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Intergenerational Relations and the Digital Economy: Educational Transformation of Urban Families

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Abstract

The rapid growth of the digital economy in the era of Society 5.0 has significantly reshaped family dynamics, particularly in urban contexts where intergenerational relations play a central role in education. This study explores how urban families in Mataram City negotiate authority, social capital, and digital capital within the context of educational transformation. Using a qualitative descriptive approach with a multi-unit case study design, data were collected through in-depth interviews, participatory observations, and field notes involving five urban families. Thematic and interactive analysis guided by Bourdieu's theory of capital revealed three major findings: first, the fragmentation of family communication as members spend more time on individual digital devices; second, the shift of educational authority from parents to digital systems that offer instant knowledge and guidance; and third, the erosion of family social capital, resulting in weakened emotional closeness and reduced parental legitimacy. Despite these challenges, the study also found that harmony is not lost when families can create reflective spaces, negotiate authority, and engage in reciprocal capital conversion between generations. These findings highlight the importance of rethinking family education not only from a technological perspective but also from a socio-economic standpoint, positioning urban families in Mataram as critical arenas for understanding how digital economies reshape intergenerational relations.

Keywords: *Digital Economy, Family Education, Intergenerational Relations, Social Capital, Urban Families.*

INTRODUCTION

The development of the digital economy in the era of Society 5.0 has brought about a profound transformation in social life, including within the institution of the family. Digitalization functions not only as a technological instrument but also as an agent of change that reconstructs patterns of communication, interaction, and education in the household. In urban areas, this phenomenon is more pronounced because internet access, digital devices, and online services are available with high intensity (Fang et al., 2021; Muminovna & Abdugapparovich, 2021). Mataram City, as one of the economic growth centers in West Nusa Tenggara, represents a vivid example of how urban families experience social disruption due to the penetration of digital technologies. Everyday life, which was once characterized by direct interpersonal interaction, has shifted toward individualized digital connectivity, often reducing the quality of dialogue and emotional closeness (González-Sala et al., 2019; Katz-Wise et al., 2024).

From a socio-economic perspective, the family is not merely a domestic unit but an arena for the accumulation and exchange of various forms of capital: economic, social, cultural, and symbolic. Pierre Bourdieu's theory of practice emphasizes that family structures are supported by habitus formed through intergenerational experiences. However, in the context of the digital economy, the distribution of capital has undergone significant change (Premanandan et al., 2024; Upe, 2023). Children, as digital natives, possess digital capital that grants them new authority in the educational domain, while parents, as digital migrants, often lag behind in terms of technological literacy (Choukou et al., 2023). This disparity in capital ownership generates intergenerational tension, where the symbolic authority of parents is displaced by the dominance of algorithms and digital information systems (Bullock et al., 2023).

This phenomenon becomes even more complex when viewed from the dimension of family education. Families that previously functioned as spaces for the transmission of values, norms, and knowledge now face new challenges. The educational process is no longer solely determined by parental figures but also by digital ecosystems that shape children's learning

behavior. Social media algorithms, online learning platforms, and digital content have gradually taken over the role of parents in guiding children (Zeng et al., 2024). As a result, family education is no longer linear and hierarchical but tends to become horizontal, with asymmetrical distributions of authority. This creates pedagogical dissonance, namely, differences in educational orientation between one generation and the next (Fesenko, 2022).

Previous studies have confirmed that digitalization within families often creates communication fragmentation. Time that should have been devoted to conversations and collective activities is increasingly replaced by each individual's engagement with their digital devices. Research shows that rising digital media use can weaken intergenerational communication, reduce emotional bonds, and diminish the effectiveness of parental supervision(Freeman et al., 2020; Hwang, Min, et al., 2023). Similarly, children are noted to trust digital information more than direct parental guidance. Nevertheless, few studies have examined this phenomenon through the lens of socio-economic sociology, particularly concerning the role of social capital and digital capital in shaping intergenerational relations (Gedik & Sahan, 2024).

