

<https://doi.org/10.16926/eat.2026.15.11.en>

eLocator/Article ID: eat-2026-npb-03

Dota SZYMBORSKA

<https://orcid.org/0000-0003-3983-3934>

WSB Merito University in Warsaw

e-mail: dorota.szymborska@warszawa.merito.pl

Katarzyna ZIĘBAKOWSKA-CECOT

<https://orcid.org/0000-0002-1414-3630>

Casimir Pulaski Radom University

e-mail: ziebakowska@uthrad.pl

The use of artificial intelligence tools by parents of young children – parental self-efficacy and ethical issues

How to cite [jak cytować]: Szymborska, D., & Ziębakowska-Cecot, K. (2026). The use of artificial intelligence tools by parents of young children – parental self-efficacy and ethical issues. *Edukacyjna Analiza Transakcyjna*, 15, Article eat-2026-npb-03. <https://doi.org/10.16926/eat.2026.15.11.en>

Abstract

This article examines the use of AI tools in everyday caregiving and educational practices by parents of young children (aged 0–6 years); N=103. The aim of the study was to understand the extent of AI use in family life, the perception of benefits and concerns associated with it, and factors differentiating the use of AI. A survey questionnaire and the Generalized Self-Efficacy Scale (GSES) were used. The study identified two groups of parents: AI users (45.6%) and non-users (54.4%). Respondents most often use AI incidentally and on a task-by-task basis. These tools are primarily used to generate ideas for activities, explain difficult issues, and support daily organization; however, they do not translate into a reduction in parents' time burden. Respondents express concerns about the effectiveness of privacy protection when using AI. Parents who do not use AI tools attribute this to a lack of need, a lack of trust in the credibility of generated content, and a lack of data protection. Some express a willingness to use AI. The level of self-efficacy does not differentiate between AI users and non-users. The research results allowed us to formulate a thesis about the selective openness of parents towards AI and practical recommendations in the area of supporting families in developing digital competences.

Keywords: artificial intelligence, large language models, use of AI in family life, parents of young children, self-efficacy.

Introduction

The development of artificial intelligence (AI) is reshaping nearly every sphere of contemporary life, including family functioning. In the digital development of young children, parents remain the primary role models, influencing children's attitudes, habits, and technology-related behaviours (Ogonowska, 2022). Consequently, the concept of digital parenting has expanded beyond traditional mediation to include technological competence, critical thinking, empathy, and the ability to guide children safely through increasingly complex digital environments (Wójcicka et al., 2025). Recent studies fur-

ther suggest that AI literacy should be regarded as an integral component of digital parenting, with parents relying primarily on active mediation rather than restrictive control (Mukhtar et al., 2025; Remiya, 2026).

A particularly important role in this transformation is played by large language models (LLMs), which enable natural-language interaction and support personalized communication (Mariani et al., 2023). They are the foundation of so-called Conversational Artificial Intelligence (CAI), which enables dialogue with a machine in a way that is natural for humans.

Applications such as ChatGPT, Google Gemini, and Microsoft Copilot are increasingly used by parents to search for information, organize everyday family life, and obtain educational or parenting support. This trend reflects the broader digitalization of family practices and has become an emerging topic of research, including studies examining parents' attitudes toward AI in children's education and upbringing (Mariani et al., 2023; Nazaruk et al., 2025).

Despite their growing popularity, AI tools evoke mixed reactions. Parents appreciate their educational and organizational value while simultaneously expressing concerns about children's socio-emotional development, privacy, and the reliability of AI-generated content (Wójcicka et al., 2025). Although conversational AI may function as a form of "digital parenting companion" by offering guidance or educational suggestions (Pakdemirli, 2026), concerns remain regarding excessive reliance on technology and the possible weakening of parental authority (Andreeva et al., 2025). There is evidence linking parents' digital self-efficacy with digital parenting attitudes, which helps differentiate general competence beliefs from technology- and parenting-specific efficacy perceptions (Fidan & Olur, 2023). These tensions justify further investigation into how parents integrate AI into everyday parenting practices and how they balance its practical benefits with ethical considerations.

