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Thesis Booklet

New Dimensions of Consumer Socialization in the Digital Age

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Table of Contents

Background of the Research.....	1
Research objectives	4
Research methods.....	6
New scientific contributions.....	8
List of references.....	12
Scientific publications related to the theses.....	15
Additional scientific publications.....	16

Background of the Research

The spread of the internet and digital technologies has fundamentally transformed consumer behavior by influencing, among other aspects, information acquisition, communication, and the characteristics of online shopping. According to statistical data, internet penetration among the population aged 16–74 reached 95% in 2024 (KSH, 2024a), and 82% of this age group have purchased online at least once (KSH, 2024b). The growing adoption of artificial intelligence (AI) applications is also noteworthy: by September 2024, 26% of individuals aged 16–65 had already tried such solutions (NRC, 2024).

The dissertation focuses on examining how digital technologies (including artificial intelligence) reshape the processes of consumer socialization, with particular attention to generational differences and intergenerational knowledge transfer. To interpret digital consumer socialization, the study examines the concept of consumer socialization and its transformation in the digital age, with special emphasis on the roles of the internet and AI in these processes.

The study of consumer socialization helps to understand the contexts in which consumers live (Ekström, 2006), that is, the factors underlying consumer behavior (Pólya & László, 2019). Consumer socialization addresses how individuals become consumers and how, over the course of their lives, they adapt to various changes in their role as consumers. Even within traditional frameworks, this is a complex phenomenon; however, the digital environment further increases its complexity. Consumer socialization is a lifelong process (Ward, 1974; Smith & Moschis, 1984; Schiffman & Wisenblit, 2015), in which individuals acquire new values, norms, and skills in response to various stimuli, shaping their consumer roles (e.g., Goodwin & Sewall, 1992; Moreira, Casotti, & Campos, 2018; Moschis, 2012). Socialization occurs through interactions with various agents that transmit norms, attitudes, motivations, and behaviors to the individual (Moschis & Churchill, 1978). Socialization during childhood is referred to as primary socialization, while socialization later in life is termed secondary socialization (Berger & Luckmann, 1967). According to Watne and Brennan (2009), from the perspective of consumer socialization, secondary socialization logically includes adaptation to market changes; accordingly, secondary consumer socialization can be considered when an adult consumer updates their skills, knowledge, or attitudes in response to such changes.

Regarding factors influencing consumer socialization, it is helpful to distinguish between the individual and the environment surrounding them. An individual's background (such as gender, age, life cycle, family background, socioeconomic status, level of education, religiosity, ethnicity, and prior experiences, among others; e.g., Mowen, 1987) fundamentally shapes consumer socialization. In addition, various expected and unexpected life events, such as retirement, economic failure, unemployment, or illness (e.g., Moreira, Casotti, & Campos, 2018; Moschis, 2012), as well as personal characteristics (Mishra, Maheswarappa, & Colby, 2018), also play an important role. Among these characteristics, openness to innovation is

