



# **Applied Research Methods (MULT30018)**

Tutorial 4

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

- Understand the logic behind multiple linear regression
- Be able to conduct multiple regression using SPSS
- Be able to interpret SPSS regression output
- Know how to dichotomise categorical variables for use in regression (as independent, not dependent, variables)
- Form groups and spend some time preparing for the group presentation

- What does regression do?
- What is it used for?

- Regression allows us to estimate the relationship between different variables
  - Existence
  - Significance
  - Direction
  - Magnitude
- Regression controls for (hold constant) the effects of potentially confounding factors
- Regression = causation?

*“In the interplay between design and statistics, design rules”*

*(Shadish, Cook, & Campbell, 2002)*

$$DV = a + bIV_1 + cIV_2 + \dots + \varepsilon$$

DV: Dependent variable

IV: Independent variable

- How to choose variables?
- Do they best measure the concept and relationship of interest?

- How do age [V242] and education [V248] influence how often respondents attend religious services [V145]?
- How do age [V242] and education [V248] influence how often respondents use daily newspaper as an information source [V217]?
- How do marital status [V57] and scale of incomes [V239] influence respondents' satisfaction with life [V23]?



- Random allocation

- Select one of these discussion topics:
  - Data helps us understand the social world
  - The use and abuse of data
  - Data can improve our lives
- Schedule:
  - Tutorials 4, 7 and 8
  - Outside of class

- Assessment:
  - Peer evaluation: 10%
  - Tutor: 10%
- Presentation criteria
  - Quality of ideas/innovation in the presentation
  - Engaging presentation
  - Clear sign of work having gone into the presentation
  - Engagement with course content
  - Response to questions from class

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