Mataram City provides a unique context for this research. As an urban center undergoing rapid growth, Mataram stands at the intersection of traditional values and digital modernity. On the one hand, families still uphold norms of collectivism, respect for parents, and emotional intimacy as the basis of social capital. On the other hand, digital penetration fosters a culture of new individualism, in which children feel more comfortable spending time with digital devices rather than engaging in dialogue with family members (Correa, 2013). This complexity illustrates how local traditions that emphasize family cohesion are challenged by the global logic of the digital economy, which is saturated with individualization and the acceleration of information (Akman et al., 2023; Hwang et al., 2022).

The shifting function of education in Mataram's urban families also reveals a redistribution of knowledge authority. Parents are no longer the sole sources of information but must compete with digital systems that provide fast and instant access (Ragnedda et al., 2019). This situation produces symbolic inequality: children with stronger digital capital gain greater autonomy in determining their learning paths, while parents with limited technological literacy often find themselves marginalized in their pedagogical role. This shift demonstrates that the digital economy impacts not only material production and consumption but also the social and educational relations within families (Hwang, Fu, et al., 2023).

Furthermore, the issue of intergenerational harmony in family education in the digital era is not merely a technical matter but a structural problem related to the distribution of social and digital capital. Families that fail to create reflective dialogue spaces risk losing education as a vehicle for character and value formation (Till et al., 2023; Alqaysi et al., 2022). Conversely, families that succeed in negotiating authority and opening participatory communication have greater potential to maintain intergenerational harmony. Thus, this study is crucial to examining how urban families in Mataram manage differences in intergenerational habitus within the context of the digital economy, while simultaneously negotiating the social and digital capital they possess (Kim et al., 2025; Zahari et al., 2022).

The urgency of this research also lies in its contribution to international literature. Many studies on families and digitalization have been conducted in developed countries, while research in developing contexts such as Indonesia remains relatively limited (Cho & Demiris, 2024; Woolley et al., 2023). In fact, the characteristics of Indonesian urban families are distinctive, as strong traditional values intersect with technological penetration (Gagné et al., 2022). By focusing on Mataram City, this study not only provides empirical insights into the dynamics of Indonesian urban families but also enriches the global perspective on how the digital economy reshapes intergenerational relations within households (Berg et al., 2024; Couturier et al., 2022).

This study positions itself at the critical intersection of family sociology, economic sociology, and digital education studies. It is designed to critically analyze the dynamics of intergenerational relations in urban families in Mataram, to identify how the digital economy influences family educational practices, and to explore the extent to which family social capital can endure or adapt in response to these changes. In doing so, the research seeks to make a significant scientific contribution to understanding the transformation of family education in the digital economy era, while also offering a conceptual model relevant for strengthening

intergenerational harmony amid technological disruption.

METHODS

This study employed a qualitative descriptive approach with a multi-unit case study design. This approach was chosen because it allows for an in-depth exploration of the dynamics of intergenerational relations within urban families in Mataram City amid the penetration of the digital economy. A qualitative design was considered appropriate to capture the complexity of social interactions rich in meaning, symbols, and emotions, aspects that are often difficult to explain quantitatively. By adopting a multi-unit case study, the research enabled comparative analysis across families, thereby producing richer and more contextual findings.

The research was conducted in Mataram City, West Nusa Tenggara Province, selected for its characteristics as an urban area with relatively high levels of internet penetration in the region. The city also presents unique social structures, where strong traditional family values coexist and contend with the forces of digital modernity. This context provides an ideal setting for analyzing how generational differences within families negotiate roles and authority under the influence of the digital economy.

The research subjects consisted of five urban families selected purposively based on specific criteria. First, the families resided within Mataram City and were categorized as urban households. Second, each family included at least two generations (parents and adolescent or young adult children). Third, all family members had active access to digital devices such as smartphones, laptops, or tablets connected to the internet. With these criteria, the selected families were deemed representative for illustrating the dynamics of intergenerational relations within the digital ecosystem.

Data collection was carried out using three primary techniques: in-depth interviews, participatory observation, and field notes. Interviews were conducted with fifteen informants, consisting of fathers, mothers, and children from each family. The interviews explored experiences with digital technology use, strategies of educational supervision, patterns of intergenerational communication, and perceptions of the shifting educational function within the family. Participatory observations were conducted in household settings to directly observe how digital devices were integrated into daily life, including in children's learning processes and family interactions. In addition, field notes were employed to document social situations, body language, and emotional dynamics that might not have been fully captured during interviews.

