Chapter 5:
Determining the Research Design

- ASRes1: Research in Daily Life 1
- Accountancy, Business and Management (ABM) Strand
- Mr. Migo M. Mendoza
Did you know?

- Adventurers usually use a map to get from one destination to another. In research, the research design serves a similar function. It is a blueprint which describes how a researcher will address the research questions, the types of data needed to address these, data collection methods and the analysis procedures one plans to employ.
Chapter 5: Determining the Research Design

• Lecture 5.1: Planning Data Collection
• Lecture 5.2: Instrumentation
• Lecture 5.3: Data Processing and Analysis Planning
Lecture 5.1: Planning Data Collection

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Did you know?

- After looking into your research population, sample and sampling strategy, you would then need to address the question: “how will you gather information or data?” This process involves some reflection and decisions before actually going to the field and interacting with research participants.
Qualitative Methods

- Creswell (2014, p. 190-193) lists some basic methods to collect data in a qualitative study. Three of these include:
  
  (1) **Interviews**;
  
  (2) **Observations**; and
  
  (3) **Document Analysis**.
These can be conducted with individuals or with groups. The method may also be done face-to-face or through telephone.
Semi-structured or unstructured interviews are also often used in this process.
Interviews

- In using open-ended questions, interviews allow the investigator to draw out research participant’s views, opinions, and feelings. It can also be used to find out their experiences, meaning associated with these and perspectives.
Observations

- This often involves fieldwork and going to the research site to observe the activities, social interactions and behaviors of individuals in the identified setting.
Observations

- Field notes are used to record observations in a semi-structured or unstructured manner. The investigator can also simply observe the social setting or decide to participate in it.
Observations

- Observations are especially useful in getting insights on people’s behaviors, and interactions in their natural setting.
Document Analysis

- This usually involves looking at available documents. These may come from public sources such as newspapers, online social fora, minutes of meetings, and official reports, or private ones like journals, diaries, emails and letters.
## Observations

<table>
<thead>
<tr>
<th>Data Collection Types</th>
<th>Options Within Types</th>
<th>Advantages of the Type</th>
<th>Limitations of the Type</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Observations</strong></td>
<td>•Complete participant – researcher conceals role</td>
<td>Researcher has a firsthand experience with participant.</td>
<td>Researcher may be seen as intrusive.</td>
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<tr>
<td>Observations</td>
<td>Observer as Participant – role of researcher is known</td>
<td>Researcher can record information as it occurs.</td>
<td>Private information may be observed that researcher cannot report.</td>
</tr>
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# Observations

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<td>• Participant as Observer—observation role secondary to participant role</td>
<td>Unusual aspects can be noticed during observation.</td>
<td>Researcher may not have good attending and observing skills.</td>
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- **Observations**
  - **Options Within Types**
    - Participant as Observer—observation role secondary to participant role
  - **Advantages of the Type**
    - Unusual aspects can be noticed during observation.
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    - Researcher may not have good attending and observing skills.
## Observations

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<td>Observations</td>
<td>•Complete Observer—researcher observes without participating</td>
<td>Useful in exploring topics that may be uncomfortable for participants to discuss.</td>
<td>Certain participants (e.g., children) may present special problems in gaining rapport.</td>
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## Interviews

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<td>Interviews</td>
<td>• Face-to-Face – one-on-one, in-person interview</td>
<td>Useful when participants cannot be directly observed.</td>
<td>Provides indirect information filtered through the views of interviewees.</td>
</tr>
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</tr>
<tr>
<td>Interviews</td>
<td>• Telephone – researcher interviews by phone</td>
<td>Participants can provide historical information.</td>
<td>Provides information in a designated place rather than the natural field setting.</td>
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<td>Interviews</td>
<td>•Focus Group – researcher interviews participants in a group</td>
<td>Allow researcher control over the line of questioning.</td>
<td>Researcher’s presence may bias responses.</td>
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# Interviews

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<td>Interviews</td>
<td>•Electronic Mail/ Internet Interview</td>
<td></td>
<td>Not all people are equally articulate and perceptive.</td>
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</table>
## Documents Analysis

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<td>Documents Analysis</td>
<td>• Public Documents – minutes of meetings or newspapers</td>
<td>Enables a researcher to obtain the language and words of participants.</td>
<td>Maybe protected information unavailable to public or private access.</td>
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</tbody>
</table>
# Documents Analysis

