

End-to-End Communication Paradox: A Family Communication Patterns Theory and Digital Void Analysis of the Elderly Care Cycle

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Abstract. This study examines the end-to-end communication paradox in institutional elderly care by applying Family Communication Patterns Theory (FCPT) and developing the concept of Digital Void. The research is motivated by contemporary family complexities—including geographic dispersion, economic constraints, and disputes over caregiving responsibilities—which complicate the placement of older adults in institutional settings. Drawing upon Family Communication Patterns Theory (FCPT), the study identifies twelve recurrent interaction patterns among family members, elderly residents, and nursing home administrators, revealing persistent double-bind communication dilemmas. A qualitative multiple-case study involving 12 families in East Java, Indonesia, demonstrates that despite the widespread availability of digital communication infrastructure, a pronounced phenomenon of Digital Void—characterised by declining frequency, responsiveness, and information transparency—emerges during tripartite coordination. This digital vacuum stems from the interplay of internal family coordination failures and institutional regulations that prioritise elderly emotional stability over transparent information exchange. Consequently, digital technologies paradoxically transition from connective tools to instruments of institutionalised social isolation, as families increasingly outsource emotional responsibility following placement agreements. The study advocates for reforming nursing home communication management through transparent End Notification Protocols. As Indonesia's elderly population continues to grow rapidly, the findings position care homes not as relationship terminators, but as essential family partners in building a more humanistic, collaborative, and dignified eldercare ecosystem.

Keywords: End-to-End Communication; Communication Paradox; Family Communication Patterns Theory; Digital Void; Elderly Care

1 Introduction

Population ageing has emerged as one of the most significant demographic transformations of the twenty-first century, presenting profound social, economic, and healthcare challenges worldwide [1]. Indonesia, as the fourth most populous nation globally, is experiencing this transition at an accelerated pace, with recent statistics indicating steadily rising proportions of older adults and escalating demands for sustainable long-term care services [2]. Improvements in healthcare, nutrition, and living standards have increased life expectancy, yet Indonesian families increasingly confront complex decisions regarding long-term care arrangements for their ageing members. Traditional family-based caregiving—historically the cornerstone of elder support—has become progressively difficult to maintain due to geographical dispersion, labour mobility, shifting family structures, economic pressures, and the declining physical and cognitive conditions of older adults themselves.

In response to these pressures, institutional elderly care has gradually emerged as an alternative solution for Indonesian families unable to provide continuous home-based care. Nursing homes and residential care facilities have proliferated across the country, particularly in East Java, Central Java, and Greater Jakarta. However, the decision to place an older adult in a nursing home does not signify the termination of family

responsibility or emotional connection. Rather, it fundamentally transforms family communication into a more complex tripartite relationship involving family members, elderly residents, and nursing home administrators. Communication no longer occurs solely within the private sphere of the family but becomes increasingly mediated by institutional procedures, organisational policies, and, paradoxically, digital communication technologies ostensibly designed to bridge geographical distances.

The rapid proliferation of smartphones, instant messaging applications, and video conferencing platforms has substantially expanded communication opportunities between geographically separated family members. Scholarly literature has generally celebrated these technologies for their capacity to strengthen family relationships by reducing geographical barriers [3], [4], [5]. Nevertheless, emerging empirical observations from Indonesian eldercare settings indicate a significant disjuncture between technological availability and meaningful communication. Many families maintain full access to digital infrastructure throughout the elderly care process, yet communication frequency, responsiveness, and information transparency demonstrably decline following institutional placement. Family members increasingly delegate emotional responsibility to nursing home staff, while institutions regulate communication based on organisational convenience and assumptions about elderly emotional stability. Consequently, communication becomes progressively mediated, selective, and emotionally attenuated despite continuous digital connectivity.

