Research Methods Assignment 2

An analysis of a small dataset chosen, for example, from an open dataset such as the UK data service or data.gov.uk (3000 words).

Assignment Description

This assignment requires you to demonstrate many of the skills you have learned throughout the course of this module. You are asked to choose a data set, taken either from among those provided or elsewhere andundertake a short literature review, relating to the contents of the chosen data set in order to derive a hypothesis to test or research questions to answer. Once the research question/hypothesis has been ascertained, you need to determine what tools are to be used to interrogate the data and thereby enable the hypothesis to be tested or the research questions answered, and provide a justification for this choice. You will then have toanalyse the data, and relate the findings of the analysis to the research questions or hypotheses.

In this assignment you are asked to adopt a critical perspective. For example, by assessing the utility of the data set – are there some additional pieces of information that could have been gathered by means of the research instrument which would have strengthened the explanatory power of the data set? Are there too many closed questions? Similarly, critiques could be made in the literature review of previous analyses of data in this subject area. For example, have previous studies relied on data sets that are too small? Were the tests chosen appropriate to the hypotheses?

What follows is a more detailed description of what needs to be included in this piece of assessment and an example of an outline that you could use. Please note that these are only examples of how you can write up this assignment and are only provided here to give you an idea about the structure and what should be included.

The different sections and headings for this assignment could be:

Introduction

The Research Question

The Research Instrument

The Data Set

The Analysis

The Results

Conclusion and Reflection

References

*Introduction*

In the first section you need to describe the focus of the assignment and provide a clear layout of it (briefly discuss what each section addresses and in what order).

*The research question*

As we have discussed in one of our sessions, it is usually the case that you work out the research question and then determine what data you will need to answer it. In this assignment, the data set will be pre-determined and thus, you will need to read around the topic and consider what question you may need to ask. Write a short literature review that will inform your research question for this assignment. The research question should be clear, focused, and simple enough to allow for adequate analysis.

*The research instrument*

Try and describe the research instrument used for the collection of the data set in terms of length (was there a risk of fatigue?), use of open/closed questions, design (did demographic questions come first?), question type (dichotomous and Likert scales?), use of incentives (free report, prize draw?) and how were ethical concerns addressed?

Reliability – can you use Cronbach’s alpha to test the instrument’s reliability?

Distribution – what approach was used to distribute the research instrument?

Sample – what sampling framework was adopted?

Readability – is it easily readable and well-designed?

*The data set*

From where did you acquire the data set? Were you given it or did it come from a data base, e.g. the Trends in International Mathematics and Science Study?

How large is the data set in terms of size – does it have sufficient responses to enable meaningful statements to be made about the population?

Is the data set readily available for analysis, or will you need to alter/input data in to the statistical programme?

Will you need to reorder/recode the data to use it?

What type of data are included – are there open ended questions – if so, have they generated enough text to be analysed qualitatively?

Sample – what sampling framework was adopted?

*The analysis*

* The quantitative analysis/the statistical test(s)

What tests are you using – what rationale do you have for choosing it? Any rationale for their use in terms of previous similar work? How will you determine reliability? At what confidence level?

* The qualitative analysis/NVivo

Is there sufficient data to warrant using Nvivo, or can you code and analyse the data manually? How will you identify what themes are relevant? How will you generate new themes from nodes? How will you determine reliability?

*The results*

Discuss the results of the analysis in relation to your research question/hypothesis.

Do the results address the research question? If so, to what extent and in what way? If not, why not?

In case of hypothesis testing, do they confirm/reject the hypothesis? Were there any surprise results?

If the results are unclear, are there any other tests we could run, or additional data that we could use? Can a qualitative analysis of the data enable a richer understanding of the relationships that may underlie quantitative data? Is it worth considering some form of triangulation of the quantitative and qualitative results? If the quantitative and qualitative results vary, what reasons might you advance for this?

*Conclusions/reflection*

Discuss the results in relation to previous work in the field/area/topic.Write a brief reflection on the analysis undertaken.

Critically reflect on your experience of undertaking this work? =What were the main difficulties? If you now had to repeat the exercise, in what ways (if any) would you do things differently?

*References*

APA style to be used when completing this list.