Collaborative Discussion 2:

Case Study: Accuracy of information

Initial Post

In the case study, Abi, the researcher is working on a project from a manufacturer Whizzz to review their product. He realizes that with the data he collected, he can actually decide the result of the research based on the correlations he chooses to perform.

I have made extended research to look deeper into this topic. In the research of Silberzahn et al. (2018), 61 analysts are asked to perform research with the same set of data and research questions, but it resulted in significant variation. The study shows that even the researchers with honest intentions, it may still be hard to avoid the different results of analyses of the same data.

I agree that it will be more ethical for Abi to support different conclusions by suggesting analyzing the correct data, as research ethics should encourage an objective method and practice in order to prevent bias(Shrader-Frechette, 1994). Therefore, it is definitely more ethical for Abi to present both the positive and the negative analyses.

If the manufacturer only publicizes the positive results which fit their interest and hides the negative facts, then they may in risk of against the laws of misleading advertisements (The International Trade Administration, N.D). Although the law of misleading advertisements differ from different countries, it is the researcher's responsibility to inform the manufacturer of the risk so they can consequently review and analyze their actions to take.

Reference

Silberzahn, R., Uhlmann, E.L., Martin, D.P., Anselmi, P., Aust, F., Awtrey, E., Bahník, Š., Bai, F., Bannard, C., Bonnier, E. and Carlsson, R., 2018. Many analysts, one data set: Making transparent how variations in analytic choices affect results. *Advances in Methods and Practices in Psychological Science*, *1*(3), pp.337-356.

Shrader-Frechette, K.S., 1994. *Ethics of scientific research*. Rowman & Littlefield.

The International Trade Administration (N.D), European Union - Trade Promotion and Advertising. Available from https://www.privacyshield.gov/article?id=European-union-Trade-Promotion-and-Advertising [Accessed 10th November 2022].

Feedback from Yin Ping Lai

Hi Brandon, your post was an interesting post and analyzed concisely. You introduced some new point of views, when analyzing the same data set, different researchers might come up with varying results and conclusions. Also, the manufacturer might violate the law by spreading misleading information and anticipate deceptive marketing activity without mentioning negative results of their products.

In Canada, partially disclosing information in the advertisement can be treated as violating the Competition law. No matter being knowingly or recklessly about making false or misleading representation, this is prohibited by the government of Canada (Government of Canada, 2022). As a result, it is wise for researchers to stay away from participating in these kinds of activities, and indeed, presenting all findings is the best way to keep distance and maintain the integrity of scientific studies.

Reference

Government of Canada, I.A.P. on R.E. (2019). False or Misleading Representations and Deceptive Marketing Practices. [online] competitionbureau.gc.ca. Available at: **https://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/03133.html**.

Feedback from Richard Meadows

Hi Hung,

The research by Silberzahn et al. (2018) is an interesting read and the finding that beliefs changed after obtaining empirical data was intriguing. It shows research may not always be reliable when analysing data.

An older relevant report by Mertzman (1993) highlights the importance of proper reporting and describes a case where mentally ill children were given or deprived psychotropic drugs based upon false research data. The whistleblower in this case was awarded for their actions, it

inevitably led to the end of the researcher's academic career, the university was forced to pay back funding, and the National Institute of Mental Health (NIMH), following its attempts to delay and ignore the investigation, was subsequently dishonoured. If this happened today, even more so, it would have violated several codes of ethical conduct.

In addition to Shrader-Frechette, K.S. (1994), Berenson et al. (2015) also stress the importance of objective and ethical statistical testing, and that good and bad results should always be presented. However, other than the chance of whistlebowing and the fear of reprimand, it is clear that further methods are required to galvanise research data and magnifies the importance of ethics in scientific research. Silberzahn et al. (2018) suggest transparency in data, methods, and process allows inspection by peers and readers, however the typical reader seldom has time to carry out such scrutiny. Returning to Abi's case study where good or bad results could be published depending on how they are framed, it is possible to see how readers might be sceptical of what they read, especially in the absence of governing bodies. At present, it is suggested only to utilise reputable sources, and trust the governing bodies' jurisdiction, however there may be requirements for more stringent frameworks for conducting research to categorically guarantee fairness and objectivity.

