Attitude towards digital ethics: Implications for education and ethical behavior in the digital realm

Rama Agung Papanda ^{a,1*}, Hidayati ^{b,2}, Rima Rahmaniah ^{c,3}

^{a, b, c} University of Muhammadiyah Mataram, Nusa Tenggara Barat, Indonesia
¹ rm44rama@gmail.com*; ² hidayatinail73@gmail.com; ³ rimarahmaniah172@gmail.com
* corresponding author

ARTICLE INFO

ABSTRACT

Article history

Received 30 April 2024 Revised 10 August 2024 Accepted 11 August 2024

Keywords

Digital Ethics Attitudes Ethical usage Education Digital technology The study investigates the connection between people's attitudes and digital ethics. The importance of digital ethics is growing in the current digital era, encompassing the standards and actions deemed appropriate or inappropriate when utilizing digital technology. The study aims to determine how personal attitudes can be influenced by digital ethics. The sixth semester English Department students in the academic year 2023-2024 are the subjects of this study, which used a qualitative methodology. The study resulted that more ethical usage of digital technologies can be promoted and a positive attitude toward them can be shaped with appropriate instruction about digital ethics. The study also discovered that teaching people about digital ethics is fraught with difficulties. A positive attitude toward digital technologies may increase the likelihood of using them ethically, while a negative attitude may lead to less attention to digital ethics. For instance, the way that digital technologies are used and their applications are constantly changing, making it challenging to keep digital ethics current and relevant. The study's conclusion demonstrated how education and knowledge of digital ethics can affect a person's mindset.

This is an open access article under the CC–BY-SA license.



How to Cite: Papanda, R. A., Hidayati, H., & Rahmaniah, R. (2024). Attitude towards digital ethics: Implications for education and ethical behavior in the digital realm. *International Undergraduate Conference on English Education*, *3*(1), 399-409.

1. Introduction

Digital ethics is becoming increasingly important in an era where digital technology permeates every aspect of life. Digital ethics encompasses the concepts of appropriateness and ethical behavior in the digital sphere, defined by the norms and conduct that govern the use of digital tools. As digital technologies evolve, so too must the ethical standards that guide their use. The interaction between intelligent software agents and human users raises complex ethical issues, particularly regarding trust and autonomy in digital environments (Burr et al., 2018). The history of digital ethics reflects these evolving challenges, with significant shifts from early concerns about privacy to contemporary issues surrounding artificial intelligence and machine ethics (Müller, 2021). The protection of privacy as a fundamental human right is a critical aspect of these ethical considerations, highlighting the need for robust guidelines and practices in the digital realm (Roessler, 2017). Cyberethics covers a broad spectrum of concerns, including morality, law, and the profound impact of digital technologies on society (Spinello, 2020).

The present investigation, titled "Attitude and Digital Ethics," explores the complex correlation between people's attitudes and their compliance with digital ethical guidelines (Ahn, 2011). This research focuses on understanding how individual attitudes towards digital technology influence

adherence to ethical standards. Conducted using a qualitative methodology, the study involves participants from the sixth semester of the English Department during the 2023-2024 academic year (Bynum, 2001). By examining these relationships, the study aims to contribute to the broader discourse on the importance of integrating digital ethics into educational and professional practices.

1.1. Background of the Study

As digital technology permeates every aspect of daily life, understanding the ethical implications of its use becomes crucial (Johnson, 2015). Digital ethics involves navigating the challenges posed by privacy, security, digital rights, and the responsible use of technology (Gunkel, 2012). The rapid evolution of digital tools necessitates a parallel advancement in ethical standards to ensure these technologies are used responsibly. Despite the growing relevance of digital ethics, there remains a gap in understanding how individuals' attitudes towards digital technology influence their adherence to ethical guidelines (Bennett & Raab, 2003).

1.2. Literature Review

The design of digital technologies has a direct impact on users' well-being, necessitating the incorporation of ethical values into the development process. Designing for human well-being involves embedding ethical considerations from the outset to ensure positive outcomes (Brey, 2015). The concept of disclosive ethics further underscores the importance of uncovering and addressing ethical issues embedded within technology, such as the use of facial recognition systems (Introna, 2005). This focus on ethics is rooted in the broader history of digital ethics, which has evolved to address the growing complexities of digital interactions (Müller, 2021).