particularly important in the digital world. In structuring the immediate environment surrounding the individual (the microenvironment), three interacting yet highly complex elements are identified: the family and social relations (including peers, school-related, work-related, and other communities such as religious, sports, or local communities), the media (including the internet and online media), and the market. Across the intersection of these three groups of factors, a number of additional sub-factors can be identified. The microenvironment exists within a broader, continuously changing environment (the macroenvironment), which influences all agents as well as the individual; moreover, macroenvironmental factors also interact with one another. The internet plays a prominent role in consumer socialization and is connected to all factors that influence it. It should be noted that some authors identify the internet itself as a socialization agent (e.g., Lee, Conroy, & Hii, 2003; Hill & Beatty, 2011; Barber, 2013; Thaichon, 2017). Technological development has thus introduced new dimensions into the approach to consumer socialization, with the most recent factor being artificial intelligence, which is playing an increasingly influential role today. Artificial intelligence raises entirely new questions as a result of changes in human-machine interactions. Research (e.g., Peltier, Dahl, & Schibrowsky, 2024) shows that individuals often behave toward computer-based systems in ways similar to how they behave toward other people, as these systems are frequently attributed with human characteristics. This phenomenon is referred to as the computers as social actor paradigm (Nass & Moon, 2000), and users may form deep relationships with AI companions (Brandtzaeg, Skjuve, & Følstad, 2022). Owing to its significance - similarly to the internet - artificial intelligence can also be interpreted as an independent socialization agent. In this context, Collins (2024) draws attention to the fact that it matters how artificial intelligence systems themselves are socialized and by whom, as these systems ultimately socialize us. The concept of digital socialization has also emerged in the literature. According to Podbolotova et al. (2021), digital socialization refers to the process of individuals' social adaptation and integration in the context of the digitalization of society, as well as the acquisition of new social experiences based on online contexts. In addition, it includes the use of information and communication technologies that contribute to the formation of so-called digital identity. Consumer socialization, in turn, encompasses how individuals construct and reconstruct their social roles as consumers (Ekström, 2006). In light of the above, digital consumer socialization is defined as a complex and lifelong process through which individuals - via interactions with both online and offline agents - acquire the knowledge, skills, attitudes, and behavioral norms necessary to perform their roles as digital consumers. In digital consumer socialization, experiences mediated by machines (digital devices and algorithms) play a key role. Digital consumer socialization also includes the acquisition of the use of digital technologies, as well as the internalization of consumer values, motivations, and behavioral norms associated with these technologies.

Intergenerational knowledge transfer plays a particularly important role in digital socialization, as younger generations often act as socialization agents for older ones. According to Watne, Lobo, and Brennan (2011), the transfer of technological knowledge

frequently flows from children to parents or other older family members. Kenesei (2020) found that older adults' internet use can be significantly increased when family members provide assistance, while research by Kolos, Kenesei, & Somosi (2014) suggests that peer influence is also an important factor for older adults - presumably involving mutual learning processes as well. Thus, intra- and intergenerational relationships not only facilitate the acquisition of technological skills but also influence the development of internet use practices.

Online shopping, as one of the central elements of digital consumer socialization, involves specific learning processes. Purchasing habits, preferences, and techniques are transmitted from generation to generation (Minahan & Huddleston, 2010); however, in the online environment, new forms of learning mechanisms may emerge depending on the level of digital knowledge.

Overall, digital consumer socialization - through which individuals develop the skills necessary to become digitally competent consumers - is a complex process in which learning, inter- and intragenerational knowledge transfer, and AI-based technologies play central roles. Together, these factors shape consumer roles in the online environment and raise new research questions, particularly concerning the interrelationships between age, learning modes, and digital literacy.

Research objectives

Secondary socialization and its generational differences remain relatively underexplored areas of research. In particular, the dynamics of intra- and intergenerational knowledge transfer - especially their joint examination - as well as the impact of artificial intelligence on consumer socialization and the related attitudinal patterns can be considered research gaps in the existing literature. The aim of this dissertation is to contribute to reducing these gaps and to foster a deeper understanding of digital consumer socialization.

A key issue from the perspective of the examined topic concerns the learning modes (formal, non-formal, and informal) that consumers employ in acquiring digital knowledge, as well as the generational differences associated with these processes. Among the modes of acquiring general digital knowledge, in the case of informal learning, intra- and intergenerational relationships play a particularly significant role. The main question, therefore, is how different groups acquire digital knowledge. Online shopping represents a pivotal moment in consumer socialization. While in traditional purchasing contexts parents typically teach their children, online platforms may generate knowledge transfer in the opposite direction, depending on the digital competencies of the parties involved. In this context, it is worth examining whether consumers relied on intragenerational ties during their first online purchase, how this varies by age, and whether these patterns correspond to those observed in general internet-related knowledge acquisition. The main question, therefore, is how the use of intergenerational relationships during the first online purchase varies across generations. One of the most significant technological changes of our time is the rapid diffusion of artificial intelligence, which is also profoundly transforming the process of consumer socialization. However, due to the novelty of the technology, the extent of these changes cannot yet be determined with certainty. In this context, examining attitudes toward artificial intelligence may serve as a first step toward a deeper understanding of this process. As the new technology is integrated into the lives of different generations to varying degrees, substantial generational differences can be expected in the results. The main question, therefore, is how age and prior technological experience influence attitudes toward artificial intelligence. In line with these considerations, the research questions and hypotheses were formulated along four thematic dimensions.