Use of AI by Parents

Many parents turn to AI to strengthen their sense of agency in everyday caregiving and educational decisions. Seeking support from conversational systems may also reflect concerns about social evaluation of parenting, particularly among parents who fear criticism or stigmatization, including those raising children with disabilities (Żabińska, 2024) or experiencing mental health challenges (Livingston et al., 2025). AI-based conversational agents offer easily accessible, non-judgemental support and may encourage reflection, provide information, and reduce feelings of isolation (Ma et al., 2023). Studies involving 1006 students using Replika application further indicate that perceived social support may contribute to improved well-being (Maples et al., 2024). At the same time, researchers caution that these systems only simulate empathy (Kurian, 2025a) and may expose users to inaccurate advice, privacy risks, emotional dependence, and the absence of professional supervision (Laestadius et al., 2022).

Within family life, the potential applications of LLMs can be considered in the following dimensions:

- *Child education and development.* Generative artificial intelligence (GenAI) enables the creation of personalized teaching materials that support children's development, e.g., linguistic and emotional (Elmorsy, 2024).
- *Emotional and mental support for parents.* Interactions with CAI can reduce feelings of loneliness, improve mood, and support self-reflection (Ma et al., 2023).
- *Pedagogical and therapeutic support.* AI-based technologies can facilitate guidance when access to specialist services is limited (Munzer, 2024).
- *Digital safety and media literacy.* Parents using LLMs can discuss online information and responsible technology use (Wójcicka & Słupska, 2025).

Despite these opportunities, the literature consistently identifies several limitations. AI-generated responses may create an illusion of empathy while relying on probabilistic rather than expert knowledge, increasing the risk of misinformation or so-called hallucinations (Ma et al., 2023). Excessive dependence on conversational systems may also weaken parents' confidence in making independent educational decisions (Mariani et al., 2023). Equally important are concerns regarding data privacy,

ethical responsibility, and the processing of sensitive family information. As Punch and Oancea (2014) note, educational research should always consider whether desirable outcomes justify ethically questionable means. Similar dilemmas have recently been discussed in relation to the responsible design of child-oriented conversational AI, particularly regarding the balance between safety, engagement, personalisation, and privacy (Kurian, 2025b).

The dissemination of generative AI tools (including large language models, LLMs) results in their entry into family practices: from planning everyday life and searching for information to supporting children's educational activities. In research across various contexts, parents point to the pragmatic value of conversational solutions (e.g., chatbots) as accessible and convenient. At the same time, the literature emphasizes the dual nature of AI's role in the family: on the one hand, it can streamline tasks and support care; on the other hand, it generates risks regarding privacy and the shifting of human agency in family relations (Glassman et al., 2021).

These concerns are also reflected in studies examining parents' information-seeking behaviours. Although AI is increasingly treated as a convenient first step when searching for information about children's health or development, parents remain aware that generated responses require verification and should not replace professional consultation. Consequently, AI appears to function primarily as an initial source of guidance rather than an authoritative decision-maker (Mahmutović Babić et al., 2025).

Methodology

Research Objective and Research Problems

The growing role of AI tools in family life and their potential relationship with parental self-efficacy justify further empirical investigation. This study examined the use of AI tools, including LLMs, by parents of young children (0–6 years) and explored their perceived usefulness in parenting and educational practices. Although previous studies have demonstrated the educational potential of LLMs (e.g., Ma et al., 2023; Mariani et al., 2023; Elmorsy, 2024; Wójcicka et al., 2025), evidence regarding their practical use within parent–child relationships remains limited. Particular attention was given to parents' generalized self-efficacy, understood after Bandura (1977) as the belief in one's ability to effectively manage challenging situations (e.g. to adopt and learn new technologies).

The study addressed four research questions:

- 1) What is the scope and nature of AI use in everyday parenting and educational practices?
- 2) What benefits, risks, and ethical concerns do parents associate with AI?
- 3) Which factors encourage or discourage AI use?
- 4) Does generalized self-efficacy differentiate AI users from non-users?