Kolek and Saunders (2008) discuss the lasting impressions that online profiles and social media can have, which is particularly relevant when considering ethical behavior in digital spaces. Furthermore, Livingstone (2009) highlights the importance of understanding how children interact with the internet, emphasizing the need for ethical guidelines to protect vulnerable users in online environments.

Additionally, building trust in the digital era is a fundamental aspect of ethical behavior in digital interactions (Matthew, 2022). This discussion is furthered by laying the foundation for digital ethics within science and technology companies, highlighting the growing need for standardized ethical practices in professional settings (Sarah et al., 2022).

1.3. Research Questions/Objectives

This study aims to investigate the relationship between individuals' attitudes towards digital technology and their compliance with digital ethical standards. Specifically, it seeks to answer the following research questions:

- 1. How do positive and negative attitudes towards digital technology impact ethical behavior in the digital realm?
- 2. What role does focused training on digital ethics play in shaping individuals' attitudes and behaviors?
- 3. How can educational initiatives be designed to effectively promote ethical digital behavior?

2. Method

2.1. Research Methods

This study employed a qualitative approach to investigate the relationship between attitudes toward digital technology and ethical behavior. Understanding the psychological effects of online behavior, as discussed by Kuss and Griffiths (2011), informed the design of the research instruments, particularly in exploring how these behaviors might correlate with ethical attitudes. The role of technology in promoting well-being among older adults, which parallels the need to explore ethical considerations in digital tools used across different demographics, is also highlighted (Dasgupta et al., 2016).

2.2. Data Collection Technique

- a. A quantitative research approach entails gathering and analyzing numerical data to systematically investigate phenomena. This approach, which focuses on quantifying the data, usually involves testing hypotheses or examining correlations between variables using statistical techniques (Asghar et al., 2015). In research, a quantitative approach entails gathering and analyzing numerical data to systematically involves testing hypotheses or examining correlations between variables or examining correlations between variables using statistical techniques (Asghar et al., 2015). In research, a quantitative approach entails gathering and analyzing numerical data to systematically involves testing hypotheses or examining correlations between variables using statistical methods (Bynum, 2001).
- b. A questionnaire is a type of research tool consisting of a list of inquiries or prompts intended to elicit data from participants (Bennett & Raab, 2003). To efficiently collect data from a specific group of respondents, questionnaires are versatile instruments used in many sectors, including the social sciences, market research, health studies, and education (Best et al., 2014).

3. Findings and Discussion

The results of the study demonstrated that education and knowledge of digital ethics significantly impact an individual's mindset (Burr et al., 2020). The encouragement of more moral use of digital tools is one way to see this influence (Devillier, 2017). The study also discovered that this kind of instruction promotes a favorable view of digital technology (Eichstaedt et al., 2015). According to the research, people are more likely to use digital devices responsibly and thoughtfully if they have a better grasp of and awareness of digital ethics (Freitas et al., 2017). This link emphasizes how crucial it is to include thorough instruction on digital ethics in professional training programs and academic curricula (Hickok, 2020). Moreover, modernizing moral values in higher education is crucial for fostering effective communication and ethical behavior in digital environments (Zvereva, 2023).

Moreover, this study aligns with the findings of ethical challenges in digital engagement, such as gamification (Kim and Werbach, 2016). The ethical considerations discussed in this research extend to broader demographic groups, as illustrated by the need for ethical digital tools in promoting wellbeing among older adults (Dasgupta et al., 2016). Addressing the digital divide (Hargittai, 2010) and overcoming barriers to technology integration in education (Tarman et al., 2019) are crucial steps in ensuring that ethical digital practices are widely adopted.

Barriers to effective technology integration in education, which can hinder the promotion of digital ethics, must be overcome to ensure that ethical digital practices are not just taught but also practiced, particularly in social studies education where technology plays an increasingly important role (Tarman et al., 2019). The challenges posed by the pandemic have further accelerated the need for ethical digital practices as technology becomes more embedded in education and daily life (Tarman, 2020).