1. Thematic area: Learning modes

Research questions:

- Which learning modes characterize the acquisition of internet-related knowledge?
- What differences can be observed between groups of different ages?

2. Thematic area: The role of intergenerational relationships

Research questions:

- What role does intergenerational knowledge transfer play in this learning process? What differences can be observed across age groups?
- What role does intergenerational knowledge acquisition play in the development of internet use practices?

3. Thematic area: First online purchase

Research questions:

- What differences can be observed between online shoppers and non-shoppers in terms of their demographic characteristics?
- What are the main characteristics of first online purchases across different age groups?
- What sources are typically used in the context of first online purchases?
- What is the role of intergenerational relationships? What role do younger generations play?

4. Thematic area: Artificial intelligence

Research questions:

- How is artificial intelligence perceived, and how does this differ across demographic groups, and to what extent does it depend on prior technological experience?
- In the case of an AI-based interviewer, what levels of response willingness can be observed, what factors influence this, and what differences emerge across groups?

Research methods

To examine the research questions and hypotheses outlined above, three primary studies were conducted. The first primary study (Primer I: Modes of Internet Knowledge Acquisition) was carried out in 2021 and focused on the learning modes used in acquiring internet-related knowledge, as well as on intergenerational relationships. The second study (Primer II: First Online Purchases) examined first online purchases, with particular attention to the role of intergenerational relationships. The third study (Primer III: Attitudes Toward Artificial Intelligence) investigated the adoption of artificial intelligence and the attitudes associated with it, with a specific focus on opinions regarding a practical application option, namely a virtual interviewer.

In the following sections, the data collection methods applied in the primary studies and the main characteristics of the samples are summarized (Table 1), along with the research questions and the statistical analysis methods applied by research thematic area (Table 2).

Table 1. Summary of the applied data collection methods

Study	Data collection characteristics*	Sample characteristics
Primer I: Modes of Internet Knowledge Acquisition	CATI, omnibus survey, RDD, mobile numbers, 2021	nationally representative, n=509
Primer II: First Online Purchases	CATI, omnibus survey, RDD, mobile numbers, 2023	nationally representative, n=1016
Primer III: Attitudes Toward Artificial Intelligence	CATI, omnibus survey, RDD, mobile numbers, 2024	nationally representative, n=1077

* *CATI = Computer-Assisted Telephone Interviewing*

RDD = Random Digit Dialing

Table 2. Summary of the applied statistical analysis methods

Thematic group	Research question	Hypotheses	Statistical and analytical methods
Learning modes (Primer I.)	What learning modes characterize the acquisition of internet-related knowledge, and are there differences across age groups?	<i>H1: In the acquisition of internet-related knowledge, learning modes differ across age groups; however, informal learning dominates in all (adult) age groups.</i>	Chi-square test
Impact of intergenerational relationships (Primer I.)	What role does intergenerational knowledge transfer play in this learning process?		Chi-square test
	What differences can be observed across age groups?	<i>H2: Intergenerational acquisition of internet-related knowledge shows different patterns across age groups.</i>	Chi-square test
	What role does intergenerational knowledge acquisition play in shaping internet use patterns?	<i>H3: Among older adults (60+), characteristics of intergenerational knowledge acquisition influence internet use patterns, including time spent online and the number of online activities; these outcomes depend on the age groups from whom individuals learned to use the internet.</i>	ANOVA, Kruskal-Wallis test, Mann-Whitney U test, K-means cluster analysis
First online purchase (Primer II.)	What demographic differences can be observed between online buyers and non-buyers?		Chi-square test
	What are the main characteristics of first online purchases across age groups?	<i>H4: At the time of their first online purchase, different age groups possessed different levels of internet-related knowledge.</i>	Chi-square test, ANOVA
	What sources are typically used during the first online purchase? What role do intergenerational relationships play?	<i>H5: During the first online purchase, younger individuals assist older ones.</i>	Chi-square test, ANOVA, Kruskal-Wallis test
Artificial intelligence (Primer III.)	How is artificial intelligence perceived, how does this differ across demographic groups, and to what extent does it depend on prior technological experience?	<i>H6: Acceptance of artificial intelligence is more characteristic of younger, more educated individuals and those living in large cities.</i> <i>H7: Acceptance of artificial intelligence depends on prior technological experience.</i>	Chi-square test
	In the case of an AI-based interviewer, what level of response willingness can be observed, what factors influence it, and what differences appear across groups?	<i>H8: Acceptance of an AI-based application (in this study: a virtual interviewer) primarily depends on attitudes toward artificial intelligence.</i>	Chi-square test, MDS, cluster analysis (hierarchical and K-means)