These observed patterns resonate with the pragmatic perspective on communication advanced [6], who argued that communication is shaped not only by message content but also by relational patterns, contradictory expectations, and broader interactional contexts. Despite the evident significance of these dynamics, most previous studies on communication in elderly care have adopted relatively narrow analytical foci, predominantly examining caregiver burden, family adaptation, institutional care quality, and digital communication adoption among older adults [7], [8], [9]. Research drawing upon Family Communication Patterns Theory (FCPT) has primarily concentrated on parent-child interaction within conventional household settings, with comparatively little attention devoted to communication systems involving institutional actors who mediate relationships between family members and elderly residents [10], [11].

Similarly, digital communication studies have predominantly concentrated on structural and competency-based frameworks, including the Digital Divide, Digital Literacy, and Technology Acceptance Models [3], [12], [13]. While these perspectives illuminate disparities in technology access and utilisation, they provide limited explanatory power for situations where technology infrastructure remains fully available while meaningful interpersonal communication progressively deteriorates. This theoretical gap demands alternative analytical frameworks capable of addressing relational, emotional, and institutional mechanisms operating independently of technological accessibility.

This study directly addresses this theoretical lacuna by conducting a comprehensive analysis of communication throughout the entire elderly care trajectory, tracing interactions from pre-placement decision-making through agreement formation, institutionalisation, and termination stages. Drawing upon FCPT as the primary analytical framework, the research systematically identifies recurrent communication patterns emerging among family members, older adults, and nursing home administrators across the care cycle. Furthermore, the study introduces the concept of Digital Void as a critical theoretical innovation—a condition in which communication infrastructure remains fully available while meaningful interpersonal communication gradually deteriorates due to relational distancing, institutional mediation, emotional responsibility delegation, and conflicting communication expectations. By integrating FCPT with the Digital Void concept, this research offers both theoretical and practical contributions to communication scholarship and elderly care practice.

Accordingly, this research is guided by three principal questions: (1) How does the end-to-end communication paradox emerge? (2) How does FCPT explain the paradox? (3) How does Digital Void develop throughout the elderly care cycle? The findings are expected to contribute substantively to communication scholarship by extending FCPT into institutional care settings and introducing Digital Void as a complementary theoretical lens within digital communication studies.

2 Literature Review

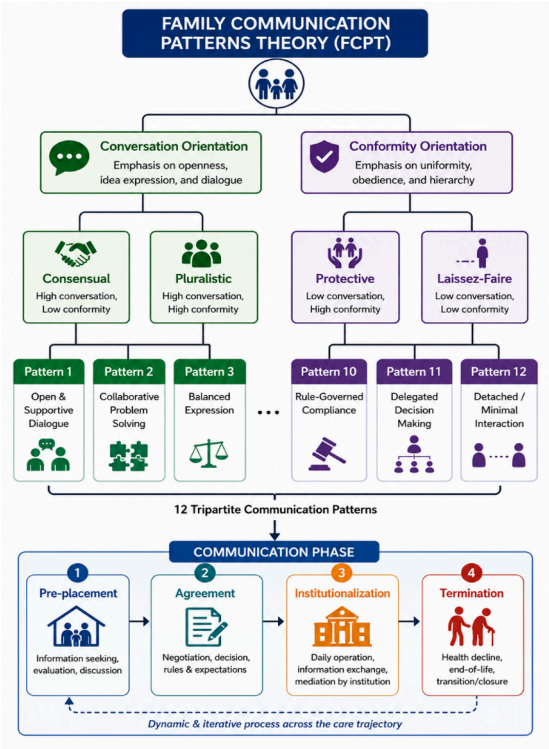
2.1 Family Communication Patterns Theory

Family Communication Patterns Theory (FCPT), formulated [10], [14], posits that family communication is shaped by two principal dimensions: *conversation orientation*—the extent to which family members are encouraged to exchange ideas openly—and *conformity orientation*—the emphasis on shared values, agreement, and adherence to family norms. These dimensions generate four family communication prototypes—consensual, pluralistic, protective, and laissez-faire—which have been empirically validated across diverse cultural contexts [11], [15]. However, when older adults reside in nursing homes, communication expands from a dyadic family relationship into a tripartite communication system involving institutional actors. Consequently, communication patterns become influenced not only by family orientations but also by organisational policies, professional protocols, and institutional mediation—creating distinctive dynamics that have not been systematically examined in previous FCPT research.

