Data Collection

So what's the best way to go
about collecting my data?

The Quest for Credible Data

- Virtually all methodologies are reliant on the collection of credible data

- The first step in any form of data collection is gaining access

Gaining Access

- Your ability to gain access will improve if you:

    - do your homework
    - act professionally
    - give something back

Access and Power

TABLE 11.1 ACCESS AND POWER

Using power	Abusing power
➢ Using official channels and protocols	➢ Avoiding and skirting around official channels and protocols
➢ Establishing points of contact	➢ Going around or above the appropriate person's head
➢ Using gatekeepers and insiders	➢ Asking gatekeepers and insiders to act unethically or to go behind management's back
➢ Building rapport	➢ Ingratiate yourself to the point of becoming sycophantic
➢ Leaving doors open	➢ Becoming a nuisance
➢ Offering something back	➢ Making promises you cannot or do not intend to keep

Surveying

- ***Survey (n):*** Information gathered by asking a range of individuals the same questions related to their characteristics, attributes, how they live, or their opinions

- ***Survey (v):*** The process of collecting such information

Knowing what to expect

- A good survey has the potential to reach a large number of respondents; generate standardized, quantifiable, empirical data - as well as some qualitative data; and offers confidentiality / anonymity

- Credible data, however, can be difficult to generate

Basic Survey Types

- A survey is a survey. Well not quite. Surveys can be:

  - *Descriptive:* These surveys pretty much do what they say - they describe. The goal is to get a snapshot - of your 'respondents'

  - *Explanatory:* These surveys go beyond description (although they do gather descriptive data) and attempt to establish why things might be the way they are

Basic Survey Types

- Surveys can also involve populations or samples of populations:

  - **Census:** This is a survey that does not rely on a sample. A census surveys every single person in a defined or target population

  - **Cross-sectional surveys:** This type of survey uses a sample or cross-section of respondents selected to represent a target population

Basic Survey Types

- Surveys can capture a moment or map trends:

  - **_Trend surveys:_** A trend survey asks similar groups of respondents, or the same cross-section, the same questions at two or more points in time

  - **_Panel study:_** A panel study involves asking the same (not similar) sample of respondents the same questions at two or more points in time

Basic Survey Types

- Surveys can be administered in a number of ways:

    - ***Face to face***
    - ***Telephone***
    - ***Self-administered***

Conducting a Survey

- Conducting a survey capable of generating credible data requires:
    - thorough planning
    - meticulous instrument construction
    - comprehensive piloting
    - reflexive redevelopment
    - deliberate execution
    - and appropriate analysis

The Survey Instrument

- From drafting the questions through to layout and design, students are quite surprised at how much thought and work goes into the development of an instrument capable of generating credible data

Questions to Avoid

- Poorly worded questions:
    - Complex terms and language
    - Ambiguous questions
    - Double negatives
    - Double-barreled questions
- Biased/leading or loaded:
    - 'Ring true' statements
    - Hard to disagree with statements
    - Leading questions
- Problematic for the respondent:
    - Recall dependent questions
    - Offensive questions
    - Questions with assumed knowledge
    - Questions with unwarranted assumptions
    - Question with socially desirable responses

Response Categories

- Survey questions can either be open or closed:
  - ***Open questions:*** These questions ask respondents to construct answers using their own words. Open questions can generate rich and candid data, but it can be data that is difficult to code and analyse
  - ***Closed questions:*** These questions force respondents to choose from a range of predetermined responses, and are generally easy to code and statistically analyse

Response Categories for Closed Questions

- **Yes / No - Agree / Disagree**:

  Do you drink alcohol?   *Yes/ No*

- **Fill in the blank:**

  How much do you weigh?   _____

- **Choosing from a list:**

  What would you drink most often?

  Beer   Wine   Spirits   Mixed drinks   Cocktails

- **Ordering options:**

  Please place the following drinks in order of preference

  Beer   Wine   Spirits   Mixed drinks   Cocktails

- **Likert type scaling:**

  It is normal for teenagers to binge drink   *1   2   3   4   5*

  strongly disagree   disagree   unsure   agree   strongly agree

Additional Considerations in Survey Construction

- Providing clear background information and lucid instructions
- Logical organization
- Comprehensive coverage without undue length
- User friendly and aesthetically pleasing layout and design

Interviewing

- ***Interviewing:*** A method of data collection that involves researchers asking respondents basically *open ended* questions of respondents

Interviewing in all its complexity

- Interviews are capable of generating both standardized quantifiable data, and more in-depth qualitative data

- However, the complexities of people and the complexities of communication can create many opportunities for miscommunication and misinterpretation

Interview Types

- Interviews can range from fixed to free:

  - **Structured:** Uses pre-established questions, asked in a predetermined order, using a standard mode of delivery
  - **Semi-structured:** As the name suggests, these interviews are neither fully fixed nor fully free, and are perhaps best seen as flexible
  - **Unstructured:** Attempts to draw out information, attitudes, opinions, and beliefs around particular themes, ideas, and issues without the aid of predetermined questions

Interview Types

- Interviews also vary in their level of formality:
  - **Formal:** A formal interview is just that, formal. Perhaps the best analogy is the classic job interview that includes: the office setting; the formal handshake; appropriate attire; order and structure; and best professional behaviour.
  - **Informal:** An informal interview attempts to ignore the rules and roles associated with interviewing in an attempt to establish rapport, gain trust, and create a more natural environment conducive to open and honest communication.