New scientific contributions

Based on the primary empirical studies, my new scientific contributions are presented in three theses, with references to the related scientific publications.

Thesis 1: Learning modes in the acquisition of internet-related knowledge

The emergence of new digital technologies in the process of secondary consumer socialization leads to changes in learning mechanisms, placing greater emphasis on informal and hybrid learning modes. When examined by age, two clearly distinct groups can be identified: individuals under the age of 40 and those aged 40 and above exhibit substantially different learning patterns.

Hypotheses related to the thesis: H1

Publications related to the thesis: 1, 2, 7, 9

The continuously changing digital environment and the technological transformations reshaping everyday life induce a re-interpretation of consumer socialization, including learning modes. Consumers belonging to different generations encountered these technologies in different ways and at different stages of their lives; consequently, their learning patterns (formal, non-formal, and informal modes) also differ. Based on the literature reviewed, the diffusion of digital technologies transforms consumer socialization and, within it, adult learning processes. The empirical findings confirmed that digital technologies influence learning mechanisms and enabled the identification of a new, hybrid learning mode (used by individuals who combine formal and non-formal learning methods). This mode is primarily characteristic of younger age groups, but it is also present among older individuals to a non-negligible extent.

The majority of younger respondents (under the age of 40) acquire internet-related knowledge through formal education as well; however, they typically complement this with informal learning, thus engaging in hybrid learning. Among older individuals (aged 40 and above), the earlier education system generally did not, or only to a limited extent, provide opportunities to acquire internet-related knowledge; therefore, non-formal learning modes play a more prominent role for them, and these modes are likely to remain relevant in the acquisition of new digital competencies. Nevertheless, learning from acquaintances is a dominant factor: most individuals aged 40 and above acquired their internet-related knowledge in this way.

In all age groups, a segment can be identified that acquires internet-related knowledge without relying on formal or non-formal education or support from acquaintances. These individuals learn independently through other informal means, such as experimentation or trial-and-error. The widespread availability of artificial intelligence and digital tools allows users to learn according to their own needs and preferences (e.g., level of knowledge, language use, level of detail in explanations) and at their own pace. Consequently, newer digital technologies, by

their very nature, may support such informal learning modes, including experimentation and exploration.

At the same time, it remains an open question how emerging digital innovations, such as the developing metaverse - where formal and non-formal education may also take place (e.g., educational service providers may appear in new forms), potentially interconnected with informal learning modes and offering an excellent environment for interactive experimentation and autonomous learning - will further shape learning modes and differentiate learning patterns across generations, and to what extent.

Thesis 2: The role of intergenerational and intragenerational knowledge transfer in the acquisition of digital competencies

The emergence of new digital technologies increases the importance of intergenerational and intragenerational knowledge transfer in the process of digital consumer socialization. This manifests in different patterns across different digital competencies and age groups as well. The complexity of the process is further reflected in the influence of participants' level of digital knowledge, life stage, and cultural factors, which may further nuance these dynamics. The empirical findings also indicate that inter- and intragenerational knowledge transfer do not function as alternatives but rather complement each other in contributing to the acquisition of digital competencies.

Based on empirical evidence, three major age groups - young adults, middle-aged adults, and older adults - can be distinguished in terms of how they utilize intergenerational and intragenerational relationships in acquiring digital competencies.

