

Research Skills

Introductory Skills for Social Researchers

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Welcome To

The aim of this book is to help you develop the knowledge and skills needed to do social research. These include quantitative and qualitative research design and analysis; creating and implementing surveys, interviews, focus groups and observations; research ethics and writing up and presenting your research.

This book takes you step by step through a four-step research process, with exercises and activities targeting skills needed to be an effective social researcher in community organisations, businesses or going on to further study.

Each chapter focuses on a central research skill and contains useful information, questions, and opportunities to practise the skills you learn. To make it easier to navigate and to remind you which step in the research process you are currently focusing on, the chapters are colour coded.

Difficult and/or technical words are highlighted in **bold** and appear in an English-Myanmar glossary at the back of the book.

Before you begin this book, please read the information on these pages. It will help you find your way around the book more easily, and help you to use and understand it.

6.1 Why Use Focus Groups?



PREVIEW

1

- 1 In pairs, discuss: 'What might be the impacts of allowing people who are younger than 18 to vote?'
- 2 Join with another pair and discuss in groups.
- 3 Discuss as a class.
- 4 Discuss the questions.
 - a What are some differences between discussing an issue with one person and with a group?
 - b Did everyone contribute to the group discussion or did some people talk more than others? What do you think is the reason for this?
 - c What do you think is the best number of people to have in a group discussion? Why?

Focus groups

Interviews focus on individual responses. A focus group is when a researcher asks questions to a group of (usually) four to ten people. They provide researchers with information that comes from group discussion. Researchers use them to get a range of individual responses to a research question, but researchers are also interested in how people talk to one another about a topic.

Focus groups give information about the range of perspectives within the group and the interactions between people. This can help the researcher to understand the wider community that the participants come from.



2



EXERCISE: True or False? (If False, Say Why)

- 1 A focus group may generate data that is different from an interview because it is more formal.
- 2 Focus group participants are encouraged to talk to each other.
- 3 A focus group and an interview both involve one research participant.
- 4 A focus group may produce information that reflects the participants' community.

Research Skills

On each page there is text which describes the main ideas in that section. There are also several task types that repeat throughout.

▶ ACTIVITY: Advantage or Disadvantage?

3

These people are talking about the advantages and disadvantages of focus groups.

- 1 Is each speaker talking about an *advantage*, a *disadvantage* or *both*?
- 2 List some more advantages and disadvantages.

b There was so much arguing in my focus group. I didn't know how to control it.

a Focus groups help me to get a range of information.

c The focus groups were so different. The first one had a lot of discussion and the other one was very quiet.

d We recorded the focus group but the sound quality isn't very good and we didn't take notes.

e We did three focus groups in one day. It took a long time to organise and analyse the data, but I'm glad all the data collection is now finished.

f The people who attended the focus group were mostly students with spare time and happy to get free food.

g During the focus group the community leader seemed to be speaking the most. Some people didn't say anything the whole time.

DISCUSSION

- 1 How many people do you think are needed to run a focus group?
- 2 What are the different roles of people that run a focus group?

4

1. Previews introduce the research skills covered in each chapter and section. They ask questions to help you start thinking about these new skills before you start.

2. Exercises help you and your teacher to check your understanding after you read.

3. Activities allow you to practise the research skills in the book. Many activities build on skills that you learned earlier, and they often involve working with others.

4. Discussions ask questions to encourage you to talk about and reflect on the new skills that you have learned.

In addition, there are **Case Studies**, which look at research activities in Myanmar, and **Your Research Project** sections which encourage you to focus on a real or imagined research project you are doing or might want to do

Lastly, there is a **Final Research Project** at the end. This involves applying tools and skills from the book to a full research process, from first deciding on a topic, to the final report or presentation. It might be the same project as the 16 'Your Research Project' activities, or it could be a completely different one.

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CHAPTER 1: Introducing Research



Learning Goals

Knowledge

In this chapter, you will increase your knowledge of:

- the research process;
- research questions;
- research topics;
- the characteristics, benefits and challenges of research.

Skills

In this chapter, you will practise the ability to:

- define research;
- describe the four steps of the research process;
- reflect on some of the benefits and challenges of research;
- analyse profiles and characteristics of researchers;
- write effective research questions.

1.1 What is Research?



PREVIEW

- 1 Why do people do research?
- 2 What do you know about research?



ACTIVITY: Getting Information

Imagine that you want to start a weekend English programme for children in your community. What do you need to know? Who do you need to talk to? What questions will you need to answer before you can open the English programme?

- 1 Put these questions in the correct list.
 - a How many primary schools are there in my community?
 - b What English skills do students need the most help with?
 - c What salary should I offer teachers?
 - d What textbooks do other schools in my township use?
- 2 Add more questions to the lists.

i. Questions about Other Schools	ii. Questions about Students	iii. Other Types of Questions
a. How many primary schools are there in my community?		

What is social research?

Research involves **systematically** collecting, evaluating, analysing and **interpreting** information to contribute to existing or new knowledge. Ultimately, research helps us to learn about the world around us and solve problems. Researchers investigate all kinds of things, from animals to medicines to historical events.

In this book, we mainly look at *social research*, which focuses on people, organisations and society. Social researchers use tools including **surveys**, interviews, **focus group** discussions and **observations** to collect information, which they then analyse and draw conclusions from.

Every day we answer questions such as, 'What will I eat for lunch?' The question may be simple to answer. Other questions are more difficult such as, 'What are my friends doing tonight?', which involves speaking to your friends.

Some questions asked by researchers on a topic – such as food and entertainment – might involve even more work to answer. For example, *'How many people eat in restaurants each day?'* would be difficult to answer because you would need to get exact numbers from a large group of people.

In the following example, *'Does earning more income mean that people can enjoy more leisure time?'*, you would need to explore a relationship between two things ('income' and 'amount of leisure time'). This involves collecting information about these two things over a period of time. Information collected and analysed for research purposes is called **data**.

EXERCISE: True or False? (If False, Say Why)

- 1 Adding to knowledge is a central purpose for research.
- 2 Social research focuses on animals and medicines.
- 3 Researchers make conclusions and then collect information to support it.
- 4 Research can involve collecting a lot of information over a long time

ACTIVITY: Useful Answers

Who might be interested in the answers to these questions? Make lists for each.

- 1 'Why do people purchase a car?' **Example:** environmentalists
- 2 'How can we reduce air pollution in Yangon?'
- 3 'Did the new school library result in increased reading amongst students?'

ACTIVITY: Topics and Questions

Look at the three topics in the table below.

- 1 What do you know about this topic (for example, facts, data, statistics, reports or other relevant information)?
- 2 What questions might be useful for researchers to ask about this topic?

a. Road Accidents	b. Air Pollution	c. Out-of-School Children
<ol style="list-style-type: none"> 1. A lot of people die in car accidents every year. 2. What are the major causes of car accidents? 		

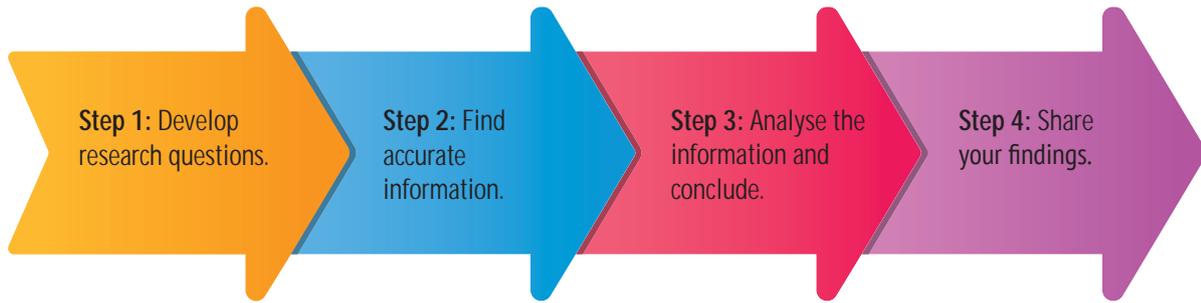
1.2 The Research Process



PREVIEW

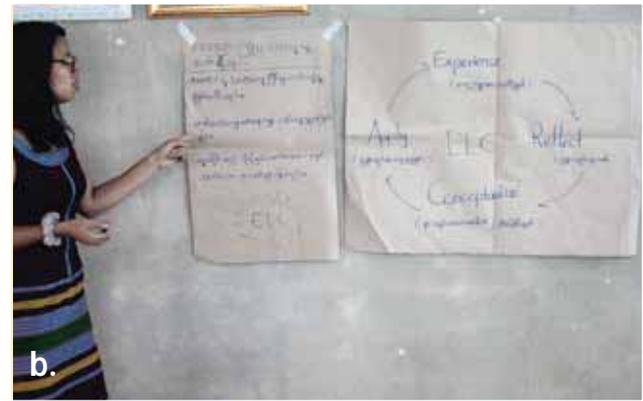
To be able to start research, what do you need?

The research process is a series of steps that guides research. Different organisations and **fields** of study may use slightly different processes, however, most are similar. The diagram below shows the process that this book will follow.



ACTIVITY: Match the Photo to the Research Step

- 1 Match the photos (a-d) to a steps 1-4 in the research process, above. Some of the photos could match to more than one step.
- 2 In pairs, explain your answers.





CASE STUDY: Analyse the Case Study

Read the case study.

- 1 Identify each step in the research process that is demonstrated in the case study.
- 2 Discuss the questions:
 - a How might the results of this research be used?
 - b Are the results of this research relevant to your community?



<https://www.mmtimes.com/news/myanmar-consumers-shift-habits-study.html>

Myanmar Consumers Shift Habits

STAFF | 12 MAR 2018

A new report has been released that claims that, 'Myanmar people buy more products for their personal lifestyle and not merely products for necessity.' EnviroSell Thailand is a research organisation. It conducted surveys on the spending habits of Myanmar consumers in 2018 in three main cities – Yangon, Mandalay and Naypyitaw. EnviroSell wanted to find out what types of products people buy, and if they were bought for their lifestyle or for daily needs.

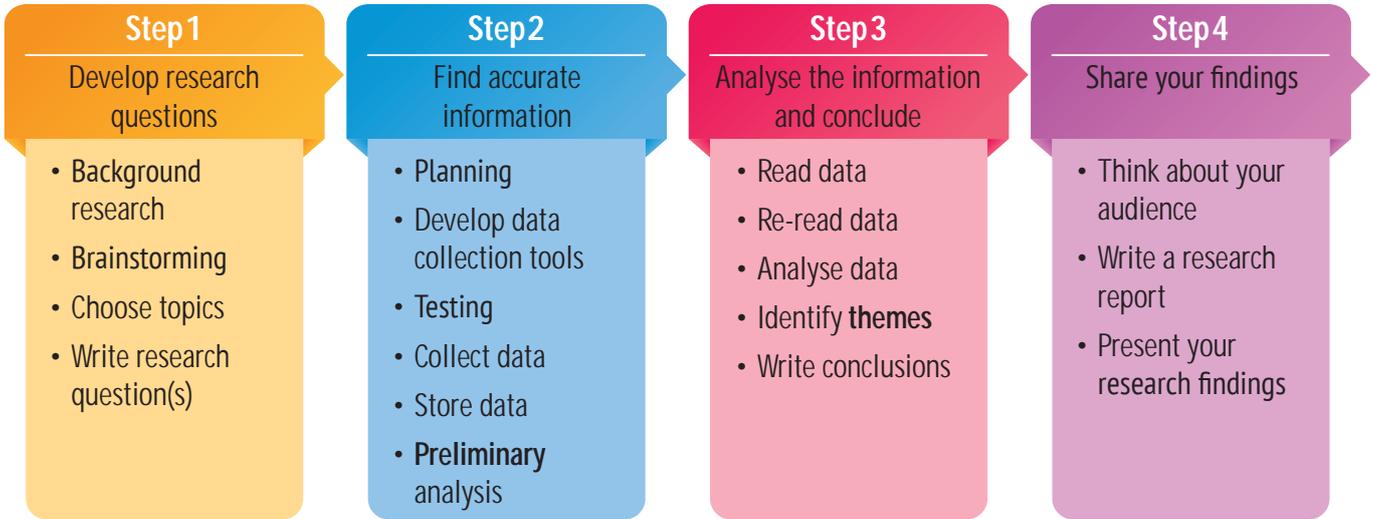


EnviroSell examined the results of the surveys to identify the types of goods that people bought and their reasons for buying them. The study found that there is more demand for items like fabric softener, hair conditioner, and shower gel, which are not necessities. 'Additionally, the **rate** of buying electrical appliances for convenience such as washing machines and refrigerators has grown.' EnviroSell Thailand suggests the reason for this is increased income of workers and economic growth during the past few years.

Adapted from: <https://www.mmtimes.com/news/myanmar-consumers-shift-habits-study.html>

Steps of the research process

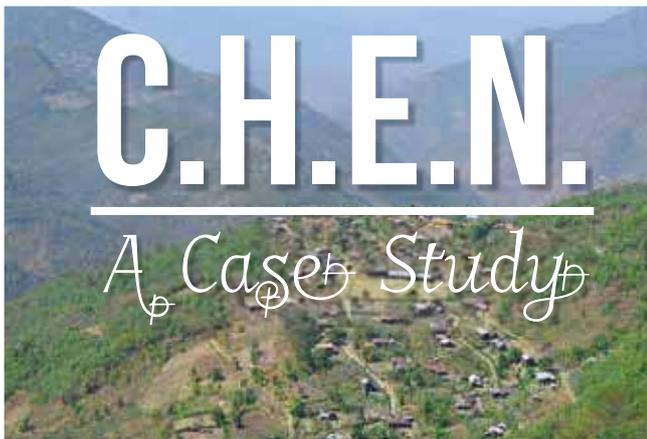
The steps for doing research are usually similar, but they can be done in different ways.



Step 1: Develop research questions

The first step in the research process is to decide on some topics that are appropriate for your research. Your choice will probably be influenced by your academic specialisation, your job or your interests.

You could brainstorm possible topics and do background research to learn more about a topic and decide if it is appropriate. You need to narrow your research down to a single, clearly-defined topic and then write research questions about that topic. You may have one research question or a few. Your research will answer this question (or questions).



1. Chin Health and Environment Network (CHEN)*, applied for funding to research environmental problems in Chin State. After brainstorming and doing background research, they decided that the environmental impact of agricultural chemicals was an important topic. They developed one research question: 'What do Chin farmers know about the environmental impacts of the chemicals that they use for farming?'

*CHEN is not a real organisation. This example case study is based on the work of a several CSOs and NGOs.

Step 2: Find accurate information

This step involves data collection. Data is information that you get during the research process. Data can be words, numbers, pictures, video or audio **recordings**. To find accurate information, you have to think about what tools (surveys, interviews, observations and focus groups, etc.) you will use to collect data and who you will collect the data from. A research *population* is the group of people or organisations that are the focus of your research, and that you will collect data from to answer your research questions.



2. The CHEN researchers collect data using surveys and interviews. They will survey 500 farmers in five townships across Chin State, and interview ten politicians and community leaders. They estimate that, with four researchers, it will take approximately ten weeks to collect the data.

Step 3: Analyse the information and conclude

This step involves analysing the data and forming conclusions. At the end of this step, you summarise the main **findings** of your research. You have **evidence**, in the form of data and analysis, to draw conclusions from and support your findings.

3. The CHEN researchers complete the data collection and begin analysis. First they read through the data from the surveys and the interviews. For the surveys, they use computer software to calculate statistics and compare between different townships. The interviews were recorded, so the researchers listen to them all and identify things that people said frequently. They develop a list of conclusions based on the results of their analysis. They **conclude** that most farmers are aware of the environmental impacts. Farmers, however, are afraid of losing income if they stop using chemicals; they worry that they will produce fewer and smaller crops, or that their crops might die.



Step 4: Share your findings

This involves sharing the results of your research with relevant people. During this step, you might write a research report, do a presentation and/or meet with communities in order to share the results of your research. Researchers usually present recommendations with their conclusions. This is especially important if they aim to influence people, organisations or governments.



4. The CHEN researchers write a report that they share with their donors, the government, farmers' organisations and other civil society organisation. They also present their findings and recommendations at a forum in Hakha with community leaders, farmers and students.

In this book, we will look in detail at the steps, chapter by chapter, as follows.

- **STEP 1** in chapters 1-2.
- **STEP 2** in chapters 3-7.
- **STEP 3** in chapters 8-9.
- **STEP 4** in chapter 10.



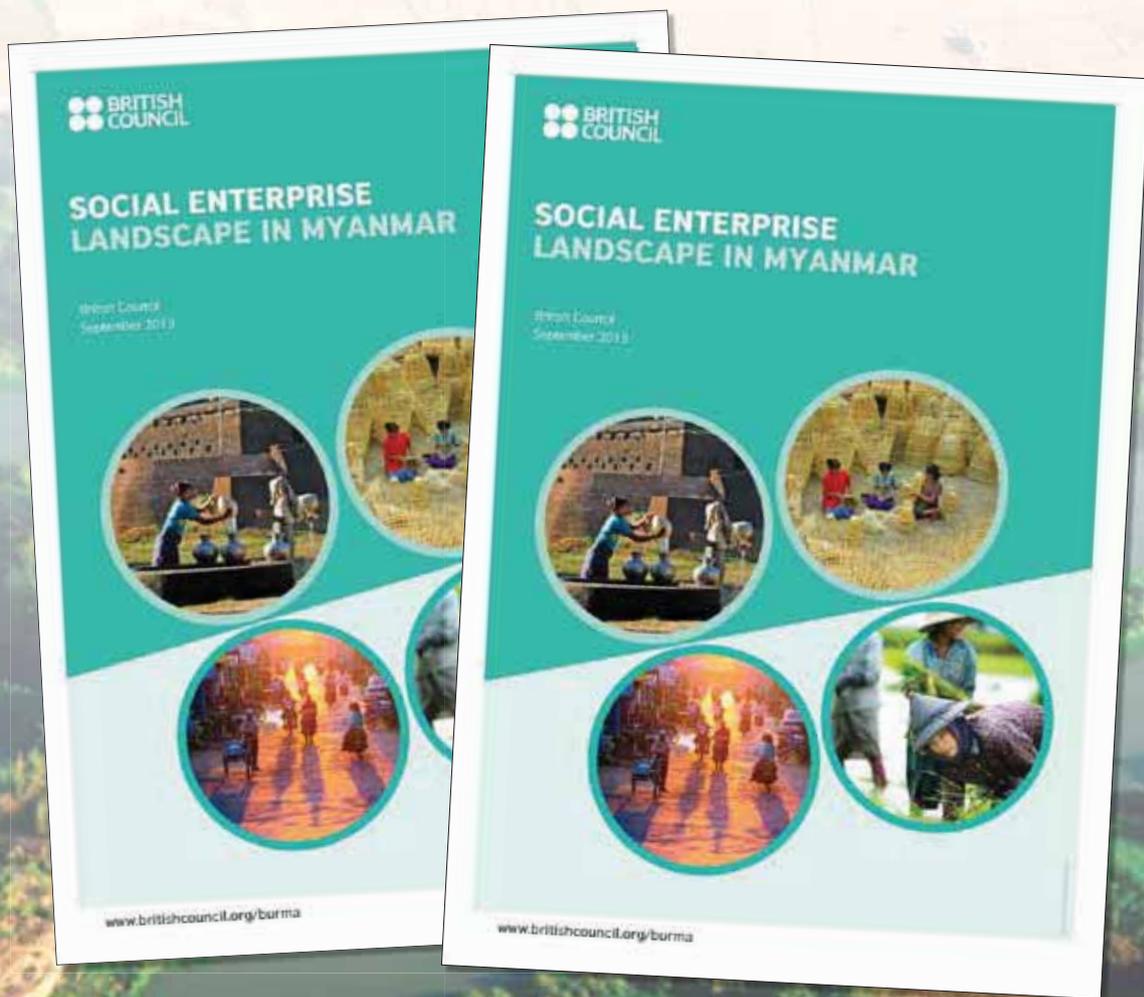
EXERCISE: Match the Activities and Order the Steps

'Social Enterprise Landscape in Myanmar' was a research project conducted in 2013 by the British Council.

Match the activities (a-d) with the steps in the research process from the previous page.

- a ___ The British Council wrote a report and published it on their website. They also held meetings with local and international experts to share their research findings.
- b ___ The researchers conducted 31 phone interviews before making field visits to selected social enterprises and experts.
- c ___ The British Council wanted to understand more about social enterprises in Myanmar. They wanted to understand what made them successful as well as the challenges that they face. They chose three research questions:
 - i Who is currently having a positive social impact?
 - ii What stops the organisations from being sustainable?
 - iii What stops the organisations from growing?
- d ___ Through the interviews, the researchers found three common themes in the responses from social enterprises. These were 'laws', 'investor attitudes' and 'the environment'.

