

Peer Response – Marwa Alkuwari

Thanks, Marwa, for your thoughtful breakdown of Abi's ethical pickle. I honestly share your view: being open and showing everything, the data says isn't optional when lives could be on the line.

Your mention of the BCS Code of Conduct from 2022 hits the mark. That code lays out why IT people and data experts should always put the public first and speak honestly. I'd add that hinting at a friendly reading of the numbers while leaving out key facts is, at best, flirting with manipulation-a grey zone researchers need to steer clear of.

I liked how you brought in the Menlo Report's push for public good, too (Finn and Shilton, 2023). Once we gather data, we often forget that our results can steer big decisions, like which products stay on shelves for consumer safety. Your reminder that ethics boards-or even whistle-blowing-are real options, even under pressure, is spot-on; far too many people let fear choke off that escape route.

Lastly, Correa et al. (2023) sketch a global overview that frames the other sources. Non-maleficence, a familiar idea in healthcare, also lives in data work, warning practitioners against charts or models that poison rather than enlighten.

All told, your answer meshes high-level ethics with on-the-ground responsibility. Abi must tell the full story, flag weak spots, and keep the public's trust front and centre.

References:

BCS (2022) Code of Conduct for BCS Members. Swindon: BCS, The Chartered Institute for IT. Available at: <https://www.bcs.org/media/5356/bcs-code-of-conduct.pdf> [Accessed 13 June 2025].

Finn, M. and Shilton, K. (2023) Ethics governance development: The case of the Menlo Report, *Social Studies of Science*, 53(3), pp. 315340.

Correa, N.K. et al. (2023) Worldwide AI ethics: A review of 200 guidelines and recommendations for AI governance, *Patterns*, 4(2), p. 100857. Available at: <https://doi.org/10.1016/j.patter.2022.100857> .

Peer Response – Sultan Alaryani

Thank you, Sultan, for your thoughtful and even-handed take on Abi's ethical duties. I especially value the way you broke down reporting bias; that quiet, sneaky twist in research can hurt a study almost as much as flat-out falsifying results.

Your mention of Resnik (2024) and his push for full transparency gets to the heart of the matter: ethical research should show the whole truth, not just the parts that look good. I also think you're spot-on when you say that any misrepresentation could land both Abi and the company in hot water under consumer-protection laws in the UK or the US, as Nollet (2024) notes. Adding that legal angle really rounds out the conversation, because folks often forget how serious the rules can be.

I found it very effective that you connected both professional standards — such as the ACM Code of Ethics (2018) and Royal Statistical Society's expectations (Pullinger, 2013) — to Abi's obligations. These expert guidelines provide a solid starting point for acting ethically in programming and statistical work.

Your suggestion that Abi could publish the full report or consult an ethics board is highly constructive. It provides practical steps that align with ethical norms while also protecting the public interest.

Overall, your post successfully integrates ethical theory, professional standards, and practical action — a strong reminder that responsible research must serve society before corporate interest.

References:

ACM (2018) ACM Code of Ethics and Professional Conduct. Available at: <https://www.acm.org/code-of-ethics> [Accessed 30 June 2025].

Nollet, L.M. (2024) Food Products Regulations in the United Kingdom. In: Global Regulations of Medicinal, Pharmaceutical, and Food Products. CRC Press, pp. 302–309.

Pullinger, J. (2013) 'Statistics making an impact', Journal of the Royal Statistical Society Series A, 176(4), pp. 819–840.

Resnik, D.B. (2024) The Ethics of Research with Human.

Van der Steen, J.T. et al. (2019) 'Causes of reporting bias: a theoretical framework', F1000Research, 8, p.280.

Peer Response – Dinh Khoi Dang

Thank you, Dinh Khoi, for your careful, well-grounded take on Abi's ethical dilemma. I especially liked how you connected p-hacking to selective analysis. That link is often missed; even when data has not been outright falsified, tweaking the presentation can still mislead stakeholders and hurt the research's integrity (Head et al., 2015).

Bringing in the American Statistical Association (ASA, 2018) and the ICMJE (2019) rules really strengthens your point. Both set clear expectations that every relevant result, limitation, and assumption must be laid out. Abi's job goes beyond just accurate math; it also means straightforward, honest meaning plus guarding against obvious misuse, just as you noted using the National Academies (2017) lens.

I found your mention of Beauchamp and Childress's principle of beneficence (2019) particularly on point. Because the product touches public health, Abi's ethical duty must reach beyond loyalty to her company; it has to put consumer welfare first.

As you say, telling Abi to think about stepping back from the project if her ethical worries are brushed aside is courageous but also grounded in reality. Johnson (2003) backs up the idea that whistleblowing, while usually a last resort, still shows a commitment to professional integrity. On the whole, your post links big ethical theories to real-world actions and points out how data scientists' choices can echo through society at large.

References:

- American Statistical Association (ASA) (2018) Ethical Guidelines for Statistical Practice.
- Beauchamp, T.L. and Childress, J.F. (2019) Principles of Biomedical Ethics. 8th ed. Oxford University Press.
- Head, M.L. et al. (2015) 'The extent and consequences of p-hacking in science', PLoS Biology, 13(3), e1002106.
- International Committee of Medical Journal Editors (ICMJE) (2019) Recommendations for the Conduct, Reporting, Editing, and Publication of Scholarly Work in Medical Journals.
- Johnson, R. (2003) Whistleblowing: When It Works—And Why. Lynne Rienner Publishers.
- National Academies of Sciences, Engineering, and Medicine (2017) Fostering Integrity in Research. National Academies Press.