through mobile communication, senior citizens can engage in virtual dialogue and interaction with their family members, which can enable them to feel connected to them. Mobile technology can also help sustain relationships among generations of family members, enabling grandparents to interact with their grandchildren and parents to communicate with their children and siblings. Additionally, the participants reported interacting with co-workers and DSWD personnel as well as other relevant social contacts. As such, mobile technology can facilitate social connections by helping people interact with friends and family members for emotional support as well as other vital social groups.

Although virtual interaction can enable individuals to feel close to each other, the replacement of face-to-face communication with mobile technology can be detrimental to social relationships. Turkle (2011) contends that the ease and accessibility of connecting virtually can affect the nature of physical interactions. As such, mobile technology should be used to complement rather than substitute face-to-face interactions. In this regard, mobile communication can enhance social relationships among senior citizens by bolstering their existing relationships rather than replacing significant interpersonal connections. Thus, the use of mobile technology in communication can be beneficial to senior citizens as it can complement their interactions with friends, family members, and other social contacts.

Mobile devices are used to network with others, enabling individuals to check on their relatives and friends and interact with them virtually, thereby increasing their social connections (Baym, 2015; Turkle, 2011). Specifically, the participants report using mobile technology to communicate predominantly with family members and relatives and to a lesser extent with co-workers and other crucial social contacts. As such, these devices can help sustain the participants' existing social relationships by enabling them to connect with friends and family members, irrespective of distance and time. Virtual communication can also enable people to obtain emotional support and exchange information, which can enhance their general wellbeing. In essence, mobile technology can facilitate social connections for individuals, especially the elderly, by enhancing their capacity to communicate effectively with friends, family members, and other vital social groups. Consequently, this technology can augment people's general



wellbeing by helping them overcome the challenges associated with interacting with loved ones and other interpersonal relationships, such as distance and time constraints (Wellman & Haythornthwaite, 2002). Thus, the participants' reports indicate that they can utilize mobile technology to bolster their social connections and maintain their relationships with friends and family members and other relevant social groups.

Navigating the Challenges of Digital Technology

Navigating the Challenges of Digital Technology represents the complex, multi-dimensional operational, cognitive, and tactile hurdles that senior citizens encounter when attempting to interact independently with modern mobile devices and digital communication applications. Within the context of the Project LOLO phenomenological study, digital technology functions as an intricate cognitive puzzle requiring simultaneous fine motor coordination, spatial memory, visual processing, and adaptive digital familiarity. As older adults undergo naturally occurring age-related biological changes—such as diminished visual acuity, reduced tactile sensitivity, and altered motor precision—standard smartphone physical layouts and software interfaces create severe operational friction. Modern software designs, characterized by densely packed touch-screen keypads, small typographic scales, subtle icon cues, and non-linear multi-step navigation paths, actively conflict with the physical and cognitive capacities of older users. When these structural interface design choices collide with low baseline digital confidence and an absence of formal, age-appropriate technological education, daily operational tasks—such as composing SMS text messages, typing on Messenger, opening video calls, or adjusting device settings—turn into overwhelming hurdles. These persistent difficulties induce severe confusion, cognitive fatigue, and a pervasive fear of committing catastrophic, irreversible errors. Seniors frequently express a heightened apprehension that an accidental tap on an unfamiliar icon could permanently erase vital phone data, alter system settings beyond repair, inadvertently purchase unauthorized digital services, or send embarrassing unintended messages to online contacts. As a result, rather than navigating communication applications with fluid agency, senior citizens feel intimidated by unpredictable device behavior, leading them to perceive modern communication platforms as unnecessarily intricate, hostile, and fundamentally alien to their lived realities.

Participant 1 said,
"Yes I don't know anything."

Participant 2 said,
"Yes... I'm not tech-savvy."

Participant 8 said,
"Really get confused I don't know how."

Participant 3 said,
"Yes... Keys are so close together...Difficulty, with the small letters."

Participant 9 said,
"Confused... Hard to type on Messenger."

This operational reality is further illuminated by Leukel et al. (2023), who demonstrated that variations in technical knowledge, digital confidence, and self-efficacy directly explain disparities in how older adults navigate digital platforms and dictate the breadth of their internet usage. While older individuals frequently express an intrinsic desire to learn and participate in the modern digital sphere, technology-induced anxiety acts as a cognitive inhibitor that restricts their willingness to explore unfamiliar interfaces independently. This dynamic is vividly illustrated in the narrative accounts of the senior citizens in Barangay 4 Catiao-tiao, who explicitly reported feeling confused, overwhelmed by small keypad layouts, and unsure of how to execute fundamental functions on Messenger. Building on this operational bottleneck, Oh et al. (2021) observed that senior citizens encounter persistent difficulties when attempting to interpret smartphone user interfaces and messaging applications primarily because of limited



foundational digital literacy skills. Their empirical observations directly reinforce the core premise of the Project LOLO study: the operational struggles experienced by rural and component-city seniors are not immutable consequences of biological aging, but rather reflect an educational deficit stemming from the lack of accessible, skill-based, and contextually grounded digital instruction. When older adults are denied tailored learning opportunities that account for their baseline abilities, ordinary technical friction escalates into complete digital disengagement.

From a broader sociological and structural perspective, van Dijk's (2020) model of the digital divide provides crucial theoretical depth to these local observations. Van Dijk posits that the contemporary digital divide has evolved far beyond mere binary inequality of physical access to devices or internet connectivity. Instead, it manifests through profound secondary and tertiary inequalities regarding operational skills, strategic usage patterns, digital self-efficacy, and the unequal distribution of supportive social resources. This theoretical lens directly contextualizes why smartphone-owning senior citizens in Tanjay City continue to experience acute operational exclusion despite possessing physical access to touchscreen smartphones. Merely placing advanced mobile technology into the hands of an older adult does not ensure meaningful digital inclusion if the user lacks the operational literacy required to navigate complex software ecosystems. Expanding upon this physical and ergonomic dimension, Wilson et al. (2021) and Gray and Charness (2022) documented that tactile interaction friction—including touch-screen hypersensitivity, tiny button targeting, ambiguous icon symbology, and unexpected pop-up notifications—serves as a primary physical deterrent for older adults. When physical interfaces fail to accommodate the sensory and motor realities of older users, disorientation ensues, prompting seniors to retreat from exploring unfamiliar application features.

Furthermore, as Tirado-Morueta et al. (2026) argued, digital literacy must be conceptualized within the specific daily routines and practical realities of older adults rather than evaluated as a set of abstract, device-operating competencies. Senior citizens do not view smartphones as abstract technological innovations to be mastered for their own sake; rather, they evaluate digital devices through the lens of practical utility, personal safety, and social connection. When daily practical barriers—such as difficulty typing due to close key spacing or confusion surrounding pre-paid load management—consistently outweigh the immediate communicative rewards of device use, perceived ease of use declines sharply, undermining the individual's motivation to interact with the device independently. This operational disincentive is further illuminated by Khan (2026), who highlighted that structural barriers in software design and instructional design frequently ignore the unique cognitive pacing and processing strategies of older populations. Without intervention, everyday practical barriers create a self-reinforcing cycle of disuse, where initial operational frustration leads to device avoidance, which in turn prevents skill accumulation and solidifies long-term digital dependence.