<http://www.britishcouncil.org.mm/programmes/society/social-entreprise>



▶ ACTIVITY: Following the Research Process

Read the scenarios. Which one does not follow the research process? Why?

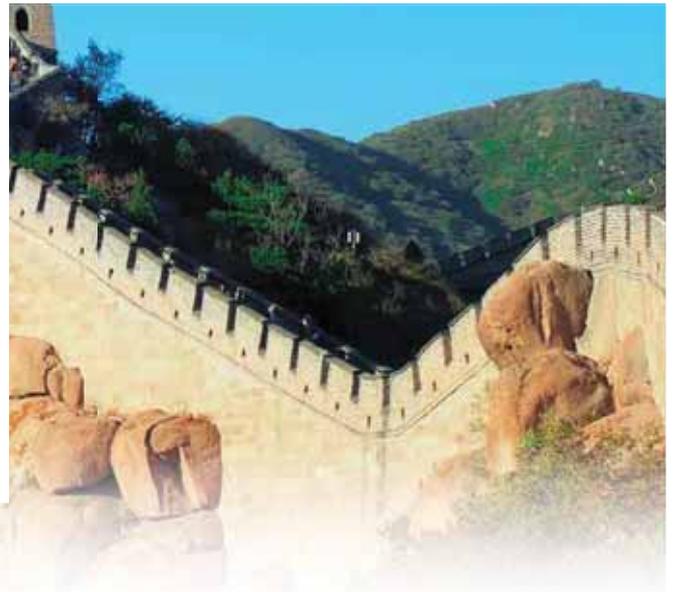


1. Health Impact Study – Kayin State

An environmental organisation in Kayin State is researching the relationship between gold mines and the health of infants. They visited communities near to mines and communities far from mines. They compared and contrasted health data from those communities and found that infants are more likely to get sick if they live close to a mine. They recommended interventions to improve health. The findings were communicated to government officials and civil society organisations.

2. Perceptions of China – National Study

A Yangon-based **think tank** did research on public **perceptions** of China. They did telephone interviews with 2,000 people from all different parts of the country including urban and rural areas. They also did longer, more **in-depth** interviews to get more detailed information. Additionally, they asked if people's perceptions had changed over time. They organised a public conference and played all 2,000 phone conversations to attendees.



DISCUSSION

What are the negative effects of not doing each step properly?

1 developing research questions

If you don't develop your research questions properly, you might get confused about what type of data collection tools to use.

2 finding accurate information

3 analysing the information and concluding

4 sharing your findings

1.3 Developing Research Questions



PREVIEW

How would you develop research questions?



ACTIVITY: Factors That Influence Your Research

Here is a list of factors that can influence what research you do:

- academic area of study (or a topic that you know about)
- your job
- issues that are important in your community
- your interests
- funding

- 1 Explain how each factor can influence your research choice.
- 2 Think of other factors that might inform your research choices. Add them to the list.

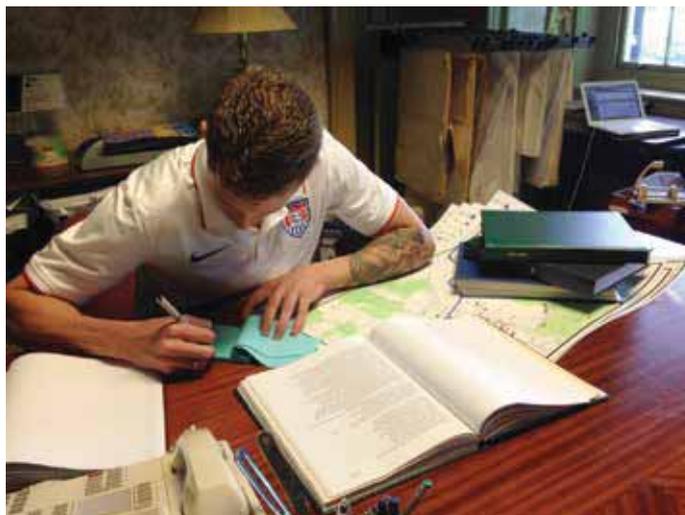
Doing *background research* can help you think of interesting and useful research topics. Once you have chosen some topics, you need to narrow them down. One way to do this is a *funnel approach*. You start with a list of general research topics then work towards ones that are clear and focused. Finally, you can choose one that is right for you.

Background research is used to learn more about potential research topics. It can introduce you to new information that makes a research topic easier or more interesting to research. However, you might learn that a topic is very difficult or expensive to research, or that there is already a lot of research about it. You might choose not to research this topic.

Sources of information for background research include the internet, libraries and people with experience in your research topic.

Background research is easier and more effective if you have a range of key terms to search online or in libraries. For example, in the Kayin State health impact study on the previous page, you might search for the words 'Kayin State', 'community health', 'gold mines' or 'infants'.

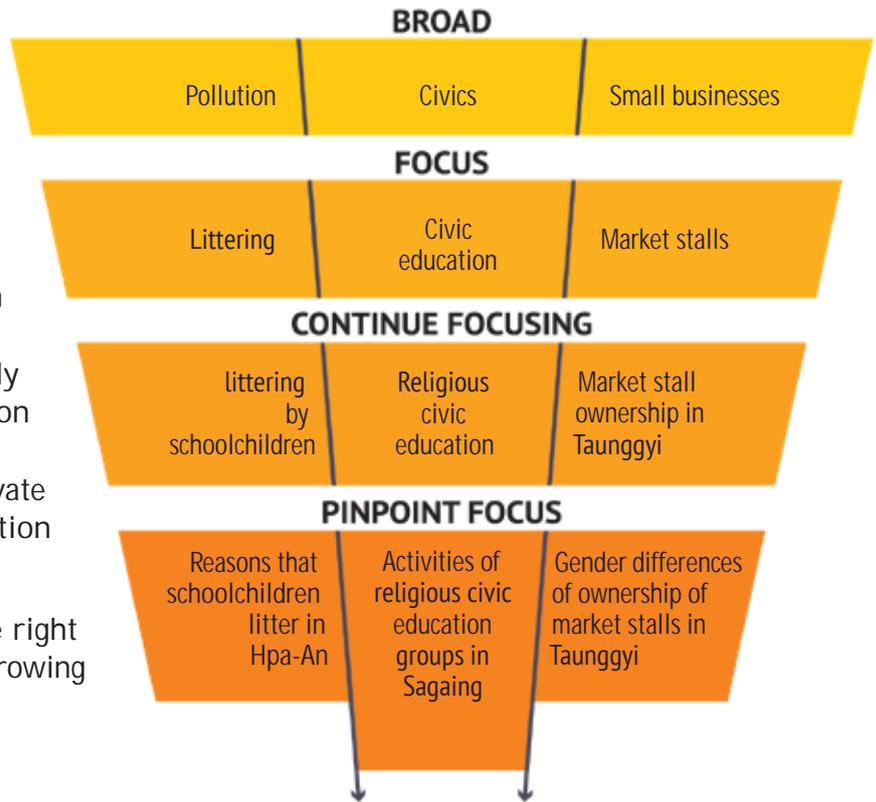
To narrow down your topic, you must reduce the range of things that you will research. For example, 'education' is a broad topic and you can't possibly research everything about it. 'Early childhood education' is still too broad. What would be better and easier



to research? Look at the following examples. Which ones are better?

- Early childhood education services in Mandalay;
- Private early childhood education services in Mandalay;
- Costs of private early childhood education services in Mandalay;
- How affordable are private early childhood education services in Mandalay?

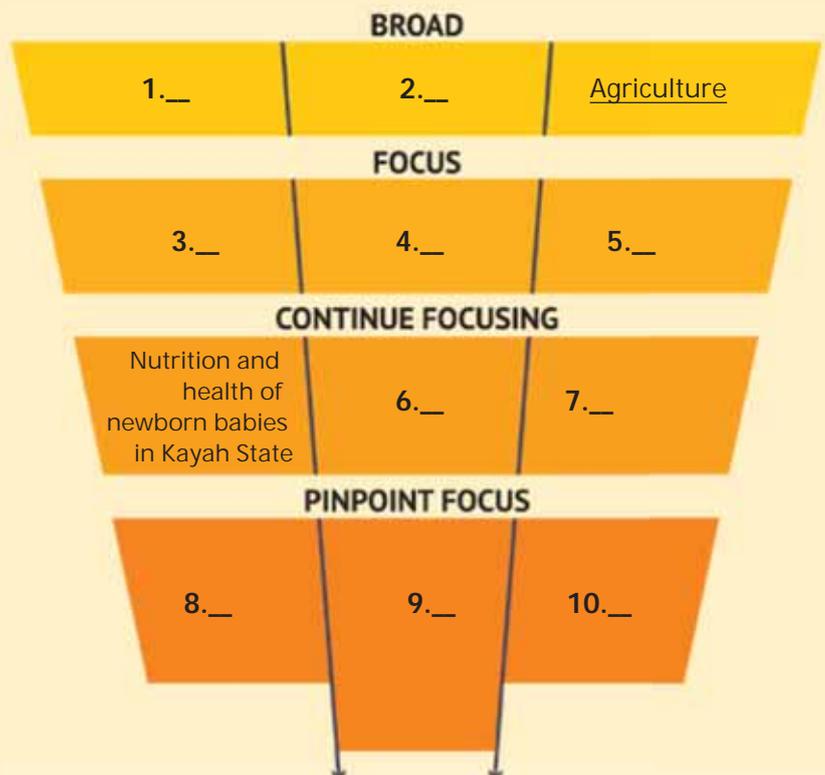
The funnel diagram on the right shows more examples of narrowing down research topics.



EXERCISE: Narrow the Topic

Put these topics in the funnel diagram.

- a Health
- b Who benefits from large-scale cash crop farms in Kayin State
- c Perceptions of local corruption in Magwe
- d Large-scale cash cropping farms
- e The impact and types of corruption that rural people in Magwe experience in day-to-day life
- f Governance
- g Health of newborn babies
- h The biggest challenges for NGOs and INGOs to improve nutrition for newborn babies in Kayah State
- i Types of large-scale cash cropping farms in Kayin State
- j Corruption in local government



EXERCISE: Choose the Best Answer

- 1 Which of the following does not help narrow a research topic?
 - a background research
 - b community needs
 - c presenting your findings
 - d a specific problem
- 2 What is the purpose of background research?
 - a to communicate a message
 - b to answer your research question
 - c to learn more about a research topic
 - d to develop your speaking skills
- 3 Why is narrowing a research topic useful?
 - a All research topics should be broad and general.
 - b Narrowing the topic is a step in the research process.
 - c If research is narrow, more people will read the results.
 - d Researching a very broad topic can be too difficult or expensive.

Your Research Project: Research Topic

Think of a research topic that you might consider researching. This should be something interesting and useful.

- 1 How could you do background research for this?
- 2 Is your topic narrow enough? If not, focus it.
- 3 In pairs, discuss your topic and why you chose it.





EXERCISE: Identify the Better Research Questions

Read the lists of research questions. Which list of questions is easier to research? Why?

List 1	List 2
<ul style="list-style-type: none"> • Why do people join in religious activities? • What is the average age that someone starts a business? • What do people in my community think about Europeans tourists? 	<ul style="list-style-type: none"> • Why do Yangon University students join religious organisations? • What challenges do women experience when starting businesses in Yangon? • What do European tourists visiting Pyin Oo Lwin know about local attractions?

Research questions

Research questions describe what your research will specifically try to understand. A researcher answers the research questions through data collection and analysis. The research questions guide data collection and analysis, and keep the research focused and **consistent**. For example:

How do landmines impact the lives of farmers in Shan State?

This question focuses your research on Shan State, farmers, and landmines. You might, while doing this research, find out a lot about how farmers are affected by flooding. This may be interesting, but it is not probably relevant to your research about landmines.

The three characteristics of a good research question

1. It Is clear

A clear question makes it obvious who and what is being researched. For example, the research question, 'What is the education of people in my village?', is not clear. It is not clear which people (children, adults, both?) or what type of education (primary, secondary, government education, non-formal or informal education?) or which village.

2. It Is focused

When the question asks about specific things, the researcher can answer it by doing data collection and analysis. If the question is too broad, the researcher may collect too much data or the data may not show a clear answer. For example, the research question, 'What is the most difficult part of education for secondary students?', is very broad – the research could ask about subjects, teachers, peers, transport or resources.

A more focused research question is, 'What subject do secondary students find most difficult?' Another example is, 'What do students think is the most significant cause of conflict between teachers and students?'

3. It Is researchable

Researchable means that it is possible to do the research. Some research topics are impossible because of a lack of time and resources. Others are impossible because it would be too difficult to get the data. For a Loikaw-based student who is doing a research project, a question about Loikaw would be better than a question about all of Myanmar. 'What do Loikaw high school teachers think is the most important subject for students?', is a better research question than, 'What do Myanmar teachers think is the most important subject for students?'

EXERCISE: Clear or Unclear?

Are these *clear* or *unclear* research questions? If unclear, what is the problem?

- 1 Are people prepared for a natural disaster like Cyclone Nargis?
- 2 What is the most popular type of motorbike in Bhamo for youth under 25?
- 3 How does unemployment affect the romantic relationships of young men in Bago?
- 4 What problems do minorities have with police?

EXERCISE: Rank from Broad to Focused

Rank these questions from broadest to most focused.

- 1 What do men under 25 find most difficult about getting a job?
- 2 What do men think is most difficult about their working lives?
- 3 What do men under 25 think is most difficult about finding a job in the construction industry?
- 4 What do men think is most difficult about finding a job?
- 5 What do men find difficult?

ACTIVITY: Focus and Rewrite

- 1 Focus and rewrite the following question so that it is more researchable:

What do senior government officials consider the best skills for youth to have?

- 2 In pairs or groups, compare your answers. Agree on a question.
- 3 As a class, choose the best research question.

ACTIVITY: Evaluating Research Questions

- 1 In groups of four-six, divide up these topics between group members. Write a research question for each topic. Remember to make your question clear, focused and researchable.
 - Media
 - Equality
 - Children
 - The Environment
 - Education
 - Work
 - Sport
 - Globalisation
 - History
 - Gender
- 2 As a group, evaluate all the research questions. Check that they are clear, focused and researchable. Write them all on pieces of paper, and stick them on the wall.
- 3 Go around the room and read other groups' research questions. Write feedback about the questions on their papers.





CASE STUDY: Analyse the Case Study

Read the case study and answer the questions.

- 1 Describe Aung Zaw Myo's research in two sentences.
- 2 Answer the questions.
 - a What factors influenced Aung Zaw Myo's choice of research topic?
 - b What is the example given of how Aung Zaw Myo made his research ethical?
 - c What do you think was the most difficult part of the research for Aung Zaw Myo?

Social Media's Impact on Studies

Aung Zaw Myo studied a Bachelor of Social Science at Chiang Mai University. In his first year, he was required to do a research project. He wanted to look into the impacts of technology. This was too broad, so he narrowed it down. He chose a specific technology – social media – because it is popular with students and was researchable with the time and resources that he had.



He only had one research question, which was, 'How does social media affect the academic performance of Chiang Mai University Students?' He used a survey to collect data.

Aung Zaw Myo was required by the university to make his research ethical (see Chapter 3). He also had to write about the methods that he used to make his research **ethical**, such as making sure that all survey participants understood the research and agreed to be involved.

His analysis of the data from his surveys was done using a computer program called Statistical Package for the Social Sciences (SPSS) (see chapter 8). He used it to calculate statistics that described different parts of what he was researching.

After he had reached some conclusions, he presented a paper. The paper detailed how he did his research, his conclusions and recommendations. It included tables that summarised the data from his research.



Your Research Project: Clear, Focused and Researchable?

Think of a research question. This could be on the topic that you used previously or a different one that you are interested in.

- 1 Look at the **criteria** and decide if the research question is clear, focused and researchable.
- 2 In pairs, assess each other's research questions.



DISCUSSION

- 1 What is the most important part of a good research question?
- 2 Should a research question ask something that you are personally interested in?

1.4 The Characteristics of a Good Researcher



PREVIEW

- 1 What sort of personality should a researcher have?
- 2 What skills should a researcher have?

Some researcher characteristics

We spoke with some researchers about characteristics that are useful for a researcher to have. Here are some common responses:

Curious

A curious person has a strong interest to learn about the world. Curiosity can motivate researchers to work hard and to think carefully about things that others might not care about.

Analytical

During analysis, the researcher will need to compare and contrast, find patterns and relationships, distinguish between useful and useless information and summarise and conclude.

Systematic

Doing something systematically means doing it carefully and following a process. Researchers do things such as developing plans, making detailed notes and analysing data. It is important that these things are done carefully and well, so that the research is **reliable** and accurate.



EXERCISE: Match the Characteristics

Read the scenarios. Match these to the three characteristics of a good researcher above.

- 1 Thiri's research project was on why young men like to play football. Most of them spoke about fitness, making friends and having fun. However, one day she noticed some young men playing later at night than others. She asked them why they played later and they said that it was because of difficult situations at home.
- 2 Mahn Mahn did 50 interviews for his study on Members of Parliament's knowledge about democracy, comparing different states and regions in Myanmar. Each interview took one hour and he had to make sure that the questions were asked in the same way, so the research was accurate. He also had to ensure that the data was stored carefully so that none of it was lost or damaged.
- 3 Myat Thu was researching the impacts of reduced tourism on communities living near Inle Lake. He interviewed ten families. Some families said the internet had a bad influence on children. He did not include this in his results because it was not relevant to his research question.

EXERCISE: Read about the Researchers

Read the three researchers' profiles and answer the questions for each.

- 1 What have they researched?
- 2 What do they like about doing research?
- 3 What characteristics do they believe that researchers should have?

a. Market Research – Khin Myat Thwe Aung

Khin Myat Thwe Aung (Grace) is a Senior Research Executive with Myanmar Survey Research (MSR). MSR does **market research** and business research in Myanmar. Grace's first research project was on the gender gap in mobile phone ownership in Myanmar. She loves her job because she learns new things every day. She says that one of the biggest challenges in doing research is keeping up with changes in technology, such as Facebook. She feels that, to be a good market researcher, you should be knowledgeable, open-minded and motivated. Market researchers have to know what's going on in local and international markets to provide useful advice to their customers.



b. Academic Research – Phyto Win Latt

Phyto Win Latt is a graduate and a researcher at the National University of Singapore. He is working on a big research project for his Ph.D. He is passionate about finding answers to important social, political and historical questions about the history of Myanmar. He loves discovering new historical **sources** that haven't been used by other researchers. The biggest challenge he has is connecting Myanmar's colonial history with Asia or Europe. This is because some sources are difficult to access. He thinks that a good researcher is curious, open-minded, honest and has no **biases**.

c. Social Research – Nyein Thiri Swe

Nyein Thiri Swe is a senior research officer at Enlightened Myanmar Research Foundation (EMReF). Her first experience as a researcher was with a project that did yearly examinations of the impacts of Cyclone Nargis. She visited communities in Ayeyarwaddy Region and spoke to people about their social and economic situation. The research was used to inform how governments, NGOs and INGOs helped these communities to recover. She thinks that the most rewarding thing about doing research is speaking to people because it gives her a direct understanding of a situation. One of her biggest challenges as a researcher is to find good quality secondary data on the political and economic sectors in Myanmar. She believes that a good researcher is able to analyse a situation from different perspectives, to be free from bias and to be adaptable.



▶ ACTIVITY: Self Reflection

Answer the questions about yourself.

- 1 Which of the researcher characteristics from this section do you have?
- 2 Which of the characteristics do you need to improve?
- 3 In pairs, compare your researcher characteristics and those that you need to improve.





ACTIVITY: Positives and Negatives of Research

- 1 Read statements a-j. Is each statement describing a positive or negative about research?
- 2 Read the researchers' comments (i-x) about doing research. Match the comments to the positives and negatives (a-j) that they best represent. Comments can match to more than one positive or negative.
- 3 Do you agree with all the speakers (i-x)? Discuss your reasons in groups.
- 4 List some more positives and negatives.