Interview Types

- Interviewing can be done one on one, or in groups:
    - ***One on one:*** Most interviews are an interaction between the interviewer and a single interviewee. It is thought that 'one on one' allows the researcher control over the process and the interviewee the freedom to express their thoughts
    - ***Group:*** Group interviews involve interviewing more than one person at a time. This can be done in a formal structured way, or may involve a less structured process where the researcher acts more as a moderator or facilitator than an interviewer

Conducting an Interview

- Conducting an interview that can generate relevant and credible data requires:
    - thorough planning
    - considered preparation of an interview schedule and recording system
    - sufficient piloting
    - reflexive modification
    - the actual interview
    - and appropriate analysis

Conducting the Interview

Two important considerations in interviewing are:

- Presentation of self
- Preliminaries
    - Be on time!
    - Set up and check equipment
    - Establish rapport
    - Introduce the study
    - Explain ethics

The Questioning Process

Listen more than talk

The main game in interviewing is to facilitate an interviewee's ability to answer. This involves:

- easing respondents into the interview
- asking strategic questions
- prompting and probing appropriately
- keeping it moving
- being true to your role
- winding it down when the time is right

Recording Responses

Recording responses can be done in a number of ways; you may need to trial a couple of recording methods in order to assess what is best for you.

- *Note taking* - this can range from highly structured to open and interpretive.

- *Audio recording* - audio recording allows you to preserve raw data for review at a later date.

- *Video taping* - video taping offers the added bonus of being able to record visual cues, but is more intrusive; is prone to more technical difficulties; and can generate data that is hard to analyse.

Observation

- ***Observation:*** A systematic method of data collection that relies on a researcher's ability to gather data through their senses

- ***Observe:*** To notice using a full range of appropriate senses. To see, hear, feel, taste, and smell

What You See Isn't Always What You Get

- Observation provides the opportunity for researchers to document actual behaviour rather than responses related to behaviour

- However, the observed can act differently when surveilled; and researchers' observations are likely to be biased by their own worldviews
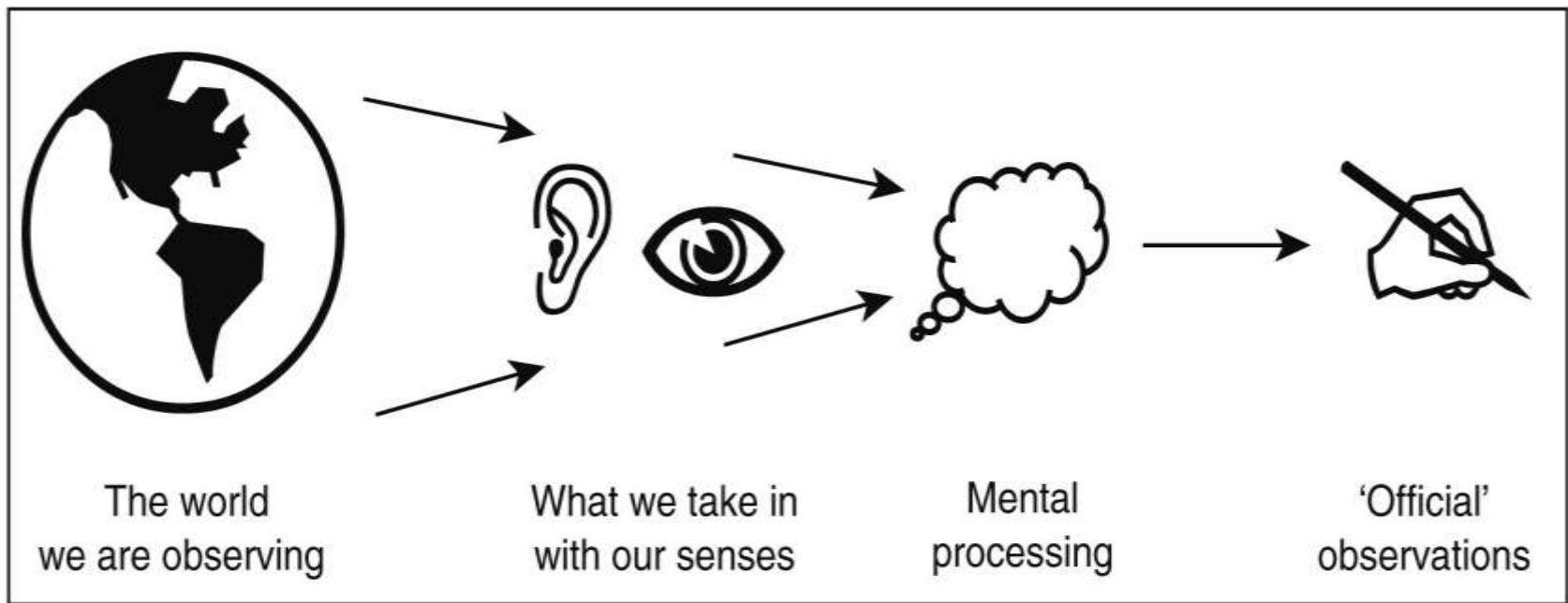
Filtering Observations

| The world we are observing | What we take in with our senses | Mental processing | 'Official' observations |