Ultimately, the empirical and narrative evidence synthesized within this theme provides a clear foundation for the instructional design of Project LOLO (Localized Outreach for the Literacy of Older Adults). The findings demonstrate that overcoming the operational divide within Barangay 4 Catiao-tiao requires moving beyond generic, high-level technology overviews toward highly targeted, age-responsive, and hands-on instructional interventions. To effectively reduce operational friction, the community-led digital communication capacity building must explicitly integrate practical modifications, such as teaching seniors how to adjust system display settings (e.g., enlarging font sizes and modifying screen sensitivity), simplifying screen navigation through step-by-step physical manuals, and offering structured opportunities for repeated tactile practice on their personal devices. By directly addressing the real-world operational challenges identified by the participants, Project LOLO can demystify touch-screen interfaces, dismantle technology-induced fear, and equip senior citizens with the tangible operational competence required to navigate digital communication applications independently within their daily lives.

Experiencing Emotional and Coping Responses in Digital Engagement

Experiencing Emotional and Coping Responses in Digital Engagement captures the multifaceted psychological, emotional, and behavioral reactions—ranging from acute frustration, personal embarrassment, and annoyance to pervasive technology anxiety—that arise when senior citizens encounter operational hurdles while navigating digital communication platforms. In the lived experience of older adults in Barangay 4 Catiao-tiao, digital communication



tools like Messenger, Facebook, and SMS are not merely modern conveniences; they represent critical lifelines for preserving personal agency, maintaining emotional closeness with geographically distant family members, and sustaining active social integration. Consequently, when messaging applications freeze unexpectedly, screen layouts alter during automated updates, or text messages fail to send, senior citizens experience profound emotional distress. This psychological turmoil is rarely just a reaction to a technical malfunction; rather, it reflects a deeper existential distress regarding declining independence and cognitive adaptation in an increasingly digitized society. This emotional burden is further exacerbated by an intense internal anxiety regarding becoming a burden to busy family members. When seniors encounter recurring device errors, they frequently hesitate to request technical help from their children or grandchildren, fearing that their inquiries will be met with impatience, dismissal, or annoyance. This perceived loss of autonomy directly threatens their self-esteem, personal dignity, and status as self-reliant family matriarchs or patriarchs.

To manage these distressing affective states and preserve their psychological well-being, senior citizens employ a spectrum of emotional and behavioral coping mechanisms. On one end of this spectrum, some older adults engage in active, relational help-seeking strategies by turning to trusted informal "intermediaries" within their immediate household or neighborhood—such as spouses, children, or grandchildren—to resolve device disruptions on their behalf. While this relational coping mechanism grants immediate relief and temporarily restores device functionality, it leaves the underlying technological anxiety unaddressed and reinforces long-term operational dependency. On the opposite end of the coping spectrum, many senior citizens adopt defensive avoidance and self-limitation strategies. When faced with disorienting application errors or overwhelming pop-up ads, seniors frequently cope by turning off their smartphones entirely, ignoring unfamiliar messages, or strictly confining their device interaction to a minimal set of basic functions. While disengagement successfully protects the older adult from immediate feelings of inadequacy, frustration, and social embarrassment, it exacts a severe long-term cost: it leads to self-imposed digital isolation, deepens technology hesitation, and excludes the senior citizen from participating fully in modern family and community life.

Participant 9 said, "I feel annoyed and irritated... I feel like I am a burden to my family when I need help with Digital Engagement."

Participant 5 said, "I feel bad when my family members do not pay attention to me. When I call them they do not come because they are busy and that makes me feel bad about Digital Engagement."

Participant 1 said, "It is normal for me. I just ask my wife for help with Digital Engagement when I need it."

Participant 8 said, "I just turn off my cellphone when I have problems with Digital Engagement so I do not feel bad about Digital Engagement."

This emotional and psychological dynamic is strongly validated by Leukel et al. (2023), who explained that unequal digital engagement among older adults is closely tied to psychological readiness and confidence; when structural or technical barriers prevent seamless device operation, the resulting frustration induces digital exclusion and social detachment. In the specific context of the Philippines, Castillo et al. (2022) examined the qualitative experiences of older adults engaging with social media and digital communication tools, observing that initial interactions with unfamiliar software consistently trigger high levels of anxiety, self-doubt, and feelings of helplessness. However, Castillo et al. also demonstrated that when older adults are embedded within supportive, patient, and culturally attuned instructional environments, this emotional strain can be mitigated, allowing seniors to transition from technology avoidance to a state of digital empowerment, confidence, and enriched social connectedness. Their insights highlight that the psychological trajectory of older learners is highly malleable when provided with appropriate community support.



Adding further empirical weight to these observations, Emmesjö et al. (2025) investigated the affective experiences of non-digital-native cohorts, demonstrating that complex, inconsistent, or visually noisy software interfaces directly heighten psychological apprehension and anxiety. When digital layouts lack predictable visual logic, older users experience heightened cognitive strain, which triggers protective avoidance behaviors—such as shutting down the device or completely delegating operation to younger family members. This psychological disengagement is also contextualized by Vincek et al. (2024), who highlighted that an individual's subjective quality of life in later years is intimately tied to their perceived autonomy; when technology interactions systematically produce feelings of helplessness rather than mastery, subjective well-being declines. To counter these negative psychological outcomes, Ahmad et al. (2022) emphasized in their systematic review that effective digital literacy interventions designed specifically for older populations must explicitly prioritize emotional and psychological needs over rote technical instruction. Successful educational programs must create compassionate, low-anxiety, and collaborative learning environments that directly reduce technology-induced stress, foster peer encouragement, and systematically build self-efficacy through incremental successes.

Within the overall conceptual architecture of Project LOLO (Localized Outreach for the Literacy of Older Adults), these emotional insights serve as a vital reminder that designing an effective digital literacy intervention requires far more than delivering technical instructions or step-by-step operational guides. The lived experiences of the senior participants in Barangay 4 Catiao-tiao demonstrate that affective barriers—such as fear of failure, shame in asking for help, and anxiety over device errors—represent the primary gatekeepers determining whether an older adult will engage with or abandon digital technology. Consequently, the Project LOLO community-led digital communication capacity building must be built upon an empathetic, age-responsive, and human-centered instructional foundation. By cultivating a patient, slow-paced, non-judgmental, and culturally reassuring seminar environment—facilitated by empathetic local instructors and supportive community leaders—Project LOLO can validate senior citizens' emotional vulnerabilities, dismantle pervasive technology anxiety, transform feelings of frustration into personal confidence, and foster genuine digital inclusion and self-reliance among older adults.