The extension of FCPT into institutional settings necessitates engagement with the concept of Double Bind [16], which occurs when individuals receive contradictory messages such that responding to one inevitably violates the other. In institutional elderly care, families experience paradoxical expectations—"stay connected, but do not disturb"—that create profound communicative tension. Family members who call frequently may be perceived as intrusive, while those who reduce contact experience guilt. These double-bind dynamics fundamentally structure the communication environment and contribute to the progressive deterioration of meaningful interaction conceptualised as Digital Void.

2.2 Digital Communication and Digital Void

Within digital communication studies, scholarship has predominantly concentrated on structural inequalities through concepts such as the Digital Divide [3], [17], Digital Literacy [12], [18], and Technology Acceptance Models [13], [19]. While these perspectives illuminate disparities in technology access and utilisation, they provide limited explanatory power for situations where infrastructure remains fully available while meaningful communication progressively deteriorates. This study proposes Digital Void as a complementary concept, characterised by three analytical dimensions: Frequency Gap (communication occurs less frequently than expected), Responsiveness Gap (messages are answered after considerable delays), and Transparency Gap (information becomes increasingly selective and institutionally mediated). These three gaps are mutually reinforcing mechanisms that collectively generate the Digital Void, where Digital Divide theory explains *who* can communicate and *how*, Digital Void explains *why* meaningful communication may not occur even when the technical means are universally available.



Source: [10], [14], [16]

Figure 1 presents the analytical framework adopted in this study. Family Communication Patterns Theory (FCPT) is extended from its conventional application within parent–child communication to a tripartite communication system involving family members, older adults, and nursing home administrators. The framework illustrates how communication evolves across four phases of the elderly care cycle and gives rise to twelve recurrent communication patterns identified through qualitative analysis.

3 Methods

Research Design

This qualitative multiple-case study [20], [21] explored communication dynamics across the elderly care cycle through cross-case comparison of 12 families in East Java, Indonesia (January 2025–February 2026). Participants were purposively selected based on three criteria: (1) elderly residents had resided in nursing homes for at least six months; (2) family members maintained digital communication; and (3) administrators were responsible for resident-family communication. Table 1 presents participant characteristics.

Table 1. Characteristics of the 12 Participating Families

Famil y Code	Elderl y Age	Gende r	Length of Stay	Main Caregiver	Residence	Primary Digital Communicatio n	Weekly Contact
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F01	72	Female	8 months	Daughter	Surabaya	WhatsApp Video Call	Weekly
F02	78	Male	2 years	Son	Malang	WhatsApp Chat	Weekly
F03	81	Female	1 year	Daughter	Jakarta	WhatsApp Video Call	Twice weekly
F04	76	Male	3 years	Younger Sister	Kediri	Telephone & WhatsApp	Weekly
F05	84	Female	18 months	Son	Sidoarjo	WhatsApp Chat	Monthly
F06	73	Male	10 months	Daughter	Banyuwangi	Video Call	Weekly
F07	80	Female	4 years	Nephew	Surabaya	WhatsApp Chat	Monthly
F08	75	Male	15 months	Daughter	Madiun	Telephone	Weekly
F09	82	Female	2 years	Son	Yogyakarta	WhatsApp Video Call	Weekly
F10	79	Male	9 months	Daughter	Jember	WhatsApp Chat	Weekly
F11	77	Female	5 years	Son	Malang	Telephone & WhatsApp	Monthly
F12	85	Female	3 years	Daughter	Surabaya	WhatsApp Video Call	Weekly

Source: Authors' field data (2026)

Data collection employed three complementary methods: in-depth semi-structured interviews (36 individual interviews, 60-120 minutes each), non-participant observation during visitations and digital sessions, and document analysis of institutional records. Analysis followed Braun and Clarke's [22] six-phase thematic procedure, using FCPT as a sensitising lens while allowing emergent concepts to develop inductively. Trustworthiness was established through source triangulation, member checking [23], [24] credibility criteria. Ethical approval and informed consent were obtained, with all identities anonymised.

