

## **Reflective Piece in Research Methods and Professional Practice Module**

The Research Methods and Professional Practice module gave me invaluable insights into research designs, methodologies, literature reviews, data collection methods, and data analysis techniques. Among the modules I have taken, this has been one of the most impactful, particularly because it aligns with my recent decision to pursue a PhD and transition into a research-orientated career. My primary goal is to establish a robust academic foundation, and this reflection highlights how the module's structure has contributed to my professional and educational growth.

One of the key areas where I observed significant improvement was my research skills, particularly through two major assignments: the literature review and the research proposal presentation. These assignments offered opportunities to apply theoretical knowledge in practical scenarios. Reflecting on the literature review, which focused on a contemporary and significant topic, I learnt the importance of structuring the review around critical discussions, maintaining a sharp focus on the central topic, and avoiding tangential issues. These skills will be instrumental in ensuring that future literature reviews, including those for my PhD research and capstone project, are well-organised and impactful. While I performed well overall, my marks in the research integrity component were slightly lower compared to other areas. This revealed the need for me to better understand and interpret Turnitin results. It became evident from research by Nketsiah et al. (2024) that students often have limited knowledge of Turnitin, despite its significant relationship with awareness and usage. This observation further motivated me to explore research ethics in greater depth, beyond the unit materials, to strengthen my academic integrity practices.

For the research proposal presentation, I chose the same topic as my literature review: artificial intelligence adoption in the finance sector, with a focus on large language models (LLMs). Between 2017 and 2023, research interest in LLMs grew significantly, as noted by Fan et al. (2024), which closely aligns with the focus of my PhD thesis on exploring AI applications across different regions and use cases. Although the presentation was limited to fifteen minutes, it required an in-depth understanding of the topic and the selection of a suitable research design and methodology. For the first time, I explored thematic analysis, a qualitative research method introduced by Braun and Clarke (2006) for identifying recurring themes. This enriched my understanding of qualitative approaches and their applications. These assignments had two key benefits for my academic development: first, I received constructive feedback on my communication skills, which I aim to improve further; second, I realised the importance of integrating theoretical frameworks into research presentations to build a solid foundation.

The module, comprising 12 units, significantly enhanced my research skills and scientific rigour. Initially, I found the artefacts and statistical worksheets particularly challenging due to their order. However, the seminars provided the clarity I needed to approach these tasks effectively. The statistical worksheets, in particular, were valuable in revisiting key concepts like hypothesis testing and data visualisation techniques. For example, interpreting p-values, which is a topic I have often found confusing despite my statistical background, became clearer and served as an excellent refresher.

Another critical component of the module was submitting artefacts or summative work for formative feedback from the tutor. This process was invaluable in

helping me integrate feedback effectively, a skill essential for both my MSc and PhD theses. As van Rooij et al. (2021) highlight, the relationship between a supervisor and a PhD candidate plays a significant role in the successful completion of a project. Actively seeking and incorporating feedback will therefore be crucial in fostering strong communication and ensuring academic progress. Beyond the theoretical knowledge gained from the module, Unit 11 emphasized professional development through activities such as conducting a SWOT analysis, creating a professional skills matrix, and drafting an action plan. These exercises provided me with a clear and focused vision for my future objectives. These tools helped me assess my strengths and weaknesses, paving the way for continuous development. Previously, I had struggled to engage with these tools effectively in other modules, but developing them here proved extremely beneficial. As Helms and Nixon (2010) explain, SWOT analysis is a powerful tool for strategic planning, and mastering it will greatly aid my future research and career planning efforts.

Identifying and selecting an appropriate topic was one of the most challenging aspects of the module, made more complex by the need to avoid self-plagiarism in preparation for my capstone project. As Rozhkova and Isaeva (2022) highlight, while self-plagiarism is not legally considered plagiarism, it remains a significant academic concern. Navigating this challenge allowed me to develop a sharper focus on selecting distinct and impactful research topics. Researchers are increasingly leveraging tools like ChatGPT during the topic selection process, and Rahman et al. (2023) stress the importance of establishing clear guidelines to address its growing relevance in research practices. Although I currently prefer to select topics independently, I recognize that my approach may evolve in the future, potentially incorporating AI tools or collaborative brainstorming techniques.

The module was primarily independent, although I engaged with colleagues during two discussions. These discussions, however, did not significantly enhance my teamwork skills, which Nagy (2023) identifies as essential for becoming a researcher. Both discussions focused on the ethics of computing professionals, a topic that was new to me and initially challenging to analyse. By the end of the module, I had successfully developed a solid understanding of its significance in the field.

Lastly, I would like to address time management. At the beginning of the module, considering all my responsibilities, the structure initially left me feeling overwhelmed and pessimistic. However, I discovered that with a well-organized timetable, everything became manageable. I now feel a sense of accomplishment in having successfully completed all the summative and formative tasks while learning valuable lessons along the way. In conclusion, the research methods and professional practice module has greatly enhanced my academic and research skills while supporting my decision to pursue a research-orientated career. By building on the research foundation provided and staying updated on advancements in research techniques, I aim to address my weaknesses and prepare myself for the demands of both my PhD journey and professional career.

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