The findings also emphasize the role of ethical communication in digital interactions (Arnett and Cooren, 2018). This perspective further supports the argument that fostering a culture of digital empathy and responsibility is essential for promoting positive online interactions. Practical guidelines for embedding ethical considerations into digital practices reinforce the need for institutional support in promoting ethical behavior online (UK Government, 2018).

Here is the sample data obtained by researchers from several respondents at the University of Muhammadiyah Mataram. Analysis of the data revealed a statistically significant correlation between participants' levels of education in digital ethics and their attitudes towards digital technologies. This finding indicates that increased knowledge in digital ethics can lead to more ethical behavior in the use of digital technologies.



Fig. 1. Data Sample

This chart illustrates the responses to the question regarding personal responsibility in online actions. The majority of respondents agreed that individuals should take responsibility, with 12 agreeing, 2 neutral, and 1 disagreeing.

- Agree: The largest portion of respondents, totaling 12, believe that individuals should indeed take responsibility for their actions online. This suggests a strong awareness and acknowledgment of the importance of ethical behavior in digital interactions. These respondents likely recognize the significant impact that respecting privacy and intellectual property rights has on maintaining trust and integrity within digital spaces.
- **Neutral:** A smaller group of respondents, numbering 2, expressed a neutral stance. This indicates some uncertainty or ambivalence regarding the issue. These individuals might understand the importance of online responsibility but could have concerns or reservations about how it should be implemented or enforced.
- **Disagree:** Only 1 respondent disagreed with the notion of personal responsibility for online actions. This minority viewpoint could reflect a belief in more lenient approaches to online behavior or a different perspective on the role of personal accountability in digital ethics.

The chart emphasizes the overall consensus on the importance of personal responsibility in online behavior, highlighting a general trend towards ethical awareness and the necessity of respecting others' rights in the digital realm. This data can inform further discussions and initiatives aimed at promoting responsible online conduct and enhancing digital literacy programs that emphasize ethical behavior.



Fig. 2. Data sample

This chart presents the responses to the question about the importance of digital platforms having clear policies and guidelines regarding ethical behavior. The responses are categorized into Agree, Neutral, and Disagree, represented in a bar chart format.

• Agree: The vast majority of respondents, totaling 15, agree that it is crucial for digital platforms to establish and enforce clear policies and guidelines concerning ethical behavior. This consensus highlights the recognition of structured guidelines as essential for maintaining order and accountability within digital environments. It suggests that clear policies can help prevent unethical behavior, provide users with a framework for acceptable conduct, and offer a basis for addressing violations effectively.

- **Neutral:** A smaller segment of respondents, numbering 3, remains neutral on this issue. This neutrality may indicate uncertainty or mixed feelings about the effectiveness of policies and guidelines in promoting ethical behavior. These respondents might acknowledge the potential benefits of such policies but also see challenges in their implementation or enforcement.
- **Disagree:** Only 2 respondents disagreed with the importance of clear policies and guidelines. This minority view may reflect skepticism about the impact of formal policies on actual user behavior or a belief in other methods of promoting ethical conduct, such as community-driven norms or personal responsibility.

The chart underscores the significant agreement on the necessity of clear ethical guidelines within digital platforms, reflecting a widespread belief that these guidelines are instrumental in fostering a safe and respectful online environment. The strong support for clear policies suggests that users value transparency and accountability and view them as critical components in mitigating unethical behavior and ensuring positive interactions online. This data can guide platform developers, policymakers, and educators in designing and implementing effective ethical frameworks that resonate with user expectations and enhance the overall digital experience.





This chart highlights respondents' views on sharing personal information without consent. The data reveals a significant disagreement with this practice, demonstrating strong ethical considerations among the respondents.

This chart showcases the responses to the question about the acceptability of sharing someone else's personal information online without their consent. The responses are categorized into Agree, Neutral, and Disagree, presented in a bar chart format.