4 Results & Discussion

4.1 Communication Patterns Throughout the Elderly Care Cycle

The findings demonstrate conclusively that communication between family members, older adults, and nursing home administrators is not static but evolves dynamically throughout the end-to-end elderly care cycle. Through systematic thematic coding and cross-case comparison, the study identified twelve recurrent tripartite communication patterns distributed across four sequential phases: pre-placement, agreement formation, institutionalisation, and termination. These patterns represent the dynamic interaction between FCPT's conversation and conformity orientations as

communication responsibilities gradually shift from family members to institutional care providers. Table 2 presents the complete typology.

Table 2. Twelve Tripartite Communication Patterns Across the End-to-End Elderly Care Cycle

Pattern	Phase	Family Communication Orientation	Institutional Role	Communication Outcome
P1	Pre-placement	Open family discussion on care alternatives	Information provider	Collective decision-making
P2	Pre-placement	Sibling negotiation on caregiving responsibility	Observer	Shared caregiving agreement
P3	Agreement Formation	Family-institution communication on procedures	Active coordinator	Placement agreement established
P4	Agreement Formation	Family requests emotional support for adaptation	Facilitator	Institutional adaptation support
P5	Agreement Formation	Communication mediated by institutional regulations	Gatekeeper	Controlled information exchange
P6	Institutionalisation	Routine communication through digital media	Primary communicator	Communication delegation begins
P7	Institutionalisation	Family depends on institutional reports	Information mediator	Reduced direct communication
P8	Institutionalisation	Institutional gatekeeping justified by 'emotional stability'	Information filter	Transparency Gap emerges
P9	Institutionalisation	Declining frequency despite digital access	Communication substitute	Frequency Gap emerges
P10	Institutionalisation	Delayed responses from family members	Passive participant	Responsiveness Gap emerges
P11	Termination	Intensive communication during health deterioration	Emergency coordinator	Reactive family engagement
P12	Termination	End-of-life notification and family coordination	End Notification Protocol	Communication closure

Source: Authors' qualitative data analysis (2026)

4.2 Pre-Placement Phase: Collective Decision-Making

The pre-placement phase encompasses the period preceding the older adult's admission to a nursing home. During this stage, conversation orientation is uniformly high across all families, as members actively exchange opinions, weigh alternatives, and negotiate responsibilities before reaching placement decisions. Digital technologies function effectively as coordination tools facilitating collective decision-making among geographically dispersed family members. *"Before deciding on the nursing home, we discussed almost every day. My siblings living outside the city joined through video calls until everyone agreed"* (Family 03, Daughter). At this stage, no indication of Digital Void is observed—communication is frequent, responsive, and transparent. However, latent tensions emerge regarding fair distribution of responsibilities. *"We all agreed it was the best option, but nobody wanted to be the one to tell Mother directly. We left that to the nursing home staff"* (Family 08, Daughter). This early delegation foreshadows more extensive responsibility outsourcing in later phases.

4.3 Agreement Formation Phase: Institutional Mediation Begins

Following placement decisions, communication gradually shifts from family-centred interaction to institutional coordination. Families negotiate visiting schedules, communication procedures, and information-sharing mechanisms with administrators. While communication frequency remains relatively high, institutional regulations begin to influence information exchange. *"Families ask us to help older adults adapt during the first weeks. Sometimes they request us to limit communication temporarily so adaptation becomes easier"* (Administrator 04). This phase introduces contradictory expectations establishing the foundation for Digital Void emergence—families simultaneously wish to remain emotionally close while expecting successful institutional adaptation, embodying the double-bind logic [16]. *"My brother in Jakarta and my sister in Yogyakarta said, 'You're the closest, you decide.' So I signed the agreement without them really understanding what they were approving"* (Family 01, Daughter). Administrators assume gatekeeping functions, establishing communication boundaries prioritising institutional efficiency over family information needs.