Practicing Caution and Seeking Safety in the Digital Environment

Practicing Caution and Seeking Safety in the Digital Environment shows how older adults try to protect themselves while using the internet. It is about the ways older adults use habits and careful thinking to stay safe in digital spaces. When I look at this I see a real part of being a senior today. There is a feeling of digital fear. Older adults want to use messaging and calling apps to stay close to people. That desire fights with a scary fear of being scammed having their identity stolen or losing their money. Older adults do not usually go online with a sense of fun or confidence. Instead older adults often feel very vulnerable. They see the world as a place that is hard to trust. To an adult, one wrong tap or one small mistake could lead to a huge problem that cannot be fixed.

This fear shapes how seniors use technology. In the Technology In Later Life (TILL) Study, Marston et al. (2019) Looked at how older adults see technology. They found that even though seniors know that digital tools help them stay social using them is often stressful. Seniors worry about privacy. Find it hard to understand how apps work. This makes every time an older adult uses a phone or computer feel like a task of checking for danger.

Participant 1 said,

"I don't even read it"

Participant 6 said,

"I don't click it"

Participant 9 said,



"I just get confused by those ads that suddenly pop up"

Participant 3 said,

"I ask my grandchildren to clarify"

To deal with these fears older adults often choose not to engage. This is a way to stay safe. Older adults might ignore messages from people they do not know and refuse to click on any links or block senders that look suspicious. There is a big problem here. Most modern apps are not easy to use. They are actually built in ways that make it hard for seniors to stay safe. Older adults often feel overwhelmed by pop-up ads and tricky links that are meant to trick people. This causes a lot of stress. If an older adult accidentally clicks a link, they often struggle to tell if a notification is real or if it is a trap like trying to tell the difference between a software update and an online scam.

This danger is well-known in studies about cybersecurity and aging. Research shows that older people are often the targets for scams because they might find tricky app designs confusing (Kazamia et al., 2024). Using Routine Activity Theory, we can see how the digital world creates conditions for criminals. Older users can be seen as targets because the software itself does not always protect them from scammers (DeLiema, 2018). Parti (2023) also talks about how these digital spaces lack the protection older adults need to stay safe from fraud.

The threats are getting even worse now. New tools like AI can make fake scams look incredibly real. This makes it much harder for older adults to spot a lie (Gupta et al. 2024). As noted in the MJTI: Multidisciplinary Journal of Technology and Informatics new scams are now so good that they can pass a visual check. This makes browsing the web feel very risky. For seniors one accidental tap can lead to serious real-world trouble so they must learn the warning signs of fraud (Imposter Scams: 8 Warning Signs and How to Avoid Them; International Review of Law, Computers & Technology / ScienceDirect).

When technology becomes too confusing, older adults look to people they trust for help. Of trying to fix a problem themselves or looking at a help menu older adults show their screens to family members or grandchildren. They ask their loved ones to check if a pop-up is safe before they click anything. This way of staying safe through family is an important social tool. Nicholson et al. (2021) Show that having "Cybersecurity Guardians" in a community can help protect people and keep them from feeling isolated.

Practicing Caution and Seeking Safety in the Digital Environment shows that digital safety for seniors is not about learning buttons. It is a struggle between trying to avoid risks and feeling frustrated by apps and asking family for help. In places like the Philippines, where technology is changing fast older adults may feel hesitant because they do not feel ready for the risks (ICCMB 2024 / ACM Digital Library). This hesitation is a way to stay safe in a world that feels unsafe.

All of this research shows why programs like the LOLO initiative are so important. A capacity building for the community cannot just teach how to open a chat window. It must teach how to stay clean, how to spot threats, how to handle pop-ups and how to stop fraud. By giving easy training that fits how older adults think these programs can turn fear into confidence. This helps older adults move from avoiding the internet to actually feeling safe using it.

Finding Support Through Family and Social Connections

Finding Support Through Family and Social Connections shows how older adults learn, use and keep using communication tools. From a lived-experience point of view the theme shows that older adults do not use technology alone. Instead, adults' use of digital tools is deeply woven into and shaped by older adults' home and family relationships. For adults a smartphone or communication app is not just a piece of hardware or software. It is an object whose usefulness comes alive when older adults receive help across generations. When older adults



face problems forget steps, visual limits or worry about setting up the device older adults instinctively reach out to close networks, children, grandchildren, spouses and relatives who become older adults' main technical helpers.

The psychological and behavioral picture of adoption for older adults is strongly shaped by these relational ties. In their study on inclusion for older adults Arpaci and colleagues (2024) look at knowledge gaps, usability obstacles and protective habits showing that older adults adopt technology mainly through informal social support. Older adults do not turn to manuals or online help; older adults lean on close people to fill skill gaps.

Participant 4 added: "I just ask around whenever I encounter problems using messaging apps."

Participant 2 shared: "I immediately run to my niece/nephew when the screen freezes or I can't send a message."

Participant 3 added: "I'll just mess it up... I just ask my grandchild to guide me sometimes so I don't tap the wrong button."

Participant 6 noted: "I just ask my children to teach me how to open or reply on digital communication app

This theme shows a range of relational dependence from giving up tasks to learning with support. At one end older adults simply give up. Delegate tasks. When problems arise older adults feel anxious. Hand the device to a partner or relative to finish the task. At the end older adults actively seek help asking for coaching from younger family members to learn digital tasks. Across this range the home acts like an informal on-hand technical desk.

From a lived-experience view this dependence shows how older adults use resources and emotional trust to make up for a lack of formal digital training. By leaning on the closeness, patience and tech skill of family older adults bridge the digital gap without facing the fear of formal instructions or cold customer service. Recent studies underline the importance of caring help showing that face-to-face patient support lowers tech anxiety and builds digital inclusion more than automated tools or written guides. Also, research in Tec Empresarial says that digital literacy programs work best when they are community-based activities, not solo drills. Relationships give adults the emotional support needed to overcome feelings of digital inadequacy and keep learning engaged over time a pattern seen in many studies, on learning engagement and confidence.

However, scholarship warns against relying on informal family help. In Human Technology (2024) it is shown that family help is often transactional not educational. Younger relatives fix the mistake to save time instead of guiding older adults through the process. While this fixes the problem it leaves older adults dependent and does not build lasting skill or independence. This shortfall highlights the gap that the LOLO project fills. While family ties give adults emotional support, a structured community-led program is needed to move older adults from passive transactional help to true digital independence. By respecting and building existing family support the Project LOLO series offers patient, repeatable lessons that turn casual curiosity into lasting independent digital confidence.

Developing Confidence and Independence Through Digital Learning

Developing Confidence and Independence Through Digital Learning represents the lived process wherein senior citizens gradually move from smartphone users toward becoming more confident and independent in performing digital tasks. For adults learning to use a smartphone is not simply about remembering which button to press or which application to open. It also involves overcoming uncertainty becoming comfortable with making mistakes practicing functions and developing the confidence to perform tasks without always relying on another person. In the context of LOLO (Localized Outreach for the Literacy of Older Adults) digital learning can therefore be understood as a process that combines practical experience, repeated use, personal motivation and social support.