The data collected were analyzed using thematic and interactive analysis (Najmah, 2023). The initial stage involved transcribing interviews and recording observations. Open coding was then applied to identify key themes such as "digital communication fragmentation," "shifts in educational authority," and "family social capital in the digital era." These themes were subsequently categorized and interpreted with reference to Pierre Bourdieu's conceptual framework of social capital, digital capital, and theories of intergenerational relations within families. The analysis process was carried out interactively, with the researcher continually moving back and forth between data, concepts, and theory to generate deeper interpretations.

To ensure data validity, the study employed methodological triangulation and source triangulation (Sugiyono, 2020). Methodological triangulation was achieved by comparing data from interviews and observations, while source triangulation was conducted by checking the consistency of information across different family members within the same case. Additionally, member checking was performed by presenting preliminary findings to informants to confirm that the researcher's interpretations aligned with their lived experiences. This validation process was essential for maintaining the credibility and trustworthiness of the study.

Through this methodological design, the research not only described patterns of digital technology use within families but also uncovered the dynamics of symbolic power, the shifting of educational authority, and the intergenerational negotiations taking place in urban households in Mataram City. Furthermore, this approach enabled the emergence of new perspectives on how the digital economy shapes micro-level social structures within families, ultimately contributing to a global understanding of the transformation of family education in the digital era.

RESULTS AND DISCUSSION

Field findings affirm that the digital economy operates not merely as a technological backdrop but as a field of power relations that reshapes micro-level interactions within families. The intensity of online

connectivity through social media, learning platforms, and algorithm-based content generates communication fragmentation in the domestic sphere: family members are physically present, yet their attention and emotions are absorbed by individual screens. From a socio-economic lens, this reflects a shift in the logic of exchange: the warmth of face-to-face interactions that once served as the "currency" of togetherness is increasingly replaced by the attention economy, where clicks, views, and scrolling become dominant values. In Mataram, this phenomenon is visible among highly mobile urban families, where quality family time narrows and is easily "pawned" to the relentless rhythms of digital platforms (Oliveira et al., 2022).

The asymmetry of digital capital between generations explains why parental pedagogical authority appears to decline. Children, as digital natives, master the techniques, language, and rhythms of platforms, thereby shifting the meaning of "learning" from a discipline shaped by authoritative figures to self-navigation guided by algorithms (X. Wang & Zhang, 2024). Parents, as digital migrants, are often strong in cultural capital (values, norms, ethics) but weak in digital capital (technical skills, platform literacy, sensitivity to algorithmic bias). This misalignment produces symbolic inequality: parental knowledge loses legitimacy compared to "the fastest search results" or "the most recommended videos," regardless of their quality or ethical grounding. Here, it becomes evident that the digital economy displaces legitimacy from intergenerational experience to the technical architecture of platforms (Grossman et al., 2021).

Ongoing digital fragmentation not only separates interactions but also repositions the aims of family education. In Mataram, many families interpret educational achievement through quantitative indicators generated by platforms such as streaks, badges, and learning duration, while the ethical, reflective, and dialogical dimensions that should form the essence of family education become de-emphasized. This change represents the metricization of education: what counts is what can be counted, not what is truly meaningful (Y. Wang et al., 2024). Sociologically, this reflects a process of symbolic commodification: core family educational values (patience, perseverance, togetherness) are marginalized by transactional and temporary platform metrics, reducing education to indicator management rather than character formation (Perera & Nilaweera, 2024).

Nevertheless, the data also highlight opportunities for productive reconversion of capital. When children share their digital knowledge with parents, for example, teaching them to use parental controls, curate educational channels, or refine search credibility, their digital capital is converted into family social capital in the form of trust, closeness, and shared learning habits (Guo, 2025). Conversely, when parents instill values, ethics, and moral sensibilities related to issues such as privacy, digital footprints, and digital civility, their cultural capital is converted into symbolic capital, acknowledged by children as a moral reference (Serra & Revez, 2023). This reciprocal conversion is the key to intergenerational harmony: not eliminating differences in capital but articulating them as exchanges that mutually reinforce one another (Ertenlice, 2024).

