Summary Post

Ethical Analysis: Selective Data Analysis and Professional Responsibility

Abi's dilemma highlights an ethical tension between professional pressure and scientific integrity. While he hasn't falsified data, selectively presenting analyses constitutes a form of "p-hacking" or cherry-picking, which Simmons et al. (2011) identify as a significant threat to research validity.

Professional and Ethical Obligations

The ACM Code of Ethics (2018) mandates that computing professionals "avoid harm" and "be honest and trustworthy" (ACM, 2018, §1.2, 1.3). Similarly, the BCS Code of Conduct requires members to act in the "public interest" and maintain professional competence and integrity (BCS, 2022). Presenting only favourable analyses, knowing negative findings exist, violates these principles and potentially misrepresents scientific truth (Wasserstein and Lazar, 2016).

Legal and Social Implications

Abi faces potential liability under consumer protection legislation. In the UK, the Consumer Protection Act 1987 and Consumer Protection from Unfair Trading Regulations 2008 prohibit misleading practices. If harm results from misrepresented nutritional claims, Abi could face professional negligence claims for failing to discharge his duty of care to end consumers.

Recommended Course of Action

Abi should present all substantive findings to the manufacturer, clearly documenting analytical methods and limitations (as recommended under Good Statistical Practice (Royal Statistical Society, 2019)). He should note that selective publication would be scientifically inappropriate. If the manufacturer proceeds to misrepresent findings, Abi should consider whistleblowing to regulatory authorities like the Food Standards Agency, protected under the Public Interest Disclosure Act 1998.

References

ACM (2018) ACM Code of Ethics and Professional Conduct. Available at: https://www.acm.org/code-of-ethics (Accessed: 20 October 2025).

BCS (2022) Code of Conduct for BCS Members. Version 8. Available at: https://www.bcs.org/media/2211/bcs-code-of-conduct.pdf (Accessed: 20 October 2025).

Consumer Protection Act 1987, c. 43. Available at: https://www.legislation.gov.uk/ukpga/1987/43/contents (Accessed: 20 October 2025).

Consumer Protection from Unfair Trading Regulations 2008, SI 2008/1277. Available at: https://www.legislation.gov.uk/uksi/2008/1277/contents (Accessed: 20 October 2025).

Public Interest Disclosure Act 1998, c. 23. Available at: https://www.legislation.gov.uk/ukpga/1998/23/contents (Accessed: 20 October 2025).

Royal Statistical Society (2019) A guide for ethical data science. London: Royal Statistical Society. Available at: https://rss.org.uk/RSS/media/News-and-publications/Publications/Reports%20and%20guides/A-Guide-for-Ethical-Data-Science-Final-Oct-2019.pdf (Accessed: 20 October 2025).

Simmons, J.P., Nelson, L.D. and Simonsohn, U. (2011) 'False-positive psychology: undisclosed flexibility in data collection and analysis allows presenting anything as significant', Psychological Science, 22(11), pp. 1359-1366. doi: 10.1177/0956797611417632.

Wasserstein, R.L. and Lazar, N.A. (2016) 'The ASA's statement on p-values: context, process, and purpose', The American Statistician, 70(2), pp. 129-133. doi: 10.1080/00031305.2016.1154108.