Participant 1 and Participant 8 said,
"I just pressed buttons."



Participant 4c added,
"I press buttons randomly so I can learn."

Participant 2 said,
"I repeat what I already know."

Participant 9 said,
"I use it every day."

Participant 3 said,
"I really want to learn so that I don't have a time replying."

Participant 5 said,
"I try to understand things so I don't have to ask for help."

Participant 6 said,
"ask my children to teach me."

Participant 7 said,
"Ask someone to teach me about the phone."

Participant 4 said,
"I don't really need to get better."

The lived experiences of the participants show that one of the ways senior citizens develop skills is through trial and error. Participant 1 and Participant 8 shared,

"I just pressed buttons."

Participant 4c added,

"I randomly press buttons so I can learn."

These responses show that some participants learn by exploring their phones rather than waiting for formal instructions. Although pressing different buttons may appear to be an action it reflects an important form of active learning. The participants are interacting with the device observing what happens and gradually becoming familiar with its functions. Through this process mistakes can become part of learning than something that should be avoided.

This finding is supported by Mitzner et al. (2015) Who examined technology-training preferences among 113 adults aged 65 to 85. Their study found that older adults preferred approaches to learning technology including one-on-one instruction and trial and error. The researchers explained that older adults may learn by beginning to use a technology and learning from the mistakes they make during the process. (PubMed Central (PMC)) This closely reflects the experiences of the participants in the study particularly those who described pressing different buttons or randomly exploring the phone to learn.

Trial-and-error learning can also contribute to a sense of confidence because it allows older adults to discover that making a mistake does not necessarily mean that they cannot use technology. Instead they can try another action observe the result and attempt the task again. A study on smartphone learning among adults emphasized the importance of providing a supportive environment where seniors can explore technology step by step and learn



through trial and error. The study found that older adults benefited from learning conditions, clear instructions and opportunities to practice without excessive pressure. (PubMed Central (PMC))

The participants also emphasized the importance of repetition and everyday practice in developing their abilities. Participant 2 noted,

“Repeating what I already learned.”

Participant 9 shared

“Use it every day.”

These responses suggest that learning does not end after an older adult is shown how to perform a task. Instead the skill becomes more familiar when it is repeatedly practiced and used in situations. Repetition allows participants to remember the steps involved in completing a task and gradually reduces the need to ask others for assistance. Daily use may also help transform a digital activity into a routine part of their lives.

The importance of repeated practice is consistent with research on technology training among adults. Mitzner et al. (2015) Found that older adults continued to have technology-training needs even when they were already using devices. Their participants particularly wanted training related to tasks demonstrating that technology learning is often an ongoing process rather than a one-time activity. (PubMed Central (PMC)) More recent research also found that structured technology tutoring can increase adults’ independent use of technology. A 2024 study involving 31 adults found that participants generally felt comfortable with technology after small-group training and reported learning more about technology. (PubMed Central (PMC))

The desire to practice and become independent can also be seen in the participants’ reasons for wanting to learn. Participant 3 stated,

“I really want to learn so that... I won’t have a hard time replying.”

Participant 5 explained,

“Try to understand them so that I won’t have to ask for help ”

These responses reveal that digital learning is connected to the participants desire for self-reliance in communication. They are not learning simply because smartphones are technologies. They want to learn because digital skills can help them respond to messages and communicate with people more independently. For these participants being able to use their phones without asking for assistance represents a practical form of independence.

This finding is supported by research on adults smartphone learning. A study by Damodaran et al. (2021) Examined a learning environment in which older adults learned smartphone technology through peer support. The researchers found that participants preferred a step-by-step approach and support from peers while their motivation to learn was connected to maintaining contact with friends and family. The study also emphasized that older adults can gradually become capable of helping older adults after developing their own skills. (PubMed Central (PMC)) This demonstrates that smartphone literacy can extend beyond ability because it can support communication, social participation and independence.

However the participants experiences also demonstrate that independence does not mean learning without assistance. For some participants guidance from family members or other people remains a part of the learning process. Participant 6 remarked,



"ask my children to teach me."

Participant 7 added,

"Ask someone to teach me about them."

These responses indicate that family members and other people in the participants social environment serve as sources of digital support. Older adults may first depend on someone to demonstrate a function explain an unfamiliar term or guide them through a task. With practice the knowledge gained from this assistance may eventually allow them to complete the same task on their own.

Mitzner et al. (2015) Found that family members and peers were among the people to provide technology training for older adults. The family and peer category included children, grandchildren, spouses, neighbors and other people within the participants social networks. The researchers also found that older adults valued one-on-one instruction because it allowed them to ask questions and receive immediate answers. (PubMed Central (PMC)) This strongly supports the experiences of Participants 6 and 7 who specifically identified people as sources of instruction.

Family support can be especially important when older adults encounter confusing technology. Research examining technology use among adults has shown that social support can help them overcome difficulties and anxiety when learning digital technologies. In one study older participants commonly turned first to family members when they encountered difficulties with technology showing the continuing importance of assistance in digital learning. (PubMed Central (PMC)) Therefore the role of family members in the study should not be interpreted simply as dependence. Instead family support can serve as a bridge toward independence during the early stages of learning.

The process can therefore be understood as a movement. At first an older adult may need someone to demonstrate a task. The individual may then repeat the task with guidance practice it independently and eventually perform it without assistance. In this sense support from children, grandchildren, peers or other community members can help establish the confidence for independent digital use.

At the time not all participants demonstrated the same level of motivation or perceived need for further digital learning. Participant 4 expressed

"I don't really need to improve."

This response is important because it demonstrates that senior citizens have levels of interest, motivation and perceived need regarding digital technology. Some may actively seek knowledge while others may feel that their existing skills are already sufficient for their daily activities. This difference means that digital literacy programs should avoid assuming that all older adults have the goals or willingness to learn.

Research on technology acceptance among adults similarly indicates that individual attitudes and perceptions influence technology use. Older adults may be more willing to engage with technology when they perceive it as useful, manageable and relevant to their needs. A randomized controlled trial examining technology adoption among adults emphasized the importance of individualized need-based training supportive environments, clear instructions and opportunities for trial and error. (PubMed Central (PMC)) This suggests that digital literacy programs should first understand what participants actually want to learn and why they want to learn it.

The findings of Theme 7 therefore demonstrate that confidence and independence are developed through interconnected learning experiences. Trial and error provides participants with opportunities to explore their devices. Repetition strengthens their familiarity with learned functions. Daily use allows digital skills to become part



of their routines. Meanwhile family members, peers and other individuals provide assistance when participants encounter difficulties. These elements work together to gradually reduce hesitation and increase confidence.

The process is particularly relevant to the LOLO project because the goal of literacy should not simply be to teach older adults a list of smartphone functions. The program should help them become comfortable enough to explore their devices. Continue learning even after the capacity building has ended. If participants are only able to perform a task while an instructor's beside them their digital independence remains limited. However if they learn how to experiment, repeat tasks ask questions and practice regularly they may become more capable of solving simple digital problems on their own.

