

<https://piotr1204essex.github.io/rmpp.html>

Introduction.....	3
Emotional response.....	3
Team activities.....	4
Learning and changed actions.....	5
Overview.....	5
Summative specific learnings.....	6
Module learnings.....	6
Conclusion.....	7
Reference list.....	8

Introduction

I would like to reflect on the final module (before the capstone project) of my MSc Data Science programme, which is Research Methods and Professional Practice (RMPP). This module has introduced me to the proper structure of academic research (University OF Essex, 2012) and its ethics code (Bailey et al., 2013; Vanclay et al., 2013). We have started with an introduction into the reasons behind starting a research (QuestionPro, 2021) and then gradually progressed into learning about scientific investigation (Anderson and Hepburn, 2020), research design (Saunders et al., 2012; Marble Jar Channel, 2018), research methods (Kaplan et al., 2005; Saunders et al., 2012), data collection process (Brace, 2013; Fuelcycle, 2019; Abramson et al., 2020; Devaul, 2020; Taherdoost, 2021) and data analysis (Berenson et al., 2015; Popenoe et al., 2021). We had a chance to apply the learnings with two summative assignments: Literature Review (LR) and Research Proposal Presentation (RPP). At the end of the module, we have also learned about project management (Maylor, 2010; Mircea, 2019) and risk management (McManus, 2012; Marichetty, 2017). The emphasis, throughout the module, has been put on improving our academic writing, ensuring we know and follow the ethics code and that we are ready to appropriately collect and analyse data.

Emotional response

This module is definitely amongst the most time consuming modules in this programme. As I am a working professional, I felt stretched quite thinly with all of the workload and requirements that this module presented itself with. I 'quitted' more than 10 times in my mind, thinking I am never going to be able to complete all the work on time and in a satisfactory manner. This module has definitely pushed me

above my limits. I had to manage my time better (Chase et al., 2013), I had to stay motivated (Dombestein et al., 2021) to keep completing the work and I had to forgo some of the planned spare time. This experience makes me confident to say that I became a more resilient and better organised person. It is important to note, that during this module I was also having an extraordinarily demanding time at work. I am proud to have completed the module. It made my benchmark for ‘it is impossible to be done’ move up quite significantly.

Team activities

While this module had no team work involved, we had two collaborative discussions. I have taken part in both of them and engaged with other colleagues. My initial and summary posts in full are available at the top of my e-Portfolio. I will include below screenshots from the conversations with my colleagues, showing myself engaging and responding to their comments.