- | | |
|--|--|
| <p>a. Research helps us understand the world better.</p> <p>b. Research can be misleading.</p> <p>c. Research can develop personal and professional skills.</p> <p>d. Research can be boring.</p> <p>e. Research can be difficult.</p> | <p>f. Research can produce detailed and accurate information.</p> <p>g. Research can be expensive.</p> <p>h. Research can be interesting.</p> <p>i. Research can be misused.</p> <p>j. Research can help us to understand what might happen in the future.</p> |
|--|--|

- i. 'Through research, we know more about how communities change over time.'
- ii. 'Research helps me learn about the causes of social problems such as poverty.'
- iii. 'After I record interviews, I have to listen to them again and again to make sure that I don't miss anything important.'
- iv. 'My research project requires advanced knowledge of statistics, several languages and going to lots of remote locations. I need to hire a team of specialists. This costs a lot of money.'
- v. 'Researchers need good thinking, organisational and communication skills. The process of doing research helps you to develop these.'
- vi. 'I hate having to do every step carefully. It takes a long time, especially the data analysis.'
- vii. 'As a government official, I need accurate, detailed, up-to-date information to inform policy. I often use the last *Myanmar Population and Housing Census*, as it has township-level information on health and income.'
- viii. 'I often research topics that relate directly to my life. The more I learn about a topic, the more exciting things I find out about it.'
- ix. 'Mistakes and errors can happen at any stage of the research process including the design of the research project, how questions are asked and how the results are analysed. This might mean that the end results are wrong.'
- x. 'People could use my research for bad purposes. My findings were that most people in my community were less worried about pollution than economic issues. I am worried that businesses will use this as an excuse to continue to pollute the environment.'



DISCUSSION

Why is it important to follow the research process?

CHAPTER 2: Research Approaches



Learning Goals

Knowledge

In this chapter, you will increase your knowledge of:

- primary and secondary research;
- the key characteristics of quantitative research;
- the key characteristics of qualitative research;
- concepts used to produce good research.

Skills

In this chapter, you will practise the ability to:

- distinguish between primary and secondary research;
- identify the key characteristics of quantitative and qualitative research;
- explore the most appropriate type of research for different research projects.

when primary research is not possible. For example, if you are researching a time in history and no one from that time is alive anymore. You will have to do secondary research to get the information that you need.

Secondary research also happens when researchers want information, but do not have the time or resources to find out the answers themselves, or when the topic has already been researched. Secondary research can be used to compare and contrast the results of different research projects. Researchers may do secondary research at the start of a research project to see what other research has already been done on that topic. Secondary research is sometimes called 'desk' research.

Examples of data that is used in secondary research include:

- **raw data** collected by other people;
- emails, magazine interviews, documentaries;
- books and academic articles;
- encyclopedias, websites or research reports.

When doing secondary research, you need to make sure that your secondary data is reliable and **valid** (see 2.2) and uses **credible** sources.



EXERCISE: Answer the Questions

- 1 Why might secondary research be cheaper than primary research?
- 2 What might you read at the start of a research project before collecting your own data?
- 3 Why is secondary research sometimes called 'desk research'?



EXERCISE: Primary or Secondary?

Are these examples of primary or secondary research?

- 1 Asking your grandmother about her experiences under the BSPP government.
- 2 Watching a documentary film about the colonial era to understand daily life during colonialism.
- 3 Comparing the findings of different research reports written about education in Mon state.
- 4 Taking video of a busy intersection in Yangon to understand driver behaviour.
- 5 Collecting data using a survey questionnaire that you developed yourself.
- 6 Conducting a nationwide census that collects data about every household in the country.
- 7 Using the internet to find articles and reports that have already been written about your research topic.
- 8 Visiting former prisoners and collecting poetry that they have written about their time in prison, to analyse.

ACTIVITY: Primary and Secondary Research

Read the scenarios.

- 1 Identify the primary and secondary research used in each scenario.
- 2 Add other possible examples of primary and secondary research to the tables below.



A. A researcher is looking at the job interests of young people in Mudon. The research question is, 'What are the career interests of youth in Mudon?' First, the researcher talks with teachers about the types of jobs that students apply for when they graduate. He then looks at school alumni records. Next, he talks with local employment agencies and NGOs that work with young people. He also analyses an NGO report on rural unemployment in Mon State.

B. A researcher is looking at community-based approaches to care for elderly people. The research question is, 'What strategies do families in Bago use to care for elderly family members?' She looks at NGO reports about law in Myanmar, and at the healthcare policies of previous governments. She does some internet research and finds survey data in a report on different types of health problems in Myanmar. After this, she interviews elderly people and their families. She then goes to different care homes for elderly people and talks to patients and staff.



Scenario A	
Primary Data	Secondary Data
- talking with teachers	- looking at alumni records
-	-

Scenario B	
Primary Data	Secondary Data



Your Research Project: Primary and Secondary Research

Think of a research question. This could be on the topic that you used previously or a different one that you are interested in.

- What primary research might you do to answer this question?
- What secondary research might you do?

- 1 Make two lists – one for primary research and one for secondary research.
- 2 In pairs, discuss your lists.

Primary Research	Secondary Research



DISCUSSION

- 1 In what situations in your community might you use primary research? Give examples.
- 2 In what situations in your community might you use secondary research? Give examples.

2.2 Quantitative Research



PREVIEW

- 1 What does this illustration say about differences in meaning between 'quantitative' and 'qualitative'?
- 2 How do these two words relate to different ways of answering research questions?

Quantitative	Qualitative
two months	uncomfortable
4 km	why
5	busy
800 MMK	like
1,220,675	senior
3.75%	respectable
-25,000	different

Quantitative research views research in society as similar to doing research in the natural sciences. It maintains that **objective** facts about society can be established through research in the same way they can be about the natural sciences.

Quantitative research is highly structured and often contains the five characteristics that are detailed in the table below.

a. Numerical Data (and Statistical Analysis)	
Numerical data is data that can easily be converted into numbers. It is very important in quantitative research. SCENARIO: A researcher answers the question, 'What is the difference in access to clean water between urban and rural areas?'	NUMERICAL DATA: '86.7% of urban households have access to improved drinking water.'
	NON-NUMERICAL DATA: A man says that although he can get clean water, it is too expensive.
b. Generalisability	
Generalisability is about whether research findings can be accurately applied to larger populations or to other settings. SCENARIO: The research question, 'What is the level of access to clean water in urban Yangon?'	GENERALISABLE DATA: The researcher visits a wide range of household types to accurately reflect all of urban Yangon.
	NON-GENERALISABLE DATA: The researcher only visits houses in downtown Yangon.

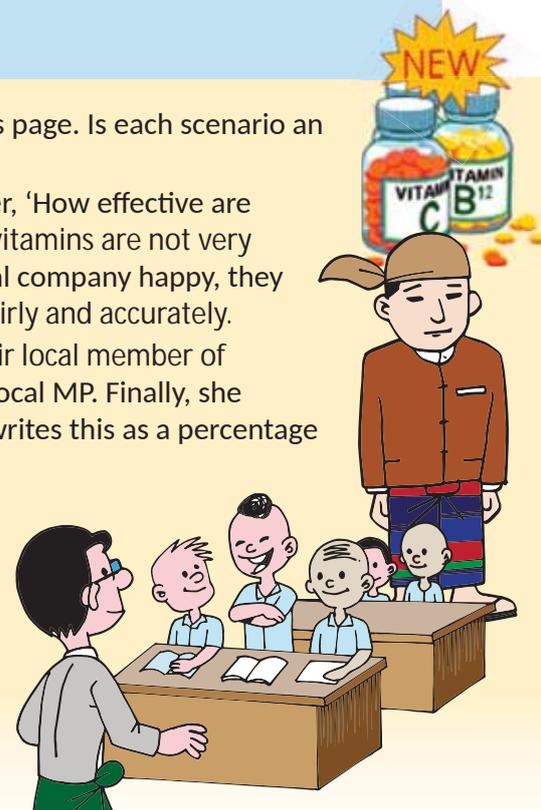
c. Objectivity	
<p>Objectivity is about reducing the influence on the research of the researcher's existing personal beliefs, interests or values. Researchers try to limit bias in the research process.</p> <p>SCENARIO: A Yangon NGO asks the research question, 'What are the impacts of our project on small businesses?'</p>	<p>OBJECTIVE: Measuring both positive and negative impacts.</p> <p>NOT OBJECTIVE: Measuring only positive impacts that make the project look very successful.</p>
d. Reliability	
<p>Reliability is about consistency in the research process, to reduce random or unintended influences. When collecting data, researchers should be consistent and thoughtful about unintended influences.</p> <p>SCENARIO: A health organisation wants to know, 'Do people in Hpa-An consider malaria a significant risk?'</p>	<p>RELIABLE: The researchers visit households and ask people a structured series of questions. The research is complete in one month.</p> <p>NOT RELIABLE: The researchers visit 50 urban households in the dry season. The same researchers visit ten rural households in the rainy season to ask the same questions.</p>
e. Validity	
<p>Validity is about the research process and how accurately the data collection tools measure what is being researched. This also affects the generalisability of the findings.</p> <p>SCENARIO: A research project asks, 'How many times per week do people in Mandalay do exercise?'</p>	<p>VALID: The researcher asks about all physical activities including going to the gym, playing sports (including informal <i>chinlone</i> or street football gatherings) walking or running.</p> <p>NOT VALID: The researcher only asks how often people go to the gym and concludes their fitness from that. They don't ask about sports, walking or any other things that are considered exercise.</p>



EXERCISE: Match the Scenarios

Match the scenarios (1-3) to characteristics a-c on the previous page. Is each scenario an example of *numerical data*, *generalisability* or *objectivity*?

- 1 A research company is paid by a medical company to answer, 'How effective are our new vitamins?' Their research shows that some of the vitamins are not very effective. If the research company want to make the medical company happy, they could ignore this data. However, they analyse all the data fairly and accurately.
- 2 A researcher wants to know, 'How well do people know their local member of parliament?' She does this by asking people to name their local MP. Finally, she counts the number of people that can name their MP and writes this as a percentage of all people.
- 3 A research project studies, 'What are the differences between boys and girls in academic performance in maths for lower secondary students in Sagaing Region?' They collect and compare information about the enrollment levels and matriculation scores of children of all ages and backgrounds, in a wide range of areas in Sagaing.



ACTIVITY: Reliable and Valid?

- 1 Read the scenario. Is it reliable or not? Why?

A research project studies, 'What are people's fears of theft?' A researcher approaches people in her community who are returning from work and asks, 'Do you feel afraid of theft when walking around the streets?' She also approaches people when they are buying their lunch and asks them the same question.

- 2 Think of ways to make it more reliable.
- 3 Read the scenario. Is it valid or not? Why?

A researcher is looking at access to teacher training for secondary school teachers from Rakhine State. The researcher does her research in Sittwe.

- 4 Think of ways to make it more valid.

Practical Tips for Small Quantitative Research Projects

Not all of the reliability and validity concerns are relevant to all research projects. For smaller quantitative research projects, the following are the most important:

- When collecting data, make sure that your collection methods are consistent (done in the same way and under similar **conditions**).
- Minimise anything that might influence how **respondents** answer.
- Carefully create questions so that the answers give you data about your research question and not about something else.
- Make sure that the people you choose for your research reflect the population that you are researching.



CASE STUDY: Analyse the Case Study

Read the case study on the opposite page and answer the questions.

- 1 Which characteristics of quantitative research can you find in this case study (numerical data, generalisability, objectivity, reliability or validity)?
- 2 What challenges do you think the researchers encountered?

Local Governance Research Report 2016 – Open Myanmar Initiative



Open Myanmar Initiative aims to increase knowledge and improve information and awareness about governance issues in Myanmar. The *Local Government Research Report* assesses existing knowledge and attitudes about governance.

The project trained people from local government and civil society in research skills.

The researchers used a survey that asked the same questions in all 14 states and regions.



According to the researchers, older people were often reluctant to participate because of their experience under military rule. Youth and women were more enthusiastic about giving their views.

The survey asked questions about people's knowledge of local village tract administrators, the rule of law, access to education, transportation, electricity and public healthcare. The survey also asked what people knew about corruption and conflict in their area. Participants were asked to **rank** the issues in order of importance for their community. The results showed that people thought rule of law was the most important, with 49.6% of people prioritising this issue. Many people also thought education and health had improved recently. However, more than 64.7% of participants believed that corruption was a continuing problem.

https://drive.google.com/file/d/1AeMOELv6gSvC9wnfT_brUGRjXQndJDlx/view



Your Research Project: Quantitative Research

Think of a research question. This could be on the topic that you used previously or a different one that you are interested in.

- 1 Is there any quantitative research that you might want to include in this project?
- 2 What can you do to ensure that it is numerical, objective, reliable and valid?
- 3 In pairs, discuss any difficulties that you might have with making this quantitative research objective, reliable or valid.



DISCUSSION

What types of research would not be suitable for quantitative methods?

2.3 Qualitative Research



PREVIEW

Decide whether each sentence is *correct* or *incorrect*. Then read the text and check your answers.

- 1 Qualitative research, like quantitative research, relies heavily on numbers.
- 2 Qualitative research can include photos and audio recordings.
- 3 Qualitative researchers are interested in the thoughts and opinions of others.

Qualitative research views research about people and society as different to the natural sciences. It tries to understand social issues in greater depth and in their context. It also focuses on the thoughts and opinions of people who are the subject of the research rather than trying to establish objective facts. Qualitative research often contains the five characteristics that are detailed in the table below.

a. Non-Numerical Data (Including words but also pictures, videos or sounds)	
<p>SCENARIO: A researcher is trying to answer the question, 'What are Inle Lake farmers' perceptions of the economic impacts of tourism?'</p>	<p>NON-NUMERICAL DATA: The researcher interviews farmers and takes photos of Inle Lake's floating farms and markets.</p>
	<p>NUMERICAL DATA: The researcher surveys farmers to calculate the percentage of farmers that think tourism has a positive economic impact.</p>
b. In-Depth Data	
<p>Qualitative research focuses on in-depth data to answer a research question, which may mean that the researcher has a few long conversations rather than many short ones. It also focuses on context, which may include people, histories and relationships that are significant to a situation.</p> <p>SCENARIO: A researcher is researching, 'How does conflict affect people in remote areas of Shan State?'</p>	<p>IN-DEPTH: The researcher writes about the history of community relationships and describes people's responses in interviews.</p>
	<p>NOT IN-DEPTH: The researcher uses a survey to ask people how many times they have experienced conflict and writes a report about it.</p>
c. Subjectivity	
<p>Subjectivity refers to reflecting the feelings, views and opinions of participants in the research rather than statistical data.</p> <p>SCENARIO: A researcher wants to find out about government services in a town.</p>	<p>SUBJECTIVE: The researcher asks interview participants for their opinions about government services in the town.</p>
	<p>NOT SUBJECTIVE: The researcher counts how many schools, hospitals and police stations there are in the town and compares that number to other towns.</p>

d. Confirmability

Confirmable means that research can be checked or repeated by others. Researchers should provide an accurate and detailed description of tools and context of their data collection so that other researchers can check the findings or use their findings for their own research.

SCENARIO: A researcher asks, 'What are the experiences of disability at Yangon University?'

CONFIRMABLE: In the research report, the researcher includes information about where students were interviewed and what questions were asked.

NOT CONFIRMABLE: The researcher only writes the results, and does not provide information about how the data was collected.

e. Credibility

Credibility is about checking with research participants for accuracy in the data, analysis and conclusions. Research participants can clarify what they mean, check for mistakes and provide additional information.

SCENARIO: A researcher does research on, 'How do farmers interact with local governments?'

CREDIBLE: The researcher interviews ten farmers. After analysis, the researcher shows the findings to some of the farmers to see if they think they are accurate.

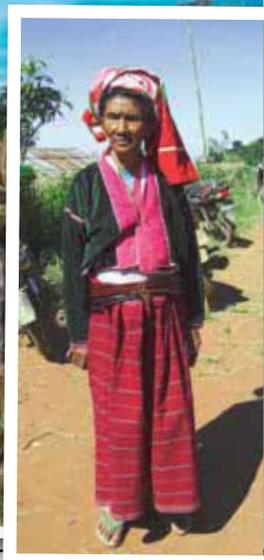
NOT CREDIBLE: After analysis of the interviews, the researcher writes the report, but does not show the results to any of the farmers first.



EXERCISE: Match the Scenarios

Match the scenarios (1-3) to characteristics a-c on the previous page. Is each scenario an example of *non-numerical data*, *in-depth data* or *subjectivity*? Scenarios could match to more than one characteristic.

- 1 A researcher wants to know, 'How do families in Shan State work together on farms?' The researcher visits six farms over three days and takes photos of families working together.
- 2 A researcher is interested in how families from minority backgrounds manage relationships with families from larger ethnic groups. The researcher interviews three people and documents their life histories.
- 3 A researcher wants to know about the effectiveness of the Kachin State government on drug issues. The researcher interviews the families of drug addicts, ethnic minority community leaders and NGOs to get their opinions.



**EXERCISE: True or False? (If False, Say Why)**

- 1 'Confirmability' is about saving researchers time and money by showing them how to repeat other people's research.
- 2 Confirmable research would show the methods that were used to collect the data.
- 3 'Credibility' is about proving to other researchers that your work is believable.
- 4 Credible research must include feedback from the participants about its accuracy.

**ACTIVITY: Confirmable and Credible?**

Read the scenario and answer the questions.

A researcher did research on a vocational training programme called Job Prospects. It aimed to help internally displaced persons (IDPs) in urban areas of Shan State. The research question was, 'What feedback do IDPs have about the Job Prospects programme?' The researcher visited Shan State once, to interview the participants. The participants said that they really liked the training but wanted more support in finding jobs. After that, the researcher did not contact the participants again.

The researcher analysed the data and wrote a report. The report included details about the methods that were used, including the questions and where, when and how interviews were conducted with the IDPs. When the research report was completed it was presented to NGOs in Yangon.

- 1 Is this research confirmable? Explain your answer.
- 2 Are the research findings credible? Explain your answer.

Practical tips for small qualitative research projects

The suggestions for confirmable and credible research are not always appropriate for small-scale research projects. For good small-scale qualitative research, we suggest that you do the following:

- Keep notes about when you collected data, where you collected data and who collected the data.
- Provide detailed information about the methods and procedures that you used.
- Document the context of the data collection and reflect on how it influenced what people say to you.
- When you have analysed all your data, talk with someone from the population that you are researching about your findings, and get their opinion and feedback about its accuracy.



CASE STUDY: Analyse the Case Study

Read the case study and answer the questions.

- 1 What characteristics of qualitative research can you find in this case study (*non-numerical data, in-depth data, subjectivity, confirmability, credibility*)?
- 2 What type of quantitative research could you do on this topic?

LIFE ON HOLD: EXPERIENCES OF WOMEN DISPLACED BY CONFLICT IN KACHIN STATE (2017) – TROCAIRE AND OXFAM

This research was about bringing together women from internally displaced persons (IDP) camps in Kachin State to discuss their hopes and priorities for peace. Women from 12 different IDP camps around Kachin State were invited to participate in two-day workshops.

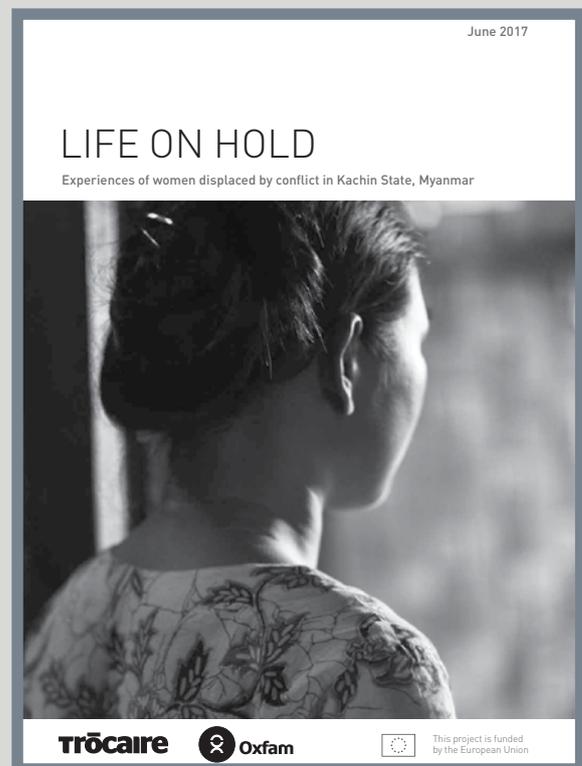
On the first day of the workshops the women discussed their experiences of the Kachin conflict, and on the second day they discussed their hopes and priorities for peace. The women were encouraged to openly share their views, feelings and needs.

The researchers analysed notes from the discussions and interviews as well as observation data such as body language and how women spoke about certain issues.

The report about this research describes the methods and tools used for the research. It provides details about the selection of IDP camps and participants, the interview questions and the conditions in which they were asked, and the process for the workshops and the group discussions.

The findings in the report were grouped as 'the past', 'the present', 'the future', 'knowledge of conflict and peace' and 'contributions of IDP women to the peace process.'

<https://www.trocaire.org/sites/default/files/resources/policy/life-on-hold-trocaire-oxfam-2017.pdf>





Your Research Project: Qualitative Research

Think of a research question. This could be on the topic that you used previously or a different one that you are interested in.