Hypotheses related to the thesis: H2, H3, H4, H5

Publications related to the thesis: 3, 4, 7, 9

The diffusion of digital technologies has a significant impact on knowledge transfer processes both between and within generations. The empirical findings highlight the complexity of these processes: patterns of knowledge acquisition differ across digital competencies and vary by age. While younger generations play a dominant role in knowledge transfer in the context of general internet use, older individuals frequently assist younger ones in the domain of online shopping. Among middle-aged individuals, peer relationships play a dominant role in knowledge transfer.

Among the youngest adults (aged 18-29), when internet-related knowledge is acquired through social relationships, assistance is provided primarily by older individuals or peers. In this group, the role of older individuals is the most pronounced in this learning process (43% learned from older acquaintances). At the same time, this age group is the most active in teaching others internet-related knowledge. Although they assist both younger individuals and peers, they most frequently support older individuals. In the context of online shopping,

reliance on the experience of older individuals is even more pronounced, alongside the continued importance of peers.

Among individuals aged 30-39, peers play a dominant role in the acquisition of general digital knowledge when social support is utilized. Intergenerational relationships display a mixed pattern in this group: knowledge transfer from older individuals is also significant, while the role of younger individuals is not negligible. In terms of teaching others, they primarily support older individuals. In online shopping as well, peers constitute the most influential source of support. Overall, the findings suggest that family situation and life stage may play a decisive role for this group. Similar patterns are observed among those aged 40-49, although the configuration of inter- and intragenerational knowledge transfer differs somewhat. In the case of general internet-related knowledge, peers and younger individuals are equally important, while the role of older individuals is substantially lower. However, in first online purchases, peers clearly represent the primary source of support, while the roles of both younger and older individuals are less pronounced. Overall, among middle-aged adults (aged 30-49), peers represent the primary source of support in acquiring digital competencies.

Among older generations (aged 50 and above), knowledge transfer directed from younger to older individuals is clearly dominant. The majority (approximately 80%) learned the basics of internet use from younger family members or acquaintances, and younger individuals also provided the primary support during first online purchases (30% among those aged 50-59 and 42% among those aged 60 and above). Among the oldest group (aged 60+), the proportion of individuals who did not assist others in learning internet-related skills is particularly high (49%). The findings suggest that older individuals (60+) who learn from multiple age groups engage in a broader range of online activities and are more active in online shopping.

The low proportion of older individuals who do not rely on social relationships for acquiring digital knowledge highlights the crucial role of external support in determining whether older consumers become digitally competent. Overall, the results clearly indicate not only that age is a key determinant in the use of inter- and intragenerational relationships in digital knowledge acquisition, but also that the specific object of learning strongly influences these patterns. In the case of online shopping, the partial persistence of traditional roles is likely, as decision-making related to financial matters is also a key factor. These processes may be further nuanced by cultural factors, as societies with different social, economic, and levels of digital development may relate differently to various forms of knowledge sharing.

Thesis 3: Dynamics of attitudes toward AI-based tools

The use of AI-based tools influences technological attitudes and preferences in different ways. While AI-based tools are an integral part of the socialization process for younger individuals, acceptance and use among older individuals still require support, primarily provided by socialization agents (family members and peers) and self-socialization processes. At the same time, AI-based tools may contribute to reducing the digital divide,

particularly through the decisive role of the quality of the first interaction among older users.

Hypotheses related to the thesis: H6, H7, H8

Publications related to the thesis: 5, 6, 8

While internet penetration is close to 100% except among the oldest age groups, acceptance of AI-based technologies and the use of AI-based applications are still characteristic of only a smaller segment of society and are strongly associated with age. Educational attainment and prior technological experience also exert a significant influence. Younger generations are more likely to use these tools than older generations. For younger individuals, AI - similarly to the internet - already constitutes an integral part of the set of socialization agents. For older individuals, however, these tools generally still represent a novelty and must be learned.