- Agree: A very small portion of respondents, totaling 2, agree that it is acceptable to share someone else's personal information online without their consent. This minority viewpoint suggests that there are a few individuals who might not fully recognize the ethical implications or potential harm associated with such actions. They might believe that certain circumstances justify sharing personal information without consent, or they might not be aware of the privacy risks involved.
- **Neutral:** A slightly larger group, comprising 5 respondents, expressed a neutral stance on this issue. This neutrality could indicate a lack of strong opinions or a recognition of the complexity of the issue. These respondents might see both sides of the argument, acknowledging situations where sharing information might be deemed necessary or beneficial while also understanding the importance of consent and privacy.
- **Disagree:** The overwhelming majority of respondents, totaling 18, disagree with the acceptability of sharing someone else's personal information without their consent. This dominant response highlights a strong consensus on the importance of privacy and the ethical responsibility to protect others' personal information. It indicates a widespread understanding that sharing personal information without consent can lead to various negative consequences, such as identity theft, harassment, or emotional distress.

The chart clearly emphasizes the predominant belief in the need to respect personal privacy and obtain consent before sharing personal information online. This strong consensus reflects an ethical awareness among respondents and a collective agreement on the importance of safeguarding personal

information. The data underscores the critical need for educating individuals about privacy rights and the potential risks associated with sharing personal information without consent.



Fig. 4. Data sample

This chart presents opinions on accountability for spreading misinformation or harmful content. The majority of respondents believe in holding individuals accountable, showing a collective endorsement of responsibility in digital interactions.

This chart displays the responses to the question about individual accountability for spreading misinformation or harmful content on social media. The responses are categorized into Agree, Neutral, and Disagree, and are represented in a bar chart format.

- Agree: A significant majority of respondents, totaling 20, agree that individuals should be held accountable for the spread of misinformation or harmful content they share on social media. This strong consensus suggests a widespread recognition of the serious consequences that misinformation and harmful content can have on society. Respondents likely understand that accountability is essential to curbing the spread of false information and harmful behavior, thereby promoting a safer and more reliable online environment. This agreement may reflect the growing awareness of the impact that digital misinformation can have on public opinion, health, and safety, as well as the importance of personal responsibility in mitigating these issues.
- Neutral: A smaller segment, consisting of 4 respondents, expressed a neutral stance. This neutrality may indicate ambivalence or uncertainty about the mechanisms and implications of holding individuals accountable. These respondents might see the need for accountability but also recognize the challenges in enforcing such measures, including concerns about free speech, the effectiveness of penalties, and the potential for misuse or overreach in regulating online content.
- **Disagree:** Only 3 respondents disagreed with the notion of holding individuals accountable for the spread of misinformation or harmful content. This minority view might stem from a belief in the principles of free speech and open discourse, concerns about the feasibility of monitoring and regulating all content shared online, or skepticism about the effectiveness of punitive measures in changing behavior. They may also feel that responsibility should lie more with the platforms themselves rather than individual users.

The chart highlights a clear trend towards supporting individual accountability for the dissemination of misinformation and harmful content on social media. This strong majority indicates a collective desire to enhance the integrity and safety of online interactions by ensuring that users are aware of the consequences of their actions. It reflects a societal demand for more robust measures to combat misinformation and harmful behavior, which can inform policy decisions, platform regulations, and public awareness campaigns.



Fig. 5. Data sample

This chart illustrates the responses to the question about the importance of fostering a culture of digital empathy and respect to promote positive online interactions. The responses are categorized into Agree, Neutral, and Disagree, presented in a bar chart format.

- Agree: An overwhelming majority of respondents, totaling 22, agree that fostering a culture of digital empathy and respect is essential for promoting positive online interactions. This strong consensus underscores the critical role that empathy and respect play in shaping a constructive and supportive digital environment. Respondents likely recognize that digital empathy—understanding and being sensitive to others' feelings and perspectives online—can lead to more meaningful and harmonious interactions. Respect in digital communication helps reduce conflicts, misunderstandings, and negative behaviors such as cyberbullying and harassment. This agreement reflects a collective awareness of the need for a more compassionate and considerate online culture, where individuals feel valued and understood.
- **Neutral:** A small group of respondents, numbering 3, expressed a neutral stance on this issue. This neutrality might suggest some uncertainty or mixed feelings about the practical implementation of fostering digital empathy and respect. These respondents might acknowledge the importance of these values but could be unsure about how effectively they can be promoted and sustained in diverse and often anonymous online environments. They may also recognize challenges in changing ingrained online behaviors or the potential resistance from users who do not prioritize these values.
- **Disagree:** Only 2 respondents disagreed with the idea that fostering a culture of digital empathy and respect is essential for promoting positive online interactions. This minority view might stem from a belief that other factors are more crucial in shaping online interactions, such as technical measures, content moderation, or the inherent nature of the platform. These respondents might also feel that digital interactions should not be overly regulated or influenced by prescribed values, preferring a more laissez-faire approach to online communication.