- 1 Is there any qualitative research that you might want to include in this project?
- 2 What can you do to ensure that it is confirmable and credible?
- 3 In pairs, discuss any difficulties that you might have with making this qualitative research confirmable and credible.



DISCUSSION

What characteristics and skills do you need to do qualitative research?

2.4 Mixed Methods Research



PREVIEW

Why might you use both quantitative and qualitative methods together in a research project?

Mixed methods research is where researchers use both quantitative and qualitative methods together to collect data in a research project. They believe that this will produce a better understanding of the social issue being researched than if only one approach (quantitative or qualitative) is used. Researchers can also compare and check their findings if they have collected data using both quantitative and qualitative methods.



EXERCISE: Categorise the Examples

Here are examples of questions, data and excerpts from research reports. Categorise each as either *quantitative*, *qualitative* or *mixed methods*. Explain your answers.

- 1 **Question:** Why do young people use mobile phones?
- 2 **Data:** This photo: 
- 3 **Data:** '86.7% of respondents indicated that they think the environment is getting worse, which was also confirmed in our interviews.'
- 4 **Excerpt:** 'During interviews, people said that they thought there was a lack of job opportunities.'
- 5 **Question:** How many times do you wash your hands daily? – 1 – 2 – 3 – 4 – 5 – 6
- 6 **Excerpt:** 'We had informal conversations with people on the street to talk about sport. We also collected data on age, gender and occupation.'
- 7 **Excerpt:** 'While answering the question, we noticed that he was looking very uncomfortable.'



ACTIVITY: Mixed Methods in Research

Look at the examples of quantitative and qualitative research in the case studies on pages 33 and 37. Discuss how these research projects could use mixed methods.

- 1 How could *Local Governance Research Report 2016* by Open Myanmar Initiative (on page 33) have used qualitative methods?
- 2 How could *Life on Hold: Experiences of Women Displaced by Conflict in Kachin State* (2017) (on page 37) have uses quantitative methods?

▶ ACTIVITY: Comparing Quantitative and Qualitative Research

1 In groups, ask ten people these questions. Record their answers.

Quantitative	Questions	Possible Responses			
	1. Is crime a big problem in your community?	a. yes	b. no		
2. Have you seen a crime in your community in the last three months?	a. yes	b. no			
3. What is the biggest crime-related problem in your community?	a. drugs	b. violence	c. theft	d. corruption	
4. What problems should the government spend money on to address crime?	a. drugs	b. violence	c. theft	d. corruption	

2 Organise and summarise the data.

3 Discuss your findings.

4 In groups, ask three people these questions. Record their answers.

Qualitative	Questions
	a. How safe is your community?
	b. How does crime impact families in your community?
	c. How can the government best address crime problems in your community?

5 Organise and summarise the results.

6 Discuss your findings.

7 As a class, compare the responses that you got for the quantitative and qualitative research questions. Discuss the questions:

- a How are the questions different?
- b How is the data different?
- c Which data is easier to organise? Why?

▶ ACTIVITY: Questions in Mixed Methods Research

1 Make a list with three quantitative questions and three qualitative questions in random order.

2 In pairs, identify your partner's quantitative and qualitative questions.

DISCUSSION



Do you think you would prefer to do quantitative or qualitative research? Why?

CHAPTER 3: Research Ethics

Ethics

Ethics is the concept of right and wrong, determining a moral course of action. Ethics divide into two main branches: applied ethics and theoretical ethics.

Learning Goals

Knowledge

In this chapter, you will increase your knowledge of:

- research ethics;
- harm;
- informed consent;
- confidentiality.

Skills

In this chapter, you will practise the ability to:

- distinguish between different types of harm;
- discuss features of ethical research;
- examine how research ethics apply in context;
- write ethical guidelines for individual research projects.

3.1 Harm



PREVIEW

- 1 How might researchers have negative impacts on the people and communities that they are researching?
Example: Research might take up a lot of people's time.
- 2 What responsibilities do researchers have to the research participants?



ACTIVITY: Predict the Possible Problems

Read the scenario. What harm might be caused by this research project?

“ Ko Lwin is a researcher at the Ministry of Home Affairs. He is researching drug use among university students. He will talk to students, including those who use drugs. He will pay students to participate in this research project. He will take photos and send a report to local university and government officials. ”



Research, when done badly, can cause harm to researchers, to research participants and to communities. Research ethics involve being respectful and avoiding harm as much as possible.

Physical harm

Physical harm involves pain or damage to a person. For example, if you do research in a conflict zone without assessing the security risk, the researcher or participants could get injured.

To reduce the risk of physical harm:

- Seek reliable information about the current security situation in areas where you will conduct research if there is armed conflict or other disturbances.
- Find out about the latest road and weather conditions if travelling to remote locations.

Social harm

Research can cause problems in relationships between people, families or communities. For example, if you are studying people's voting preferences and people find out how other people in their community voted, they might get angry with each other for not voting for their preferred party or candidate.

Legal harm

Legal harm means problems that come from police or courts. For example, research in areas that the government doesn't allow people to travel to, or investigating issues that the authorities see as sensitive, such as police corruption.

To reduce the risk of social and/or legal harm, **confidentiality** is important. Keep the identity of participants confidential so that they do not know who other participants are or what they said about sensitive issues (social harm) and so they do not have trouble with authorities (legal harm).

Psychological harm

Psychological harm is when someone's mental or emotional state is negatively affected. A researcher's questions could make people feel very upset, depressed, ashamed or lose confidence. Researchers need to develop skills to be sensitive when asking questions.

To reduce the risk of serious psychological harm:

- Be aware of issues that may be upsetting for participants when you are developing your interview questions.
- Seek advice first from experts or researchers who are experienced in asking questions about topics that might be upsetting to participants.
- Explain to the participant they do not have to answer any questions that they do not want to, and can end an interview at any time.
- Watch for signs of any distress (for example, crying or becoming very angry) from participants when they are answering questions during interviews.
- If a participant does become distressed answering a question, do not pursue that question further.
- If possible, offer participants who have discussed **traumatic** experiences contact details for organisations that can provide support and counselling.

**ACTIVITY: Identify the Harm**

Each of the scenarios is an example of possible harm. For each scenario, explain:

- 1 Who might be harmed and what type of harm might be caused?
- 2 What could be done to reduce the risk of this harm.
 - a Johnny wants to do research about land rights. He's going to interview people about a land conflict with other people in their community.
 - b Roi Ja is researching bullying at school. She decides to have a group discussion with students to discuss their experiences of bullying.
 - c Tin Oo is observing and filming a punk rock band. Members of the band join a demonstration. Tin Oo films them at this demonstration.
 - d Mu Htoo is researching working conditions in mines. To get to some remote mines, she has to ride her motorbike over bad roads. In the rainy season, these roads have mudslides.
 - e Sai Sai is interviewing people about the saddest moment in their lives. He is planning to interview twenty people per day.
 - f Mi Mi is researching abuses amongst domestic workers. She publishes photos of people who have been beaten and the names of their employers.

3.2 Features of Ethical Research



PREVIEW

Discuss the questions then read the text and check your answers.

- 1 What should happen before someone gives consent to participate in research?
- 2 Who knows about the participants if the research is confidential?
- 3 Why is it important to record data and report research accurately?

As well as harm, there are other ethical considerations in research, including **informed consent**, confidentiality and privacy. These come in at all stages of the research process.

1.

INFORMED
CONSENT



It is the responsibility of the researcher to explain to participants:

- a short summary of the research;
- possible risks of harm and possible benefits of the research;
- whether the researcher will take notes, recordings or photos;
- that participants can withdraw from the research any time;
- that participants do not have to answer all questions;
- that participants can ask questions about the research;
- about confidentiality (see below),

A researcher can do this verbally or in writing. After a participant is informed about the research and its benefits and possible risks, they can give **consent**. Usually, a researcher will ask for consent before the research begins. Research participants can withdraw their consent at any stage during the research process.

2.

CONFIDENTIALITY



Confidentiality means that information about participants is not shared (in person, in text or online) with anyone outside the research team. This could include information such as their names, photos or other identifying details. Only the researchers know who provided which information.



3.

HONESTY



If research does not accurately represent findings about a community, the research can negatively influence decisions (such as by NGOs, governments, etc.) that can affect the community. Therefore, it is important to honestly record data and represent findings and seek feedback from the community about the findings. An honest researcher should also write about possible biases and limitations in their research.

**EXERCISE: Choose the Best Answer**

- 1 A researcher makes sure that the research participant cannot be identified by anyone. What is this an example of?
 - a confidentiality
 - b consent
 - c honesty
 - d primary research
- 2 Which of the following is research honesty most relevant to?
 - a participants' personal lives
 - b the risk of arrest for the researcher
 - c making respectful and ethical decisions at home or school
 - d collecting data and presenting findings
- 3 For a research participant to be fully informed, which of the following is not necessary?
 - a an explanation of the research, including its objectives
 - b possible consequences to the participant and community
 - c background information about the researcher's education
 - d information about how participants can withdraw consent at a later stage

**ACTIVITY: Identify the Problem**

- 1 Match the scenarios (a-c) to the lack of a feature of ethical research – *informed consent, confidentiality or honesty*.
 - 2 What could the researcher do to conduct the research more ethically in each scenario?

EXAMPLE: A student puts photos of his research participants on Facebook. Some participants are unhappy about this.

 1. *This is an example of a lack of confidentiality.*
 2. *The researcher should get permission from participants to put photos on social media.*
- a An information technology company wants to know if internet-connected businesses are more successful than ones that are not online. Most responses indicate that this is true. However, a few responses suggest that it is not true. They decide to remove the negative responses from the results so that they can more easily sell new internet technologies to businesses.
 - b A researcher interviews students about cheating in exams and they sign a consent form before being interviewed. When he shows them his draft report, two students say they no longer consent to be in the study because they might get in trouble with their teachers. He does not remove their data and publishes the report with no changes.
 - c A participant wants to talk about something sensitive during an interview but is afraid of the problems if people learn what he says. The researcher promises that his name will not be mentioned. However, he is described in detail so that anyone from his town who reads it could recognise him.

ACTIVITY: Guidelines for Ethical Research

Here are two (simplified) examples of codes of conduct for ethical research.

- 1 What are the similarities?
- 2 What are the differences?

Ethics Principles of International Research Organisations (Simplified)	
International Code on Market, Opinion and Social Research and Data Analytics (ICC/ESOMAR)	RESPECT Code of Practice for Socio-Economic Research (UNESCO)
i. Be transparent about data collection. ii. Protect personal data. iii. Don't do anything that might harm someone or damage the reputation of social research.	i. Do good-quality research. ii. Comply with the law. iii. Avoid social and personal harm.

- 3 Here is a list of research guidelines (a-e). What in the codes of conduct is similar to which guidelines?
- 4 In pairs or groups, discuss other possible ethical research guidelines and then add them to the list.
- 5 Make a class list of ethical guidelines for research. Put it on the wall.

Ethical Research Guidelines

- a. Reduce risk of harm. Think about ethics at the beginning of your project and throughout the whole research process.
- b. Ensure that research participants are informed about, and aware of, consent processes.
- c. Respect the needs and availabilities of community members.
- d. If you feel like there is a situation where you will cause harm to yourself, other researchers or the community, stop the research. Never continue a research project where there is serious risk of harm.
- e. Always be honest in your research. Never misreport your findings.

▶ ACTIVITY: Ethics in Practice

Read the scenario and answer the questions.

- 1 What are the ethical considerations of this research? (Consider the types of harm and the features of ethical research outlined on pages 42-43 and page 44.)
- 2 When should the researchers ask the participants for consent?
- 3 Identify the type of harm in each situation, and how the risk of this harm could be reduced.
 - a The research participants are visibly upset by the questions.
 - b The lead researcher wants community members to come to Yangon for the report launch. However, the community members will not go unless they are given money, otherwise they will lose money by not working.
 - c The funding organisation asks you to give all of your field notes to them. They want to use the field notes for future research. The field notes include photos of individuals and their names.

'DEMOCRACY' RESEARCH — RURAL SHAN STATE

A researcher is doing research in a small rural village. She is researching people's opinions and ideas about democracy. She will conduct individual and group interviews. She plans to ask people their name, age, address, income and number of siblings. She will also ask people questions about their political beliefs, thoughts about democracy, membership in political parties and experiences with political organising.

The village is in a very remote part of Shan State. To get there takes a 12-hour bus ride, then a four-hour motorbike ride over a mountain.

The lead researcher is Australian. She has hired a Myanmar-speaking consultant researcher to be her guide and translator. He will help conduct the interviews. The consultant researcher has experience doing research in politically-sensitive areas.

The community leader is worried because the local authorities might find out about the research and be unhappy that it is happening. However, he thinks that there are possible benefits for the village.

Most community members, but not all, speak Myanmar. They are mostly farmers who work during the day. Some have experienced armed conflict in the past. The community leader warns the researchers that some people are suspicious of the research project. They fear trouble if the authorities find out about their personal details and political beliefs.

The research is funded by an international organisation with an interest in promoting democracy around the world. The organisation would like to show, through this research, that people in rural areas are increasingly interested in democracy.





Your Research Project: Research Ethics

Think of a research question. This could be on the topic that you used previously or a different one that you are interested in.

- 1 What are the ethical issues in this research? What ethical problems might you face?
- 2 In pairs, discuss the ethical considerations in your project.
- 3 Look at the class list of ethical research principles from the previous activity. How do they relate to your research?

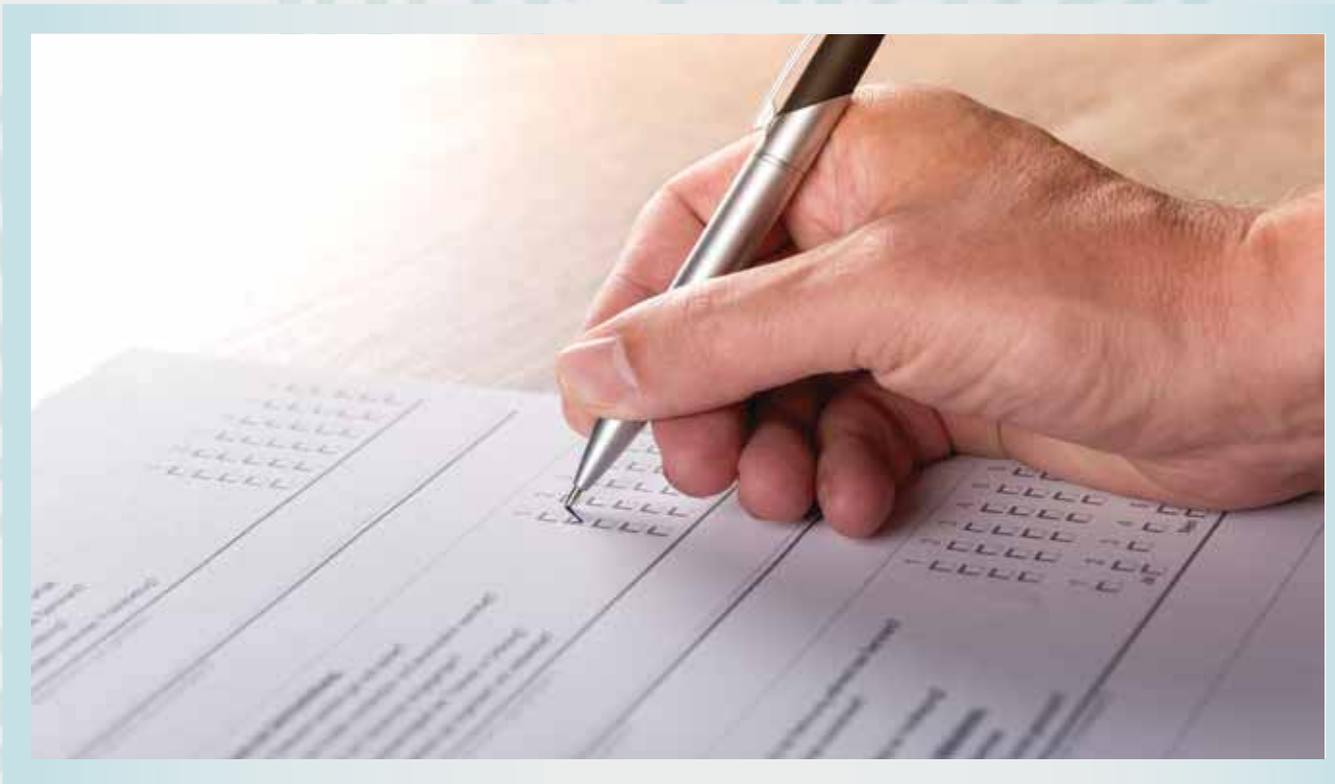


DISCUSSION

Which things about doing research ethically do you believe would be most difficult? Why?

CHAPTER 4:

Surveys



Learning Goals

Knowledge

In this chapter, you will increase your knowledge of:

- surveys;
- structured interviews;
- self-completing questionnaires;
- question types;
- populations and sampling;
- administering surveys.

Skills

In this chapter, you will practise the ability to:

- distinguish between a self-completing questionnaire and a structured interview;
- write and organise survey questions;
- define your research population and discuss different sampling strategies;
- pilot and improve a questionnaire.

4.1 Surveys



PREVIEW

- 1 Answer the questions in the box below.
- 2 In pairs, compare your answers.
- 3 Discuss the questions.
 - a What surveys have you completed in the past?
 - b Were they similar or different to this survey?

Question:	Agree	Disagree
1. Eating animals is wrong.		
2. Sports like boxing make society more violent.		
3. Individuals are responsible for their own situation.		
4. Theft is a big problem in my community.		
5. The government should provide free education and health care to everyone.		

Surveys

Surveys are one of the most commonly used tools for data collection in quantitative social research (although they are also used in qualitative research).

A survey involves asking respondents a list of questions through a structured interview or questionnaire.

Surveys can measure opinions, beliefs and experiences and get basic information such as age, gender and place of birth. They are useful in getting accurate information, especially in research that involves data collection from a large number of people.

Some survey questionnaires are completed with the assistance of a researcher, and some without help. A 'structured interview' is when a researcher asks a respondent questions, and writes down or records the respondent's answers. A 'self-completing questionnaire' is when the respondent reads the questions and writes the answers by themselves, without a researcher's help.

Structured interviews

A structured interview involves a researcher asking a research participant the questions from a questionnaire and recording the answers. Every participant is asked the same questions in the same order.

The questionnaire includes instructions for the interviewer, so that each structured interview is done systematically and the research is reliable.

Self-completing questionnaire

A self-completing questionnaire is a list of questions that a research participant completes themselves. It can be on paper or it can be online. It is designed for a respondent to complete themselves, so the instructions are simple.

Self-completing questionnaires often ask closed questions that offer a limited number of possible answers. The respondent reads the questions and writes the answers (or chooses one of the possible answers) themselves. After it is complete, they send the questionnaire back to the researcher who will then analyse it.

When is it useful to do a survey?

Surveys are useful for getting accurate, reliable and valid information about large numbers of people.

Survey questionnaires are used because they are relatively quick and easy to make and complete. For example, if a teacher wants to get feedback from her class of 50 students, it is quicker to get students to complete a survey questionnaire than to interview each student individually.

There are many uses of surveys. For example, hotels use surveys to get feedback from guests. NGOs use surveys to get information about the people they assist.

Censuses

A census is a survey that records data about all members or units of a given population. It usually refers to a census of a nation state, which attempts to collect information about all the people who live in a country.

Census-taking began thousands of years ago, but those censuses only included some people (for example men, soldiers or landowners) in a population. Modern censuses, that attempt to collect information about all the people living in a country, started 2-300 years ago.

In modern times, governments use the information collected by a census to plan their budgets for healthcare, education and other infrastructure. Sometimes a census can cause controversy over how information is collected, what type of information is collected and how that information might be used.



EXERCISE: True or False? (If False, Say Why)

- 1 Survey questionnaires are usually quicker to complete than structured interviews and can collect information from large groups of people.
- 2 Instructions in a structured interview are included so that the interview is conducted the same way each time.
- 3 A research participant writes down their responses in a structured interview.
- 4 A self-completing questionnaire is used to collect data.
- 5 An interviewer asks the respondent questions and records their answers in a self-completing questionnaire.
- 6 A census is a large survey to collect information about the government of a country.



CASE STUDY: Analyse the Case Study

Read the case study.

- 1 What were the reasons for the ILO's research?
- 2 What kind of survey questionnaire did the ILO use?
- 3 Read the ILO survey questionnaire on page 134. In pairs, perform a roleplay. Partner A is an ILO interviewer, Partner B is a participant. The interviewer asks the participant the questions in the survey and records the answers.
- 4 Swap roles and repeat the activity.