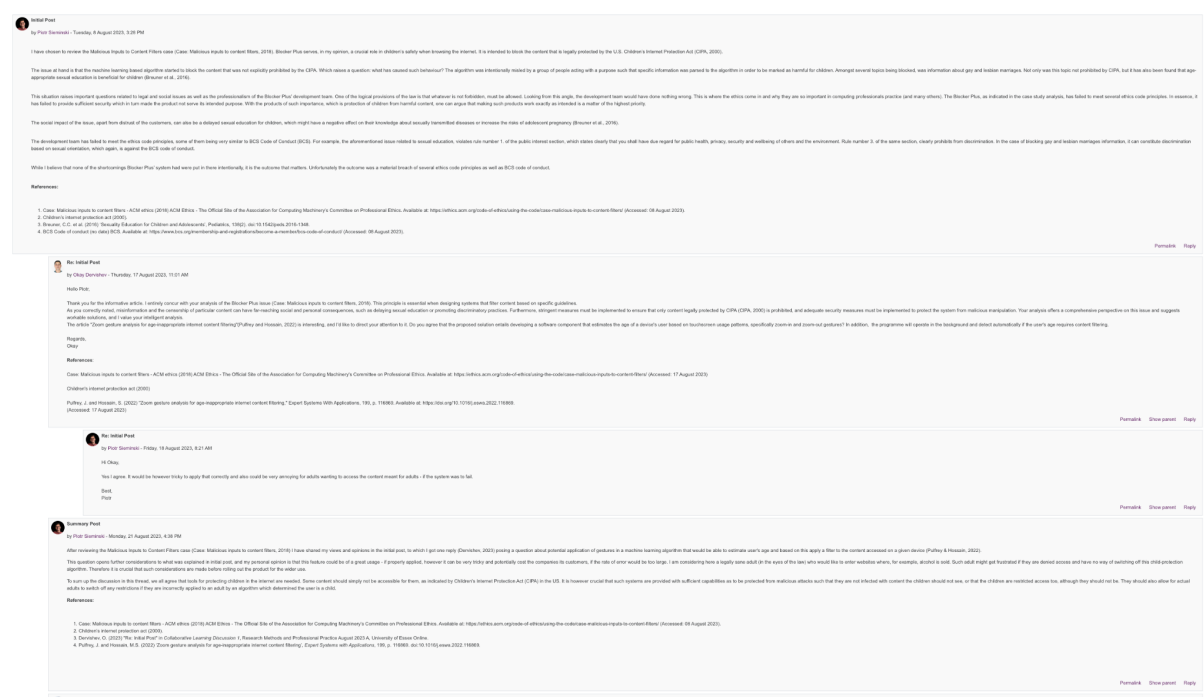


Figure 1: Collaborative Learning Discussion 1: my initial post and the thread below.

Figure 2: Collaborative Learning Discussion 2: my initial post and the thread below.

Overview

The biggest, noticeable, difference between my experiences and what I learned throughout the module was the structure, generalisability and peer review of the research. Corporate studies are much less rigid and much more tailored to the specific needs of a company, while academic research is meant to bring

developments in the field (Fritzlen, 2022), must be generalisable and must follow scientific methods (Anderson and Hepburn, 2020). This learning allowed me to better grasp the research concepts and incorporate these learnings into my submissions. First and most important evidence of that is that while my LR submission has been evaluated as (mostly) 'very good', RPP has received 'excellent' and 'outstanding' comments throughout the feedback sections.

Summative specific learnings

I struggled at first with the 15 minutes time limit for the RPP. Working on it allowed me to learn how to better plan the presentation (Grimble et al., 2023) and after several attempts at recording and pacing the way I speak - I succeeded at delivering the presentation in a satisfactory manner in the required time. When it comes to LR, a great learning occurred when some of the sentences in my work were flagged by Turnitin (anti-plagiarism software). I evaluate that specifically in the Unit 7 section of the portfolio. This experience made me very conscious of Turnitin checks before submitting. While I am honest with my work and do not copy from others, I learned that unintentionally certain phrases may come up and it is required to either reference or change them, such that the academic integrity is ensured (Holden et al., 2021).

Module learnings

The biggest takeaway from this module was learning how to properly use citations (Holden et al., 2021) and how to make sure that the work submitted is critical. Some of the first formative assignments received comments from my Tutor about starting a reference list on a new page and to ensure that the citations are in order - which I

applied after I read the feedback. LR was lacking criticality while RPP has received 'excellent' comments for this section of the feedback, which is another evidence of progress throughout the module. RPP has also explicitly made us think critically, as part of the requirements was to include a risk assessment. In its nature, it 'forces' you to evaluate the things that can go wrong with the research and come up with a mitigation plan. It helped me greatly with improving my critical writing (Myers and Klein, 2011).

Conclusion

This module has been extremely time consuming. It was a non-technical module, yet I can fairly say it was an extraordinarily demanding one. I had a chance to refresh my knowledge on the topics I was already familiar with (research methods, data analysis, statistics etc.). I benefited the most from the learning of the structure of academic writing, criticality and presentation planning - I plan to implement all of this learning during the capstone project. I was close to quitting many times during this module, but I am glad I stayed, completed the work and now I feel fully equipped and ready to start working on my capstone project.

Reference list

Abramson, C. & Sánchez-Jankowski, M. (2020) Conducting Comparative Participant Observation. in: Abramson, C. & Gong, N. (Eds) *Beyond the Case: The Logics and Practices of Comparative Ethnography*. Oxford Scholarship Online

Anderson, H & Hepburn, B. (2020) 'Scientific Method' in: Zalta, E. (Eds) *The Stanford Encyclopedia of Philosophy* (Winter 2020 edition). Metaphysics Research Lab, Stanford University.

Bailey, M. et al. (2013) *Applying Ethical Principles to Information and Communication Technology Research: A Companion to the Menlo Report*.

