RMPP - Collaborative Learning Discussion 2

Accuracy of Information

Initial Post

In the presented case study, Abi is indeed in a tough position. On one hand, it is his professional duty to conduct the data analysis as objectively and ethically as possible. On the other hand, the research project is funded by the manufacturer who expects a certain outcome.

If Abi does not omit data, it is ethical to analyse the data in a way that supports multiple conclusions. Whilst it is common practice to augment a dataset in hopes of achieving a more favourable outcome (e.g., by collecting more data), it can be deemed unethical to do so, especially due to the risk of inflating the type I error rate. Sagarin et al (2014) present a study that introduces a statistic to quantify the error inflation resulting from a post-hoc decision to augment a dataset. If Abi relies on enhancing the dataset to suggest a positive outcome, it would be ethical to disclose any post-hoc decisions he made within the study, as well as quantify the error inflation of his augmentations.

As outlined in the ACM Code of Ethics, honesty and trustworthiness are both components of ethical and professional conduct (ACM, 2018). While Abi is not obligated to do so, if he were to follow the code of ethics, he should fully disclose all analysis outcomes to the manufacturer, including positive or negative.

It is then the manufacturer's duty to ensure compliance with local legislation when presenting the research results. In Norway, for instance, companies must abide by strict marketing control laws. The company needs to make sure that any commercial practice does not contain false information or is otherwise likely to deceive consumers. If the research conducted by Abi concludes that Whizzz is harmful, the manufacturer would need to ensure that the main characteristics of its product, including the product's risks, are portrayed accurately and that marketing efforts do not mislead consumers to make an economic decision that they would not otherwise have made (Norwegian Consumer Authority, 2012).

List of References

ACM (2018) ACM Code of Ethics and Professional Conduct. Available from: https://www.acm.org/code-of-ethics [Accessed 25 April 2022].

Norwegian Consumer Authority (2012) The Marketing Control Act. Available from: https://www.forbrukertilsynet.no/english/the-marketing-control-act#chapter-1 [Accessed 25 April 2022].

Sagarin, B.J., Ambler, J.K. and Lee, E.M., 2014. An ethical approach to peeking at data. *Perspectives on Psychological Science* 9(3): 293-304. DOI: https://doi.org/10.1177%2F1745691614528214

Summary Post

In the scope of the presented case study that was analysed within this discussion forum, there were many interesting viewpoints on what Abi and the company Whizzz need to account for when handling and presenting data.

Firstly, the link between nutritional research and marketing, and the complex issues surrounding it were highlighted. A legal framework must be implemented to protect consumers from being misled and making an economic decision that they would not otherwise have made.

Another important point that was highlighted is that the manufacturer Whizzz needs to be held accountable for reporting Abi's findings, both legally and ethically. If discrepancies in data are not reported and neglected, this could affect the company's reputation and customer trust and thus result not only in fines but also a decrease in product sales.

Even though Abi is in a difficult position, it is in his best interest to analyse and report his research as honestly and objectively as possible. This should also align with Whizzz's approach in how the findings are used and marketed.

Peer Response #1

Hi Sebastian,

Thank you for highlighting the link between nutritional research and marketing and the problems that accompany it.

I fully agree that analysing information and providing all the results irrespective of a company's marketing agenda is important. Furthermore, a legal framework must be implemented to protect consumers from being misled and making an economic decision that they would not otherwise have made.

An interesting study conducted by Théodore et al (2021) analysed persuasive techniques utilised in digital marketing of products with poor nutritional values in Mexico. The study found that products with an excess of critical nutrients were most frequently advertised across social media using a variety of persuasive marketing techniques. Their conclusion was that these techniques appealed especially to children and adolescents and hence, need to be regulated.

Reference

Théodore, F. L., López-Santiago, M., Cruz-Casarrubias, C., Cendoza-Pablo, P. A., Barquera, S. & Tolentino-Mayo, L. (2021) Digital Marketing of Products with Poor Nutritional Quality: A Major Threat for Children and Adolescents, *Public health* 198: 263–269. DOI: https://doi.org/10.1016/j.puhe.2021.07.040

Peer Response #2

Hi David,

Thank you for your insight regarding the case study at hand. You have brought up very valid points regarding research integrity and ethics.

I agree that the statistical practitioner should not mislead any stakeholder regardless of personal or external pressures.

Like the American Statistical Association guidelines, the Code of Practice for Statistics outlines the cornerstones of a common quality framework within the UK that can be referenced when evaluating the professional conduct of researchers. The code is based on three pillars, which are Trustworthiness, Quality and Value (UK Statistics Authority, 2018).

Within the Trustworthiness pillar, it is important that there is confidence in the people that produce data and research. An important facet of building confidence is to ensure those handling the data are acting with honesty and integrity and guided by ethics. The results should be presented impartially and objectively regardless of external factors (UK Statistics Authority, 2018).

The Quality pillar assures that produced statistics fit their intended uses and are not materially misleading. This includes principles that ensure suitable data sources as well as a methodology that is sound and based on good practice (UK Statistics Authority, 2018).

Reference

UK Statistics Authority (2018) Code of Practice for Statistics. Available from: https://code.statisticsauthority.gov.uk/wp-content/uploads/2018/02/Code-of-Practice-for-Statistics.pdf [Accessed 29 April 2022].

Peer Response #3

Hi Shiraj,

Thank you for your post on the ethical code of conduct in research. Especially interesting was the point you brought up on the reputational damages a company might face without disclosing discrepancies in data. Additionally, Laura has also mentioned important points, for example, the legislative requirements that food companies need to comply with.

Besides the reputational damage that a company might face, it also needs to consider the monetary implications of misleading consumers through false advertising. One such case study is that of the retailers Kohl's and Walmart, in which the companies promoted products that were eco-friendly and engaged in "greenwashing". These claims were deemed misleading and violated the Federal Trade Commission (FTC) Act and Textile Act. The FTC proceeded to penalise the companies for a combined $5.5 million (Fair, 2022).

Hence, the repercussions of misleading advertising can be severe. It is in the best interest of companies to ensure that product research is factual and objective and subsequently marketed honestly and transparently.

Reference

Fair, L. (2022) $5.5 million total FTC settlements with Kohl's and Walmart challenge "bamboo" and eco claims, shed light on Penalty Offense enforcement. *FTC*. Available from: https://www.ftc.gov/business-guidance/blog/2022/04/55-million-total-ftc-settlements-kohls-walmart-challenge-bamboo-eco-claims-shed-light-penalty [Accessed 29 April 2022].