Based on multidimensional scaling (MDS) analysis of attitudes toward virtual interviewers, four respondent groups can be identified: technology skeptics, moderately open users, cautious pragmatists, and technology-friendly users. These clusters help to explain the formation of attitudes and the factors influencing trust in AI-based tools. One of these groups (moderately open users) appears to value the communication itself more than whether the interaction is mediated by a human or a machine. Based on these findings, the quality of the first interaction may play a particularly important role in shaping technological attitudes among older age groups; consequently, AI-based tools may help reduce the digital divide. It should also be noted that initial support may be necessary in cases of difficulties or disruptions, in which previously examined social relationships may play a significant role. Accordingly, for older generations, the functionality of the tools - such as communication and practical usability - along with ease of use and support, may be critical, while for younger users, interactivity and opportunities to experiment with new features may be the most important factors.

List of references

- Barber, N. A. (2013). Investigating the Potential Influence of the Internet as a New Socialization Agent in Context with Other Traditional Socialization Agents. *Journal of Marketing Theory and Practice*, 21(2), 179-194. <http://dx.doi.org/10.2753/MTP1069-6679210204>
- Berger, P. L., Luckmann, T. (1967). *The Social Construction of Reality*. Allen Lane the Penguin Press, London.
- Brandtzaeg, P. B., Skjuve, M. Følstad, A. (2022). My AI Friend: How Users of a Social Chatbot Understand Their Human-AI Friendship. *Human Communication Research*, 48(3), 404-429. <https://doi.org/10.1093/hcr/hqac008>
- Collins, H. Why artificial intelligence needs sociology of knowledge: parts I. and II. *AI and Society* (2024). <https://doi.org/10.1007/s00146-024-01954-8>
- Ekström K. M. (2006). Consumer Socialization Revisited. In Belk, R. W. (Ed.) *Research in Consumer Behavior (Research in Consumer Behavior, Vol. 10)*, Emerald Group Publishing Limited, Bingley, 71-98. [https://doi.org/10.1016/S0885-2111\(06\)10004-6](https://doi.org/10.1016/S0885-2111(06)10004-6)
- Goodwin, C., Sewall, M. (1992). Consumer Socialization Associated With Relocation to a New Community: a Framework and Pilot Study. *Advances in Consumer Research* 19, 532-540.
- Hill, W. W., Beatty, S. E. (2011) A. model of adolescents' online consumer self-efficacy (OCSE). *Journal of Business Research*, 64(10), 1025-1033, <https://doi.org/10.1016/j.jbusres.2010.11.008>
- Kenesei, Z. (2020). A. technológia használatának segítő tényezői idős korban. *Vezetéstudomány Budapest Management Review*, 51(10), 15-28. <https://doi.org/10.14267/VEZTUD.2020.10.02>
- Kolos, K., Kenesei, Z., Somosi, Á. (2014). Idősebb fogyasztók technológiai kompetenciáinak meghatározó tényezői. In Hetesi Erzsébet, Révész Balázs (szerk.), „Marketing megújulás” – *Marketing Oktatók Klubja 20. Konferenciája előadásai*. Szegedi Tudományegyetem Gazdaságtudományi Kar, Szeged.
- KSH (2024a): Az internethasználók arányának alakulása a lakosságon belül az utolsó használat időpontja szerint. Retrieved 16.01.2024. from https://www.ksh.hu/stadat_files/ikt/hu/ikt0017.html