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<td>Documents Analysis</td>
<td>•Private Documents – journals, diaries, or letters</td>
<td>Can be accessed at a time convenient to researcher – an unobtrusive source of information.</td>
<td>Requires the researcher to search out the information in hard-to-find places.</td>
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## Documents Analysis

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<td>Documents Analysis</td>
<td>• Private Documents – journals, diaries, or letters</td>
<td>Represents data to which participants have given attention.</td>
<td>Requires transcribing or optically scanning for computer entry.</td>
</tr>
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### Documents Analysis

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| Documents Analysis    | •Private Documents – journals, diaries, or letters | As written evidence, it saves a researcher the time and expense of transcribing. | •Materials may be incomplete.  
  •The documents may not be authentic or accurate. |
Take Note:

- The decision on how to go about data collection will depend on what you think would work best in the research setting and what will bring you the most reliable, rich, in-depth data.
For Example:

- If the researcher wants to study student behaviors on waste management in school, then, he or she might consider ways how to make students feel at ease and safe during the course of the study. The investigator may consider having group interviews, utilizing natural groupings in the school such as per classroom, dividing the class according to gender, cleaning groups, among others.
Triangulation

- It refers to using multiple sources of information or methods to ensure that you have a complete picture of the phenomenon under study. It also allows the researcher to check and recheck the data one has gathered from one method to another, ensuring that they are reflective of the actual phenomenon.
For Example:

- In study on Filipino immigrant community leaders, both interviews and participants observations were utilized (Clamor, 2012). The interviews allow the researcher to look into research participants’ histories, experiences and perspectives. On the other hand, observing leaders in their actual setting enabled the researcher to see how the community leaders actually practiced and demonstrated leadership.
Lecture 5.2: Instrumentation

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Reflect:

• At this point, you have already identified the methods you will use in your research. Think for a while on possible tools that may help you gather data.

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Did you know?

- The tools you will use to guide your data collection pertain to the instruments of the study. In qualitative research, foremost in this is the researcher himself or herself.
Did you know?

- In qualitative research, aside from the researcher, the most common instruments are *the interview guide and the observational protocol.*
An interview guide usually contains a list of questions or issues that need to be looked into during the actual interview.
Interview Guide

- This ensures that “the same information” is gathered among different research participants. It also allows the investigator to make the most out of the time allotted for the interview (Patton, 1980, p. 200).
Did you know?

- The use of an interview guide will vary depending on the variation of the interview method you plan to use: **unstructured, semi-structured or structured interview.**
Structured Interview

• In this case, the sequence of the questions and how they are phrased are determined beforehand. The interview has to be conducted as planned and in accordance with the interview protocol.
Structured Interview

- This type of interview is best used when very limited time is allotted for the interview and if greater comparability among the answers is desired (Patton, 1980).
Semi-Structured Interview

- The semi-structured interview format is guided by a list of topics or questions that need to be explored. Within this list of topics, the interviewer is “free to build a conversation around it” (Patton, 1980, p.200).
Semi-Structured Interview

- In essence, you may ask your questions differently, sequence them differently, and add questions if these allows you to probe and elicit rich, lengthy and detailed responses from your research participants.
**Unstructured Interview**

- This method is most useful in exploratory studies, in areas where little is known about the topic and has limitations in investigating the issue in a systematic manner (Merriam, 1988, p.74).
Unstructured Interview

- It is often utilized to allow the researcher to find out more about the topic and, henceforth, come up with areas to look into in further data collection processes. In such cases, the method may also be combined with observation.
Did you know?

- Some researchers find it challenging to use unstructured interviews as it requires flexibility. You would need to keep a conversation and adapt to the situation you encounter. In addition, it takes more work to process the collected data, connect pieces together and form topics and issues from various insights, shared experiences and revelations.
## Structured Interview

<table>
<thead>
<tr>
<th><strong>Strengths</strong></th>
<th><strong>Weaknesses</strong></th>
</tr>
</thead>
</table>
| • “Respondents answer the same questions, thus increasing comparability of responses; data are complete for each person on the topics addressed in the interview.”  
  • Reduced interviewer effects and bias when several interviewers were used.  
  • Permits decision makers to see and review the instrumentation used in the evaluation.  
  • Facilitates organization and analysis of the data.” | • “Little flexibility in relating the interview to particular individuals and circumstances; standardized wording of questions may constrain and limit naturalness and relevance of questions and answers.” |
### Semi-Structured Interview