FIGURE 11.1 FILTERING OBSERVATIONS

Types of Observation

- In conducting observations, researchers can be anything from removed to immersed:
  - ***Non-participant:*** In this role, the researcher does not become, nor aims to become an integral part of the system or community they are observing
  - ***Participant:*** In this role, the researcher is, or becomes, a part of the team, community, or cultural group they are observing

Types of Observation

- Researchers need to carefully consider the advantages and disadvantages of full disclosure:
  - *Candid:* The researcher offers full disclosure of the nature of their study and the role the observations will play in their research
  - *Covert:* Can be non-participant, i.e.) watching pedestrian behaviour at an intersection, or watching interactions at a school playground. But they can also be participatory. This involves researchers going 'undercover' in an attempt to get a real sense of a situation, context, or phenomenon

Types of Observation

- Observational techniques can range from highly structured to unstructured.

    - **Structured:** Highly systematic and often rely on predetermined criteria related to the people, events, practices, issues, behaviours, actions, situations, and phenomena being observed.

    - **Semi-structured:** Observers generally use some manner of observation schedule or checklist to organize observations, but also attempt to observe and record the unplanned and/or the unexpected.

    - **Unstructured:** Observers attempt to observe and record data without predetermined criteria.
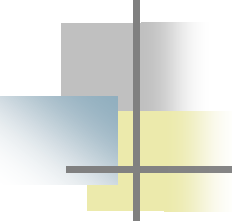
The Observation Process

- The collection of credible data through observation requires:
  - thorough planning
  - careful observation
  - thoughtful recording
  - reflexive review
  - considered refinements
  - appropriate analysis

Receiving, Reflecting, Recording, Authenticating

- We do not all take in or perceive the world in the same way. In fact, two observers in the same situation will take in quite different sensory inputs

Receiving, **Reflecting,** Recording, Authenticating

- It is exceptionally difficult for researchers to be objective. Our worldviews are a part of how we understand and make sense of the world, and how we might go about observing it

- Another difficulty in unbiased reflecting is your own expectations. Put simply, you are more likely to see the things you expect to see, and hear the things you want to hear

Receiving, Reflecting, **Recording,** Authenticating

- Your method of recording will vary depending on the level of participation, openness, and structure in your observations. Recording may include:
  - *The capture of raw data* - this can involve audio and video recording, as well as still photography
  - *Note taking / journaling* - content can range from purely descriptive and formal accounts of space, actors, acts, and events; to much more interpretive narrative accounts or 'thick descriptions'

Receiving, Reflecting, Recording, **Authenticating**

- Because the observation process can be tainted with issues of bias, it is important to include credibility checks in your methodological plan

- Ensuring credibility should include both thoroughness and confirmation

Document Analysis

- ***Document analysis:*** Collection, review, interrogation, and analysis of various forms of text as a primary source of research data

Going to the source

- Document analysis sees researchers working with pre-produced, rather than generated, texts

- This requires researchers to consider two potential sources of bias:
    - the original author's
    - their own

Document Types

- **Authoritative sources:** documents that by their authorship or authority attempt to be unbiased and objective

- **The party line:** documents have an 'agenda' or identifiable bias

- **Personal communication:** letters, e-mails, memoirs, sketches, drawings, photographs, diaries, memos, journals etc. that are personal and subjective

- **Multi-media:** newspaper or magazine columns/ articles, current affairs shows, news reports, TV sitcoms, commercials, etc.

- **Historical documents:** records, minutes, and policy documents, or any other materials that have been authored or produced within a particular historical period

The Document Analysis Process

- The process of document analysis includes:
  - thorough planning
  - broad resource gathering
  - comprehensive review
  - deliberate interrogation
  - considered reflection and refinement
  - and appropriate analysis

From Documents to Data

- Two techniques for drawing data from a document are:

  - *The Interview* - treating each document as a 'respondent' . Basically you 'ask' your document a question, and highlight the passages in the document that provides the answer.

  - *Noting occurrences* - quantifying the use of particular words, phrases, and concepts within a given document.

Things to Consider

- All data collection methods are capable of gathering quantitative and qualitative data, although some may be better suited towards one task or the other

- There is no single data collection method that can guarantee credible data

- All data collection methods can be consciously manipulated

- All data collection methods can be 'contaminated' by unrecognized bias

- All data collection methods require conscious deliberation on the part of the researcher to ensure credibility