Recent evidence also supports the use of structured but supportive technology training for adults. A 2024 study on technology tutoring found that small-group training was acceptable to adults with participants reporting greater comfort with technology and increased independent use across several activities after the intervention. (PubMed Central (PMC)) This provides support for the development of LOLO, as a community-based learning intervention where participants can receive guidance while also being given opportunities to practice independently.

Furthermore the findings show that confidence needs to be seen as a result of digital literacy. When older adults keep succeeding at tasks they may start to feel less scared of making mistakes and more ready to try new things. On the hand if they keep feeling confused and don't get enough help they may get discouraged and keep depending on others. So the learning environment needs to make people feel that making mistakes is a part of learning.

The participants experiences also suggest that the best way for LOLO should mix practice repeating things, step-by-step guidance and support from others. This way of teaching matches research that shows adults like learning by trying and failing getting one-on-one help and getting support from family or friends. Of just using lectures or showing how to do things the seminar can let participants use their own smartphones while doing simple activities. They can practice sending messages, opening apps changing settings and doing similar tasks over and over until they feel comfortable.

Overall Theme 7 shows that building confidence and independence among people is a slow and ongoing process. The participants experiences show that digital learning can start with something easy as pressing different buttons doing something they already know or using the phone every day. Sometimes learning starts with asking kids or others for help. These experiences show that independence doesn't come away; it grows through constant practice, encouragement and success.

The findings give a base, for the LOLO Community-Led Digital Communication Capacity Building. The program should make a learning environment where older people are encouraged to explore without being scared of making mistakes, repeat activities until they feel comfortable and ask for help when needed. At the time the main goal should be to help participants slowly do common digital communication tasks on their own. In this way LOLO can go beyond just teaching smartphone functions. Instead help older people build the confidence and independence they need to take part more in daily digital communication.

Identifying Desired Digital Skills and Learning Needs

Identifying Desired Digital Skills and Learning Needs refers to the skills that older adults consider important in their use of mobile phones and the difficulties they encounter while using them. In the context of LOLO (Localized Outreach for the Literacy of Older Adults) identifying these needs is important because digital literacy activities should be based on what older adults want and need to learn. Than focusing immediately on complicated smartphone functions the learning process should begin with simple and useful skills that can help older adults communicate, access information enjoy digital content and use their phones more comfortably and safely.



The participants identified skills and areas of concern that they wanted to learn or improve. Their responses included learning how to use applications knowing where to tap on the screen making letters larger making calls watching videos and dealing with advertisements or pop-ups. Some participants also expressed a willingness to learn anything they did not yet know how to do while one participant showed little interest in learning additional smartphone skills.

Participant 1 said,

"I want to learn how to use applications."

Participant 8 said,

"Whatever is taught in the capacity building and how to use apps."

Participant 2 said,

"Once I hear what the capacity building covers... I can point out what I don't know yet."

Participant 6 said,

"I want to learn everything I don't know how to do."

Participant 3 said,

"I just want to learn where to tap on the screen."

Participant 5 said,

" letters and how to make them larger."

Participant 7 said,

"Just the important things... Making calls and watching videos."

Participant 9 said,

"I just get confused by those ads that suddenly pop up."

Participant 4 said,

"I'm not really interested either."

The responses reveal that the digital learning needs of the participants are mostly centered on functional smartphone skills. Their desired skills are not primarily focused on technological features. Instead they are interested in functions that they can directly use in their lives. This includes communication through calls navigating the touchscreen adjusting the appearance of text using applications and accessing videos. These findings suggest that older adults may benefit more from digital literacy lessons that immediately connect to their daily activities rather than lessons that introduce complex or unfamiliar technological concepts.

The participants' responses also show that there is variation in the level and type of skills they want to develop. Some participants were able to identify skills, such as using applications or making text larger while others preferred to learn generally about functions that they did not yet understand. This difference suggests that older adults do not have a set of digital learning needs. Their experiences with phones, previous exposure to technology and personal interests may influence what they consider important to learn. Therefore digital literacy programs should provide opportunities for participants to identify their learning priorities.

The desire to learn how to use applications is particularly relevant because smartphone applications have become tools for communication, entertainment, information and everyday activities. However applications can sometimes be difficult for adults because they contain different icons, menus, buttons and procedures. A learning program such as LOLO can address this by introducing applications and focusing on those that are most useful to the participants.



By teaching many applications at once the program can focus on commonly used communication and entertainment applications and allow participants to practice them repeatedly.

The responses also emphasize the importance of touchscreen navigation. Knowing where and how to tap is a skill because almost every smartphone function requires interaction with the screen. If an older adult is unsure about where to tap, swipe or press even simple tasks may become difficult. Therefore digital literacy instruction should not assume that participants already understand touchscreen movements. Activities can begin with demonstrations and repeated practice allowing participants to become familiar with tapping icons scrolling, opening applications returning to the home screen and selecting different options.

Another important learning need involves adjusting the phone's display to make information easier to read. The participant's response regarding making letters larger suggests that accessibility features are important to smartphone users. Changes in vision associated with aging can make text and icons difficult to read. For this reason teaching participants how to increase font size adjust display settings and make other accessibility changes can make smartphone use more comfortable. Research has similarly emphasized the importance of considering age-related changes and accessibility when designing digital learning experiences for adults (Mao, 2025; Zolbin et al., 2025).

Communication also appears to be one of the meaningful purposes of smartphone use. The participant who identified making calls as one of the "things" demonstrates how older adults may prioritize functions that allow them to stay connected with family members, friends and other people. This supports the view that digital learning becomes more meaningful when it is connected to relationships and everyday activities. Digital literacy programs should therefore include communication skills as one of their learning areas including making calls answering calls, managing contacts and eventually using video calls when appropriate.

Watching videos is another example of a digital activity that may be meaningful to older adults. Videos can provide entertainment well as access to information and educational materials. Teaching participants how to search for, open, pause and adjust videos can therefore expand their ability to use their smartphones for purposes beyond communication.

However instruction should remain simple. Focused on the functions that participants are most likely to use. This concern is especially important because confusion when using technology can affect an adult's confidence. If an individual repeatedly encounters features that they do not understand they may become hesitant to explore their phone. As a result teaching safety together with basic navigation can help reduce uncertainty and encourage safer and more confident smartphone use.

The finding that one participant expressed interest in learning is also significant. It demonstrates that digital literacy programs cannot assume that every older adult will automatically be motivated to learn. Some may not see a need to use additional smartphone functions while others may feel that technology is difficult or unnecessary. This suggests that LOLO should demonstrate the benefits of digital skills instead of simply presenting them as technical lessons. Showing participants how smartphones can help them communicate with family, view content, access information or perform useful tasks may encourage greater interest.

The findings further indicate the importance of participant-centered learning. Since participants have needs instructors should avoid using a single approach for everyone. Some may require time to practice basic touchscreen functions while others may already understand basic operations and want to explore applications. A participant-centered approach allows instruction to adjust according to the abilities and needs of the learners. This can make the learning experience more comfortable and prevent participants from feeling overwhelmed.