Methods, Techniques, and Research Tools

The quantitative-exploratory study was conducted using the diagnostic survey method. The primary research tool was an original, structured survey questionnaire consisting of 58 items. The survey included a mix of single-choice questions (e.g., regarding the frequency of AI use), multiple-choice questions (e.g., regarding the purposes of using AI and the types of devices used), and items evaluated on a 5-point Likert scale (1 = "strongly disagree" to 5 = "strongly agree", used for assessing attitudes, perceived utility, and ethical acceptability).

Additionally, the General Self-Efficacy Scale (GSES) was applied to measure the level of general self-efficacy. The psychometric properties of the GSES scale (by Schwarzer & Jerusalem, adapted by Juczyński) meet the criteria for diagnostic tests, and the scale has 10 statements serving to measure the global index of self-efficacy.

The construction of the questionnaire was inspired by the Technology Acceptance Model (TAM) and recent literature on digital parenting and parental mediation. According to TAM, technology use is explained by perceived usefulness, perceived ease of use, attitudes toward use and behavioural in-

tention. Recent research has shown that perceived usefulness and positive attitudes significantly predict parents' use of ChatGPT, whereas parental encouragement is the strongest predictor of children's use (Xue et al., 2026).

Similar to research involving young children, where the impact of the power imbalance between children and adult researchers must be minimised, research with parents of varying levels of digital competence also required a balanced narrative, not suggesting the perception of reality through the prism of the researchers' competencies (Hendry et al., 2024). Thus, prior to the main data collection, the questionnaire underwent a content validity evaluation and a pilot test on a small group of parents (n=5) to ensure the clarity and comprehensibility of the questions; minor linguistic adjustments were made based on their feedback.

Study Procedure

Respondents who confirmed their status as a parent of a child aged 0–6 years and expressed informed consent to participate could join the study. The link to the online form was disseminated in the period of October–November 2025 through kindergartens, social media, and academic contact networks.

The study complied with established principles of social research ethics (Pilch & Bauman, 2017). Participation was voluntary and anonymous, respondents could withdraw at any stage, and all procedures followed the European Union's personal data protection regulations (Regulation (EU) 2016/679).

Results

The study sample consisted of 103 parents of young children (aged 0–6). The majority of respondents were women (86.4%). The largest age groups were parents aged 30–34 (36.9%) and 35–39 (35.0%). In terms of education, respondents with a master's degree predominated (63.1%). Regarding family structure, more than half of the participants had two children (55.3%), while 29.1% had one child. The sample is highly digitized: virtually all respondents have access to a smartphone and a computer, and a significant portion also uses tablets, smart TVs, and smart speakers in their households.

Two groups of respondents were identified in the study: users of AI tools (45.6%) and non-users (54.4%). 56 parents reported not using AI tools in matters related to the child, while 47 parents answered positively, with 16.5% of AI users reporting regular use, i.e., at least once a week (n=17), and 29.1% use them occasionally, i.e., once a month or less frequently (n=30). The most frequent purposes of using AI tools in the context of the child are presented in Table 1.

Tab. 1

The most frequent purposes of using AI by respondents in the context of the child (N=47, 100%)

Purposes of AI use:	N	%
ideas for play/ developmental activities	20	42.6%
health/ diet/ sleep disorders	15	31.9%
explaining difficult topics to the child	14	29.8%
parenting support (issues regarding emotions, relationships)	14	29.8%
creating/ telling fairy tales, rhymes	8	17.0%
support for the parent (time, stress)	8	17.0%
support in learning language/ reading/ counting	5	10.6%
translations	5	10.6%

Source: own elaboration.

It was most frequently indicated that the generated answers are understandable (32) and useful (25). Their adjustment to the child's age (12), the necessity of verification (10), as well as their creative, inspiring character (8) were emphasized.

Regarding the use of the child's sensitive data by AI tools, the majority declares that they never do this (36), 8 – sporadically (after anonymization), 3 – sometimes. Similar attitudes were declared regarding the child's exposure to AI-generated content: 32 never do this, 6 – rarely, 8 – sometimes, 1 – often. Parents' specific attitudes towards AI are detailed in Table 2.