References

Berenson, M. L., Levine, D. M., & Szabat, K.A. (2015) *Basic Business Statistics: Concepts and Applications.* 3rd ed. Harlow: Pearson Education. Available from: https://web-s-ebscohost-com.uniessexlib.idm.oclc.org/ehost/ebookviewer/ebook/bmxlYmtfXzE0MTk1NDVfX0FO0?sid=ca3af24c-8035-45c4-8751-4a83b7c446ce@redis&vid=0&format=EB&rid=1 [Accessed 11 November 2022].

Mertzman, R. (1993) Available from: **https://video-alexanderstreet-com.uniessexlib.idm.oclc.org/watch/ethics-and-scientific-research/details?context=channel:science** [Accessed 11 November 2022].

Shrader-Frechette, K.S. (1994) *Ethics of Scientific Research*. Rowman & Littlefield. Available from: https://www.google.co.uk/books/edition/_/MBXeOMM4mqwC?hl=en&gbpv=0&kptab=overview [Accessed 11 November 2022].

Silberzahn, R. et al. (2018) Many analysts, one data set: Making transparent how variations in analytic choices affect results. *Advances in Methods and Practices in Psychological Science* 1(3): 337–356. **https://doi.org/10.1177/2515245917747646**

My Feedback to Kei Yiu Yvone Chan

Hi Yvone,

Thanks for sharing your point of view.

I agree with your statement that Abi should adhere to the integrity of the research by providing both positive and negative results. Mitcham (2003) states that to meet the integrity of the research, the analysis should be conducted precisely, the result of the study should be transparent, and all the research findings should be fairly presented with reasonable interpretations. Furthermore, the research theoretically should withstand scrutiny by other well-informed researchers in the same field. Even though the negative results might not fit the client's interests, Abi has the responsibility to ensure the trustworthiness of his research to adhere to the integrity standard (Pimple, 2002).

Reference

Mitcham, C., 2003. Co-responsibility for research integrity. *Science and engineering ethics*, *9*(2), pp.273-290. [Accessed 16 Nov 2022]

Pimple, K. D. (2002). Six domains of research ethics. *Science and engineering ethics*, *8*(2), 191-205.
World Conferences on Research Integrity. (N.D.) Statement. Available from: **https://wcrif.org/statement** [Accessed 17 Nov 2022]

Formative feedback for your e-portfolio: CLQ 2 from Tutor Karen Outram

Hi Students,
Thank you for your posts, and good to see most people engaging with the formative.

This feedback here will be useful for your e-portfolio and so please add this feedback to your e-portfolio for those of you that have engaged.

These comments are not directed to any one student, but act as 'umbrella' feedback to support all students. And so please reflect on the comments and your own posts to identify where this feedback may apply to you.

I have also posted these comments in student announcements:

As follows:

- Posts are generally well constructed

- And generally engage with appropriate unit based scenarios and research

- Mostly there is regular use of citation; if you have posted formative without citation please remember that citation needs to occur in both formative and summative responses

- Similarly all posts need a List of References that reflect in-text citation

- Wherever possible use dated references and citation

- Ensure an appropriate breadth of research is engaged with at all times

- Good to see the inclusion of peers in peer responses, (and reflecting upon and debating peer discussion)

- Keep paragraphs evenly weighted

- There is debate and discussion occuring in some posts which is academically appropriate

- Ensure reference lists reflect in-text citation

- Register all references to the left side margin, there is no need to indent

- Keep line spacing to 2 point line spacing, keep font to Arial size 12

- Only use speech marks when quoting

- Good to see tables added to formative to highlight facts in some instances

- Good to see engagement with peer response and to see reflections related to peer discussions in most instances

- Good to see some other ethical issues being discussed in some peer responses

- In some instances there isn't a full synthesis of discussion, and some content takes a more list based approach and so in all instances intergrated discussion needs to take place as opposed to speaking about one aspect of research and then another

I hope this helps,

With best wishes

Karen