- KSH (2024b): Az internetes vásárlások aránya az utolsó vásárlás időpontja szerint, Retrieved 16.01.2024. from https://www.ksh.hu/stadat_files/ikt/hu/ikt0019.html
- Lee, C. K. C., Conroy, D. M. (2005). Socialisation through Consumption: Teenagers and the Internet. *Australasian Marketing Journal*, 13(1), 8-19.
- Lee, C. K. C., Conroy, D. M., Hii, C. (2003). The Internet: a consumer socialization agent for teenagers. In: *Proceedings of the ANZMAC 2003 Conference*, Adelaide, 1–3 December, 1708–1715. Retrieved 26.02.2023. from <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.127.1698&rep=rep1&type=pdf>
- Minahan, S., Huddleston, P. (2010). Shopping with mum – mother and daughter consumer socialization. *Young Consumers*, 11(3), 170-177. <https://doi.org/10.1108/17473611011074241>
- Mishra, A., Maheswarappa, S. S., Colby, C. L. (2018). Technology readiness of teenagers: a consumer socialization perspective. *Journal of Services Marketing*, 32(5), 592–604. <https://doi.org/10.1108/jsm-07-2017-0262>
- Moreira, C. S. C., Casotti, L. M., Campos, R. D. (2018). Consumer socialization in adulthood: challenges and directions for research. *Cadernos EBAPE.BR*, 16(1), 119-134. <http://dx.doi.org/10.1590/1679-395157008>
- Moschis, G. P. (2012). Consumer Behavior in Later Life: Current Knowledge, Issues, and New Directions for Research. *Psychology & Marketing*, 29: 57-75. <https://doi.org/10.1002/mar.20504>
- Moschis, G. P., Churchill, G. A. (1978). Consumer Socialization: A Theoretical and Empirical Analysis. *Journal of Marketing Research*, 15(4), 599-609. <https://doi.org/10.2307/3150629>
- Mowen, J. C. (1987). *Consumer behavior*. Macmillan Publishing Company, New York.
- Nass, C., Moon, Y. (2000). Machines and mindlessness: Social responses to computers. *Journal of Social Issues*, 56(1), 81–103. <https://doi.org/10.1111/0022-4537.00153>
- NRC (2024). Élet 3.0 – Elveszi-e munkádat a mesterséges intelligencia? NRC. Retrieved 23.01.2024. from <https://nrc.hu/nrc-podcast/mesterseges-intelligencia-nemzetek-kozotti-harc>
- Peltier, J. W., Dahl, A. J. Schibrowsky, J. A. (2024), Artificial intelligence in interactive marketing: a conceptual framework and research agenda, *Journal of Research in Interactive Marketing*, Vol. 18 No. 1, 54-90. <https://doi.org/10.1108/JRIM-01-2023-0030>

- Podbolotova, M., Dmitrieva, V., Reznikova, R., Grishaeva, Y., Tkacheva, Z. (2021). Digital socialization of students by means of educational media. *SHS Web of Conferences*, 98. <https://doi.org/10.1051/shsconf/20219805015>
- Pólya, É., László, É. (2019). *Fogyasztói magatartás*. Neumann János Egyetem, Kecskemét. ISBN 978-615-5817-48-9. Retrieved 19.11.2024. from <http://nbn.urn.hu/N2L?urn=nbn:hu-162088>
- Schiffman L. G., Wisenblit J. L. (2015). *Consumer Behavior*. Global Edition, 11th Edition, Pearson, Harlow.
- Smith, R. B., Moschis, G. P. (1984). Consumer Socialization of the Elderly: an Exploratory Study. In *NA - Advances in Consumer Research*, 11, Kinnear, T. C. (eds), Provo, UT: Association for Consumer Research, 548-552.
- Thaichon, P. (2017). Consumer socialization process: The role of age in children's online shopping behavior. *Journal of Retailing and Consumer Services*, 34, 38-47. <https://doi.org/10.1016/j.jretconser.2016.09.007>
- Ward S. (1974): Consumer socialization, *Journal of Consumer Research*, Vol. 2, September, 1-13.
- Watne, T., Brennan, L. (2009). Secondary consumer socialisation of adults. In Tejib, D. (ed.) *Proceedings of the ANZMAC 2009 Conference*, Melbourne, Australia, 30 November-2 December, 1-8.
- Watne, T., Lobo, A., Brennan, L. (2011) Children as agents of secondary socialisation for their parents. *Young Consumers Insight and Ideas for Responsible Marketers*, 12(4), 285-294. <https://doi.org/10.1108/17473611111185841>