Research on adult learning supports the importance of connecting learning to experiences and meaningful needs. Older adults are more likely to find digital learning valuable when the skills taught have applications in their everyday



lives particularly in communication, independence and access to information (Knowles et al., 2020; Santos & Ramos 2024). Thus the findings of the study support the need for LOLO to prioritize skills that participants can immediately apply rather than emphasizing complicated technological concepts.

The findings also suggest that digital learning should be gradual and repetitive. Older adults may require opportunities to practice a particular skill before they feel comfortable performing it independently. A capacity building should therefore avoid presenting many functions at once. Instead instructors can introduce one skill, demonstrate it allow participants to practice it and then repeat the procedure when necessary. This approach can help participants remember the steps and gradually build confidence.

In addition learning materials should be simple, clear and easy to follow. Large text, pictures numbered steps and demonstrations can help participants remember the procedures after the capacity building. Since some participants specifically identified difficulty with text and touchscreen navigation hands-on materials may be particularly useful. Participants can also be encouraged to practice using their phones because the layout and settings may differ depending on the device they use.

The findings provide a basis for developing the learning activities of LOLO. Based on the participants' responses the program may include lessons on touchscreen navigation making and receiving calls using selected applications adjusting font size watching videos, managing notifications and advertisements and practicing basic digital safety. These skills can be arranged from the functions to more advanced ones allowing participants to gradually develop their abilities.

Overall the findings show that adults' digital learning needs are largely practical, individualized and connected to their everyday experiences. They want to learn skills that allow them to communicate navigate their phones read information comfortably use applications enjoy videos and handle unfamiliar content. At the time differences in interest and ability demonstrate that digital literacy programs should remain flexible and responsive, to individual participants.

Therefore finding out which digital skills and learning needs older adults want is a starting point for LOLO. Knowing what people want to learn helps the program create lessons that're meaningful easy to reach and helpful. Of asking older adults to learn all the features of a smartphone the program can focus on the skills that make the most difference in their everyday lives. With real-life examples lots of practice easy to understand materials and careful support LOLO can help older adults slowly feel at ease and better at using digital technology.

In the end being good with tools for older adults should not be, about how many smartphone features they can use. The real importance is whether the skills they learn help them talk to others find information do daily tasks stay safe online and use their devices more confidently. By looking at what they need and like LOLO can offer a learning experience that fits the people involved and helps them keep taking part in a world that is becoming more digital every day.

Seeking Accessible and Age-Responsive Digital Learning

Seeking Accessible and Age-Responsive Digital Learning entails tailoring teaching methods that help senior citizens understand and use digital technology effectively. This theme emphasizes how digital literacy among senior citizens cannot be developed by merely providing them smartphone, internet access and application apps. Instead, they require pedagogical strategies specifically designed for their cognitive, sensory, and social needs—comprising patient instruction, simplified module pacing, structured visual guides, and continuous hands-on practice. Without these intentional educational adaptations, access to technology alone can exacerbate feelings of frustration, anxiety, and digital exclusion. Through the LOLO (Localized Outreach for the Literacy of Older Adults) project, digital lessons should be simple, clear and suited to their learning pace. Older adults may need more time to grasp the information and actual practice when learning unfamiliar applications and procedures.



Studies indicate that older adults acquire digital skills more effectively when instruction is presented into small and manageable components. Information overload may cause confusion, while slower, concise and more organized teaching method allows learners to focus on one task at a time before moving to another (Ahmad et al., 2022; Knowles et al., 2020). (Sharit et al., 2021) also found that older adults are willing to spend time when they see the usefulness of the learning process. This suggests that digital learning should be simple, useful, and not unnecessarily difficult or time-consuming. The experience of the participants supported this idea, as they repeatedly expressed the need for someone to guide them patiently and clearly.

Participant 1 shared,
“It is easier if someone teaches me”

Participant 2 shared
“Slowly, step by step”

Participant 6 also shared the same idea,
“Explain clearly, don’t go too fast.”

Participant 6, participant 7, and participant 8 highlighted,
“Manual and hands-on teaching”

These findings show that older adults do not only need access to digital devices but also require deliberate instructions that are patient, structured and responsive to their individual learning needs. The repeated emphasis on being taught “slowly,” “step by step” and “clearly” suggests that participants prefer learning processes that allow them to understand and practice each task before proceeding to the next.

Participants 6, 7, and 8 emphasized the importance of ‘Manual and hands on teaching,’ that means they prefer learning through demonstrations and practice rather than just verbal explanations alone. This finding is supported by the study of Santos and Ramos (2024) who emphasized that effective digital literacy training for older adults depends on methods that prioritize practical use, comfortable learning environments, and allow them to learn at their own pace. Furthermore, Tsai et al. (2015) found that social support plays an important role in helping older adults learn new technologies, while many participants developed their digital skills through actively exploring and practicing with tablet devices. This supports the participants’ preference for manual and hands-on teaching, as direct practice allows older adults to gain familiarity and confidence when using digital technologies. Wildenbos et al. (2018) similarly emphasized that age-related barriers involving cognition, motivation, physical ability, and perception can affect older adults’ ability to use digital technologies effectively, highlighting the need for age-responsive approaches that address these barriers.

Consequently the gathered data offers strong empirical basis for the LOLO (Localized Outreach for the Literacy of Older Adults) to conduct Digital Communication Capacity Building. The capacity building should be structured around micro-learning modules, step-by-step demonstrations, physical hardcopy reference guides (e.g., printed manuals with large typography and visual callouts), and direct hands-on practice. The instructional activities must focus on essential digital communication tools—such as video calls, messaging platforms, and online community portals—that senior citizens can immediately apply to maintain family connections and enhance personal autonomy. Through this localized and age-responsive approach, the program can effectively address varying learning abilities, speeds, and socio-emotional needs.

Overall, Seeking Accessible and Age-Responsive Digital Learning shows that senior citizens need more than access to technology. They also need the right kind of support to understand and use it.



Recognizing the Need for Community-Based Digital Literacy Support

Recognizing the Need for Community-Based Digital Literacy Support emphasizes the systemic importance of providing digital learning opportunities within local community. Learning to navigate digital tools should not be something senior citizens have to do alone. Within the LOLO (Localized Outreach for the Literacy of Older Adults) project, digital learning is framed not as solitary endeavor; instead the community can provide familiar and encouraging social support.

Community based digital literacy can make technology learning easier to access for seniors citizens. Instead of expecting older adults to find training by themselves, local organizations and community leaders can make learning activities locally accessible. Community leaders can inform senior citizens about the capacity building or other educational program. This is helpful especially for older adults who seeks for digital literacy training or may feel hesitant to join technology related activities on their own (Hunsaker & Hargittai, 2018; Quan-Haase et al., 2018)

The lived experiences of the participants shows that community support and educational seminar are considered useful by many senior citizens.