4.4 Institutionalisation Phase: Gradual Attrition of Meaningful Communication

The institutionalisation phase constitutes the longest and most critical stage, where Digital Void most prominently manifests. After initial adaptation, communication gradually decreases across all families despite continuous digital connectivity. Families increasingly depend on institutional reports rather than direct interaction: *"Initially I called almost every day. Later, I trusted the nursing home staff... I stopped asking for details"* (Family 11, Son). Administrators justify information filtering: *"We don't tell families about minor falls... It only makes them worry"* (Administrator 07). This produces the Transparency Gap, where families receive sanitised information while elderly residents comply to avoid being burdensome: *"I usually just tell them that everything is okay. They don't need to worry about me"* (Older Adult 07, Female, 80). Cross-case analysis confirms communication reduction does not result from technological barriers—all participants possess smartphones and internet access—yet meaningful interaction progressively diminishes. *"My daughter video-calls every Sunday. Five minutes... We don't talk about my life here"* (Older Adult 03, Female, 81). This transformation from substantive engagement to ritualistic checking-in exemplifies the Frequency Gap characterising Digital Void.

4.5 Termination Phase: Reactive Communication Resurgence

Communication intensity rises significantly when older adults experience severe health deterioration. Families increase visits and calls immediately after receiving information regarding declining health conditions. However, this resurgence is predominantly reactive rather than preventive. *"After receiving news about my father's condition had worsened, everyone immediately arranged schedules to visit him. We were all there in the final week"* (Family 05, Son). By this stage, previous emotional

distance cannot always be completely restored: *"In the last two weeks, we called every day. But I felt we had already missed so much. He looked at me like a stranger sometimes"* (Family 09, Son). The termination phase culminates in the End Notification Protocol, exposing the paradox: families are most intensely engaged only when engagement no longer offers opportunities for meaningful relationship-building.

4.6 Emergence of Digital Void: A Tripartite Phenomenon

The central finding is the systematic emergence of Digital Void across all 12 families. Table 3 synthesises how dominant communication patterns shift across phases.

Table 3. Mapping of Communication Patterns Across Care Phases

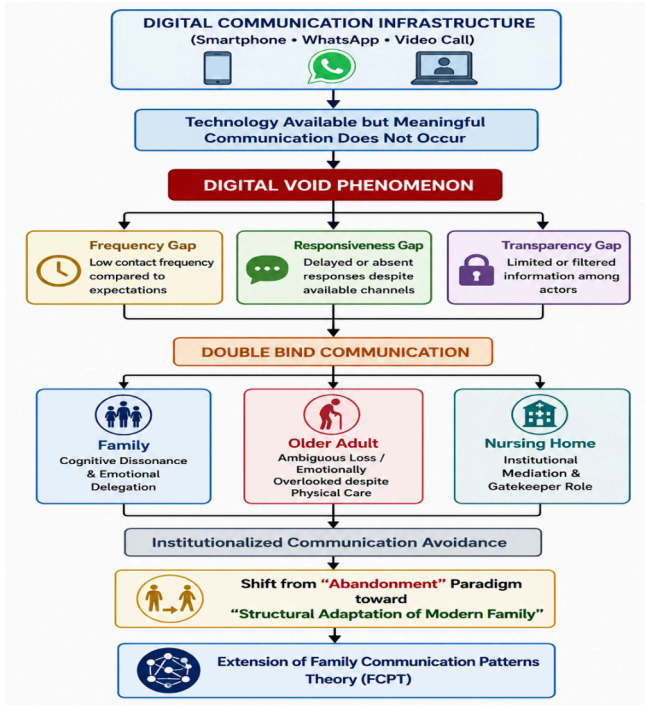
Pattern	Phase	Dominant Orientation	FCPT	Communication Outcome
P1	Pre-placement	High Conversation		Collective decision-making
P5	Agreement Formation	High Conformity		Institutional mediation
P8	Institutionalisation	High Conformity		Transparency Gap
P9	Institutionalisation	Low Conversation		Frequency Gap
P10	Institutionalisation	Low Conversation		Responsiveness Gap
P12	Termination	Mixed Orientation		End Notification

Source: Authors' analysis based on qualitative interviews (2026)

