

CS5005: The Power of Media: Myth & Reality

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Preface

This is a Quarto book.

To learn more about Quarto books visit <https://quarto.org/docs/books>.

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Part I

PART 1 : LECTURES

1 Introduction to Media Effects

2 Scientific Study of Media Research

2.1 Ways of Knowing

CS5005 outlines three main ways of knowing:

1. **Experience**

One possible way to learn more about a subject is to experience it firsthand.

Experience is good in that it allows a person to get up close with the topic. However, it is often messy and may result in different outcomes for different experiences.

2. **Authority**

Which includes scientists, political leaders, religious leaders, community leaders, and elders.

Authority is the easiest way of knowing, but authorities may sometimes have vested interests.

3. **Science**

Science combines logic and empiricism with the thought of improving precision via observation.

2.2 Goals of Science

Science has three main goals:

1. **Prediction**

2. **Explanation**

3. **Understanding**

This refers to knowing how a particular sequence of events might unfold in a given phenomenon.

2.3 Achieving the Goals of Science

Science is general and assumes that there is one “objective truth”. Scientists adopt a skeptical attitude (which often leads to controversy).

Yet, science is unable to answer *all* questions.

2.4 Discovering Effects of Media Content

CS5005 lists three main ways:

2.4.1 Content Analysis

This is a research technique for objectively, systematically, and quantitatively describing content in communication media.

1. Type of movie (1 = Comedy; 2 = Action, 3 = Horror, 4 = Others)
2. Presence/Absence of smoking (1 = Absent; 2 = Present)
3. Length of smoking footage (in seconds)
4. Type of person smoking (1 = Antagonist, 2 = Protagonist, 3 = Others)
5. Portrayal of smoking (1 = Glamorous, 2 = Dirty, 3 = Everyday life)

Figure 2.1: A Sample Coding Category for a Smoking Study

For instance, researchers specify a set of rules for selecting media and “coding” them. A **coder** is a person who classifies content into categories - the system used by the coder is such that any other person who uses the system will also end up with the same result.

2.4.2 Surveys

There are two main kinds of studies covered in CS5005:

1. Cross-Sectional Studies

These surveys are based on a sample at a single time. Most exploratory and descriptive studies are often cross-sectional.

2. Longitudinal Studies

These can be broken down into three more kinds of (sub-)studies:

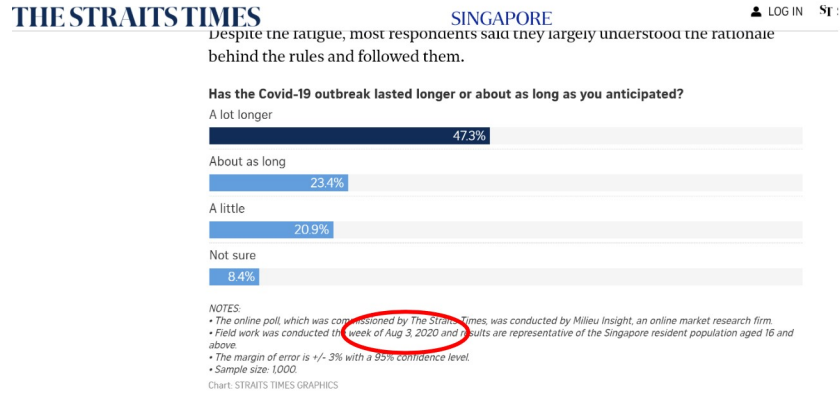


Figure 2.2: Cross-Sectional Study Conducted in the Straits Times

1. Trend Studies

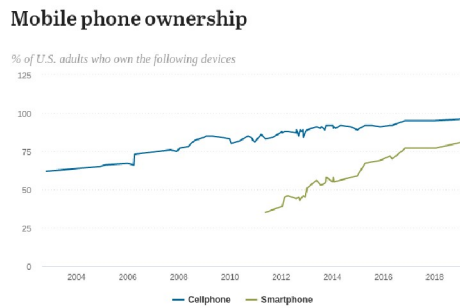


Figure 2.3: Trend of Mobile Phones over Time

A trend is analyzed.

2. Cohort Studies

One follows the same group over time. However, the same people may not be followed up on.

3. Panel Studies

This kind of study surveys the same people over time.

2.4.3 Experiments

To perform an experiment, one identifies their independent and dependent variables (i.e., IVs and DVs). The IVs are manipulated.

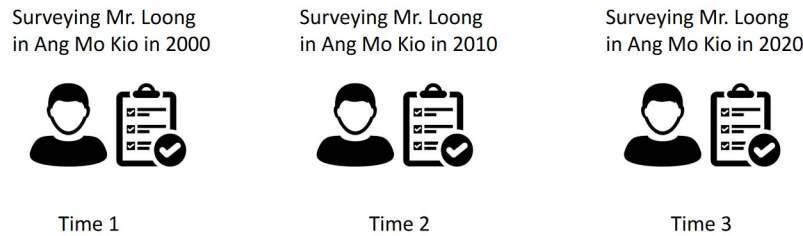


Figure 2.4: An Example of a Panel Study

Participants of the study also get randomly assigned to different conditions of the IV. The results obtained from the IVs should be compared against those with the control group.

2.4.3.1 Criteria for Determining Casual Relationships

There are three main conditions:

1. **Correlation**

It must be statistically significant.

2. **Time order**

The independent variables of a study *must* come before the dependent variable of a study.

3. **Non-spurious relationships**

Spurious relationships can cause weird conclusions. Some examples of spurious relationships can be [found here](#).

2.4.3.2 Types of Experiments

There are three main kinds covered in CS5005:

1. Pre-test and post-test design
2. Pre-test and a post-test with control¹
3. Post-test-only design

¹A control is present here - subjects in the control also take the pre-test and post-test survey.