International Labour Organization – Myanmar Labour Force Survey 2015

The labour force is all the people in a country who are able to work, including people who are currently jobless.

In 2015 the International Labour Organization (ILO) did research to get accurate and reliable information about Myanmar's labour force. The research covered topics including types of employment, unemployment, gender, health and child labour.

To get this information, ILO interviewers visited over 23,000 households across Myanmar. The interviewers visited homes to conduct structured interviews. Interviewers spoke to the heads of each household. They asked about people in the house, their literacy, education, skills and employment. Interviewers carefully followed the questionnaire so that, in each of the households, the questions were asked in the same way. This ensured that the survey was more reliable.

http://www.mol.gov.mm/mm/wp-content/uploads/downloads/2017/02/LFS-English-Report-_17-11-2016.pdf



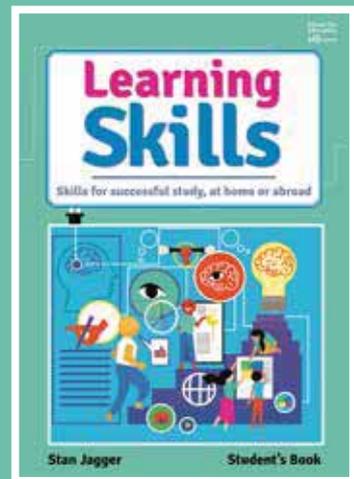


CASE STUDY: Analyse the Case Study

- 1 Read the case study and answer the questions.
 - a Who wrote their responses into the questionnaires?
 - b What did the questionnaires measure?
 - c Have you completed a questionnaire like this?
- 2 Complete the Mote Oo Education *Learning Skills* Student Survey.
- 3 Compare answers with a partner.

Self-Completing Questionnaire for *Learning Skills* Textbook

In 2017, Mote Oo Education wanted to get feedback about a learning skills textbook that they were writing. They used self-completing questionnaires to get feedback about the book – one questionnaire for teachers and another for students. The questionnaires asked about the importance of the skills that were taught in the book, and the how much students' knowledge and ability to use certain skills had improved through using the book.



Mote Oo Education - Learning Skills Student Survey

Location: _____

Gender: Male Female

What subjects are you studying in your education program? _____

For each learning skill below, tick one box that is closest to how much you use that skill at school or in class.

If you never use the skill or do not know what it is, that is ok, tick the appropriate box.

Learning Skill	Always	Often	Sometimes	Rarely	Never	I don't know what this is
1. Asking questions in class						
2. Finding out more about things for yourself						
3. Working with other people						
4. Taking notes						

CASE STUDY: Analyse the Case Studies

Read the case studies and answer the questions.

- 1 What are the benefits of using a questionnaire in each situation?
- 2 What are the similarities between the two case studies?
- 3 What are the differences?

A. THE UNITED NATIONS MYANMAR NATIONAL CONSULTATIVE WORKSHOP FOR YOUTH, PEACE AND SECURITY



In March 2017, several United Nations (UN) agencies came together and invited young peace activists to Yangon for a workshop. During the workshop, the peace activists discussed issues related to peace and conflict in their communities. At the end of the workshop, participants were asked to take a few minutes to complete a questionnaire.

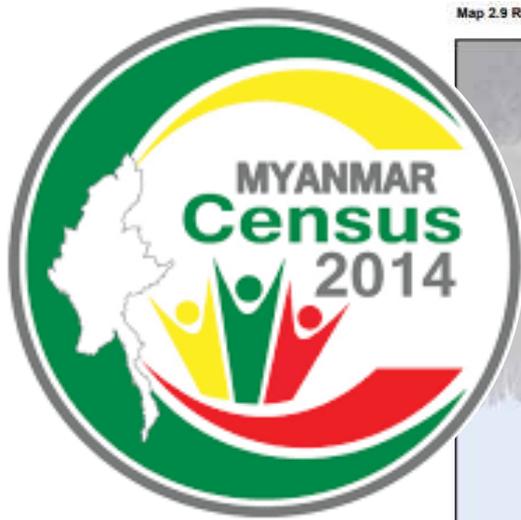
The questionnaire collected data about the participants' understanding of the peace processes in Myanmar and their comments or criticisms about the workshop.

From the results, the UN agencies saw that participants understood Myanmar's peace process better. They also got feedback about the workshop (for example, some people thought that it was too short).

The information can be used by the UN to improve future workshops. It can also be used to understand which parts of the workshop were effective and which parts needed improvement.

<https://www.youth4peace.info/system/files/2017-10/2017%20-%20Report%20-%20Myanmar%20National%20Consultative%20Workshop%20for%20Youth%2C%20Peace%20%26%20Security.pdf>

B. 2014 MYANMAR POPULATION AND HOUSING CENSUS

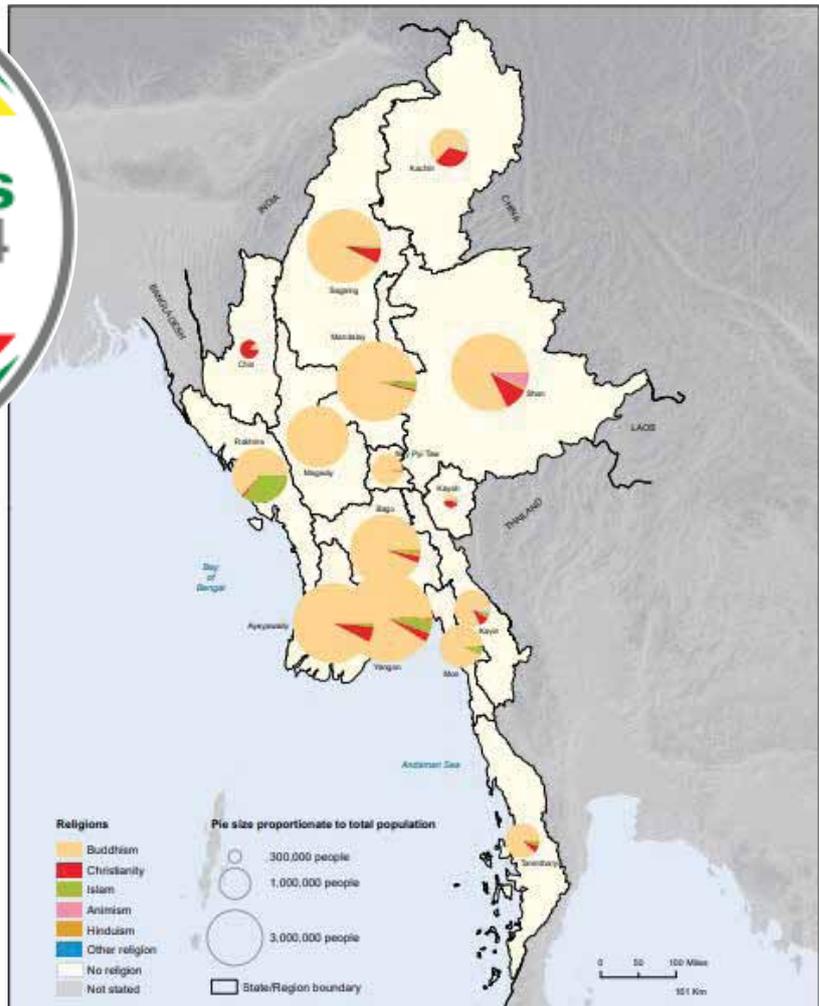


In 2014, Myanmar conducted its first national census in over 30 years. The Myanmar census collected data on the country's population (and the population of its states, regions and townships) and a range of different things including birth rates, death rates, employment, income, religion, disability and education level.

The data will provide the Government with information about the population of Myanmar, including social, economic and housing conditions. It can also be used for decision making and to plan and evaluate social and economic policies for the whole country in the future.

http://themimu.info/sites/themimu.info/files/documents/Census_Atlas_Myanmar_the_2014_Myanmar_Population_and_Housing_Census.pdf

Map 2.9 Religion, States/Regions



DISCUSSION

- 1 What are the differences and similarities between structured interviews and self-completing surveys?
- 2 What kind of survey would you like to do in your community? Why?

4.2 Making a Survey Tool



PREVIEW

- 1 What should be at the start of a questionnaire?
- 2 What should be at the end of a questionnaire?



Survey structure

Survey tools (both for self-completing questionnaires and structured interviews) usually have an introduction, a body and a conclusion. Additionally, a structured interview includes instructions for the researcher. A self-completing questionnaire includes instructions for the research participant.

INTRODUCTION – This contains general information, including the research title, a brief summary of the research and an estimate of the amount of time it will take to complete the survey. It also explains informed consent.

BODY – This contains the main survey questions. The responses to these questions are what you will analyse. Start with easier questions and ask more difficult or sensitive questions towards the end. This section may also ask for personal or **demographic** information the research needs from the participant.

CLOSING – This is where you thank people for participating in your survey, provide contact information and explain how the survey results will be made available.

Survey question topics

Some of the questions in a survey include:

1. **PERSONAL QUESTIONS.** These ask for personal information about the respondents themselves. For example, age, gender, occupation, income, or number of family members. These questions help you to understand who

your respondents are and you can compare between groups. For example, if you did research on sleeping habits and asked respondents for their age, you could compare sleeping habits between younger and older people.

2. **QUESTIONS ABOUT ATTITUDES, BELIEFS AND VALUES.** These questions relate to opinions. They might be about morals, religion or politics. For example, you could ask someone about illegal drug use. Do they think that some or all drugs should be illegal? Do they think that drug users should be punished?
3. **QUESTIONS ABOUT KNOWLEDGE.** These check what things people know. For example, to check understanding of reproductive health, a researcher could ask questions like, 'What contraceptive methods do you know about?', or, 'At what point during the menstrual cycle is a woman most fertile'?
4. **QUESTIONS ABOUT EXPERIENCES.** You can ask people about how often they do something or what their experiences of doing something are. For example, 'Have you ever worked in another country? If so, which one(s)?'



EXERCISE: Categorise the Question Topics

Here are examples of survey questions. Choose which of the four question topics (1-4 on pages 56-57) the following questions should go into.

- a How old are you? 1. Personal question
- b How do you feel about birth control?
- c Do you think microfinance is effective?
- d What do you know about human rights?
- e Do you think birth control is good or bad for society?
- f When was the last time you missed school because you were sick?
- g Do you believe that Myanmar's peace process will be successful in the next ten years?
- h What are the branches of government in Myanmar?
- i Do you think closer economic integration with Thailand will result in more jobs for Myanmar people?
- j How many people live in your household?



ACTIVITY: Write Survey Questions

- 1 Write examples of each of the topics of survey questions.
- 2 In groups, read out your questions. Group members identify the question topic for each question.

1. Personal questions	2. Questions about attitudes, beliefs and values	3. Questions about knowledge	4. Questions about experiences
<ul style="list-style-type: none"> • How many children do you have? 			

Survey question types

One of the roles of the researcher is to decide what types of questions to ask. Different types of question can be used to collect different types of data. Researchers will also choose survey questions based on how much time and resources they have. For example, it is faster to collect data for five closed questions than for five **open questions**.

Closed questions

Closed questions have a limited number of possible answers to choose from. They are easily quantifiable because the answers can be converted into numbers. For example, a 'yes–no' question is a closed question that could be converted into '1' for *yes* and '2' for *no*. Other examples of closed question include:

- How many sisters and brothers do you have?
- Have you completed primary school? Yes | No
- What was your favourite subject at school? Myanmar/English/Science/Math/
History/ Geography/ Economics/
Other

Open questions

Open questions encourage the participant to freely answer a question in their own words. Open questions get more detailed answers and are usually associated with qualitative methods. Sometimes they are not a question but a statement that requires a response. A 'why' question is an open question. Other examples include:

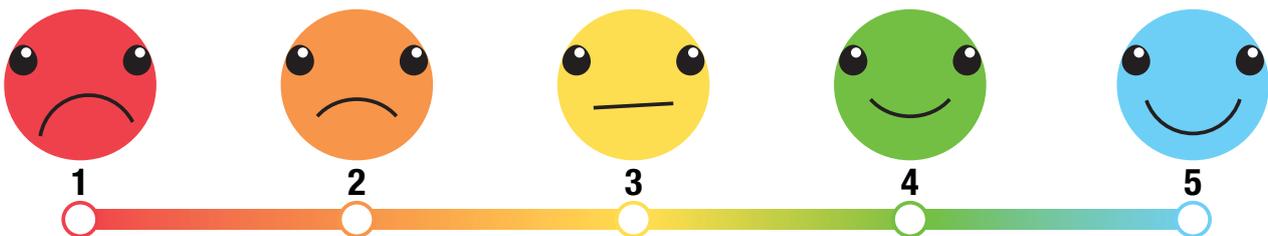
- What is your relationship with your brothers and sisters like?
- What do you like most about your family?
- What do you find most difficult about your family?
- Tell me about the relationship between you and your mother.

Rating scale

A rating **scale** is a type of closed question. It is used to measure degrees of something, such as an opinion, that are difficult to get with a simple yes–no question.

Question Three: How difficult are the following subjects?					
	Very Difficult	Difficult	OK	Easy	Very Easy
Maths	1	2	3	4	5
Science	1	2	3	4	5
English	1	2	3	4	5
Social Science	1	2	3	4	5

Sometimes, researchers will use smiley faces to measure people's feelings and opinions.



Likert scale

A Likert scale is a specific type of rating scale where participants respond to a statement. It is used to measure attitudes, values and opinions. Usually there is also a neutral middle response (for example, neither agree or disagree).

Rank order questions

A rank order question asks respondents to put items from a list into an order (for example, in order from least to most important).

It can be useful when trying to find out from a group what their priorities are. For example, if a researcher wanted to know what community leaders' priorities for improving education in their communities are, they could be asked to rank different education needs by order of importance.

1) Myanmar is a great place to live.

1 2 3 4 5
Strongly disagree Disagree Neither agree nor disagree Agree Strongly Agree

2) I do volunteer work.

1 2 3 4 5
Never Rarely Occasionally A moderate amount A great deal

3) The internet is very important for school.

1 2 3 4 5
Unimportant Slightly important Neutral Moderately important Extremely important

4) I do all my homework by myself and on time.

1 2 3 4 5
Never true Not often true, but sometimes Neutral Usually true Always true

Rank the following in order of importance from 1 to 4 where 1 is most important and 4 is least important to you.

Education	2
Money	4
Happiness	1
Love	3



EXERCISE: Open or Closed?

Are these questions open or closed?

- 1 Have you ever smoked a cigarette?
- 2 How many cigarettes do you smoke each day?
- 3 What do you think are the health impacts of smoking?
- 4 What type of transport do you use to get to work?
- 5 What websites did you visit last week?
- 6 What do you think causes conflicts in a family home?
- 7 How many times have you been to the doctor in the last year?



ACTIVITY: Write Survey Questions 2

You are doing research on the following question:

What do students think is the most important subject for their future?

Write examples of these question types:

- 1 an open question
- 2 a closed question
- 3 a rating scale
- 4 a Likert scale
- 5 a rank order question



CASE STUDY: Analyse the Case Study

Read the case study and answer the questions.

- 1 What types of research does Myanmar Survey Research do?
- 2 What is the purpose of a 'consumer behaviour trends' survey?
- 3 What topic of question (see pages 56-57) is each of the two example questions?
- 4 What type of question (see pages 58-59) is each of the two example questions?
- 5 What is a feature of ethical research that is described in the case study, and how does MSR follow this?



Market research collects information about customers, so that companies can develop new products and services for them. If a company has an idea for a new product or service, market research can help to develop it so that it best meets the needs of consumers.

Myanmar Survey Research conducts research on society, law and the economy in Myanmar. They do market research as well as social and environmental research. Their customers include NGOs and businesses.

An example of MSR's market research is a consumer behaviour trends survey. A business hires MSR to do this before they create a new product or service. This survey involves asking customers about their needs, desires and values. From the results, the business can predict if people will want to buy their new product or service, or not.

First, MSR meets the client to discuss what they want to know from the research. Then they develop a questionnaire. The survey uses a sample (see 4.3) of several hundred people so it mostly uses **closed questions**.

The surveys aim to find out about things like:

- what products people spend their money on;
- if people would like a new service (such as a coffee shop) and;
- the times of day that people go shopping.

Examples of questions include:

- a. At which time of the day do you usually do your grocery shopping?
 - Morning • Midday • Afternoon • Evening
- b. Place these in order from least to most (1-4) important to you when you visit a shop.
 - Service • Range of goods
 - Lighting • Layout

MSR is a member of ESOMAR, a world association for market, social and opinion researchers. Members of the organisation have to subscribe to ethical and privacy guidelines. A principle of MSR is that personal information of people they collect through their surveys is kept private.

<http://www.myanmarsurveyresearch.com/Home>



DISCUSSION

- 1 What topics might be useful for a consumer behaviour trend survey in your community?
- 2 What types of questions are easiest to design? What types are most difficult? Why?

4.3 Populations and Sampling



PREVIEW

An environmental NGO wants to do an project in Putao, Kachin State. To decide what to focus on, they develop the research question, 'What do people in Putao think is the biggest environmental problem in their community?' The NGO wants to make sure that the results reflect what the population thinks (so that it is valid) and includes a range of different perspectives.

- 1 How many people would you need to survey?
- 2 Which people do you need to survey?



Populations

In research, the population refers to the specific group of people, organisations or things that are the subject of the research. For example, if a researcher was asking the question, 'What do people in Pyay know about climate change?', the population would be, 'all people living in Pyay.' However, if the researcher wanted to focus their research and ask, 'What do schoolchildren in Pyay know about the effects of climate change?', the population would be 'all schoolchildren in Pyay'. If the researcher asked, 'What do monastic schools in Pyay teach about the effects of climate change?', then the population would be, 'all monastic schools in Pyay.'

Sometimes it can be difficult to know if the subject of your research is in your population or not. For the group 'all factory workers in Pyay', there might be confusion. For example, will the research include factory owners and managers? Will it include part-time workers? Will it include people who live outside Pyay but travel there for work? When a researcher describes a research population, they use a list of characteristics (criteria) that helps decide who or what to include or exclude from data collection.

Research question	What do factory workers in Pyay know about the effects of climate change?
Population	Factory workers in Pyay
Criteria	<ul style="list-style-type: none"> • Working at a factory • Working at least ten hours per week • Over the age of 18 • Living in Pyay for at least two years

EXERCISE: Choose the Best Answer

- 1 Your research population describes:

<ul style="list-style-type: none"> a all workers in a factory. b all subjects of your research. 	<ul style="list-style-type: none"> c all people in a state or region. d all people in Myanmar.
---	--

- 2 The population criteria is information that:

<ul style="list-style-type: none"> a defines who or what you will collect data from. b makes our culture and identity stronger. 	<ul style="list-style-type: none"> c makes qualitative research more valid. d lists characteristics of a good researcher.
---	---

- 3 A population criteria is helpful because:

<ul style="list-style-type: none"> a it increases your sample size. b it outlines a specific target group. 	<ul style="list-style-type: none"> c it improves communication. d it makes the results easier.
--	--

EXERCISE: Match the Criteria

Here are two examples of populations. Match the criteria to the relevant population.

- | | |
|---|---|
| <p>1 All small-scale farmers from Ayeyarwaddy Region:</p> | <ul style="list-style-type: none"> a have between three and twenty office staff. b have less than 25 acres of farmland. c have a household income of less than 100 million kyat. d have a land ownership certificate. |
| <p>2 All small businesses in Ayeyarwaddy Region:</p> | <ul style="list-style-type: none"> e have a director. f are registered in Ayeyarwaddy Region. g live in Ayeyarwaddy Region. h are registered with the Ministry of National Planning and Economic Development. |

CASE STUDY: Analyse the Case Study

Read the case study on the opposite page and answer the questions.

- 1 What is the population that this research examines?
- 2 Choose the most likely five characteristics (from the list below) that the *Myanmar Library Survey* would have used as criteria to identify active libraries.
 - a The library has a building that it can use.
 - b The library building is made of bricks.
 - c The library has access to the internet.
 - d People can borrow books from the library.
 - e The library has staff that currently work there.
 - f The library is on the register of 55,755 libraries in Myanmar.
 - g The library has a budget to buy books and pay staff.
 - h The library building was built before 1948.
 - i The building has a sign outside that says 'Library'.
 - j The library has a collection of books that people can borrow and read.

The Myanmar Library Survey

The *Myanmar Library Survey* is a study of all of Myanmar's public libraries. The objective of the study is to evaluate the libraries based on their location, conditions and resources (such as access to internet).