Three recurring and interlinked dimensions were consistently identified. Frequency Gap—communication occurs substantially less frequently than expected, declining from daily calls to weekly or monthly check-ins: *"We started with daily calls, then weekly, then only when there was news... It just happened gradually"* (Family 06, Daughter). Responsiveness Gap—messages are answered after considerable delays, interpreted as decreasing emotional engagement: *"I send a voice note... She replies two days later... It makes me feel forgotten"* (Older Adult 11, Female, 77). Transparency Gap—information becomes increasingly selective and institutionally mediated: *"We don't tell families about minor falls... We tell them only when it's serious"* (Administrator 07). *"Looking back, I don't think I ever really knew what life was like for her there"* (Family 12, Daughter). These gaps are mutually reinforcing: frequency reduction diminishes meaningful exchange, responsiveness delays signal waning emotional investment, and transparency gaps undermine trust—collectively generating the Digital Void.

4.7 Digital Void as a New Communication Concept

The study demonstrates communication deterioration cannot be adequately explained by Digital Divide theory. Digital infrastructure remained fully available throughout all phases, yet communication quality progressively declined due to four interrelated mechanisms: (a) emotional responsibility delegation, (b) institutional mediation, (c) contradictory communication expectations, and (d) communication avoidance. Figure 2 illustrates the conceptual model of Digital Void developed from this study. Figure 2. Conceptual Model of Digital Void in the End-to-End Communication Cycle



Source: [10], [14], [16]

Figure 2 illustrates the conceptual model of Digital Void developed from this study.

Although digital communication technologies remain continuously available, meaningful communication gradually decreases because of institutional mediation, delegated family responsibility, contradictory communication expectations, and information filtering. These mechanisms collectively produce three observable dimensions—Frequency Gap, Responsiveness Gap, and Transparency Gap—which explain the emergence of Digital Void.

4.8 Theoretical Implications

The findings extend FCPT in two significant ways. First, they demonstrate family communication within institutional elderly care cannot be understood exclusively through conversation and conformity orientations among family members—institutional actors actively shape communication processes, creating a tripartite system where family-level orientations interact with organisational regulations. Second, conformity orientation operates differently in institutional contexts, manifesting not merely as shared family values but as delegation of emotional responsibility to institutional authorities and compliance with organisational regulations—even when contradicting family desires for transparency. Digital Void complements existing digital communication theories by explaining communication failure in technologically connected environments, broadening scholarship by foregrounding relational, emotional, and institutional dimensions beyond technological accessibility.

5 Conclusion

This study demonstrates that the end-to-end communication paradox in institutional elderly care emerges not because of technological limitations but because of changing family communication orientations, institutional mediation, and emotional responsibility delegation. The study identified twelve recurrent tripartite communication patterns extending FCPT beyond nuclear family communication into

institutional care. Communication is influenced not only by family conversation and conformity orientations but also by organisational regulations, institutional gatekeeping, and systematic delegation of emotional responsibility. Conformity orientation manifests differently in institutional contexts—not merely as shared family values but as delegation of emotional responsibility to institutional authorities, even when contradicting family desires for transparency.

The most significant theoretical contribution is Digital Void—a condition where digital infrastructure remains fully available while meaningful communication progressively deteriorates due to relational distancing, institutional mediation, and conflicting expectations. Unlike the Digital Divide, which concerns unequal technology access, Digital Void addresses communicative attenuation persisting even when structural inequalities are addressed. Three dimensions—Frequency Gap, Responsiveness Gap, and Transparency Gap—collectively explain this phenomenon, advancing understanding of Double Bind dynamics in institutional contexts. Practically, nursing homes should develop transparent communication protocols (weekly digital updates, unmediated video calls, quarterly family-inclusive planning). Policymakers should mandate communication protocols in accreditation standards. Families must recognise that progressive communicative withdrawal—even unintentional—directly contributes to Digital Void.