Tab. 2

Parents' attitudes towards AI on a Likert scale, from 1 to 5 (N=47)

Statements regarding AI	M	SD	median
AI helps to find ideas for activities faster	3.72	1.08	4
I am afraid that AI increases "screen time"	3.09	1.43	3
AI can be frustrating	2.93	1.20	3
AI replaces my creativity	2.62	1.31	3
Thanks to AI, I save time for my child	2.30	1.32	2
AI answers inspire conversations with the child	2.09	1.06	2

Source: own elaboration.

The results indicate parents' caution regarding privacy and the moderate inclusion of the child in contact with AI content. Furthermore, when evaluating ethical scenarios, parents strongly rejected the idea of replacing professional diagnosis and therapy with AI (mean score of 1.98 on a 1–5 scale). Parents' various ethical scenarios are presented in Table 3.

Tab. 3

The mean value of the ethical scenarios on a Likert scale, from 1 to 5 (N=47)

Imagine the following situations and rate how acceptable each one is (use a scale from 1 to 5, where 1 indicates low acceptability).	M
Ethical scenarios: A parent asks AI...	
to create a plan for helping their child manage emotions and gives it to the child's teacher	1.70
to generate a therapeutic story based on information about the child's fears	2.83
for dietary advice concerning the child's food intolerance	2.87
to assess the child's behaviour and provide a diagnosis	1.98

Source: own elaboration.

GSES and AI Use – Discussion

The GSES scale was fully completed by 97 eligible respondents. The reliability of the scale was very high (Cronbach's $\alpha = 0.912$). For the overall scale score in the range of 10–40 points, the results were: $M = 30.80$, $SD = 5.34$ (min = 12, max = 40), placing the respondents in a moderately high area of generalized self-efficacy.

The comparison of GSES results between AI users ($N=46$; $M = 31.20$; $SD = 5.41$) and non-users ($N=51$; $M = 30.45$; $SD = 5.30$) did not show statistically significant differences.

An independent samples Welch's t-test yielded: $t(100.93) = 1.13$, $p = .260$, with a small effect size (Cohen's $d = 0.22$) and a 95% Confidence Interval for the difference $[-1.01, 3.68]$. To provide a more granular understanding, respondents were further divided into three groups based on frequency: non-users ($n=51$), occasional users (once a month or less, $n=29$), and regular users (at least once a week, $n=17$). A one-way analysis of variance (ANOVA) confirmed no significant differences among these three groups: $F(2, 100) = 0.65$, $p = .526$, with a negligible effect size ($\eta^2 = 0.013$). Thus, generalized parental self-efficacy is not significantly differentiated by AI usage frequency.

To move beyond descriptive statistics, the relationships between AI use, demographics, and attitudes were analysed. Chi-square tests of independence revealed that while gender ($\chi^2 = 4.12$, $p = .128$)

and education level ($\chi^2 = 0.92$, $p = .630$) did not significantly differentiate AI users from non-users, age was a significant factor ($\chi^2 = 4.93$, $p = .026$): parents aged 34 and younger were significantly more likely to adopt AI tools. Furthermore, correlation analyses among AI users (Spearman's ρ) indicated that the frequency of AI use is not strongly tied to the generalized GSES score ($r = -0.07$, $p = .635$), nor is GSES significantly correlated with perceived utility ($r = -0.05$, $p = .758$) or privacy fears ($r = 0.06$, $p = .684$). This suggests that decisions regarding AI adoption are driven more by specific pragmatic needs, trust, and age than by global self-efficacy.

The most frequently reported reasons for not using AI in parenting were the lack of need (76.8%), lack of trust (37.5%), and ethical or privacy concerns (12.5%), whereas lack of time or knowledge was mentioned considerably less often. Despite this scepticism, respondents expressed moderate openness to future use ($M = 4.79$ on a 10-point scale), suggesting that greater transparency, stronger privacy safeguards, and increased trust could encourage wider adoption.

