



Applied Research Methods (MULT30018)

Tutorial 10

Nhan La

- W1. Introduction
- W2. Descriptive statistics
- W3. Crosstabs and correlations
- W4. Regression 1
- W5. Regression 2
- W6. Experiments
- W7. Counterfactuals
- W8. Mixed methods
- W9. Group presentations
- W10. Final assignment workshop**

Question 1: What do we mean by the term counterfactual?
Provide two examples.

Counterfactual means contrary to facts. They imagine how outcomes (the dependent variable) would change if we changed one event in history (the independent variable) or some other phenomenon.

Examples may vary

Question 2: Why are counterfactuals useful in social science? In what field(s) of social science are they most useful?

- 1) think about causation in settings where it cannot be tested;
- 2) think about alternatives to 'reality' ('what if');
- 3) make us aware of the contingency of history.

Fields: history and/or international relations, where it is difficult or impossible to run experiments or to collect data (e.g., you cannot go back in time to re-run history or run a survey).

Question 3: What is mixed methods research? Provide one example.

Mixed methods are quantitative methods + qualitative methods.

Examples may vary

Question 4: What was the key argument of *Designing Social Inquiry* (the book by Gary King, Robert Keohane, and Sidney Verba)?

- Quantitative research template should be applied to all social science research, including qualitative research designs.
- The aim of all social science research is to make inferences, inferring beyond what's immediately observed.
- Social scientists should always aim to increase their number of observations.

Question 5: How did John Snow discover the cause of cholera? Explain with reference to mixed-methods research.

- John Snow demonstrated that cholera was a water-borne infectious disease, which could be prevented by cleaning up the water supply (London).
- Methods: Mixed-methods, quantitative analysis, interviews, fieldwork (the shoe-leather method)
- Reports of cholera in London (which he mapped) were located around a particular water pump. He found that it was a particular water pump that was spreading the disease in London.

Question 4: What did Sudhir Venkatesh discover when administering surveys to gang members in Chicago? How did he address this?

- When administering surveys to gang members in Chicago, Sudhir Venkatesh discovered that this was a hard to sample population and the intended survey research was not the best approach to take.
- Sudhir Venkatesh changed his approach and engaged in a qualitative study of experiences of people who lived in the housing project. He embedded himself in that environment by befriending (and hanging out with) people who lived there.

Question 5: List two criticisms made of *Designing Social Inquiry (DSI)* by the authors of *Rethinking Social Inquiry*.

- *DSI* downplayed the unique contribution of qualitative methodologies in providing in-depth contextual information on specific cases.
- *DSI* underplayed limitations of quantitative methods (e.g., significance tests do not account for all kinds of uncertainty).
- *DSI* did not acknowledge that hypotheses are often based on contextual in-depth knowledge, which is inherently qualitative.
- *DSI* does not talk about the value of mixed methods research as it simply argues that quantitative template is superior.

- A clear Research Question (RQ) that you can answer/tackle with linear regression
- RQ focuses on independent variables (IV) and a single dependent variable (DV)
- IV and DV included in RQ correspond to specific question or sub-question from WVS
- RQ based on a clear hypothesis
- RQ is concisely expressed and is either a title or appears in the *Introduction*
- RQ is analysed in the context of a number (4-8) of independent variables that are connected to the literature review or included as control variables

- Additional variables are explained and justified in your Literature Review, Methodology, Data Analysis and Discussion.
- There are 5 sections to this assignment (Introduction, Theoretical Background/Literature Review, Method, Data Analysis, Discussion). Sections have appropriate sub-headings.

Introduction (~200 words)

Summarise your research, including research question and its significance

Literature Review (~650 words)

Explain how your research question and hypothesis fit in existing body of academic literature, research and theory in your chosen topic. Using academic sources justify your variable selection (IVs and DVs)

Methodology (~200 words)

- What are your variables (IVs (including control variables), DV)? What questions from WVS they correspond to?
- Are they coded appropriately for your intended data analysis?
- If you had to recode your variables, explain how they were recoded (e.g., dichotomised).
- How did you assess the relationship between your IV and DV (e.g., run correlation, run crosstab)?
- How many and what variables were included in your multiple linear regression?
- Based on the total number of IV's provide equation for your multiple linear regression.

Data Analysis (~300 words)

- Table of correlation output **OR** crosstab of your IV and DV.
- Multiple Linear Regression Output (including, Model Summary, ANOVA table (i.e. N), Coefficients)
- Describe your results in plain language (in proper sentences with statistical values in parentheses where necessary) in relation to effect size, significance and direction of relationship.
- Please comment on the following statistical values: R squared, N (sample size), B (Regression Coefficients — Unstandardised), Standardised Coefficients, p values (statistical significance).

Discussion (~650 words)

- Go back to the sources used in the Literature Review to interpret your result in the context of existing theory, literature and research.
- **Answer your research question!!!**
- Show awareness of advanced concepts (week 6-10 contents) when discussing limitations of your study.
- In concluding remarks, please include directions of (and recommendations for) future research on the topic.



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