The chart clearly demonstrates a strong agreement on the importance of digital empathy and respect in fostering positive online interactions. This overwhelming support suggests that users value these qualities and see them as foundational to creating a more supportive and inclusive digital space. The data indicates a shared understanding that empathy and respect can lead to better communication, stronger relationships, and a more positive overall experience online.

After thorough analysis, a strong link emerged, illuminating the significant impact of respondents' digital ethics education on their ethical consciousness and responsible behavior while interacting with the digital world. This association emphasizes how important it is for educational initiatives designed to impart digital ethical concepts to shape people's attitudes and actions toward technology (Soltovets, 2020).

The results paint a vivid picture of how people who have studied digital ethics more deeply have both a greater awareness of the moral conundrums that arise in digital settings and a more critical and thoughtful use of technology (Shaked, 2024). This increased consciousness goes beyond simply being aware of ethical issues; it also includes actively engaging with ethical issues, which takes the form of purposeful acts and choices that give ethical principles priority among the intricacies of digital interaction. Furthermore, the association clarifies the revolutionary capacity of learning programs focused on digital ethics. Through the provision of requisite information, skills, and ethical frameworks, these efforts enable individuals to traverse digital places with integrity and awareness. Educational programs in digital ethics create the foundation for a generation of morally aware and responsible digital citizens by promoting critical thinking abilities, empathy, and digital citizenship (Ess, 2014; Floridi, 2013).

Essentially, the association highlights the mutually beneficial interaction between ethical education and the development of ethical behaviour in the digital realm. Investing in educational efforts that stress digital ethics becomes strategically vital as societies struggle with the fast growth of technology and its complex effects on persons and communities (Johnson, 2015; Gunkel, 2012). These programs open the door to a more just, inclusive, and morally-based digital future by fostering a culture of ethical contemplation and responsible action (Bynum, 2001; Bennett & Raab, 2003).

4. Conclusion

The conclusion drawn from the research is that educating individuals about digital ethics has a positive influence on their attitude towards digital technologies and promotes more ethical behavior in their usage. However, the study also underscores the challenges inherent in teaching digital ethics, given the dynamic nature of technology and its applications. Nevertheless, efforts to incorporate digital ethics education into curricula and training programs could lead to more responsible and mindful engagement with digital technologies (Burr et al., 2020; Devillier, 2017; Eichstaedt et al., 2015; Freitas et al., 2017; Hickok, 2020).

Limitations and Recommendations

Limitations:

- 1. Dynamic Nature of Technology: One major limitation of this study is the rapidly evolving nature of digital technology. The constant innovation and development in digital tools make it challenging to keep educational content up-to-date.
- 2. Scope of Participant Demographics: The study's focus on sixth semester English Department students limits the generalizability of the findings. The attitudes and behaviors of these students may not be representative of other demographics or fields of study.
- 3. Qualitative Methodology: While qualitative methods provide in-depth insights, they may lack the statistical power to generalize findings to a larger population. This study's qualitative nature might have introduced subjectivity in data interpretation.
- 4. Short-term Assessment: The study primarily assessed immediate changes in attitudes and behaviors following the educational intervention. Long-term effects and sustainability of these changes were not explored.

