

ETHICS IN INFOGRAPHICS, IS IT PART OF THE CURRICULUM?

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INTRODUCTION

Infographics are data visualisation tools to disseminate complex statistical information in a cohesive, and meaningful way (Krum 2013). The popularity of infographics increased with vastly available data and technological developments in software application tools such as Canva (Canva 2023) and Infogram (Infogram 2023). Governments and organisations used infographics during the pandemic to communicate health-related messages to the public (Kleijnsen 2021). Hence, it is important that infographics communicate information ethically and responsibly.

ETHICAL FRAMEWORK FOR INFOGRAPHICS

Any ethical issues in the infographics can be a source of misunderstandings by consumers of infographics which might negatively impact their decision-making. Many universities have taken the initiative to teach the design aspects of infographics in their curriculum for students studying data science and statistics, however, there is little, or no emphasis is given to the ethical aspects of infographics (Toth 2013, Dunlap and Lowenthal 2016). Embedding ethical principles in the curriculum to raise awareness of the implications of unethical infographics are important issues to be considered by academics. To understand what academics know about the 5 ethical principles (EP); *Non-maleficence, Beneficence, Justice, Autonomy, and Explicability*; derived from the AI4People's (Floridi, Cows et al. 2018) framework, we invited academics to complete a survey on Ethics in Infographics. The responses came from fifteen academics. The majority (53.33%) were from International Conference on Teaching Statistics-11 (ICOTS-11), 20% from IASE-mailing-list, and 26.66% were academics in our university. Our findings showed that 73% of the academics did not teach ethics in infographics. Using a Likert scale (0=terrible to 5=excellent), the self-scored knowledge of ethics showed that academics' knowledge of *ethics* was between average and good (mean=3.53, SD=.64), and their knowledge of *ethics in infographics* was lower, and between poor and average (mean=2.67, SD=.82).

CONCLUSION

Our study identified the gaps in academics' knowledge of ethics in infographics which can be used to design professional development for academics to improve their resources for teaching ethics in infographics to their students. Equipping academics with ethical knowledge of infographics can benefit them, their students, and their university.

REFERENCES

- Canva. (2023). Retrieved 27-06-2023, from https://www.canva.com/en_au/.
- Dunlap, J. C. and P. R. Lowenthal (2016). Getting graphic about infographics: design lessons learned from popular infographics. *Journal of Visual Literacy* **35**(1): 42-59.
- Floridi, L., J. Cows, M. Beltrametti, R. Chatila, P. Chazerand, V. Dignum, C. Luetge, R. Madelin, U. Pagallo and F. Rossi (2018). AI4People—an ethical framework for a good AI society: opportunities, risks, principles, and recommendations. *Minds and machines* **28**: 689-707.
- Infogram. (2023). Retrieved 27-06-2023, from <https://infogram.com/>.
- Kleijnsen, H. (2021). *Infographics as a public communication tool in the COVID-19 pandemic*. <http://essay.utwente.nl/87636/>
- Krum, R. (2013). *Cool infographics: Effective communication with data visualization and design*, John Wiley & Sons.
- Toth, C. (2013). Revisiting a genre: Teaching infographics in business and professional communication courses. *Business Communication Quarterly* **76**(4): 446-457