Social class and Mataram's urban ecology also shape these dynamics. Middle-class families with stable access to devices and connectivity tend to face issues of over-exposure (content overload, overchoice, time displacement), while informal worker families struggle with under-support (shared devices, unstable connections, limited study space) (Lin et al., 2025). These two poles produce different forms of disharmony: for the first, the challenge is managing attention and content curation; for the second, the challenge is digital inclusion and learning support. Consequently, family interventions cannot be homogeneous; they must be sensitive to Mataram's socio-spatial ecology, from neighborhood density and availability of communal spaces to local traditions of collective solidarity that can serve as buffers of social capital (Wibowo et al., 2024).

Gender roles and the division of care work further shape digital relations. In many households, mothers play central caregiving roles, yet digital capital is often controlled by sons or fathers who interact directly with work-related devices (Gonzales et al., 2023). When care work is not accompanied by care literacy in digital domains, mothers risk exclusion from negotiations over content and digital rules. This produces a double asymmetry: (1) asymmetry of digital authority between children and mothers, and (2) asymmetry of caregiving burdens unbalanced by a voice in digital decision-making (Peng, 2022). Addressing this requires gender-sensitive digital literacy, not merely technical training

but also strengthening mothers' bargaining power in formulating a household "digital constitution" (screen time rules, content types, privacy protocols, and escalation procedures) (Lau et al., 2025).

The discussion also underscores the clash between local values such as kinship, consensus, and respect for parental figures and global platform cultures emphasizing speed, individualization, and virality, which generates normative dissonance (Gerrand et al., 2023). Children absorb cross-border peer cultures with language, humor, and symbols that are not always aligned with household values, while parents employ local moral commonsense as benchmarks (J. Wang & Wu, 2023). Here, children's digital habitus intersects with parents' cultural habitus (Green et al., 2022). Harmonizing the two requires bridging practices: joint content viewing with brief critical reflection, post-online-learning debriefings, and weekly family tech check-ins to negotiate norms without nullifying children's autonomy (Archer & Delmo, 2023).

In practice, cohesive families demonstrate three forms of micro-level institutionalization (Ellison, 2023). First, non-negotiable rituals of togetherness (e.g., device-free dinners, 30-minute reading circles, or weekend offline windows), which act as social safeguards against platform encroachment (Carenzio et al., 2021). Second, transparent and co-negotiated rule architectures differentiated screen time based on school needs, whitelisted content lists, and support protocols for troubling materials so that authority emerges not from prohibition but from deliberation (Warmansyah et al., 2023). Third, collaborative accountability, where parents model digital self-regulation (e.g., not replying to work messages during family time), ensuring moral authority is not eroded by behavioral inconsistency (Bezzo et al., 2023). These mechanisms are effective not because of strict control but because of the strength of symbolic legitimacy built through consistency and fairness (Lewis et al., 2021).

To strengthen the resilience of family education amid the digital economy, this discussion proposes the framework of "3C-Curation, Co-presence, Conversion." Curation refers to the family's ability to filter and prioritize meaningful streams of digital activity rather than mere quantity, fostering sensitivity to algorithmic biases and placing values above metrics (Chan, 2024). Co-presence stresses the importance of being physically and mentally present in digital educational activities, such as watching, reading, and reviewing, so that learning becomes relational rather than solitary (Jin et al., 2022). Conversion demands intergenerational capital exchange: children convert digital capital into social capital by sharing skills, while parents convert cultural capital into symbolic capital by framing ethics, thereby increasing the total capital of the family (Akter & Bhattacharjee, 2025). This framework is compatible with Mataram's context due to its flexibility: it can adapt to device limitations, space constraints, or time availability (Díaz, 2021).

Ultimately, families should not be seen as passive victims of technology but as reflective actors capable of reinterpreting the economization of attention into an ecology of learning. At the city level, supporting ecosystems such as Qur'an learning groups (TPQ), neighborhood associations, community libraries, and campus–community co-learning spaces can be orchestrated to strengthen both bonding social capital and bridging social capital. At the policy level, initiatives such as family-based digital literacy training rooted in local cases, Indonesian-language content curation toolkits, and campaigns promoting adult role-modeling of digital self-regulation will enhance impact (Ferreras-Listán et al., 2021). Thus, digital transformation need not equate to relational erosion; it can serve as a lever of capacity-building when Mataram's families consistently combine value reflection, equitable rule architecture, and intergenerational capital exchange.