These findings support the interpretation of cautious optimism toward AI in family life. Parents recognise the usefulness of AI for educational and organisational purposes, yet remain reluctant to rely on it in situations involving children's health, development, or sensitive family matters. Neutral responses observed in some studies suggest continuing uncertainty regarding the quality and consequences of AI use (Glassman et al., 2021). This pattern is consistent with the Technology Acceptance Model (TAM), according to which perceived usefulness encourages adoption, whereas concerns regarding privacy, transparency, and trust reduce behavioural intention. Rather than rejecting AI altogether, parents appear to adopt a selective openness strategy, limiting its use to clearly defined, task-oriented activities while avoiding applications requiring expert judgement or involving sensitive personal data.

An important implication concerns parental mediation and competence. Excessive use of digital tools may reduce face-to-face interaction and weaken concentration; therefore, parental mediation should not rely solely on restrictions. Parents can actively scaffold children's interactions with conversational tools by encouraging critical reflection and establishing ethical and security boundaries, thereby adopting a supportive and educational approach to AI use.

The present results are consistent with previous studies indicating that trust in AI remains conditional and context-dependent. Parents generally perceive AI as an accessible source of preliminary information, while recognising that important educational, developmental, or health-related decisions require professional consultation (Mahmutović Babić et al., 2025). Similar concerns regarding privacy, data protection, and the preservation of family relationships have also been reported in studies on digital parenting and sharenting (OECD, 2025; Sobczak, 2023). Although technological optimism appears stronger among adolescents and in some cultural contexts (Farisal, 2025; Kapania et al., 2022), the parents surveyed in the present study clearly distinguished between educational support and the delegation of parental or expert responsibilities to AI, reflecting broader concerns that conversational technologies may reduce direct human involvement when they begin to substitute rather than support parent-child interaction.

From a practical perspective, these findings suggest that future educational initiatives should focus on strengthening AI literacy among parents, particularly in relation to critical evaluation of AI-generated content, privacy protection, and responsible data sharing. Educational institutions may play an important role by providing reliable guidance on the opportunities and limitations of AI while promoting its use as a supportive educational tool rather than a substitute for professional expertise or family relationships.

Finally, the GSES findings indicate that parents demonstrate a moderately high level of generalized self-efficacy, which does not differentiate AI users from non-users. This suggests that AI functions primarily as a complementary resource supporting parental decision-making rather than replacing parents' own competences and confidence.

In contrast to the above, children and teenagers consider AI a neutral "expert". Approximately 30% of US teenagers consider conversations with it to be as satisfying as with peers (Common Sense Media, 2023). Some researchers warn that excessive reliance on AI may weaken family bonds and parental

authority. Pawlak (2025) notes that "humanizing" AI may disrupt emotional development – cases of teenagers establishing quasi-relationships with chatbots signal disturbing changes in the understanding of friendship and closeness, which also happens to adults.

Conclusions

The results of this exploratory research reveal a specific pattern of parental behaviour towards artificial intelligence, which we operationalize as "selective openness". Research on families in a mediatized environment should be open to new phenomena and take into account constructivist narratives due to the diversity of their experiences (Zbróg, 2024), as should research involving children. The concept of "selective openness" differs significantly from general ambivalence or mere pragmatic technology use. While general ambivalence implies a state of pervasive uncertainty, and pragmatism focuses solely on immediate utility, selective openness is a deliberate compartmentalization of technology use based on perceived risk and ethical boundaries. The survey data explicitly support this operationalization: parents readily adopt AI in low-risk, high-utility areas (e.g., generating ideas for play, reported by 42.6% of users, or explaining difficult topics), but they set strict boundaries in sensitive, high-risk domains. This is evidenced by the firm rejection of using AI for professional diagnosis (mean acceptability 1.98 out of 5) and the conscious refusal to share children's sensitive data (with the vast majority of users declaring they never do so).

While our cross-sectional study provides a valuable snapshot of current parental attitudes, the methodology does not allow for determining the long-term impact of AI on family relationships, parental authority, children's emotional development, or mental health. Claims regarding the potential weakening of family bonds or the psychological effects of excessive reliance on AI represent theoretical problems emerging from the literature rather than direct consequences of our survey data. Consequently, these areas indicate critical directions for future longitudinal and qualitative research, which should further explore families in a mediatized environment.