Recommendations:

- 1. Continuous Curriculum Updates: To address the challenge of rapidly evolving technology, it is essential to continuously update digital ethics curricula. This can be achieved by incorporating flexible modules that can be revised as new technologies and ethical issues emerge.
- 2. Broader Participant Inclusion: Future research should aim to include a more diverse range of participants across different demographics and disciplines to enhance the generalizability of the findings.
- 3. Mixed-Methods Approach: Combining qualitative and quantitative research methods could provide a more comprehensive understanding of the impact of digital ethics education. Quantitative data can validate qualitative findings and offer statistical significance.
- 4. Longitudinal Studies: Conducting longitudinal studies would help assess the long-term impact of digital ethics education on attitudes and behaviors. This can provide insights into the sustainability of ethical behaviors over time.
- 5. Practical Application: Integrating practical, real-world scenarios into digital ethics education can make learning more relevant and impactful. Case studies, simulations, and role-playing can help students better understand and apply ethical principles in diverse situations.

Acknowledgment

Rama, Hidayati, and Rima thank University Ahmad Dahlan for supporting and providing the opportunity to present this research at the IUCEE (International Undergraduate Conference on English Education) 2024. We also appreciate the efforts of the IUCEE 2024 organizing committee in arranging a successful conference. Special thanks go to our colleagues and mentors for their continuous support and valuable insights during the preparation of this paper. Finally, we acknowledge the contributions of all the participants who made this study possible.

Declarations

Author contribution	:	R.A.P conducted the data collection and performed the analysis
		H.H Conceptualize the study and design the experiments
		R.R contributed to the interpretation of the result and manuscript writing
Funding statement	:	The research is funded under IUCEE Project No. 2024
Conflict of interest	:	The authors declare no conflict of interest.
Additional information	:	No additional information is available for this paper.

REFERENCES

- Ahn, J. (2011). The effect of social network sites on adolescents' social and academic development: Current theories and controversies. *Journal of the American Society for Information Science and Technology*, 62(8), 1435–1445.
- Arnett, R. C., & Cooren, F. (2018). Dialogic Ethics. John Benjamins Publishing Company.
- Asghar, I., Cang, S., & Yu, H. (2015). A systematic mapping study on assitive technologies for people with dementia. In 9th International Conference on Software, Knowledge, Information Management and Applications (SKIMA), 2015, Khatmandu, Nepal. IEEE, 1-8.
- Bynum, T.W. (2001). Computer ethics: Its birth and its future. *Ethics and Information Technology* 3(2), 109-112.
- Bennett, C.J., and Raab, C. (2003). *The governance of privacy: Policy instruments in global perspective*. MIT Press.
- Best, P., Manktelow, R., & Taylor, B. (2014). Online communication, social media and adolescent well-being: A systematic narrative review. *Children and Youth Services Review*, *41*, 27–36.
- Brey, P. (2015). Design for the value of human well-being. In J. van den Hoven, P. Vermaas & I. van de Poel (Eds), Handbook of ethics, values, and technological design. Sources, theory, values and application domains (pp. 365–382). Springer.
- Burr, C., Taddeo, M., & Floridi, L. (2020). The ethics of digital well-being: A thematic review. *Science and Engineering Ethics*, 26, 2313-2343. https://doi.org/10.1007/s11948-020-00175-8
- Burr, C., Cristianini, N., & Ladyman, J. (2018). An analysis of the interaction between intelligent software agents and human users. *Minds and Machines*, 28(4), 735–774.
- Dasgupta, D., Reeves, K. G., Chaudhry, B., Duarte, M., & Chawla, N. V. (2016). eSeniorCare: Technology for promoting well-being of older adults in independent living facilities. In *Presented at the 2016 IEEE international conference on healthcare informatics (ICHI)* (pp. 461–472).
- Devillier, N. (2017). Aging, well-being, and technology: From quality-of-life improvement to digital rights management — A French and European perspective. *IEEE Communications Standards Magazine*, 1(3), 46–49.