Limitations include the study's exclusive focus on East Java, Indonesia, with 12 families, limiting transferability to other cultural contexts. Future research should validate Digital Void across hospitals, rehabilitation centres, and different national contexts; develop quantitative scales for the three dimensions; conduct longitudinal studies; and incorporate perspectives of healthcare professionals and social workers. Ultimately, this study challenges technologically deterministic assumptions that infrastructure alone sustains meaningful relationships, revealing instead that communication quality depends on relational intentions, institutional practices, and stakeholder willingness to maintain substantive engagement. As Indonesia's elderly population grows rapidly, nursing homes can become genuine partners in dignified elderly care—but only if communication practices are intentionally designed to sustain, rather than systematically erode, meaningful family connections.

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References

1. World Health Organization. Decade of healthy ageing: Baseline report. World Health Organization (2021)
2. Badan Pusat Statistik. Statistik Penduduk Lanjut Usia 2024. Badan Pusat Statistik (2024)
3. Van Dijk, J. The digital divide. Polity Press (2020)
4. Castells, M. The rise of the network society (2nd ed.). Wiley-Blackwell (2010)
5. Hampton, K. N., Sessions, L. F., & Her, E. J. Core networks, social isolation, and new media: *Information, Communication & Society*, 14(1), 130–155 (2011)
6. Watzlawick, P., Beavin, J. H., & Jackson, D. D. *Pragmatics of human communication*. W. W. Norton (1967)
7. Pinquart, M., & Sörensen, S. Differences between caregivers and noncaregivers in psychological health and physical health: A meta-analysis. *Psychology and Aging*, 18(2), 250–267 (2003)
8. Gaugler, J. E., Kane, R. L., Kane, R. A., & Newcomer, R. Early community-based service utilization and its effects on institutionalization in dementia caregiving. *The Gerontologist*, 45(2), 177–185. (2005)
9. Qu, Y., & Zhao, X. : Digital communication and emotional well-being among older adults in institutional care. *Journal of Aging and Health*, 35(6), 789–802 (2023)
10. Koerner, A. F., & Fitzpatrick, M. A. Toward a theory of family communication: *Communication Theory*, 12(1), 70–91 (2002)

11. Schrodt, P., Witt, P. L., & Shimkowski, J. R. A meta-analytic review of family communication patterns: *Communication Monographs*, 75(3), 248–269 (2008).
12. Hargittai, E. Digital na(t)ives? Variation in internet skills and uses among members of the "net generation." *Sociological Inquiry*, 80(1), 92–113 (2010)
13. Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478 (2003)
14. Koerner, A. F., & Fitzpatrick, M. A. Family communication patterns theory: A social cognitive approach. In D. O. Braithwaite & L. A. Baxter (Eds.), *Engaging theories in family communication* (pp. 50–65). SAGE Publications (2006)
15. Ledbetter, A. M. Family communication patterns and relational maintenance behavior: Direct and mediated associations. *Communication Reports*, 22(1), 1–15 (2009)
16. Bateson, G., Jackson, D. D., Haley, J., & Weakland, J. Toward a theory of schizophrenia. *Behavioral Science*, 1(4), 251–264 (1956) <https://doi.org/10.1002/bs.3830010402>
17. Norris, P. *Digital divide: Civic engagement, information poverty, and the Internet worldwide*. Cambridge University Press (2001)
18. Livingstone, S. Media literacy and the challenge of new information and communication technologies. *The Communication Review*, 7(1), 3–14 (2004)
19. Davis, F. D. Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340 (1989) <https://doi.org/10.2307/249008>
20. Creswell, J. W., & Poth, C. N. *Qualitative inquiry and research design* (4th ed.). SAGE Publications (2018).
21. Yin, R. K.. *Case study research and applications* (6th ed.). SAGE Publications (2018)
22. Braun, V., & Clarke, V. *Thematic analysis: A practical guide*. SAGE Publications (2021)
23. Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. Member checking: A tool to enhance trustworthiness or merely a nod to validation? *Qualitative Health Research*, 26(13), 1802–1811 (2016) <https://doi.org/10.1177/1049732316654870>
24. Lincoln, Y. S., & Guba, E. G. *Naturalistic inquiry*. SAGE Publications (1985)

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