The researchers visited the libraries and also collected feedback from library users and non-users. The research team had to find out where the libraries are. They got a list of all the libraries that are publicly registered. They found that a total of 55,755 libraries had been registered. However, this was the total number of libraries registered since British colonial rule and not all of these libraries are still active. Some of the libraries may have closed down a long time ago.

The researchers developed five criteria to identify active and operating libraries.

Any library that did not have one of these characteristics was not considered to be active and operating and was excluded from the study.



Your Research Project: Population

Think of a research question. This could be on the topic that you used previously or a different one that you are interested in.

- 1 What is the population in this research? What eligibility criteria might you need?
- 2 In pairs, discuss the population and eligibility criteria in your project.

Sampling

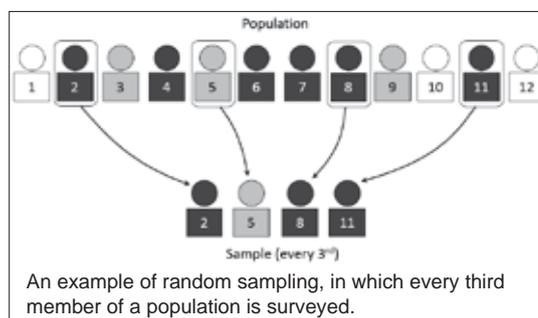
It is difficult for researchers to get accurate information about large research populations. Getting information from all the people in the research population is usually not possible, so researchers use a 'sample'. A sample is a group of people that represents and reflects the wider research population.

There are different ways to do **sampling**. These include:

- random sampling;
- purposeful sampling;
- convenience sampling;
- snowball sampling.

Random sampling

Random sampling is where all people in a population have equal chances of being selected for the sample. The idea is that, if people are selected randomly, the sample will be more representative of the population as a whole. Random sampling is often considered the most reliable because a random sample will be less biased. For example, if a researcher wants to do a health survey of people in Shan State, they could get a list of all the households from local authorities and survey every tenth household. However, it is difficult and expensive to get accurate lists and to generate an accurate random sample.



Purposeful sampling

Purposeful sampling is where you choose groups within your population to get a range of different responses. Participants are selected based on the purpose of the research. Purposeful sampling is useful when you want to collect data from minority groups in a population. For example, for a health survey, the research team may want to choose different groups within the population, 'people living in Bago Region'. For example, urban residents, rural residents, men, women, young, old and people with different levels of education. They would select people to make sure that all groups are represented, especially at-risk groups, such as the elderly or drug users.

Convenience sampling

Convenience sampling is where people are chosen for the research as they are the easiest to locate for the researcher. For example, research that is done on friends, work or schoolmates, family, or volunteers.

Snowball sampling

Snowball sampling is where people are chosen for the research based on referral from someone else (often other research participants). Convenience and snowball sampling are useful when there are no population lists to use for random sampling, or the population is difficult to find. For example, for a survey on tuberculosis treatment, a researcher may visit a hospital and ask the hospital staff to introduce them to people who have had tuberculosis. That would be convenience sampling. Then the researchers could ask those people to introduce them to other people who have had tuberculosis. That would be snowball sampling.

**EXERCISE: True or False? (If False, Say Why)**

- 1 To get a random sample, you choose the people that you want.
- 2 Snowball sampling would be useful for research of people involved in criminal activities (and who are only known to each other).
- 3 Random sampling is where people are selected from a group because they have relevant characteristics.
- 4 Purposeful sampling relies on people's relationships in order to find participants.

**EXERCISE: Categorise the Scenarios**

Are these scenarios examples of *convenience*, *random*, *purposeful* or *snowball* sampling?

- 1 A researcher wants to know about income levels of farmers in the Ayeyarwaddy Delta. They decide that they will research a few people from different groups. The different groups include people that grow rice, garlic, fruit and vegetables.
- 2 A researcher wants to know about the quality of local schools in Myanmar. They get a list from the government of all the schools in the country. They then do a survey with the principal of every tenth school.
- 3 A researcher wants to know about homeless youth in Yangon. They contact a local NGO and ask to be introduced to a homeless youth. After they survey the individual, they ask to be introduced to other homeless youth who they can survey.
- 4 A researcher wants to know about the types of social media people use at her school. She asks her friends at the school to complete her survey on social media use.

**ACTIVITY: Analyse the Scenarios**

Read the scenarios and answer the questions about each.

- 1 What sampling type (*random*, *purposeful*, *snowball*) did the researcher use?
- 2 Why would the researcher have used the sampling method described in each scenario?
- 3 Describe the advantages and disadvantages of this sampling method for this scenario.

A researcher wants to know, **'What are impacts of land disputes between people in my community?'**

a: The researcher does a structured interview with people from different priority groups including farmers, men, women, businesses, community leaders, INGOs and NGOs.

b: The researcher is introduced to a farmer in a land dispute with his neighbour. He asks the farmer to introduce him to other farmers that are also in land disputes with their neighbours.

c: The researcher has a list of all the households and chooses every fifth household on the list to survey about land disputes.



CASE STUDY: Analyse the Case Study

Read the case study and answer the questions.

- 1 What were the research population?
- 2 What were the approaches to sampling? Why?
- 3 What were the eligibility criteria for household selection?
- 4 What other sampling approaches could be used in this study? How?

HelpAge International: Impacts of Migration on Households in the Dry Zone, Myanmar

The 2017 *Dry Zone Impact Survey* was a survey of the impacts of migration on migrant-sending households from Dry Zone areas of Myanmar.

The research was done by surveying and comparing migrant-sending and non-migrant-sending households in Mandalay and Magwe Regions.

The sample involved 700 households in the Dry Zone. This was done by selecting two townships in Mandalay (Myingyan and Taungtha) and two townships in Magwe (Pakkoku and Yesagy) where HelpAge International has worked before.

HelpAge selected those locations because they had limited time and money and needed to

limit the size of their sample. They considered economic development levels and population sizes to try and make sure that the townships in Mandalay and Magwe were comparable.

After they chose the four townships, 35 urban wards and rural villages in those townships were selected.

The research team got household registries from local officials in the wards. Then the research team set a target for 470 households with at least one migrant and 230 households with no migrants. For each ward/village, the survey team interviewed 20 households that met their eligibility criteria.

https://www.psc.isr.umich.edu/pubs/pdf/Myanmar-Migration-DryZone_Knodel-2017.pdf



Your Research Project: Sampling

Think of a research question. This could be on the topic that you used previously or a different one that you are interested in.

- 1 What type of sampling approach is most appropriate for your research project? How might you get this sample?
- 2 In pairs, discuss how sampling might be used in your project.



DISCUSSION

What are the difficulties of doing sampling in Myanmar?

4.4 Writing and Administering Your Survey



PREVIEW

- 1 What do you need to do before collecting survey data?
- 2 What are some difficulties that you might have when collecting survey data?

Improving your questionnaire

The first draft of a survey might have problems such as confusing question wording or mistakes. Here are some guidelines for reviewing your survey and fixing mistakes.

1. Proofread your questionnaire for spelling, grammar and other mistakes.
2. Check for consistency.
3. Avoid **leading questions**.
4. Make your questionnaire clear.
5. Don't ask two questions at once.



EXERCISE: Match the Guidelines and Examples

The situations, and related bad and good examples in the table below, match to the five guidelines above. Which guideline best matches which situation?

Situations	Bad Examples	Good Examples
a. A researcher wants to know about students' reading habits.	How many books and magazines did you read this week?	How many books did you read this week? How many magazines did you read this week?
b. A researcher wants to know what a community thinks of organisations that are working on child health.	How beneficial are child health organisations to your community?	How do you feel about child health organisations in your community?
c. The research question is, 'What do young people think is the sport with the most physical benefits?'	What are the best sports that you like to do when you have free time, maybe on the weekends, for your fitness?	What sports are the best for health?
d. The research question relates to gender stereotypes in the workplace.	What gender-related issues if any do you face when working, with lame colleagues?	What gender-related issues, if any, do you face when working with male colleagues?
e. A researcher is trying to find out what crops farmers grow.	1. Do you grow bananas? 2. Do you have any apple trees?	1. Do you grow bananas? 2. Do you grow apples?

Administering your survey

A **pilot** is when you trial your survey with one or more people before you do it more widely. This will help you to find problems with your questionnaire or interview. If possible, try to pilot it with a member or members of the group that you plan to survey. If they find any of the questions confusing, ask them for feedback about why.

You will need to organise how, when, and where you administer your survey. For example, will it be administered face to face, self-completed on paper, on line, by post or telephone, etc? You may also need to ask for permission from community leaders and arrange suitable times for participants to do the survey.

ACTIVITY: Before You Administer

1 Look at these questions from a survey about access to news media. Check them for *grammar and spelling mistakes, consistency, leading or unclear questions or two questions asked at once.*

- a. Do you get news from television in the past week?
- b. Did you get news from Facebook or newspapers in the past week?
- c. Did you listen to the radio to hear the news last month?
- d. Newspapers are trustworthy, so why don't people trust them?
- e. What other modes of information gathering do people use to expedite building their knowledge?

2 Rewrite the questions to make them better.

3 In pairs, pilot the survey with a partner to see if it works well. Make notes about any questions that didn't work well or how you might change the survey.

4 Join with another pair. Compare your lists.

Your Research Project: Administration

Think of a research question. This could be on the topic that you used previously or a different one that you are interested in.

- 1 If you are using a survey, how would you administer it? What method(s) might you use?
- 2 In pairs, discuss how you might administer your survey.



DISCUSSION

What are the advantages and disadvantages of each method of administering a survey (face to face, online, by post, by telephone)?

CHAPTER 5:

Interviews



Learning Goals

Knowledge

In this chapter, you will increase your knowledge of:

- key characteristics of interviews;
- interview structure;
- developing an interview protocol;
- how to conduct an interview;
- note taking during an interview.

Skills

In this chapter, you will practise the ability to:

- discuss advantages and disadvantages of interviews;
- distinguish between structured, semi-structured and unstructured interviews;
- ask appropriate questions in an interview;
- practise note taking during an interview.

5.1 What Is an Interview?



PREVIEW

- 1 In pairs, interview each other about culture. Use these questions:
- 2 Discuss the questions.
 - a How are these questions different from questionnaire questions?
 - b Which questions did the interviewee find easy to answer?
 - c Which questions did the interviewee find difficult to answer?

You and Your Culture

1. When were you born?
2. Where were you born?
3. Describe where you grew up. What was it like?
4. How has it changed over the years?
5. What caused these changes?
6. Describe the most important holiday in your culture.
7. What is considered respectful in your culture?
8. What is considered disrespectful in your culture?



Interviews

An interview is a conversation between two or more people. The interviewer asks questions related to a research topic. The interviewee (or interviewees) respond to the questions.

Interviews can explore a topic in detail and at length. You can use a questionnaire to find out what people's opinions are, but an interview will allow you to look at the reasons for why they have those opinions. For example, interviews can provide a lot of information about people's political ideas or religious beliefs.

Data is produced through note taking, audio, or video recording of the interview. Often, a recording of an interview is **transcribed**. Transcribing is the process of writing out what has been said from a recording of an interview. This can be time consuming.

ACTIVITY: Advantage and Disadvantages of Interviews

- 1 Read the statements. Decide if each is an *advantage*, *disadvantage* or *both*.
 - a Interviews allow you to go into a lot of detail.
 - b If you are interviewing about something sensitive, someone may not tell the truth.
 - c Interviews allow you to ask **follow-up** questions.
 - d An interview may take a long time.
 - e During interviews, you can establish trust.
 - f You can explore many different opinions and attitudes.
 - g Interviews can be expensive.
 - h An interviewer's personal style may influence the respondents' answers.
- 2 List more advantages and disadvantages of interviews.



CASE STUDY: Analyse the Case Study

Read the case study and answer the questions.

- 1 What is the difference between the questions in the survey and in the interviews?
- 2 What would be an advantage of using an interview in this research?
- 3 What might be a difficulty of doing research on this topic?
- 4 What interview questions might the interviewers have asked?

World Health Organization: *Poverty Alleviation and Tobacco Control in Myanmar*

This research looks at the social and economic impacts of tobacco use on people with a low income. The research used both surveys and interviews. The purpose of the surveys was to get information about people's age, gender, income, type and frequency of tobacco use and their knowledge about health problems caused by tobacco. The interviews asked people about their perceptions of tobacco use and its impacts on their families.



DISCUSSION

- 1 When (in what situations) is it best to use interviews?
- 2 Why would surveys be unsuitable for the situations that you described in question 1?
- 3 What situations are unsuitable for face-to-face interviews? Why?

5.2 Interview Structure



PREVIEW

Each of these images is of an interview. What makes them different from each other?



Interview structure

Interviews can be very structured, unstructured or semi-structured.

Highly structured interviews are systematic and consistent. The researcher asks questions with the same order, wording and setting for each interview. They are usually used in surveys for quantitative research.

Unstructured interviews are more conversational. This means that questions do not need to be asked with the same order, wording or setting.

The most common type of interview is a semi-structured interview. A semi-structured interview has both structured and unstructured parts.

Characteristics of Different Types of Interviews

Structured interviews are systematic and consistent. Questions are decided beforehand and do not change during data collection.

Uses:

- with large populations
- when the researcher wants to ensure reliability and validity of their research
- for quantitative research questions
- to answer closed questions

Unstructured interviews have few or no set questions. Questions regarding the research topic are asked in a similar way to a conversation. The researcher may take some notes or none at all during the interview.

Uses:

- to develop trust and rapport with the research participant
- when participants feel uncomfortable about a structured interview involving note taking or recording

Semi-structured interviews have set questions, but allow for the interviewer to ask additional questions.

Uses:

- when the researcher has specific questions to ask participants but wants the flexibility to explore certain topics more
- when the researcher wants to be able to ask follow-up questions about things raised by the interviewee

▶ ACTIVITY: Interviews in Research Projects

Here are some different types of research.

- 1 Decide if each interview was structured, unstructured or semi-structured.
- 2 Decide if you think that the researcher has used the right tool for the situation. Why?

a. Study on Child Labour in Yangon, Ayeyarwaddy Region and Mon State by the International Labour Organisation (2015)

This research collected data to measure the knowledge and attitudes of communities and employers about child labour, and to identify organisations that use child labour. The research included 314 interviews with child labourers and non-working children. The research combined different sampling methods. During interviews, children were asked about their knowledge of child rights, using closed questions.

http://www.ilo.org/ipec/Informationresources/WCMS_IPEC_PUB_27675/lang--en/index.htm



b. Youth Space of Dialogue and Mediation in Myanmar by Berghof Foundation (2017)

30 interviews and discussions were conducted in Yangon Region and Kayah, Karen and Mon states, using qualitative methods. The researcher selected people from a wide range of backgrounds and spoke with them about the role of youth in peace processes. Key questions were about the challenges of youth participation and improving relationships between people from different ethnic and religious backgrounds. However, the interviewer also asked additional questions when the interviewee mentioned something interesting.

https://www.jointpeacefund.org/sites/jointpeacefund.org/files/documents/youthspaceofdialoguemediation_myanmar.pdf



c. In-Service Teacher Training: University Teachers in Myanmar

This study attempted to identify the views, the challenges and the benefits of a teacher training programme in Myanmar. This was done by interviewing university lecturers across Myanmar. Eight participants took part in the research. Data was collected through face-to-face and Facebook chats. The interviewers asked lecturers to describe their experiences during the programme, such as what they liked and didn't like about it.

<https://files.eric.ed.gov/fulltext/EJ1169154.pdf>



ACTIVITY: Interview Roleplays

Look at the three interview protocols.

- 1 In pairs, do the structured interview. Partner A is the interviewer who asks questions and takes notes. Partner B answers the questions. Change roles and repeat.
- 2 Find a different partner. Do the semi-structured interview. Change roles and repeat.
- 3 Find a different partner. Do the unstructured interview. Change roles and repeat.
- 4 Look back at your notes from each interview. Discuss the questions:
 - a Which interview was most difficult? Why?
 - b Which interview was most appropriate for the topic?
 - c How were the responses different?
 - d How would the different interview structures affect the findings?



i. Structured Interview Protocol

Instructions for Interviewer

- Ask all questions exactly as they are written.
- Write or circle the appropriate word.
- Repeat the question if asked.

Section One: Personal information

Age: **Gender:**

Have you graduated from high school?
Yes | No

What year did you graduate?

Section Two: Donating

In the past week, have you donated money to a charity? Yes | No

In the past year, have you donated money to a religious charity? Yes | No

Section Three: Which of the following do you trust the most?

Charities	Religious groups
Government	Businesses

ii. Semi-Structured Interview Protocol

Instructions for Interviewer:

- Ask all questions exactly as they are written.
- Repeat the question if asked.

Section One: Personal information

Age: Gender:

Section Two: Donating

In the past week, have you donated money to a charity? Yes | No

If yes, ask for more details.

In the past year, have you donated money to a religious charity? Yes | No

If yes, ask for more details.

Section Three: Which of the following do you trust the most?

Charities **If yes, why?**

Religious groups **If yes, why?**

Government **If yes, why?**

Businesses **If yes, why?**



iii. Unstructured Interview Protocol

Discussion topics

1. Charity
2. Which are the best charities?
3. Which organisations do the best work in your community?



ACTIVITY: Structured and Unstructured Interview Questions

Read the scenarios. For each, write one question for a structured interview and one for an unstructured interview.

- 1 Interview farmers about the types of crops they grow.
- 2 Interview students about their experiences with technology in the classroom.
- 3 Interview construction workers about their knowledge of labour laws.



DISCUSSION

Would you prefer to do more structured or less structured interviews? Why?

5.3 Interview Protocol



PREVIEW

- 1 Make a class list of things that you can do during an interview so that it goes well.
- 2 What problems might happen if you don't prepare properly for an interview?

An interview **protocol** is the tool that an interviewer uses to guide the interview and to take notes.

Opening

Here, you introduce yourself and the research project and explain how the information will be used. Tell the interviewee about discussion topics, and **outline** ethical issues such as confidentiality and informed consent.

Body

This is where you ask the main research questions. Structured interviews will give the exact wording of questions. An unstructured interview might only have a list of conversation topics.

Closing

Finish the interview and thank the interviewee for their time. Check your notes to see if there is anything that you want to clarify or follow up on. You might also remind the interviewee about confidentiality and informed consent.



EXERCISE: Match the Questions

- 1 Match the questions (i-x) with the part of the interview they came from (a-c).
- 2 Put them in order.

Interview about the Myanmar General Election 2015

Part of interview	Questions Asked During interview	Order
a Opening b Body c Closing	i ___ Can you tell me some more about your feelings on election day?	___
	ii ___ How are you today?	___
	iii ___ Do you have any questions for me before we finish?	___
	iv ___ Do you consent to participating in this interview?	___
	v ___ Where were you born?	___
	vi ___ Who did you vote for?	___
	vii ___ Thank you for participating. Would you like a copy of the finished report?	___
	viii ___ Can you tell me more about those conversations with your sister on election day?	___
	ix ___ What did you do on election day?	___
	x ___ Do you understand what this research is about?	___



CASE STUDY: Analyse the Case Study

Read the case study and answer the questions.

- 1 What is the topic of this research?
- 2 How did the researchers structure the interview?
- 3 Why do you think it was important to select and train researchers well?
- 4 What might the researchers have said before starting each interview?
- 5 What might the researchers have said at the end of each interview?
- 6 What could the results of this research be used for?

Behind the Silence: Violence Against Women and their Resilience, Myanmar

by Gender Equality Network

This study aims to understand women's experiences of abuse and violence from husbands and other men. The research is based on interviews with 38 women in Yangon and Mawlamyine.

Qualitative interviews can be useful when little is understood about violence in a setting. This is true of women's experiences of violence in Myanmar. There were five sections to the interview, which were: early years, adulthood and current life, current relationships, sexual health and a closing section.



The interviews were semi-structured. The least sensitive questions (childhood) were discussed before the most sensitive questions (sexual health). All in-depth interviews were conducted by local female researchers who had experience with this kind of research.

Before starting data collection the questions were checked thoroughly. The interviewers had five days of training on researching sensitive issues. The research was designed with input from local women's organisations.

http://www.burmalibrary.org/docs20/GEN-2014-11-Behind_the_Silence-en-ocr-tpo.pdf



DISCUSSION

- 1 What problems could badly-written questions cause when researching a sensitive topic?
- 2 When researching a sensitive topic, how should a researcher start and end an interview?

ACTIVITY: Roleplay an Interview

- 1 In pairs, practise the interview. Follow the protocol from start to finish. Pause, show interest and repeat things that they say, to clarify that you heard correctly.
- 2 Swap roles and do it again.
- 3 Discuss which questions were easy to answer and which were difficult. Why were they easy or difficult?