CONCLUSION

The presence of the digital economy in Mataram City has reshaped intergenerational relations within urban families, particularly in the context of education. The intensive use of digital devices has shifted educational authority from parents to algorithm-based digital systems. This transformation has generated communication fragmentation, weakened emotional bonds, and reduced dialogical spaces that should serve as the foundation of family education. Consequently, families are confronted not only with technical challenges in technology use but also with structural issues, particularly the unequal distribution of digital and cultural capital across generations.

Intergenerational harmony, however, is not entirely lost. The findings indicate that when families create reflective spaces through open communication, negotiated authority, and reciprocal capital exchange, they are able to preserve and even strengthen social

cohesion. Children with strong digital capital can support parents in developing technological literacy, while parents with cultural capital continue to serve as the moral and ethical foundation in their children's digital practices. In this way, intergenerational relations can be transformed from a site of conflict into a space of productive collaboration.

From a sociological perspective, urban families in Mataram can be understood as arenas of capital conversion within Bourdieu's framework. Social, cultural, and digital capital are exchanged, converted, and negotiated to create a new balance. Harmony in digital family education can only be achieved if generational differences are not rejected but managed as dialogical strengths. This underscores that family education in the digital economy cannot be separated from socio-economic analysis, as the transformation involves not only digital skills but also power relations, symbolic legitimacy, and value reproduction.

This study contributes significantly to the expansion of international literature on family sociology and the digital economy by offering the distinctive context of Indonesia. Mataram City demonstrates that urban families can serve as an important locus for understanding how technological globalization intersects with traditional values. The practical implications of these findings highlight the need for family-based digital literacy programs, the strengthening of parental roles within digital ecosystems, and policy support that emphasizes a balance between technology and human values.

REFERENCES

Akman, E., İdil, Ö., & Çakır, R. (2023). An Investigation Into the Levels of Digital Parenting, Digital Literacy, and Digital Data Security Awareness Among Parents and Teachers in Early Childhood Education. *Participatory Educational Research*, *10*(5), 248–263.

Akter, S., & Bhattacharjee, S. (2025). Beyond Storytime: Oklahoma Public Libraries' Comprehensive Approach to the Resilience of Refugee Children and Their Families Support. *International Journal of Environmental Research and Public Health*, *22*(8), 1298.

Alqaysi, M. E., Albahri, A. S., & Hamid, R. A. (2022). Diagnosis-Based Hybridization of Multimedical Tests and Sociodemographic Characteristics of Autism Spectrum Disorder Using Artificial Intelligence and Machine Learning Techniques: A Systematic Review. *International Journal of Telemedicine and Applications*, *2022*, 1–26.

Archer, C., & Delmo, K. M. (2023). Play Is a Child's Work (On Instagram). *M/C Journal*, *26*(2).

Berg, V., Arabiat, D., Mörelius, E., Kervin, L., Zgambo, M., Robinson, S., Jenkins, M., & Whitehead, L. (2024). Young Children and the Creation of a Digital Identity on Social Networking Sites: Scoping Review. *Jmir Pediatrics and Parenting*, *7*, e54414. https://doi.org/10.2196/54414

Bezzo, F. B., Raitano, M., & Vanhuysse, P. (2023). Beyond Human Capital: How Does Parents' Direct Influence on Their Sons' Earnings Vary Across Eight OECD Countries? *Oxford Economic Papers*, *76*(2), 375–394.

Bullock, G. S., Ward, P. S., Impellizzeri, F. M., Kluzek, S., Hughes, T., Hillman, C. C., Waterman, B. R., Danelson, K. A., Henry, K., Barr, E., Healey, K., Räisänen, A. M., Gomez, C., Fernandez, G., Wolf, J., Nicholson, K. F., Sell, T., Zerega, R., Dhiman, P., … Collins, G. S. (2023). *Up Front and Open, Shrouded in Secrecy, or Somewhere in Between? A Meta Research Systematic Review of Open Science Practices in Sport Medicine Research*.