Scientific publications related to the theses

1. Danó, G. (2006a). Hungarian Netizens. In: BMF, KGK (szerk.), *Business sciences: Symposium for Young Researchers [Fikusz 2006]*, 2006: Budapest, November 3, 2006: proceedings, Budapesti Műszaki Főiskola, Budapest, Magyarország, 39-47.
2. Danó, G. (2006b). Kommunikációs szokások tegnap és ma. *Marketing és Menedzsment*, 40(4), 55-64.
3. Danó G. (2016). Tinédzser fiúk és lányok a neten. In: Fehér A., Kiss V. Á., Soós M., Szakály Z. (szerk.), *EMOK XXII. Országos konferencia 2016 Tanulmánykötet: Hitelesség és értékorientáció a marketingben*, Debreceni Egyetem Gazdaságtudományi Kar, Debrecen, Magyarország, 749-769.
4. Danó, G. (2018). Hatások és kölcsönhatások. In: Gabos, E. (szerk.), *A média hatása a gyermekekre és fiatalokra IX*. Budapest, Magyarország: Nemzetközi Gyermekmentő Szolgálat Magyar Egyesület. 54–60
5. Danó, G. és Kovács, S. (2025). A Mesterséges Intelligencia gyakorlati alkalmazásának lehetőségei a marketingkutatásban, *Marketing & Menedzsment*, 58 (Különszám I. EMOK), 25-34. <https://doi.org/10.15170/MM.2024.58.KSZ.01.03>
6. Danó, G., Kovács, S., és Surman, V. (2025). Challenges and Opportunities of AI in Market Research: Virtual Interviewers. *Tér - Gazdaság - Ember Journal of Region, Economy and Society*, 13(1). <https://doi.org/10.14513/tge-jres.00413>
7. Danó, G., Kovács, S. és Surman, V. (2025). Secondary Consumer Socialisation on the Internet: Intergenerational Learning. *Periodica Polytechnica Social and Management Sciences*, <https://pp.bme.hu/so/article/view/24077>
8. Danó, G., Kovács, S., és Surman, V. (2026). AI meets marketing research: Virtual interviewers and the challenges of regional and demographic adoption. *International Journal of Information Management*, 86, 102985. <https://doi.org/10.1016/j.ijinfomgt.2025.102985>
9. Kovács, S., Danó, G. és Surman, V. (2025). Másodlagos fogyasztói szocializáció - online vásárlás. *Vezetéstudomány Budapest Management Review*, 56(3).

Additional scientific publications

10. Antalóczy T., Danó G., Kósa É., László M. (2017). Digitális Galaxis, 20 év kutatás a médiáról és a gyerekekről. Budapest: Nemzetközi Gyermekekmentő Szolgálat Magyar Egyesület.
11. Bernschütz, M., Danó, G., Kovács, I., Petruska, I. (2020). Internethasználati szokások feltérképezése a Rogers-féle elmélet szerint a magyarországi idősezők körében. *Vezetéstudomány Budapest Management Review*, 51(KSZ), 35-48. <https://doi.org/10.14267/VEZTUD.2020.KSZ.04>
12. Danó, G., Bernschütz, M. és Kovács, I. (2020). Az idősebb generációk online tevékenységének rogersi csoportosítása. In: Ercsey, I. (szerk.), *Marketing a digitalizáció korában*, 161–172.
13. Hartl K., Danó G. (2023). Hazai online és offline jogafogyasztói szokások változása a Covid-19 tükrében. *Marketing és Menedzsment*, 56(4), 67-77. <http://doi.org/10.15170/MM.2022.56.04.07>
14. László, M., Danó, G. (2015). Akik példaképek és akik nem in: Kósa É., Berta J. (szerk.): *Médiaszocializáció*. Budapest, Wolters Kluwer. 179-226.
15. Surman, V., Tóth, Z. E. és Danó, G. (2022). Defining Service Quality Attributes at Different Levels of Operation in Higher Education Institutions: How Could the Service Quality Perceptions of Students Contribute to a Better Understanding of Improvement Directions? *Zagreb International Review of Economics and Business*, 25(S1), 1-15. <https://doi.org/10.2478/zireb-2022-0021>
16. Vasné E. M., Danó, G. (2013). Hazai e-vásárlási szokások fő jellemzői és dinamikája. In: Sikos, T. T. (szerk.), *A válság hatása a kiskereskedelemre*, Szent István Egyetemi Kiadó, Gödöllő, Magyarország, 101–129.