Berenson, L., Levine, D. & Szabat, K. (2015) *Basic Business Statistics: Concepts and Applications*. 13th Ed. Pearson

Brace, I. (2013) *Questionnaire Design: How to Plan, Structure and Write a Survey*. Kogan Page.

Chase, J.-A.D., Topp, R., Smith, C.E., Cohen, M.Z., Fahrenwald, N., Zerwic, J.J., Benefield, L.E., Anderson, C.M. and Conn, V.S. (2013). Time management strategies for research productivity. *Western Journal of Nursing Research*, [online] 35(2), pp.155–176. doi:<https://doi.org/10.1177/0193945912451163>.

Devault, G. (2020) What is a Market Research Focus Group?

Diffy (2018). *What is Product Data?* [online] Diffblog. Available at: <https://blog.diffbot.com/what-is-product-data/> [Accessed 23 Oct. 2023].

Dombestein, H., Norheim, A. and Aase, K. (2021). How to stay motivated: A focus group study of Norwegian caregivers' experiences with community healthcare services to their parents with dementia. *Health & Social Care in the Community*, 30(1). doi:<https://doi.org/10.1111/hsc.13396>.

Fritzlen, K. (2022). Differences between Academic and Industry Research (from a recovering academic). [online] Buildertrend Research. Available at: <https://medium.com/buildertrend-research/differences-between-research-in-academia-vs-industry-and-also-some-similarities-df4860f379ae>.

Fuelcycle (2019) The Three Most Common Observation Research Methods.

Grimble, G., Lobo, D.N., Delzenne, N. and Deutz, N.E. (2023). Presentation and publication skills: How to present a paper. *Clinical Nutrition ESPEN*, [online] 57, pp.410–413. doi:<https://doi.org/10.1016/j.clnesp.2023.07.009>.

Holden, O.L., Norris, M.E. and Kuhlmeier, V.A. (2021). Academic Integrity in Online Assessment: A Research Review. *Frontiers in Education*, [online] 6. doi:<https://doi.org/10.3389/educ.2021.639814>.

Kaplan, B. & Maxwell, J.A. (2005) Qualitative Research Methods for Evaluating Computer Information Systems. In: Anderson J.G. & Aydin C.E. (Eds) Evaluating the Organizational Impact of Healthcare Information Systems. Health Informatics. New York, NY: Springer.

Marble Jar Channel. (2018) How to write a research paper.

Marichetty, K. (2017) The Use of Effective Risk Management in Cloud Computing Projects. Thesis. Harrisburg University of Science and Technology.

Maylor, H. (2010) Project Management. 4th Ed. Pearson Prentice Hall.

McManus, J. (2012) Risk Management in Software Development Projects.

Mircea, E. (2019) Project Management using Agile Frameworks. *Economy Informatics* 19(1): 34-44.

Myers and Klein (2011). A Set of Principles for Conducting Critical Research in Information Systems. *MIS Quarterly*, 35(1), p.17.
doi:<https://doi.org/10.2307/23043487>.

Popenoe, R., Langius-Eklöf, A., Stenwall, E. and Jervaeus, A. (2021). A practical guide to data analysis in general literature reviews. *Nordic Journal of Nursing Research*, [online] 41(4), pp.175–186.
doi:<https://doi.org/10.1177/2057158521991949>.

QuestionPro (2021). What is research?

Saunders, M., Lewis, P. & Thornhill, A. (2012) Research Methods for Business Students 6th ed. Pearson Education Limited.

Stahl, B.C., Timmermans, J. and Mittelstadt, B.D. (2016). The Ethics of Computing. *ACM Computing Surveys*, 48(4), pp.1–38. doi:<https://doi.org/10.1145/2871196>.

Taherdoost, H. (2021). Data Collection Methods and Tools for Research; A Step-by-Step Guide to Choose Data Collection Technique for Academic and Business Research Projects. *International Journal of Academic Research in Management (IJARM)*, 10(1), pp.10–38.

University of Essex (2012) How to write a research project.

Vanclay, F., Baines, J. & Taylor C. (2013) Principles for ethical research involving humans: ethical professional practice in impact assessment Part II. *Impact Assessment and Project Appraisal* 31(4): 243-253.