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>• “The outline increases the comprehensiveness of the data and makes data collection somewhat systematic for each respondent.</td>
<td></td>
</tr>
<tr>
<td>• Logical gasp in data can be anticipated and closed.</td>
<td>• “Important and salient topics may be inadvertently omitted. Interview flexibility in sequencing and wording questions can result in substantially different respondents, thus reducing the comparability of responses.”</td>
</tr>
<tr>
<td>• Interviews remain fairly conversational and situational.”</td>
<td></td>
</tr>
</tbody>
</table>
# Unstructured Interview

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</tr>
</thead>
</table>
| • “Increases the salience and relevance of questions; interviews are built on and emerge from observation; the interview can be matched to individuals and circumstance.” | • “Different information collected from different people with different questions.  
• Less systematic and comprehensive if questions don’t arise “naturally”.  
• Data organization and analysis can be quite difficult.” |
Something to think about...

- Now, you may be wondering how will you come up with your interview guide. Here, you would need to consider the type of questions you want to ask, the sequence of the questions and their wording.

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In coming up with questions to ask, you may consider the following type of questions depending on the focus of your study (Patton, 1980, p.207-209):
First: Experience/Behavior Questions

- These look into “what a person does or has done.”
Second: Opinion/Value Questions

- Makes people think and come up with decisions. These look into “people’s goals, intentions, desires, and values.”
Second: Opinion/Value Questions

- Example questions may begin as such:
  - “What do you believe...?”
  - “What do you think about...?”
  - “What would you like to see happen...?”
  - “What is your opinion of ...?”
Third: Feeling Questions

- These look into emotions people associate with their experiences.
Fourth: **Knowledge Questions**

- To find out participants’ knowledge about a particular topic. These revolve around “factual information.”
Fifth: Sensory Questions

- Revolve around what has been “seen, heard, touched, tasted and smelled.”
Sixth: Background/Demographic Questions

- These concern with “identifying characteristics of the person being interviewed” such as “age, education, occupation, residence/mobility questions,” among others.
Concerning the sequence of questions, Patton (1980, p.210-211) provides the following suggestions:
Suggestion 1: **Sequence of Question**

- Start with noncontroversial topics like “behavior, activities and experiences.” These will be easy to answer for your research participants and encourage them to open up.
Suggestion 2: Sequence of Question

- Consider asking opinions, thoughts and feelings in the first part of the interview. This allows participants to remember their experiences and provides a context for the rest of the interview.
Suggestion 3: **Sequence of Question**

- Link questions on knowledge on their experiences to make it less “threatening” and also provides a context for these factual information.
Suggestion 4: **Sequence of Question**

- If timeframe questions need to be asked, it is advisable to ask questions concerning the present first as these are easy to address. Then, this response can serve as a reference point in asking about the past. Future-oriented questions are then brought up later.
Suggestion 5: **Sequence of Question**

- Interject background and demographic questions in between as these make the interview monotonous and boring.
Take Note

- You may also need to take note of the wording of your questions. This will determine how your research participant will respond (Patton, 1980).
According to Patton (1980, p.211-214), the wording of the questions takes into consideration of the following:
Consideration 1: Wording of Questions

- Use open-ended questions. This allows research participants to respond to your interview questions in any way they prefer.
Consideration 1: Wording of Questions

- Examples of these include:
  1. “How do you feel about...?”
  2. “What do you think about...?”
  3. “What is your opinion of...?”
  4. “Tell me how you...”
Consideration 2: Wording of Questions

- Guarantee that each question is only about one idea. This helps your research participants to focus on an aspect, prevents them from being confused and judge the meaning behind the question. Avoid asking several questions at the same time.
Consideration 3: **Wording of Questions**

- Make sure that your questions are clear. This ensures that your various research participants understand the question and that they will have a common interpretation of them. Language plays a role here. Use familiar words as much as possible.

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Consideration 4: Wording of Questions

- Try to make your questions as neutral as possible. This means that no biases are reflected in the questions. This allows research participants to be open and share whatever they feel and think about the topic and that they are free from being judged.
Consideration 4: **Wording of Questions**

- Whatever your research participants say, take a neutral stance. In Patton’s word (1980, p.231):

  “I cannot be shocked; I cannot be angered; I cannot be embarrassed; I cannot be saddened – indeed, nothing the person tells me will make me think more or less of them.”
Take Note:

- There are no hard rules in drafting your interview guide. Many factors come into play in developing one. It will depend on the focus of your research, how you plan to conduct the interview, the time allotted for the interview, and your research participants.
Items to be Included in the Interview Guide

