



# **Applied Research Methods (MULT30018)**

Tutorial 6

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

- Problems with the observational data
- Experiments as solutions for many, if not all, of these problems
- Fundamentals of experiments
  - Logic
  - Limitations
- Work on group presentation

- Come up with an experimental study design
- Class presentations
  - 5 minutes
- Questions & answers
  - 5 minutes
- Cross-group assessment

- Research Topic 1: The relationship between alcohol consumption and creativity
- Research Topic 2: The relationship between weather and students' class engagement
- Research Topic 3: The relationship between the physical attractiveness of a political candidate and voters' opinions of him/her
- Research Topic 4: The relationship between coffee consumption and academic performance

- Design a correlational study to investigate the relationship between these two variables.
  - What is your hypothesis?
  - How do you define and measure these variables?
  - Assume a significant positive correlation relationship. What are three possible causal explanations for an
  
- Design an experimental study to investigate these variables.
  - What is your hypothesis?
    - Experiment-enabled hypothesis
  - What are dependent and independent variables?
  - How do you manipulate independent variables?
  - How to ensure high internal validity?
  - Will you use random assignment and, if yes, at which level?
  - How to select participants?
  - Are there ethical concerns?

Group	Rank
1	
2	
3	
4	

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