Based on the presented analysis, practical recommendations can be formulated. To ensure methodological rigor, they have been divided into two categories: those directly stemming from our empirical data, and those derived from the broader literature review and social context.

Recommendations based directly on empirical results:

- *Parent education on privacy and AI limitations.* Since parents in the study explicitly expressed fears regarding data protection and a lack of trust in AI-generated content, targeted educational initiatives (e.g., conducted by kindergartens and nurseries) should focus on teaching data anonymization techniques and raising awareness of AI "hallucinations."
- *Promoting critical use of AI as an assistant, not a substitute.* As parents demonstrated "selective openness" by firmly rejecting AI in diagnostic roles, educational messaging should reinforce this healthy boundary. AI should be actively promoted strictly as a parental assistant rather than a replacement for expert judgement or human empathy.

Recommendations derived from literature and broader social context:

- *AI standards in care and educational institutions.* While only indirectly related to parental home use, the literature highlights the necessity of institutional regulations (Pakdemirli, 2026). Clear policies regarding the permissible use of AI in pedagogical diagnosis and therapy should be established by institutions to protect children's well-being.
- *Promoting digital hygiene.* Addressing the broader concerns identified in theoretical frameworks, there is a systemic need to protect family face-to-face interactions and the mental health of the youngest generation from the risks of technoference, ensuring that digital tools support rather than disrupt family bonds.

These conclusions align with studies explicitly focused on how parents perceive AI in children's education and upbringing, reinforcing the need for research and practice-oriented guidance for families (Nazaruk et al., 2025). The survey results inspire further mixed-methods research to show, among

others, the emotional and educational dynamics related to technology. It is also worth examining the perspective of children, especially in the context of their first contacts with generative conversational systems.

Limitations

An important methodological limitation of this study is the application of the General Self-Efficacy Scale (GSES). The GSES measures a generalized, global trait of self-efficacy, which is relatively stable across different situations. The lack of statistically significant differences between AI users and non-users might stem from the fact that general self-efficacy is too broad of a construct to capture nuanced technological behaviours. Future studies should employ domain-specific scales, such as Digital Parenting Self-Efficacy or Technological Self-Efficacy, which are better tailored to the specific context of AI adoption and digital mediation, and might reveal differences that a generalized measure could not capture.

Declaration of AI Usage

AI tools (ChatGPT GPT-4 and Google Gemini Advanced for the Academy) used for: editing and proofreading the text, verifying the statistical analyses. All content generated this way, was verified by the authors for substantive accuracy, reliability, and truthfulness.

References

- Andreeva, Y., Fakhrutdinova, L., Dautova, R., & Teleguzova, D. (2025). Phenomena of influence of household artificial intelligence on child-parent relations in the family space. *Education and Self Development*, 20(2), 97–109. <https://doi.org/10.26907/esd.20.2.08>
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behaviour change. *Psychological Review*, 84(2), 191–215.
- Ciechowska, M., & Szymańska, M. (2017). *Wybrane metody jakościowe w badaniach pedagogicznych. Część 1*. Wydawnictwo Naukowe Uniwersytetu Pedagogicznego.
- Elmorsy, G. N. H. (2024). Using generative AI tools to improve children's story production skills in early childhood: Suggested standards. *Scientific Journal of King Faisal University*, 25(1), 73–81. <https://doi.org/10.37575/h/edu/230043>
- Farisal, U. (2025). The impact of AI on family communication: A narrative review on children's respect for parents in developing Southeast Asia. *Journal Parenting Dan Anak*, 2(2), 1–15. <https://doi.org/10.47134/jpa.v2i2.1472>
- Fidan, N., & Olur, B. (2023). Examining the relationship between parents' digital parenting self-efficacy and digital parenting attitudes. *Education and Information Technologies*, 28, 15189–15204. <https://doi.org/10.1007/s10639-023-11841-2>
- Glassman, J. R., Humphreys, K., Yeung, S., Smith, M., Jauregui, A., Milstein, A., & Sanders, L. (2021). Parents' perspectives on using artificial intelligence to reduce technology interference during early childhood: Cross-sectional online survey. *Journal of Medical Internet Research*, 23(3), e19461. <https://doi.org/10.2196/19461>
- Haley, L. C., Boyd, A. K., Hebballi, N., Reynolds, E. W., Smith, K. G., Scully, P. T., Nguyen, T. L., Bernstam, E., & Li, L. T. (2023). Attitudes on artificial intelligence use in pediatric care from parents of hospitalized children. *Journal of Surgical Research*, 295, 158–167. <https://doi.org/10.1016/j.jss.2023.10.027>
- Hendry, H., Teszenyi, E., Rodriguez-Leon, L., Maynes, M. L., Dorrian, J., & Edwards, T. (2024). Tensions, assumptions and situated ethics: Attuning to the unpredictability of ethics in early childhood research participation. *European Early Childhood Education Research Journal*, 33(3), 483–496. <https://doi.org/10.1080/1350293X.2024.2387570>