Carenzio, A., Ferrari, S., & Rasi, P. (2021). Older People's Media Repertoires, Digital Competences and Media Literacies: A Case Study From Italy. *Education Sciences*, *11*(10), 584.

Chan, G. H. (2024). Enhancing Digital Literacy in Education: Educational Directions. *Education + Training*, *66*(1), 127–142.

Cho, H., & Demiris, G. (2024). *Addressing Digital Literacy in Telehealth Interventions for Persons With Dementia*.

Choukou, M.-A., Olatoye, F., Urbanowski, R., Caon, M., & Monnin, C. (2023). Digital Health Technology to Support Health Care Professionals and Family Caregivers Caring for Patients With Cognitive Impairment: Scoping Review. *Jmir Mental Health*, *10*, e40330.

Correa, T. (2013). Bottom-Up Technology Transmission Within Families: Exploring How Youths Influence Their Parents' Digital Media

Use With Dyadic Data. *Journal of Communication*, *64*(1), 103–124.

Couturier, Y., Lanoue, S., Karam, M., Guillette, M., & Hudon, C. (2022). Social Workers Coordination in Primary Healthcare for Patients With Complex Needs: A Scoping Review. *International Journal of Care Coordination*, *26*(1), 5–25.

Díaz, M. J. S. (2021). Emergency Remote Education, Family Support and the Digital Divide in the Context of the COVID-19 Lockdown. *International Journal of Environmental Research and Public Health*, *18*(15), 7956.

Ellison, T. L. (2023). Normalizing Black Students/Youth and Their Families' Digital Literacies. *The Reading Teacher*, *76*(5), 594–600.

Ertenlice, A. (2024). Social Media Interaction of Publications in the Field of General Surgery: A Comparative Analysis of the Twitter Performances of Q1 Medical Journals With Their Impact Factor. *Archives of Current Medical Research*, *5*(1), 21–27.

Fang, M., Jandigulov, A., Snezhko, Z., Volkov, L., & Dudnik, O. (2021). New Technologies in Educational Solutions in the Field of STEM: The Use of Online Communication Services to Manage Teamwork in Project-Based Learning Activities. *International Journal of Emerging Technologies in Learning (Ijet)*, *16*(24), 4–22.

Ferreras-Listán, M., Gómez, C. I. H., Moreno-Crespo, P., & Fernández, O. M. (2021). School–Family Relations: An Educational Challenge in Times of COVID-19. *International Journal of Environmental Research and Public Health*, *18*(20), 10681.

Fesenko, I. (2022). Similar Evolutionary Steps: Journal of American College of Surgeons and Journal of Diagnostics and Treatment of Oral and Maxillofacial Pathology. *Journal of Diagnostics and Treatment of Oral and Maxillofacial Pathology*, *6*(1).

Freeman, S., Marston, H. R., Olynick, J., Musselwhite, C., Kulczycki, C., Genoe, M. R., & Xiong, B. (2020). Intergenerational Effects on the Impacts of Technology Use in Later Life: Insights From an International, Multi-Site Study. *International Journal of Environmental Research and Public Health*, *17*(16), 5711.

Gagné, A., Bigras, N., Charron, A., & Lemire, J. (2022). The Integration of Affective Characteristics of the Family Environment for a More Comprehensive Explanatory Model of Reading Abilities. *Frontiers in Education*, *7*.

Gedik, C., & Sahan, G. (2024). Evaluation of Parents' and Teachers' Views on Digital Parenting Skills. *International E-Journal of Educational Studies*, *8*(16), 87–106.

Gerrand, V., Lam, K., Magee, L., Nilan, P., Walimunige, H., & Cao, D. (2023). What Got You Through Lockdown? *M/C Journal*, *26*(4).

Gonzales, G. C., Machado, E., & Plitkins, L. (2023). "I Bring Them Here to Tell Their Stories": Transnational Latina Mothers' Critical Literacy Practices in an Intergenerational Storytelling Workshop. *Journal of Adolescent & Adult Literacy*, *66*(5), 308–318.