1. INTRODUCTION	<ul style="list-style-type: none"> • Introduce yourself • Introduce the objectives • Mention how research will be used • Explain consent
	<ul style="list-style-type: none"> • My name is _____. • I am doing research on food. • The purpose of my research is to _____. • I will use the research to share information with the rest of the class. • Is it okay if I share your information with the rest of the class?
2. BODY	
Topic One: Background information	Age: Gender:
Topic Two: Food safety	<ul style="list-style-type: none"> • What do you know about food safety? • What are some good activities to make sure that you don't get sick?
Topic Three: Treating sickness	<ul style="list-style-type: none"> • What do you do when you get sick from food? • Describe what other people do when they get sick from food.
3. CLOSING	<ul style="list-style-type: none"> • Follow-up questions • Thanks • Consent reminder

Your Research Project: Interviews

Think of a research question. This could be on the topic that you used previously or a different one that you are interested in.

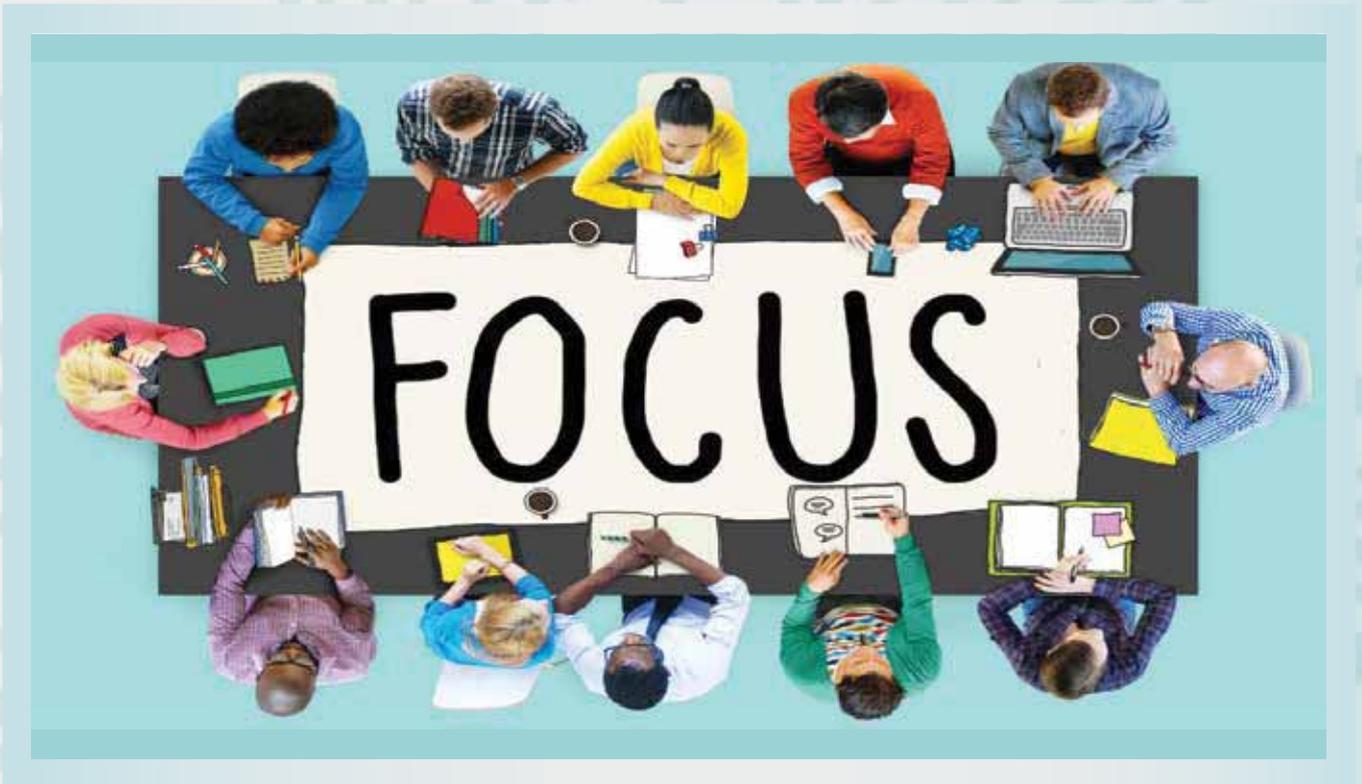
- 1 How could interviews be used to answer your research questions? Are they an appropriate tool?
- 2 What kind of interviews would you use – structured, semi-structured or unstructured? Why?
- 3 In pairs, discuss how interviews might be relevant to your project.

DISCUSSION



- 1 What do you think is the most difficult part of interviewing?
- 2 Do you think you would be good at face-to-face interviewing? Why or why not?

CHAPTER 6: Focus Groups



Learning Goals

Knowledge

In this chapter, you will increase your knowledge of:

- focus groups;
- focus group schedules;
- focus group activities.

Skills

In this chapter, you will practise the ability to:

- describe focus groups;
- write focus group questions;
- facilitate a focus group.

6.1 Why Use Focus Groups?

PREVIEW

- 1 In pairs, discuss: 'What might be the impacts of allowing people who are younger than 18 to vote?'
- 2 Join with another pair and discuss in groups.
- 3 Discuss as a class.
- 4 Discuss the questions.
 - a What are some differences between discussing an issue with one person and with a group?
 - b Did everyone contribute to the group discussion or did some people talk more than others? What do you think is the reason for this?
 - c What do you think is the best number of people to have in a group discussion? Why?

Focus groups

Interviews focus on individual responses. A focus group is when a researcher asks questions to a group of (usually) four to ten people. They provide researchers with information that comes from group discussion. Researchers use them to get a range of individual responses to a research question, but researchers are also interested in how people talk to one another about a topic.

Focus groups give information about the range of perspectives within the group and the interactions between people. This can help the researcher to understand the wider community that the participants come from.



EXERCISE: True or False? (If False, Say Why)

- 1 A focus group may generate data that is different from an interview because it is more formal.
- 2 Focus group participants are encouraged to talk to each other.
- 3 A focus group and an interview both involve one research participant.
- 4 A focus group may produce information that reflects the participants' community.

▶ ACTIVITY: Advantage or Disadvantage?

These people are talking about the advantages and disadvantages of focus groups.

- 1 Is each speaker talking about an *advantage*, a *disadvantage* or *both*?
- 2 List some more advantages and disadvantages.

b There was so much arguing in my focus group. I didn't know how to control it.

a Focus groups help me to get a range of information.

c The focus groups were so different. The first one had a lot of discussion and the other one was very quiet.

d We recorded the focus group but the sound quality isn't very good and we didn't take notes.

e We did three focus groups in one day. It took a long time to organise and analyse the data, but I'm glad all the data collection is now finished.

f The people who attended the focus group were mostly students with spare time and happy to get free food.

g During the focus group the community leader seemed to be speaking the most. Some people didn't say anything the whole time.

DISCUSSION

- 1 How many people do you think are needed to run a focus group?
- 2 What are the different roles of people that run a focus group?

6.2 Organising a Focus Group



PREVIEW

- 1 What do you think is involved in organising a focus group?
- 2 What types of questions do you think are best for focus groups? Why?

You will need to decide a few things before organising your focus group(s).

1. What do you want from your focus group?

1. Focus groups can give you detailed information and a range of opinions.

EXAMPLE

A researcher working for Rakhine Water Health is developing a new project. She wants to know what people in disadvantaged communities in Sittwe know about water- and sanitation- related diseases.

2. Who will be in your focus group(s)?

2. Your focus group can consist of people that are similar or different. If you want a wide range of ideas, you need a wide range of people. However, if you want to discuss issues in great depth, a group of similar people may be more useful.

EXAMPLE

The researcher is focusing on adults in Sittwe. To explore water and sanitation issues in depth, she has separate focus groups for men and women. The women and men are from households that have a combined income of less than 300,000 MMK a month.

3. How many focus groups should you have?

3. Small research projects might only have one focus group discussion, while large projects might have ten or twenty. This depends on time, resources and your research objectives. The more time and resources that you have, the more focus group discussions you can hold. If you want a wide range of opinions from a large population, you may need a lot of focus groups.

EXAMPLE

The researcher has enough resources for only two focus groups. She decides to spend an entire day with each group (the women then the men) in order to get in-depth information.

4. How will you facilitate your focus group?

There are lots of different ways to facilitate a focus group. The most common method is for the facilitator to ask questions and encourage discussion. However, a facilitator can also ask participants to do an activity, such as writing a list of rules or creating a community map. Depending on resources, it can be very useful to have the researcher facilitate and to have another person take notes.

EXAMPLE

The researcher already has separate groups for women and men. She also hires a member of the community as the co-facilitator so that the focus group participants feel more comfortable, and to give her time to take detailed notes. As well as discussions, she gets the participants to produce a community map that shows the locations of different water sources in and around their community.



EXERCISE: Choose the Best Answer

- 1 To explore one topic in depth, it is helpful to have people in your focus groups who are...
 - a similar.
 - b disadvantaged.
 - c women.
 - d different.
- 2 Which of these is least likely to influence how many focus groups you will organise?
 - a time and resources
 - b the age of the facilitator
 - c information needs
 - d whether it is a small or a large project
- 3 Which of these is least likely to be a part of facilitating the focus group discussion?
 - a Getting participants to do an activity like drawing a map
 - b Deciding who will be focus group discussion participants
 - c Getting participants to discuss an issue with each other
 - d Sharing tasks like asking questions and taking notes



Developing a focus group schedule

A focus group **schedule** contains the instructions and questions that a facilitator asks to participants. Focus group questions are usually open-ended and qualitative. For example, during a focus group on physical activities done by office workers, the researcher may ask, 'What types of physical activity are easiest for people with full-time office jobs?'

However, focus groups can also use activities where participants work on a task or solve a problem. Activities can be useful with difficult topics that participants might not feel comfortable discussing directly. For example, if the researcher wanted to know about health problems for factory workers, asking openly and directly might not get honest or useful responses. Instead, the facilitator could ask all participants to work in groups to create a list of problems, or **anonymously** write their thoughts on a piece of paper and give it to the facilitator.

Activities can also be used to gather specific information. For example, the researcher could ask the participants to make a map of locations where workers can take breaks and rest.

**EXERCISE: Match the Activities and Descriptions**

Match these common focus group activities (1-6) with their descriptions (a-f).

- | | |
|--|--|
| <p>1 Free listing</p> <p>2 Rating</p> <p>3 Ranking</p> <p>4 Choosing amongst alternatives</p> <p>5 Community mapping</p> <p>6 Roleplay</p> | <p>a Participants have a list of items. They place each item on a scale from good to bad (similar to a Likert scale).</p> <p>b Participants produce a map of their community, with an emphasis on water supplies.</p> <p>c Two or more participants pretend to be in a scenario and others observe how they behave and react.</p> <p>d Participants order a list (for example, from most to least important).</p> <p>e Participants produce a list about an issue (for example, make a list of all the leaders in your community).</p> <p>f Participants are offered some options and asked to choose the one (or few) that they think are best or most appropriate for a situation.</p> |
|--|--|

**ACTIVITY: Improve the Focus Group**

Read the questions (right) and:

- 1 Find a closed question and make it open.
- 2 Find a question that is too specific and make it broader.
- 3 Find an unclear question and make it clear.
- 4 Think of an activity that could be used for this focus group.
- 5 What would you say to participants during the following sections of the focus group? Write scripts or notes for each.
 - a Introduction
 - b Consent
 - c Closing
- 6 In groups of five-ten, practise the focus group discussion. Group members play the roles of:
 - facilitator
 - note taker
 - participants

Questions for Peace Focus Group**Background Questions**

- a. Is there conflict between people in your community?
- b. What is the difference between 'a problem' and 'a conflict'?

Conflict

- c. Think of three people who you have a good relationship with. What actions would harm the relationships?
- d. What are differences in the causes of conflicts in Yangon and in Mandalay?

Peace

- e. Think of three people who you have a negative relationship with. What actions would improve the relationships?
- f. In what ways have you contributed to or participated in any peacebuilding activities?
- g. Are there challenges to creating peace in your community?
- h. How important is peace for your personal life?



CASE STUDY: Analyse the Case Study

Read the case study and answer the questions.

- 1 What is the research topic?
- 2 Describe the research population and sampling method used.
- 3 How did the researcher improve the questions that they asked during the focus groups?
- 4 Explain why the following tools might not be appropriate:
 - a interviews in households with youth living in them
 - b structured surveys

Youth Employment in Yangon: Myanmar Association of Public Policy

In 2014, the Myanmar Association of Public Policy (MAPP) conducted research on youth and work in Yangon. They wanted to know what young people in Yangon know about the job market and what the biggest challenges are for them in finding work.

Researchers conducted 19 focus group discussions with youth living in or very near Yangon. Each focus group had between three and five participants and usually lasted one hour.

The researchers chose to use focus group discussions because they needed to:

- allow youth to speak privately and in comfort;
- quickly get a lot of information;
- get them to discuss their own opinions and experiences;
- find out what is common for youth in their communities.

The researchers piloted the questions using a test group of research assistants. They then got feedback and changed some of the questions.

The research assistants selected participants belonging to the target group and people who were familiar with the topic. They asked youth that they met to introduce them to other youth.

Researchers found that:

- social networks and employment magazines are the most common job-seeking methods used by both youth and employers;
- educated yet inexperienced youth lack the skills required for many jobs;
- as well as a lack of skills, the main challenges in finding jobs were a lack of work experience, low salaries and high transportation costs.

<http://sandhigovernanceinstitute.org/files/uploads/docx/Youth%20Employment%20in%20Yangon%2C%20Myanmar%20%28Final%20Report%29%20NYU%20.docx>



Your Research Project: Focus Groups

Think of a research question. This could be on the topic that you used previously or a different one that you are interested in.

- 1 Is a focus group an appropriate tool to answer your research question?
- 2 In pairs, discuss how a focus group might be relevant to your project.



DISCUSSION

- 1 What is the easiest part of focus group discussions?
- 2 What is the most difficult part of focus group discussions?

CHAPTER 7: Observations



Learning Goals

Knowledge

In this chapter, you will increase your knowledge of:

- observations;
- participant observation;
- field notes.

Skills

In this chapter, you will practise the ability to:

- describe observation;
- distinguish between structured, unstructured and participatory observations;
- write observation notes;
- observe immediate surroundings.

7.1 Observation



PREVIEW

- 1 Look at the photo below for one minute. Write as much as you can about it.
- 2 After one minute, close your book and compare your observations with a partner. What do you have that is the same? What is different?
- 3 Write a research question based on the photo.



Researchers use observations to collect data about people's behaviour. People's behaviour is often different to how they describe their behaviour in surveys, interviews or focus groups. For example, someone may say that they read about current events from newspapers, but observed behaviour may show they get more news from social media. Observations are often guided by a researcher's research questions.

In social research, observations usually take place in normal, everyday settings such as a street, in a family home or in a library. For example, to find out what TV shows different families watch, a researcher could do observations in family homes.

Researchers make careful, objective notes about what they see, during or shortly after their observation.



EXERCISE: True or False? (If False, Say Why)

- 1 Observations focus on human activities rather than human thoughts.
- 2 Observations are visits to family homes.
- 3 Observations may give different information than other data collection tools.
- 4 Observation notes must be written later, only after the researcher has had time to think about what they have seen.

▶ ACTIVITY: Observations

In pairs, read the scenarios and answer the questions about each scenario.

- 1 What is the researcher observing?
- 2 What research question could guide the observation?
- 3 Do you think the researcher should take notes during or after this observation? Why?
- 4 What potential difficulties or problems would a researcher face doing this observation? How could they overcome these problems?

SCENARIO ONE

A researcher wants to know the buying patterns of elderly people in local markets in Yangon. The researcher goes to the market and watches what elderly people are buying.



SCENARIO TWO

A researcher wants to know about water issues in a camp for internally displaced persons in Shan State. The researcher walks through the community and talks to people about water issues while walking. The researcher observes people at water facilities and watches how they use them.



ACTIVITY: Observing an Activity

1 Work in two groups and follow the instructions in the box below.

Group One:	Group Two:
Without speaking, stand in a row from: <ul style="list-style-type: none"> • tallest to shortest, then; • youngest to oldest, then; • into groups based on favourite subject. 	Observe and take notes about: <ul style="list-style-type: none"> • what body language was used? • how long did it take for people to figure out what to do? • was anyone leading the group?

2 What potential difficulties or problems would a researcher face doing this observation? How could they overcome these problems?

Participant observation

Participant observation is when a researcher joins in the activities that they are observing. Sometimes researchers have to participate in activities to get accurate information. For example, if you wanted to study workers in a restaurant, to learn more about their experiences, you might also work with them in the restaurant. Another example of participant observation would be a researcher playing in the football matches of the football team that they are observing

Participant observation can take weeks, months or even years to understand a situation and build trust, if the research is on sensitive topics. As a participant you can talk to the people around you to learn more and build trust. An example of long-term participant observation is a researcher living in a community to understand the challenges faced by pregnant mothers in rural areas. It may take a long time for the researcher to observe something significant, and for mothers to feel comfortable talking about this issue.

EXERCISE: Participant Observations?

Are these scenarios examples of *participant observation* or are they *not*?

- 1 A researcher picks up rubbish from the streets together with an environmental group as part of a project looking at inner-city community engagement.
- 2 Three researchers attend Japanese, Chinese and English language classes as part of a project looking at different language teaching methods.
- 3 A researcher goes to band practices and watches the band as they prepare for a big concert. This is part of a project on leadership styles in the music industry.

DISCUSSION



- 1 Describe a research situation where long-term observation is necessary.
- 2 What do you think would be the best topics for observation?
- 3 What do you think would be the worst topics for observation?

7.2 Field Notes



PREVIEW

- 1 Have you ever watched an important public event? What do you remember about it?
- 2 If you want to remember something in a social situation (such as someone's name) what strategies do you use to memorise it?

Field notes

Field notes are notes that a researcher takes for their research. They are made during and after an observation. Field notes can be put in a notebook, or spoken into a recording device and then put into a notebook or typed into a computer.

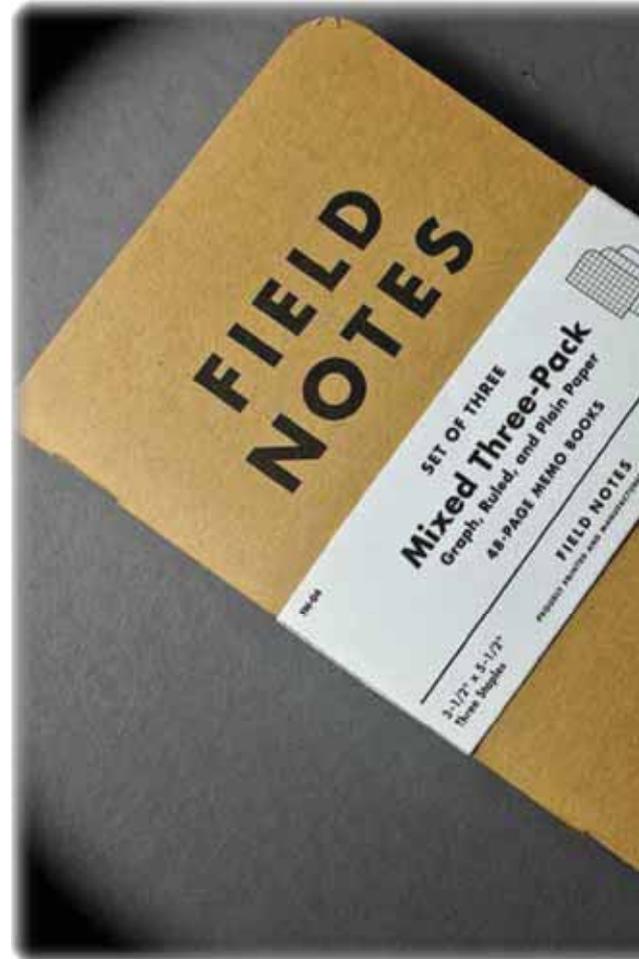
Often, observers take lots of notes about what they are observing so that they don't miss or forget anything. They can also add photos to their field notes. Observers will also write down their ideas, questions and other thoughts about their observations that link to their research questions. The notes may be of different types.

Types of field notes:

- Mental note – information that you tell yourself to remember. Mental notes are useful when it is inappropriate to be seen writing notes.
- Jotted notes – very brief notes written to help you to remember things later.
- Full field notes – detailed notes made as soon as possible after observations have been done.

Some general principles of taking field notes are:

- Write down notes, however brief, as quickly as possible after seeing or hearing something related to your research question.
- Write up full field notes by the end of the day and include details such as date and time of the day, location, who is involved, what caused something to happen, etc.
- Some people may prefer to use a digital recorder to record initial notes. However, this may create problems if you later need to transcribe a lot of speech.
- Notes need to be clear and understandable – you should not have to ask at a later date, 'What did I mean by that?'
- You may need to take a lot of notes so, if in doubt, write it down.



