

## **Research Methods and Professional Practice Unit 7 Reflection**

### **Description**

This unit was the seventh unit of the Research Methods and Professional Practice module. This unit focused on inferential statistics and hypothesis testing. The goals of this unit were to understand the principles of inferential statistics and their applications in data analysis, to identify and apply appropriate probability distributions for statistical inference and to learn how to conduct hypothesis testing to evaluate assumptions and compare population values effectively.

In this unit there was a collaborative discussion on the legal, social and ethical concerns Abi must consider in the case study, the hypothesis testing worksheet, the summary measures worksheet and a lecture cast on summary measures and Inference. We were also required to read chapter 4, 9 & 10 from the book on Basic Business Statistics (Berenson et al., 2019) and the article on inferential statistics (Purdue University, 2023) and had to hand in the literature review assignment.

### **Feelings**

I felt overwhelmed this week due to the number of tasks to complete alongside the literature review assignment. Missing the lecture added to my stress, as I only realized after submission that my references needed to be in alphabetical order, which was not a requirement in previous modules or stated in the university's guidelines. This oversight made me feel frustrated and anxious about my grade. Additionally, I found the grammatical errors in the lecture cast distracting, which affected my focus. Despite these challenges, I appreciated the structure of the worksheets, as they helped clarify concepts, I initially found confusing.

### **Evaluation**

The unit provided valuable insights into inferential statistics, particularly through the hands-on worksheets, which reinforced my understanding of hypothesis testing. The collaborative discussion on legal, social, and ethical concerns broadened my perspective on real-world applications of research. However, missing the lecture negatively impacted my ability to adhere to assignment requirements. The lack of clarity in referencing expectations and the errors in the lecture cast content reduced the overall quality of the learning experience.

### **Analysis**

The challenges I faced this week highlighted the importance of attending lectures and reviewing recordings promptly to avoid missing critical information. The university's inconsistency in referencing requirements created confusion, demonstrating a need for clearer communication and standardized guidelines. Despite these setbacks, the unit's emphasis on statistical inference was beneficial, as it provided a strong foundation for future research tasks. The worksheets were particularly effective in translating theoretical concepts into practical skills, such as identifying probability distributions and performing hypothesis tests.

## **Conclusion**

Although I gained significant knowledge from this unit, missing the lecture and encountering inconsistencies in referencing guidelines hindered my performance. Improved time management and better communication from the university could have alleviated these issues. The practical components of the unit, such as the worksheets and discussions, were highly valuable and enhanced my understanding of inferential statistics.

## **Action plan**

To improve my performance in the module going forward I will ensure I attend all lectures or watch recordings promptly to stay updated on assignment expectations and key concepts, use formative feedback from discussions and worksheets to enhance my understanding and improve future assignments and allocate specific time slots for completing readings and worksheets to ensure tasks are not rushed, even during busy weeks.

## **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

Purdue University. (2023) *Basic Inferential Statistics: Theory and Application*.