• Creswell (2014, p.194) proposes for the following items to be included in the interview guide:

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Items to be Included in the Interview Guide

• **First Item:** Heading (Date, Place, Interviewer, Interviewee)
Items to be Included in the Interview Guide

- **Second Item:** Instructions to follow, applicable especially for structured interviews.
Third Item: Questions (containing “ice-breaker questions” at the start, followed by questions about the research and a concluding statement or question)
• **Fourth Item:** Probing Questions (to prompt your research participants to expound more on what they have shared)
Items to be Included in the Interview Guide

• **Fifth Item:** Spaces in between questions where you can write down research participants’ responses
Items to be Included in the Interview Guide

- **Sixth Item**: Thank you statement at the end to express gratitude for the time and effort the research participant spent for the interview.

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The observational protocol is a tool which helps the researcher to record observational data during fieldwork (Creswell, 2014, p.193).
Observational Protocol

- A usual form contains basic information about the place, time and date of the fieldwork. Aside from these, the page may also be divided into two columns. The descriptive notes and the reflective notes.
• This is the first column. It is intended to record descriptive data (i.e., what the researcher sees, hears, tastes, smells and touches; what is happening in the situation, among others) (Creswell, 2014, p.194).
Reflective Notes

• The second column. The second one allows space for reflective notes where the researcher can jot down his or her impressions, interpretations, ideas and “speculations” about what is happening (Creswell, 2014, p.194).
Research Mates Activity 8:
Constructing Interview Guide

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Instruction:

• Let’s go back to your own research topic. What instrumentation will you use to gather data? If you plan to use the interview method, address these questions:
Instruction:

(1) “What will be the setting of your interview?”
(2) “What type of interview will help research participants to open up about their experiences, feelings and thoughts?”
(3) “What topics or issues do you wish to explore with them”

In considering these questions, develop a tentative interview guide.
Instruction:

• If you plan to use observation as a method, what important aspects do you wish to look into in gathering data? Draft a simple observation protocol for your study.
Please Be Guided:

- Use this template. Encode the interview guide and observation protocol for your study (Font: Arial; Font Size: 11, Double Space) on the box below and print it and submit it to your teacher. Also, send the word format of it for critiquing purposes to jay-r_mendoza@dlsu.edu.ph or migo.mendoza@lsca.edu.ph 7 days after this activity is given.
Lecture 5.3:
Data Processing and Analysis Planning

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Classroom Task:

• Let’s have a quick survey of your initial ideas on data analysis in qualitative research. There are two statements on the next slide showing different stances on data analysis. Tell me your position about these two statements.
## Data Analysis

<table>
<thead>
<tr>
<th>Statement 1:</th>
<th>Statement 2:</th>
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<tbody>
<tr>
<td>“We have to process and analyze data alongside data collection.”</td>
<td>“We have to finish data collection first before analysis of data begins.”</td>
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Did you know?

• Aside from developing the instruments before you gather your data, you would need to think how you will process your collected data and analyze them. You would need to plan for these and describe them in your research design.
In qualitative research, data processing and analysis are done in conjunction with data collection. This means that analysis is done of collected data in between interviews and fieldwork. Doing so guides the researcher to look deeper into aspects in the succeeding data collection phase and to also fill in data gaps.
Planning Data Analysis

• During the process of reviewing data, the investigator may also write notes that may be used eventually for the research report (Creswell, 2014, p.195).
• In between interviews and observations, you would need to go through your notes. Determine patterns and themes, or areas where participants describe similar aspects or interpret experiences in the same way.
• Review your notes as well for missing information or aspects you have wished to uncover to help you get a clearer or complete picture of the phenomenon under study.
Reasons: Planning Data Analysis

(1) To fill in data gaps;
(2) To explore in more details an emerging theme to validate it or disprove it.
You may have observed that data collection and analysis in qualitative research are continuous processes wherein you may bounce back from one process to another.
Did you know?

• There will come a point wherein you have reached data saturation, wherein no additional themes are being uncovered. Here, you would need to consider to focus your efforts on data analysis.
Take Note:

• Expect that you will encounter a mountain of data. However, not all of these will be relevant for your study. You would need to sort through them and choose which ones do address your research questions.
Take Note:

• From these sorted information, you would need to determine patterns and themes. Once you have identified these, look at data sources that support and provide detailed descriptions of these themes and patterns. Consequently, bringing the analysis on another level, you may try to look at how the themes are related to one another.