- Kapania, K., Siy, O., Clapper, G., Meena SP, A., & Sambasivan, N. (2022). "Because AI is 100% right and safe": User attitudes and sources of AI authority in India. In *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems*. Association for Computing Machinery. <https://doi.org/10.1145/3491102.3517533>
- Kurian, N. (2025). AI's empathy gap: The risks of conversational artificial intelligence for young children's well-being and key ethical considerations for early childhood education and care. *Contemporary Issues in Early Childhood*, 26(1), 132–139. <https://doi.org/10.1177/14639491231206004>
- Kurian, N. (2025). Designing Child-Safe Conversational AI: Three Dilemmas for Responsible Design. In *Proceedings of the 7th ACM Conference on Conversational User Interfaces (CUI '25)*. Association for Computing Machinery, New York, NY, USA, Article 25, 1–5. <https://doi.org/10.1145/3719160.3737638>
- Laestadius, L., Bishop, A., Gonzalez, M., Illenčik, D., & Campos-Castillo, C. (2022). Too human and not human enough: A grounded theory analysis of mental health harms from emotional dependence on the social chatbot Replika. *New Media & Society*, 26(10), 5923–5941. <https://doi.org/10.1177/14614448221142007>
- Livingston, V., Jackson-Nevels, B., Davis-Wagner, D., Jameson, D., & Joyner, C. (2025). Dignity in mental health—Examining the dynamics of mental health stigma: A narrative review. *Academia Mental Health and Well-Being*, 2(3). <https://doi.org/10.20935/MHealthWellB7837>
- Ma, Z., Mei, Y., & Su, Z. (2023). Understanding the Benefits and Challenges of Using Large Language Model-based Conversational Agents for Mental Well-being Support. *AMIA Symposium. Annual Symposium proceedings, 2023*, 1105–1114. <https://arxiv.org/abs/2307.15810>
- Mahmutović Babić, A., Duranović, M., Lovrić, I., Petrović, A., & Madžar Čančdar, A. (2025). Artificial intelligence in parental information-seeking about child health and development. *Research in Education and Rehabilitation*, 8(2), 494–503. <https://doi.org/10.51558/2744-1555.2025.8.2.494>
- Maples, B., Cerit, M., Vishwanath, A., & Pea, R. (2024). Loneliness and suicide mitigation for students using GPT3-enabled chatbots. *npj Mental Health Research*, 3, Article 4. <https://doi.org/10.1038/s44184-023-00047-6>
- Mariani, M. M., Hashemi, N., & Wirtz, J. (2023). Artificial intelligence empowered conversational agents: A systematic literature review and research agenda. *Journal of Business Research*, 161, Article 113838. <https://doi.org/10.1016/j.jbusres.2023.113838>
- Mukhtar, Z., Selvi, I. D., Nurkamelia, A. H., Jasandra, A., Sultan, S., & Kepulauan Riau, A. (2025). Digital parenting in the era of artificial intelligence: The role of parents in guiding early childhood interaction with smart technology. *JOYCED Journal of Early Childhood Education*, 5(2), 260–270. <https://doi.org/10.14421/joyced.2025.52-08>
- Munzer, T. (2024). *How will artificial intelligence (AI) affect children?*. HealthyChildren.org. <https://www.healthychildren.org/English/family-life/Media/Pages/how-will-artificial-intelligence-AI-affect-children.aspx>
- Nazaruk, S., Rybka, A., Mościbrodzka, J., & Sokołowska, B. (2025). Postrzeganie przez rodziców możliwości wykorzystania sztucznej inteligencji w edukacji i wychowaniu dzieci. Wyniki badań własnych [Parents' perception of the potential use of artificial intelligence in children's education and upbringing. Own research results]. *Studia Edukacyjne*, 77, 153–167. <https://doi.org/10.14746/se.2025.77.9>
- OECD. (2025). *How's life for children in the digital age?* OECD Publishing. <https://doi.org/10.1787/0854b900-en>
- Pakdemirli, A. (2026). Artificial intelligence and digital technologies in family and parenting contexts. *Journal of Basic and Clinical Health Sciences*, 10, 149–156. <https://doi.org/10.30621/jbachs.1868255>
- Parlament Europejski & Rada Unii Europejskiej. (2016). *Rozporządzenie (UE) 2016/679 z dnia 27 kwietnia 2016 r. w sprawie ochrony osób fizycznych w związku z przetwarzaniem danych osobowych i w sprawie swobodnego przepływu takich danych oraz uchylenia dyrektywy 95/46/WE (ogólne rozporządzenie o ochronie danych)* [Regulation (EU) 2016/679 of the European Parliament and of the

- Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation)]. *Dziennik Urzędowy Unii Europejskiej*, L 119, 1–88. <https://uodo.gov.pl/404>
- Pilch, T., & Bauman, T. (2017). *Zasady badań pedagogicznych: Strategie ilościowe i jakościowe* [Principles of pedagogical research: Quantitative and qualitative strategies] (5th ed.). Wydawnictwo Naukowe PWN.
- Punch, F. P., & Oancea, A. (2014). *Introduction to research methods in education*. Sage.
- Remiya, J. S. (2026). Parental mediation in the age of artificial intelligence and smart devices: A study of digital parenting practices in India. *Journal of Emerging Technologies and Innovative Research*, 13(2), a712–a721. <https://doi.org/10.56975/jetir.v13i2.575451>
- Sobczak, A. (2023). Zjawisko sharentingu – między prawem do prywatności dziecka a aktywnością rodziców w mediach społecznościowych [The phenomenon of sharenting: Between the child's right to privacy and parents' activity on social media]. *Studia Edukacyjne*, 71, 93–106. <https://doi.org/10.14746/se.2023.71.6>
- Wójcicka, N., Słupska, A., Groń, M., Ogrodzki, P., Piechna, J., Sowiński, P., Rywczyńska, A., Domańska, E., Michałowski, A., Osuch, A., Oleszkiewicz, K., Ładna, A., Jankiewicz, A., Wałkuska, O., Ryłski, A., Urbańska-Galanciak, D., Perfuński, M., & Czechowska, Z. (2025). *W sieci wyzwań. Sztuka wychowania w cyfrowym świecie* [In the web of challenges. The art of parenting in a digital world]. NASK – Państwowy Instytut Badawczy.
- Xue, L., Mahat, J., & Ghazali, N. (2026). Technology Acceptance Model in artificial intelligence in education: A meta-analysis. *SAGE Open*, 16(1), 1–23. <https://doi.org/10.1177/21582440251409441>
- Zbróg, Z. (2024). Praktyki wykluczania rówieśniczego w grupie pięcioletnich dziewczynek – analiza dyfrakcyjna [Peer exclusion practices in a group of five-year-old girls: A diffractive analysis]. *Polska Myśl Pedagogiczna*, 10, 241–255. <https://doi.org/10.4467/24504564PMP.24.013.19967>
- Żabińska, A. (2024). Social exclusion of mothers of children on the autism spectrum as presented in popular publications. *Avant. Pismo Awangardy Filozoficzno-Naukowej*, 15(3). <https://doi.org/10.26913/ava3202414>