González-Sala, F., Osca-Lluch, J., & Osca, J. H. (2019). Information Resources: Differential Characteristics Between Ibero-American and Dutch JCR Psychology Journals From 1998 to 2017. *Resources*, *8*(2), 111.

Green, L., Dudek, D., Cohen, L., Ólafsson, K., Staksrud, E., Jacques, C., & Jaunzems, K. (2022). Tox and Detox. *M/C Journal*, *25*(2).

Grossman, R. C., Sgarbură, O., Hallet, J., & Søreide, K. (2021). Social Media in Surgery: Evolving Role in Research Communication and Beyond. *Langenbeck S Archives of Surgery*, *406*(3), 505–520.

Guo, Y. (2025). Is Political Capital the Most Important Factor? How Do the Children of Civil Servants Form Aspirations to Become Civil Servants? *Chinese Journal of Sociology*, *11*(3), 374–395.

Hwang, W., Fu, X., Brown, M., & Silverstein, M. (2022). Digital and Non-Digital Solidarity Between Older Parents and Their Middle-Aged Children: Associations With Mental Health During the COVID-19 Pandemic. *International Journal of Environmental Research and Public Health*, *19*(19), 12560.

Hwang, W., Fu, X., Brown, M., & Silverstein, M. (2023). Intergenerational Solidarity With Digital Communication and Psychological Well-being Among Older Parents During the COVID-19 Pandemic. *Family Process*, *63*(3), 1356–1372.

Hwang, W., Min, J., Brown, M., & Silverstein, M. (2023). Intergenerational Solidarity and Digital Communication During the Covid‐19 Pandemic in South Korea: Implications for Dyadic Well‐being. *Family Process*, *63*(2), 912–931.

Jin, S. J., Abdullah, A. H., Mokhtar, M., & Kohar, U. H. A. (2022). The Potential of Big Data Application in Mathematics Education in Malaysia. *Sustainability*, *14*(21), 13725.

Katz‐Wise, S. L., Godwin, E. G., Medzhitova, Y., Moore, L., Parsa, N., Hill, A., Oparah, N., Bogart, L. M., Rosal, M. C., Sansfaçon, A. P., Ehrensaft, D., Nishman, M. M., & Austin, S. B. (2024). Development of a Family-Level Intervention for Families With Transgender and/or Nonbinary Youth: Lessons and Recommendations. *Journal of Family Psychology*, *38*(7), 995–1006.

Kim, D. H., Jeon, K., & You, S. C. (2025). *Evaluating Regional Diversity in Scientific Communication: A Comparative Analysis of COVID-19 Preprints and Peer-Reviewed Publications*.

Lau, B. H., Shum, E. N., Kwok, A. P., Liu, B. C., Chan, C., Kwan, R. Y. C., Fong, F. K., Lam, G., Tsang, C. L. N., Leung, D., Cheung, J. C., Chow, J. W. M., Wong, P. P., & Gietel‐Basten, S. (2025). Revealing the Nuances of 'Grey Digital Divide' in Hong Kong: A Latent Profile Analysis. *Plos One*, *20*(7), e0326413.

Lewis, T., Markham, A., & Holcombe-James, I. (2021). Embracing Liminality and "Staying With the Trouble" on (And Off) Screen. *M/C Journal*, *24*(3).

Lin, X., Xu, G., & Xiong, B. (2025). Artificial Intelligence Literacy, Sustainability of Digital Learning and Practice Achievement: A Study of Vocational College Students. *Plos One*, *20*(10), e0332175.

Muminovna, M. M., & Abdugapparovich, N. U. (2021). Ensuring Economic Growth through the Development of Digital Technologies in Uzbekistan. *Indonesian Journal of Innovation and Applied Sciences* (*IJIAS*), 1(1), 77-81.

Najmah, N. A. (2023). *Analisis Tematik pada Penelitian Kualitatif*. Salemba Empat.

Oliveira, A. F., Brites, M. J., & Cerqueira, C. (2022). Intergenerational Perspectives on Media and Fake News During Covid-19: Results From Online Intergenerational Focus Groups. *Media and Communication*, *10*(4), 277–288.

Peng, Y. (2022). Gendered Division of Digital Labor in Parenting: A Qualitative Study in Urban China. *Sex Roles*, *86*(5–6), 283–304.