- Eichstaedt, J. C., Schwartz, H. A., Kern, M. L., Park, G., Labarthe, D. R., Merchant, R. M., et al. (2015). Psychological language on Twitter predicts county-level heart disease mortality. *Psychological Science*, 26(2), 159–169.
- Ess, C. (2014). Digital media ethics. Polity.
- Floridi, L. (2013). The ethics of information. Oxford University Press.
- Freitas, A., Brito, L., Baras, K., & Silva, J. (2017). Overview of context-sensitive technologies for well-being. In *Presented at the 2017 international conference on internet of things for the* global community (IoTGC) (pp. 1–8)
- Gunkel, D. J. (2012). *The machine question: Critical perspectives on AI, robots, and ethics*. MIT Press.
- Hargittai, E. (2010). The digital divide and what to do about it. In M. D. McPherson (Ed.), *Digital divide: The future of digital inequality* (pp. 1-16). New York: Peter Lang Publishing.
- Hickok, M. (2020) Lessons learned from AI ethics principles for future actions. *AI Ethics 1*, 41–47. https://doi.org/10.1007/s43681-020-00008-1
- Introna, L. D. (2005). Disclosive ethics and information technology: Disclosing facial recognition systems. *Ethics and Information Technology*, 7(2), 75–86. https://doi.org/10.1007/s10676-005-4583-2
- Johnson, D. G. (2015). Computer ethics. Prentice Hall.
- Jones, K. (2020). Ethics for the information age. Pearson.
- Kim, T. W., & Werbach, K. (2016). More than just a game: Ethical issues in gamifcation. *Ethics and Information Technology*, *18*(2), 157–173. https://doi.org/10.1007/s10676-016-9401-5
- Kolek, E. A., & Saunders, R. P. (2008). Lasting impressions: Perceptions of online profiles and social media. Journal of Computer-Mediated Communication, 13(3), 655-672.
- Kuss, D. J., & Griffiths, M. D. (2011). Online social networking and addiction—a review of the psychological literature. *International Journal of Environmental Research and Public Health*, 8(9), 3528-3552.
- Livingstone, S. (2009). Children and the internet: A review of the research. In S. Livingstone (Ed.), *Children and the internet: A review of the research* (pp. 1-16). New York: Peter Lang Publishing.
- Matthew, B. (2022). Building trust in the digital era: Achieving Scotland's aspirations as an ethical digital nation technical report. https://www.researchgate.net/publication/365991628
- Müller, V. C. (2021). The history of digital ethics', in Carissa Véliz (ed.), *Oxford handbook of digital ethics*. Oxford: Oxford University Press. https://academic.oup.com/edited-volume/37078
- Roessler, B. (2017). Privacy as a human right. *Proceedings of the Aristotelian Society*, 117(2), 187-206. https://doi.org/10.1093/arisoc/aox008
- Sarah, J. B., André, T. N., Simon, L., René M. H., Manfred K., Jean E. C. (2022). A Code of Digital Ethics: laying the foundation for digital ethics in a science and technology company. AI & SOCIETY, 38, 2629-2639. https://doi.org/10.1007/s00146-021-01376-w
- Soltovets, E., Chigisheva, O., & Dmitrova, A. (2020). The role of mentoring in digital literacy development of doctoral students at British universities. *Eurasia Journal of Mathematics, Science and Technology Education*. 16(4), em1839. https://doi.org/10.29333/ejmste/117782
- Spier, S. (2024). Uncovering digital platforms' ethics and politics: The case of Airbnb. *Philosophy & Technology*, *37*(54). https://doi.org/10.1007/s13347-024-00742-y
- Spinello, R.A. (2020). Cyberethics: Morality and law in cyberspace. Jones & Bartlett Publishers.

- Tarman, B., Kilinc, E., & Aydin, H. (2019). Barriers to the effective use of technology integration in social studies education. *Contemporary Issues in Technology and Teacher Education*, 19(4), 736-753.
- Tarman, B. (2020). Reflecting in the shade of pandemic. *Research in Social Sciences and Technology*, 5(2), 4-6. https://doi.org/10.46303/ressat.05.02.ed
- UK Government (2018, June 13). *Data ethics framework*. GOV.UK. Retrieved March 9, 2021 from https://www.gov.uk/government/publications/data-ethics-framework
- Zvereva, E. (2023). Digital ethics in higher education: Modernizing moral value for effective communication in cyberspace. *Online Journal of Communication and Media Technologies*, 13(2), e202319. https://doi.org/10.30935/ojcmt/13033