Participant 1 shared,

“Senior citizens leaders inform us about meeting”

Participant 5 shared,

“Capacity building like that are really necessary”

Participant 7 also shared the same idea,

“Conduct capacity building for senior citizens”

Participated 4 noted,

“No need to hold capacity building”

Participant 9 added,

“Ask for help from their children anyway”

These finding show that senior citizens have different opinions regarding how they should receive digital support. Majority of the participants think that capacity building are necessary, while few of them prefer to ask their family members for assistance. This suggests that digital literacy programs should not only rely on one type of support. Instead, community programs and family assistance can work together to provide guidance for older adults with different ways of learning.

The response of participant 1 highlighted the vital role of senior citizen leaders in sharing information about meetings and other activities. Since senior citizens rely heavily on information channels they already know, these leaders can promote digital literacy programs and encourage them to participate. (Hunsaker & Hargittai, 2018; Bakshi & Bhattacharya, 2022)

The participants also express strong support for conducting capacity building. Participant 5 stated that capacity building like these are “really necessary,” Participant 7 also conveys similar opinion suggesting to conduct capacity building specifically for senior citizens. These responses suggest that older adults value having formal and supportive



space to learn. Community capacity building can provide hands on training, provide clear explanations and opportunities to ask questions. They can also make older adults comfortable asking for help without worrying about taking too much of their family's time. Facilitator can provide repeated explanations so that older adult allows to learn at their own pace (Quan-Haase et al., 2018; Putrie, 2025)

Family members also play a crucial role in helping older adults learn technology. Participant 9 stated that senior citizens can "ask help from their children" showing that family is accessible source of assistance. Their children or younger relatives can guide them in using smartphones like in messaging applications and digital tools. However relying solely on kinship network can present challenges when relative face busy schedules or when older adult feel hesitant to ask repeatedly. Consequently community based seminars can complement family assistance by offering additional opportunities for older adults to learn and practice digital skills. (Rasekaba et al., 2022)

The perspective shared by participants 4, who noted that there's 'no need for to hold capacity building,' shows that community programs must maintain flexible and responsive to different learning needs. While some senior citizens may prefer learning from their children and feel that they don't need to participate in capacity building, others may benefit from structured community support. Therefore participation is encouraged but not forced.

Overall, the findings show that digital learning among older adults is not only an individual responsibility but also a collective one where community leaders, families and local organizations work together to provide accessible and supportive learning avenues. Through the LOLO project, senior citizens are afforded opportunities to ask questions, practice digital literacy and gain confidence.

Everyday Practical Barriers to Mobile Phone Use

Everyday Practical Barriers to Mobile Phone Use is the term that is used to describe the practical difficulties experienced by users while operating mobile phones in their daily lives. Although smartphones are effective communication devices, they present physical and procedural challenges that require ongoing practice, fine motor coordination, and digital familiarity (Wilson et al., 2021). When individuals encounter repeated friction in navigating these interfaces, perceived ease of use drops significantly, which in turn directly reduces willingness to engage with the phone independently (Hunsaker & Hargittai, 2018). The participants discussed numerous practical barriers related to the touchscreen interface, such as the use of smaller touchscreens and text entry difficulties as well as confusion with regard to multi-step processes involved in topping up their pre-paid mobile phones, which reflects the usability studies examining the interaction between individuals and complex systems (Voigt et al., 2023). Because these technical hurdles can feel overwhelming, individuals frequently turn to family members for assistance, shifting mobile device operation from an independent personal activity into a shared or proxy-mediated family task (Lee et al., 2024).

Participants described clear practical difficulties in daily phone use, ranging from interface input friction to an ongoing reliance on younger family members:

Participant 2 and Participant 9 highlighted reliance on family for phone management:

"Niece/nephew handles things, [and I] ask for help from [my] children."

Participant 3 shared procedural confusion:

"Confused by loading prepaid credits."

Participant 5 noted a self-imposed boundary on app usage:

"Only use Facebook and Messenger."



Participant 8 described physical interface friction:

“Hard time typing.”

Mobile phones serve as a primary utility for social connectivity, but practical barriers fundamental to the physical and software interface shape how users interact with them. From a usability perspective, the physical interaction with phones presents challenges, such as the small size of touchscreen buttons which may lead to incorrect inputs, and abstract processes involved in topping up the pre-paid balance, such as the need to enter a code or navigate the contact list (Gray & Charness, 2022). Additionally, Voigt et al. (2023) examined the mechanics of the physical interaction with phones and concluded that contact menus which had been modified into tangible interfaces reduced the overall workload and minimized errors during operation. Similarly, their empirical findings correspond to the thematic analysis results which indicate that the presence of multiple-step procedures during the interaction with phone menus increases the likelihood that users will engage in cognitively demanding tasks, hence deterring them from completing those activities. Indeed, Emmesjö et al. (2025) evaluated the association between smartphone use and non-digital-native groups' experiences of anxiety and discovered that the complexity of screen layouts was a significant contributor to the apprehension of those individuals with regard to exploring unfamiliar features of the smartphone.

However, the empirical evidence within this theme appears to challenge the framework proposed by Wilson et al. (2021) regarding how individuals respond to initial physical barriers. Wilson et al. (2021) suggest that the individuals who experience barriers while interacting with the physical aspects of the phone develop digital literacy competencies over time which subsequently enables them to navigate touchscreen interfaces without experiencing difficulty. According to the thematized findings presented in this study, the gradual development of touchscreen navigation competencies rarely occurred, as evidenced by the decision of the participants to limit their phone use to the to basic functions of applications like Facebook and Messenger. The findings from this study align with those generated by Hunsaker and Hargittai (2018), who argued that the low self-perceived levels of digital competence prompted individuals to set limits with regard to familiarity of their interactions with smartphones. Thus, instead of expanding their digital capabilities, these individuals opted to reduce the complexity of their interactions with smartphones in order to minimize the likelihood of encountering difficult procedures (Delello & McWhorter, 2017).

The everyday practical barriers to mobile phone use which were encountered by the participants can be linked to the broader themes in health and technology literature. For instance, while reviewing the efficacy of strength-based health promotion interventions, Hirst et al. (2013) argued that the maintenance of perceived control of daily interactions was important in ensuring the stability of individuals' self-esteem and empowerment. Indeed, the inability to navigate the touchscreen interface of the smartphone diminished the sense of control of the participants, thus impacting their overall sense of self. Specifically, Luo et al. (2020) examined the impact of limitations associated with the completion of routine activities and discovered that the inability to perform first-order activities affected individuals' psychological wellbeing while also interfering with their ability to engage in more complex undertakings. In the context of technology, Zhu et al. (2025) demonstrated that older adults could manage technology-related feedback through informational processing self-efficacy, where the lack of the aforementioned skill aggravated technology anxiety, therefore, deteriorating psychological wellbeing. By contrast, Li, K et al. (2025) explored the moderating role of internet self-efficacy and discovered that the engagement in social media activities reduced social isolation of older adults, thus preventing negative effects on psychological wellbeing. Therefore, the motivation to overcome the everyday practical barriers to mobile phone use were linked to the desire of the participants to maintain access to communication applications as a means of reducing social isolation.