Perera, K., & Nilaweera, L. (2024). Sybil and the Screen: A Very Young Child's Digital Literacy Practices in a Home Environment. *Journal of Early Childhood Research*, *23*(1), 3–17.

Premanandan, S., Ahmad, A., Cajander, Å., Ågerfalk, P. J., & Gemert‐Pijnen, J. E. v. (2024). Designing and Evaluating IT Applications for Informal Caregivers: Scoping Review. *Journal of Medical Internet Research*, *26*, e57393.

Ragnedda, M., Ruiu, M. L., & Addeo, F. (2019). Measuring Digital Capital: An Empirical Investigation. *New Media & Society*, *22*(5), 793–816.

Serra, S., & Revez, J. (2023). Social Inclusion of Refugees and Asylum Seekers: The Role of Public Libraries in the Lisbon Metropolitan Area. *Journal of Librarianship and Information Science*, *56*(2), 397–414.

Sugiyono. (2020). *Metode penelitian kuantitatif, kualitatif dan R&D*. Alfabeta.

Till, S., Mkhize, M., Farao, J., Shandu, L. D., Muthelo, L., Coleman, T., Mbombi, M. O., Bopape, M. A., Klingberg, S., Heerden, A. v., Mothiba, T. M., Densmore, M., & Verdezoto, N. (2023). Digital Health Technologies for Maternal and Child Health in Africa and Other Low- And Middle-Income Countries: Cross-Disciplinary Scoping Review With Stakeholder Consultation. *Journal of Medical Internet Research*, *25*, e42161.

Upe, A. (2023). Innovation and Technological Adaptation of Business Actors in the Digital Age: A Digital Sociology Perspective. *Indonesian Journal of Innovation and Applied Sciences* (*IJIAS*), 3(3), 218-227.

Wang, J., & Wu, Y. (2023). Income Inequality, Cultural Capital, and High School Students' Academic Achievement in OECD Countries: A Moderated Mediation Analysis. *British Journal of Sociology*, *74*(2), 148–172.

Wang, X., & Zhang, Y. (2024). Intergenerational Care and Rural Childhood Obesity in the Digital Era: Based on Screen Exposure Perspective. *SSM - Population Health*, *27*, 101694.

Wang, Y., Zhao, Y., Lu, J., & Gao, Y. (2024). Young Children's Digital Literacy Practices With Caregivers in the Home Environment: Voices of Chinese Parents and Grandparents. *Sustainability*, *16*(8), 3300.

Warmansyah, J., Ismandela, A., Nabila, D. F., Wulandari, R. T., Wahyu, W. P., Khairunnisa, K., putri, A., Komalasari, E., Sari, M., & Yuningsih, R. (2023). Smartphone Addiction, Executive Function, and Mother-Child Relationships in Early Childhood Emotion Dysregulation. *Jpud - Jurnal Pendidikan Usia Dini*, *17*(2), 241–266.

Wibowo, A., Gularso, D., & Purwaningsih, O. (2024). The Importance of Social Capital in Developing Students' Literacy Skills in Elementary Schools. *Indonesian Journal of Educational Research and Review*, *7*(1), 116–127.

Woolley, K. E., Bright, D., Ayres, T., Morgan, F., Little, K., & Davies, A. (2023). Mapping Inequities in Digital Health Technology Within the World Health Organization's European Region Using PROGRESS PLUS: Scoping Review. *Journal of Medical Internet Research*, *25*, e44181.

Zahari, I., Östbring, K., Purhagen, J., & Rayner, M. (2022). Plant-Based Meat Analogues From Alternative Protein: A Systematic Literature Review. *Foods*, *11*(18), 2870.

Zeng, A., Tang, Q., O'Hagan, E., McCaffery, K., Ijaz, K., Quiroz, J. C., Kocaballı, A. B., Rezazadegan, D., Trivedi, R., Siette, J., Shaw, T., Makeham, M., Thiagalingam, A., Chow, C. K., & Laranjo, L. (2024). Use of Digital Patient Decision-Support Tools for Atrial Fibrillation Treatments: A Systematic Review and Meta-Analysis. *BMJ Evidence-Based Medicine*, *30*(1), 10–21.