## Research Methods and Professional Practice Unit 6 Reflection

# **Description**

This unit was the sixth unit of the Research Methods and Professional Practice module. This unit of the module focused on quantitative methods. The goals of this unit were to understand and apply descriptive statistics in data analysis, to identify and classify different levels of measurement for variables and to learn how to calculate and interpret measures of location and spread in numerical data.

During this unit we were required to read chapter 2 & 3 in the book Basic Business Statistics: Concepts and Applications (Berenson et al., 2019) and had to prepare for next week's seminar by attempting the Seminar preparation activity in unit 7.

## **Feelings**

The reading for this unit didn't match what it said on the learning platform and didn't seem relevant as the learning platform said that the reading this week will give you more information on designing a questionnaire however it instead focused on different ways of visualising and analysing data rather than designing a questionnaire and the context of the examples weren't relevant to computer science.

The worksheets for the seminar preparation activity on Summary Measures and Hypothesis Testing were both significantly out of date as some files were either missing or name incorrectly which caused me a great deal of confusion.

I injured my wrist this prior to starting this week's activities which made me fall behind again as I was unable to type which is not ideal due to the ever increasing workload of this module.

#### **Evaluation**

The unit provided an insightful exploration of quantitative methods, focusing on descriptive statistics, measures of location, and measures of spread. These concepts were useful for understanding how to analyse and summarize data effectively. However, the discrepancies between the recommended reading and the content on the learning platform were disappointing. The promised focus on questionnaire design was instead replaced with unrelated examples, which lacked relevance to computer science. This mismatch significantly hampered my learning experience. Additionally, the outdated seminar preparation worksheets added confusion, as they lacked clear organization and included missing or mislabelled files.

Despite these challenges, the foundational knowledge of quantitative methods gained during this unit has proven to be valuable. It strengthened my ability to classify data, calculate descriptive measures, and interpret their implications, which are crucial for statistical analysis in research.

## **Analysis**

The inconsistency between the assigned readings and the learning platform highlighted a gap in the course's structure and delivery. The focus on data visualisation and statistical analysis in the readings was a missed opportunity to reinforce questionnaire design, which was stated as the week's focus. This misalignment made it difficult to directly connect the material to practical applications in computer science, where contextually relevant examples would have been more impactful. Additionally, the outdated seminar preparation worksheets presented logistical challenges, detracting from the overall learning experience. Despite these issues, the unit successfully introduced foundational statistical concepts, enabling a better understanding of data summarisation techniques.

## Conclusion

While the unit succeeded in covering the fundamentals of quantitative methods, it fell short in aligning supplementary resources and activities with the stated goals. Ensuring that all course materials are updated, well-organized, and relevant to the module's objectives would significantly improve the learning experience. Greater effort is needed to tailor examples and activities to the field of computer science, enhancing the module's overall relevance and effectiveness.

## **Action plan**

Utilize external resources, such as online tutorials or textbooks, to fill gaps in understanding and reinforce concepts like questionnaire design and data visualization.

#### References

Gibbs, G. (1998) Learning by Doing: A guide to teaching and learning methods. Further Education Unit. Oxford Polytechnic: Oxford.

Berenson, L., Levine, D., & Szabat, K. (2019) *Basic Business Statistics: Concepts and Applications*. 14th Ed. Pearson.