Furthermore, the reliance of the participants on family assistance to navigate the practical barriers associated with mobile phone use identified another important theme in smartphone literacy—the importance of social support. Specifically, the willingness of the participants to rely on children, nieces and nephews to operate the phone indicates the role of younger family members as technological intermediaries who can perform tasks which the older adults cannot achieve due to their limited digital literacy (Lee et al., 2024). This observation coincides with the



research of Correa et al. (2015), which discussed the notion of intergenerational brokering which highlighted the role of younger family members in assisting older individuals to access and benefit from the use of communication technologies. Building on this dynamic, Korpela et al. (2024) identified younger relatives as "warm experts" in the homes of older adults who could be relied upon to provide technological guidance and support whenever the need arises. Thus, by interacting with such individuals, the older adults minimized their immediate stress and maximized the likelihood of successfully accomplishing the task.

The findings from this study which highlight the challenges associated with overcoming everyday practical barriers to mobile phone use correspond to the technology adoption literature, particularly the studies which emphasize the role of self-driven learning practices. Specifically, according to the findings published by Pang et al. (2021), the non-digital-native users increasingly opted to rely on self-driven learning practices, such as viewing instructional videos or engaging in trial and error experiences, in order to expand their digital competencies. This approach allowed them to manage their own learning processes without having to rely on the availability or the willingness of family members to provide assistance or without having to interrupt their busy schedules. The inclination of the participants for such approaches was highlighted by the study conducted by Li, X et al. (2025), who demonstrated that the older adults absorb instructions better when taught by instructors of a similar age during the trial with instructional videos. While participants across the study frequently demonstrated a genuine eagerness and interest in learning how to use their phones, the practical barriers associated with everyday phone use seldom encouraged them to pursue the self-driven learning options. Instead, they opted to rely on their family members, particularly during urgent tasks such as topping up their pre-paid balances or overcoming the tactile barriers associated with touchscreen use. Thus, while the general motivation to learn appeared to be strong, the practical barriers associated with everyday phone use prompted the participants to rely on operational guidance from relatives over independent learning in their routine device management.

The ability to engage in actual practice with the software interface is essential in overcoming the digital divide. By delegating the responsibility of managing advanced tasks to other family members, the user deprives themselves of the practical experience necessary for them to become confident in their ability to operate the application. The same conclusion was drawn by Zhao et al. (2026), who argued that home technology should allow individuals to gain competence to foster empowerment and build long-term user confidence. While delegation solves the immediate practical problem, it does not resolve the underlying issue of the lack of hands-on experience, which is why the solution fails to align with the principles of digital empowerment. For instance, in the context of health, the study by Kwan et al. (2020) found that while technology-enabled exercises could promote adherence to health guidelines, positive outcomes could only be achieved if the user interacted directly with the application. In other words, the role of the assistant or caregiver can only be supplemental, as concluded from the findings generated by Korpela et al. (2024) and Lee et al. (2024). Once the task is executed on the user's behalf, their ability to perform it independently decreases.

This dynamic therefore determines the manner in which individuals navigate day-to-day barriers to digital independence while balancing their capacity for self-sufficiency against their reliance on third parties. As demonstrated within Theme 11, overcoming operational hurdles does not follow a simple path toward full digital literacy. Instead, users attempt to manage their limitations by setting restrictions on their own application use and delegating more complex tasks to family members.

Conclusion

This phenomenological study explored the lived experiences of senior citizens who own a mobile phone in Barangay 4 Catiao-tiao, Tanjay City, Negros Oriental, as they manage digital communication applications in their daily lives. Since technological advancements are inevitable, understanding the lived experience of the target population becomes necessary to bridge the digital gap, particularly with the older generation.



The qualitative findings produced eleven (11) significant themes related to the target population's experience interacting with the current digital communication media. The findings demonstrated how senior citizens apply mobile tools into routine activities to maintain social bonds while overcoming physical, intellectual, and functional barriers. Faced with hardware friction and complex digital interfaces, participants rarely engage in self-guided trial-and-error. They instead adopt a strategy of self-limitation by limiting usage strictly to basic functions on platforms like Facebook and Messenger. Furthermore, the findings show a deep structural reliance on intergenerational family support, wherein Korpela et al. (2024) identified 'warm experts' as family members who undertake specific tasks on behalf of the respondents, which removes the need for actual practice among the elderly.

While this proxy-mediated support addresses immediate operational challenges, delegating tasks prevents older adults from acquiring hands-on practice, strengthening long-term digital hesitation and dependency. Though this intergenerational relationship enables easier resolution of issues related to smartphone use, it creates a safety net wherein the senior citizens do not develop the confidence and competence to use their devices. Despite the respondents' lived experiences and interactions with digital communication applications, the findings indicated their willingness to gain the confidence and competence necessary to manage the tools independently. Participants also showed preference for structured, slow-paced, step-by-step instruction accompanied by hands-on practice, simple visual demonstrations, and printed physical manuals. These empirical insights directly support the development of Project LOLO (Localized Outreach for the Literacy of Older Adults), a community-led digital communication capacity building designed specifically to handle the real-world priorities, accessibility needs, and improve the digital literacy of older learners. By narrowing the gap between informal family assistance and structured community support, localized interventions can turn digital communication tools from sources of anxiety into avenues for personal empowerment.

The limitations of the study are necessary to note before developing a comprehensive perspective of the findings. Firstly, the research was limited to senior citizens residing in Barangay 4, Catiao-tiao, Tanjay City, Negros Oriental. As such, the findings represent the general perception of the population concerning smartphone use in managing digital communication applications and may not fully represent older adults in urban centers or other regions. The sample size was also chosen based on the availability of participants in the locality—therefore, the findings cannot represent the experience of other senior citizens residing in the area or those who do not own smartphones. Additionally, participant eligibility was bound to senior citizens who already owned smartphones, leaving the unique barriers of non-owners unexamined. Upon observation through direct interactions in the field, emotional comfort also influence their openness to share their experiences. Finally, relying on self-reported interview data carries potential recall or social desirability bias regarding feelings of anxiety or familial reliance.

Moving forward, both the findings and limitations of the study have practical implications for community leaders, educators, instructional designers, and future researchers. Community leaders or local government units (LGUs) and the Barangay Association of Senior Citizen Affairs officers (BASCA) should promote community-based programs and services tailored to the needs of the older population. For instance, Project LOLO's inclusion in local programs and services can enable the LGUs to formalize the role of digital communication literacy in senior citizens' lives. The instructional designers developing programs for the geriatric population must consider the barriers to smartphone use when designing the interventions. The lessons must be free from unnecessary jargon and allow ample time for practice using the participants' devices. Moreover, families of the senior citizens must be advised to shift from practicing tasks on behalf of the elderly and encouraging them to participate in the process to enable confidence and competence in the target population. Overall, community engagement is critical in bridging the digital divide and ensuring generational competency in digital communication.



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