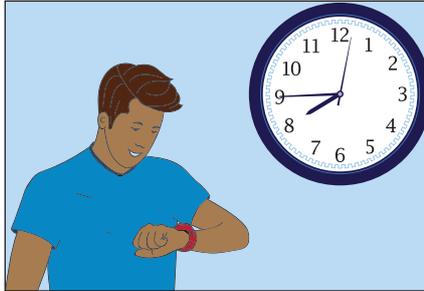
▶ ACTIVITY: Tips for Observations

Here are some tips for conducting observations.

- 1 Sort the tips below into the categories in the table. Some tips may fit into more than one category.
- 2 In groups, add more tips to each list.



a Dress appropriately for the situation.



b Arrive early and familiarise yourself with the location and context.



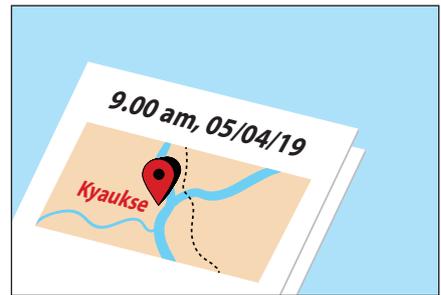
c Review your notes and add any further details that you remember.



d Write notes at the time if appropriate or as soon as possible afterwards.



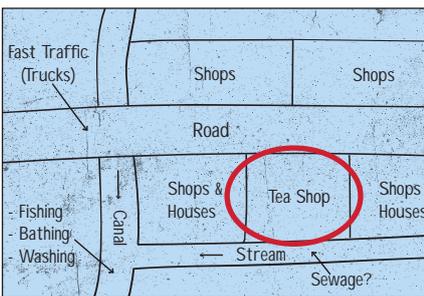
e Reflect on your observations.



f Record time, date and location.



g If you do not understand something, ask someone about it later in an interview.



h Draw a map, take a photo and/or describe the physical surroundings.



i Transcribe your recorded notes.

Before You Observe	While You Observe	After You Observe
a,		

▶ ACTIVITY: Observe Your Surroundings

Individually or in pairs or groups, observe your immediate surroundings.

- 1 Choose your observation topic and your method of observing it.
 - What will you observe?
 - Will it be participatory or not?
- 2 Do your observation and take notes.
- 3 As a class or in groups, discuss:
 - a What did people observe?
 - b What method did they use?
 - c What did you find through your observations?
 - d How did people take notes?

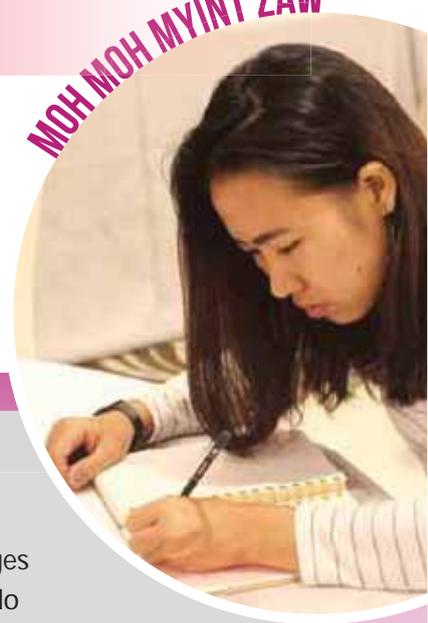


CASE STUDY: Analyse the Case Study

Read the case study and answer the questions.

- 1 What was Moh Moh Myint Zaw's research topic?
- 2 What behaviours was she observing?
- 3 Did she do participant observation? How?
- 4 What was the relationship between observations and interviews in this research?

MOH MOH MYINT ZAW



'CHALLENGES FACING INTERNATIONAL STUDENTS', A RESEARCH PROJECT

During her third year of studying a Bachelor of Social Science degree at Chiang Mai University, Moh Moh Myint Zaw did a research project on challenges facing international students. Her research questions were, 'What challenges do international students face studying at Chiang Mai University?', and, 'What strategies do students use to overcome these challenges?' She used mixed methods in her research involving observations and interviews. Her observations took place in school canteens and then in classrooms. In the canteen she observed who international students sat with and how they interacted with students of other nationalities. Sometimes she joined them for lunch. She found that people often ate in groups that spoke the same language when they were in the canteen. However, in the classroom she found that there was less segregation because students had to do group work together. After observations, she interviewed the international students. During the interviews she asked students why they stayed mostly with their own group and how that related to other challenges they faced.





Your Research Project: Observations

Think of a research question. This could be on the topic that you used previously or a different one that you are interested in.

- 1 Is observation an appropriate tool to answer your research question?
- 2 In pairs, discuss how you might use observations in your projects.



DISCUSSION

- 1 What are the most difficult things about doing observations?
- 2 What more would you like to know about observations?

CHAPTER 8:

Analysing Quantitative Data



Learning Goals

Knowledge

In this chapter, you will increase your knowledge of:

- analysis of quantitative data;
- numerical and categorical data;
- coding quantitative data;
- descriptive statistics;
- data sets and data tables;
- charts and tables;
- computer assisted analysis.

Skills

In this chapter, you will practise the ability to:

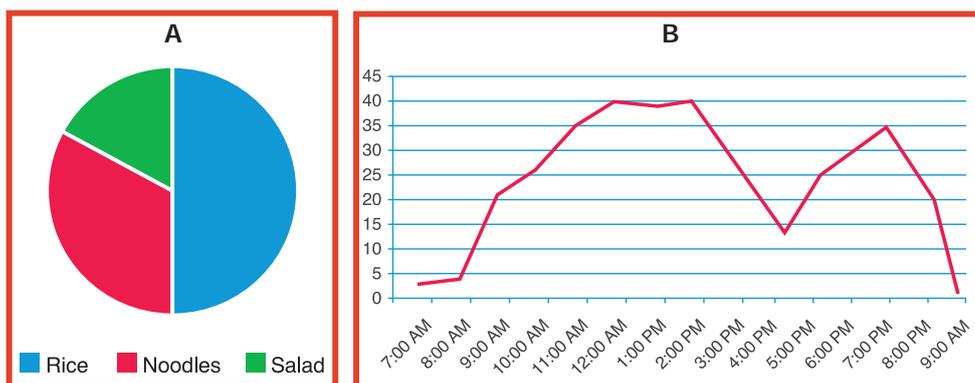
- describe the steps for analysing quantitative data;
- analyse quantitative data;
- calculate summary statistics;
- produce data tables and charts.

8.1 Quantitative Data



PREVIEW

- 1 What does analysis of quantitative data involve?
- 2 You are doing research at a restaurant in Mandalay.
 - a What do you think Chart A shows?
 - b What do you think Chart B shows?



Analysis of quantitative data

Qualitative data and quantitative data are analysed in different ways.

Quantitative data analysis involves using statistics, tables and **charts** to analyse data and show relationships within the data. For example, if you are researching computer ownership in a small community and you ask about computer ownership in a survey, you could calculate the percentage of computer owners. To calculate the percentage, the number of computer owners is divided by the total number of people in the community and then it is multiplied by 100. For example, your data shows 20 computer owners and 80 people in the community: $20/80 = 0.25 \times 100 = 25\%$ of community members are computer owners.

If you want to display and compare data within your sample population, you can create tables. For example, if you wanted to compare the differences in computer ownership between people with different levels of income, you could show this in a table.

You can also illustrate relationships in data by using charts. For example, if you wanted to see if there is a relationship between education and computer ownership in your sample population, you could show different levels of educational achievement and computer ownership together in a chart.

However, in quantitative research, proving a relationship between two things requires a lot of data and statistical analysis. There are often many possible factors (variables) that could influence the relationships between two things in your data. Small research projects may suggest possible relationships between things but they cannot usually prove relationships without a lot more data collection and analysis.

When you design your data collection tools, you should think about the data analysis methods you will use when you have collected your data.

Steps in analysis of quantitative data

Step 1: Organise

- Organise data so that it is in an appropriate format and style for analysis.
- Put data into data tables and data sets.
- **Code** the data (Give non-numerical data (words) a numerical value).

Step 2: Analyse

- Explore your data to find patterns, relationships, similarities and differences.
- Analyse the data using **descriptive** statistics.
- Use the data to create tables, charts and **graphs**.

Step 3: Conclude

- Develop conclusions based on the analysis of the data.
- Ensure that your conclusions link to your research question(s).
- Use tables, charts and graphs to illustrate the results from your research.



EXERCISE: Match the Steps and Activities

Match the steps (1-3) with the activities (a-f). There are two activities for each step.

- | | |
|---------------------------|--|
| 1 Step 1: Organise | a identifying the most common topics in your data
b comparing different groups to find similarities and differences |
| 2 Step 2: Analyse | c using charts or tables to demonstrate your findings
d arranging the data so that it is clear and consistent
e writing a summary of your analysis |
| 3 Step 3: Conclude | f making sure that all the data has a number value to help with analysis |

Numerical and categorical data

In quantitative analysis, data can be numerical or **categorical**. You analyse these in different ways.

Numerical data

Numerical data is data used to measure something, such as weight, test scores, how many soft drinks you buy or how long it takes you to complete your homework, etc. Numerical data has mathematical meaning. This means that you can add and subtract or calculate an average of the data (calculating an average from numerical data is used in the example below).

Example: A bus company is doing research on how often people living in Bago Region visit Yangon per year. They ask people how many times they have visited Yangon in the past 12 months. They spoke to ten people. On average they found that people visit Yangon 2.3 times in one year.

Q6: Each year, how many times do you visit Yangon?

Answers: 0, 1, 3, 5, 10, 2, 0, 0, 0, 2
 $= 23$ (total)/10 people (sample size) = 2.3

Average number of visits = 2.3

Categorical data

Categorical data cannot be measured numerically, and includes things like a person's gender, occupation, favourite foods or problems in their community. It does not have mathematical meaning because it does not make sense to add and subtract the data or calculate averages with it. Therefore, you cannot put it into a data set.

Example: *The bus company asked people for information about their gender and what type of community they live in.*

Q2. What is your gender? Male | Female

Community with 0-100 people

Q3. Where do you live? Community with 100-1,000 people

Community with over 1,000 people

From this information they found that:

- *men and women travel the same amount*
- *people living in large communities (over 1,000 people) are more likely to travel to Yangon than people living in small communities.*



EXERCISE: Numerical or Categorical?

- 1 Are these questions *numerical* or *categorical*?
 - a How many years of schooling have you completed?
 - b How many times every day do you wash your hands?
 - c What's your favourite food?
 - d Which political party do you vote for?
- 2 Are these answers *numerical* or *categorical*?
 - a 10 seconds
 - b Five
 - c Yangon
 - d Yes
 - e 50%
 - f 800 people
 - g 124 Mahabandoola Road
 - h ph. 09796463342

Coding in quantitative analysis

In quantitative analysis, coding is the process of assigning a number to categorical data to make analysis easier. Non-numerical data is given numerical meaning by coding in order to make it easier to analyse. (e.g.: 1 for 'yes', 2 for 'no' and 0 for 'no answer' or an answer that you can't understand).

Example: *In the questionnaire, Experience with Dogs in Urban and Rural Areas, there is a number next to the possible responses. For example, the answers to Question 1, 'What area do you live in?', use the codes '1' for urban, '2' for rural and '3' for semi-urban.*

Experience with Dogs in Urban and Rural Areas Questionnaire				
Q1: What area do you live in?	Urban (1) Rural (2) Semi-urban (3)	Q3: Has a dog been aggressive to you in the past week?	Yes (1)	No (2)
Q2: What is your main type of transport?	Public transport (1) Walking (2) Car (3) Motorbike (4) Bicycle (5) Taxi (car or motorbike) (6) Other (7)	Q4: Do you think there is a dog problem in your area?	Yes (1)	No (2)

EXERCISE: Code the Responses

Here are four participants' responses to the questions in the *Experience with Dogs in Urban and Rural Areas* questionnaire.

Participant 1:

Urban, car, yes, yes

Participant 2:

Semi-urban, car, no, no

Participant 3:

Semi-urban, motorbike taxi, no, yes

Participant 4:

Rural, other, yes, yes

Code the responses, and write them in the *Experience with Dogs in Urban and Rural Areas* table.

Experience with Dogs in Urban and Rural Areas Questionnaire				
	Q1	Q2	Q3	Q4
Participant 1	1	3	1	1
Participant 2				
Participant 3				
Participant 4				

ACTIVITY: Problem Solving with Data Recording

- You ask what people's ages are. The answers are:
16, 18, 18, 22, 25, 29, 29, 34, 35, 37, 44, 45, 50, 52, 67, 71, 71, 78, 89.

Design a data table for this data.

- You ask people's religion. You plan to record the answers as:
Buddhist - 1 | Muslim - 2 | Christian - 3
Hindu - 4 | Animist - 5 | No religion - 6

After completing the interviews, you find that one participant is Hindu and another is Animist. Two people have no religion. Eight people are Buddhist. Two are Muslim and two are Christian. However, three do not answer the question and one practises Judaism, which was not included in your data planning. How would you record these?

DISCUSSION



What is the difference between analysing categorical and numerical data?

8.2 Descriptive Statistics



PREVIEW

This table contains information about the number of siblings of a class of English students.

- 1 What is the most common number of siblings for someone in that class?
- 2 What is the least common number of siblings for someone in that class?
- 3 How is this table different from the table in the previous section?

Number of Siblings of English Class	
Number of Siblings	Students Who Have This Number
0	2
1	4
2	7
3	4
4	0
5	3
Total	20

Descriptive statistics are basic statistical operations to describe your data. This can include the *mean*, *medium* and *mode* (known as measures of central tendency), as well as basic percentages (see page 96) that help to describe your data.

Data sets and measures of central tendency

A data set is a collection of data related to a specific research topic. The data needs to be organised to be useful for descriptive statistics, often by putting the data in order from lowest to highest. For example, you ask five people their age and their answers are 27, 20, 20, 19, and 22. The data set can be organised as:

19 20 20 22 27

It is then easier to calculate the mean, median and mode. The mean, median and mode each provide a statistical summary of the data set in the form of a numerical value.

Calculating the mean

The **mean** is the average of the data set – the total of the numbers in the data set divided by the number of data entries.

1. Add together all the numbers in a data set.

$$27 + 20 + 20 + 19 + 22 = 108$$

2. Divide the total by the number of values in the data set.

$$108 / 5 = \mathbf{21.6}$$

'21.6' is the mean.

Calculating the median

The **median** is the middle number of the data set.

19, 20, **20**, 22, 27

'20' is the median.

Calculating the mode

The **mode** is the number that occurs the most often – the most common number.

19, **20**, **20**, 22, 27

'20' is the mode.

Data tables

A data table organises data into a table so that all the information can be seen. It helps researchers look for patterns and use descriptive statistics and charts, which will be explained in the next section.

Usually a data table is organised with each respondent in a row and each question in a column. It presents all or part of the data collected for a research project.

You can create data tables on paper, or use a spreadsheet computer program.



EXERCISE: Calculate the Mean, Median and Mode

Calculate the mean, median and mode for the numbers of siblings of the class of English students (from the table on the previous page).



ACTIVITY: Analyse and Create a Data Table

- 1 Analyse the data table and answer the questions.
 - a What is the mean age of respondents?
 - b What is the mean amount of free time that respondents have?
 - c Is reading or sport more popular with people under 35? For people over 35?
- 2 Create another data table. Collect data from eight people in your class or community using the three questions about free time activities.
- 3 As a class, discuss your results.
 - a Can you make any generalisations about people's age and how much free time they have?
 - b Can you make any generalisations about people's age and whether they prefer sport or reading?
- 4 For who/what might this information be useful?

Free Time Activities			
	Q1: How old are you?	Q2: How much free time do you have most days?	Q3: Do you prefer to read or play sport in your free time?
Respondent 1	16	3 hours	sport
Respondent 2	18	30 minutes	reading
Respondent 3	22	1 hour	sport
Respondent 4	33	2 hours	sport
Respondent 5	36	30 minutes	reading
Respondent 6	43	6 hours	sport
Respondent 7	47	1 hour 30 minutes	reading
Respondent 8	58	1 hour 30 minutes	reading

Frequency distribution tables

A frequency distribution table is a table that summarises both numerical and categorical data. The frequency is how many times something appears in the data.

Data Table

	Q1: What food do you eat most often?
Participant 1	rice
Participant 2	noodles
Participant 3	rice
Participant 4	rice
Participant 5	bread

Frequency Distribution Table

Item	Frequency
noodles	1
rice	3
bread	1
Total	5



EXERCISE: Correct the Incorrect Data

Here is the data set and frequency distribution tables from a survey on matriculation. Find the two incorrect entries in the frequency distribution table and correct them.

Data Set

Q1: What age did you matriculate?

Answers: 16, 18, 17, 16, 15, 20, 17, 19, 16, 16

Q2: What was your matriculation score?

Answers: 464, 421, 522, 310, 499, 384, 220, 510, 478, 345

Q3: What was your favourite subject in school?

Answers: English, Myanmar, chemistry, mathematics, biology, Myanmar, economics, mathematics, chemistry, chemistry

Frequency Distribution Table

Q1- What age did you matriculate?		Q2 – What was your matriculation score?		Q3 – What was your favourite subject at school?	
Value	Frequency	Value	Frequency	Value	Frequency
15	2 1	-100	0	English	1
16	4	101-200	0	Myanmar	2
17	2	201-300	1	chemistry	2
18	1	301-400	3	mathematics	2
19	1	401-500	6	biology	1
20	1	501+	2	economics	1
Total	10	Total	10	Total	10

ACTIVITY: Frequency Distribution Table

- 1 Look at the frequency distribution table on the left then complete the blank one about your class.
- 2 How is your table different from the example?

Example: The mean age of my class is younger than the example class.

Example Class	
Age	Frequency
Under 16	0
16-20	1
21-25	5
26-30	6
31-40	6
41-50	3
51-60	1
60+	0
Total	22

Your Class	
Age	Frequency
Under 16	
16-20	
21-25	
26-39	
31-40	
41-50	
51-60	
60+	
Total	



DISCUSSION

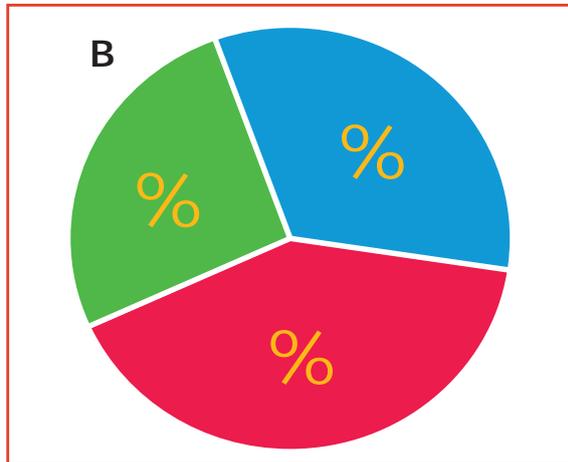
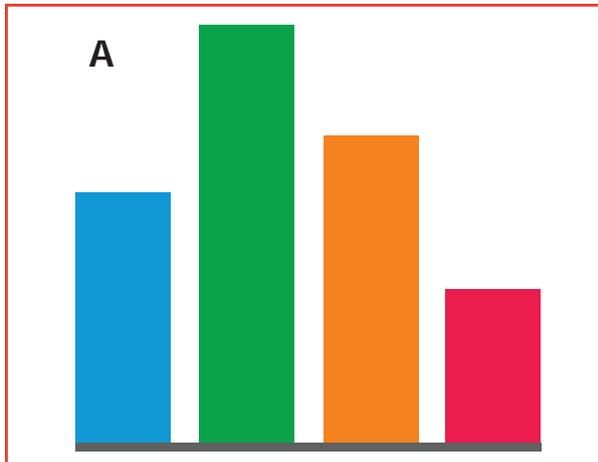
Do you think categorical or numerical data is easier to analyse? Why?

8.3 Visualising Quantitative Data



PREVIEW

- 1 What are the two types of charts that are shown in the images?
- 2 Why are charts used in research?



Charts

A chart is information that is presented in **visual** form, such as a graph, diagram or map. This section looks at two ways to present information – bar charts and pie charts.

BAR CHARTS are used to display data sets. They can be useful when you are comparing how something changes over time. For example, a researcher might use a bar chart to show how the average school leaving age has changed in Myanmar since the 1990s.

PIE CHARTS are used to show percentage or proportional data. They can be useful in comparing parts of a whole. For example, a pie chart could show the education levels of the entire population of Myanmar.

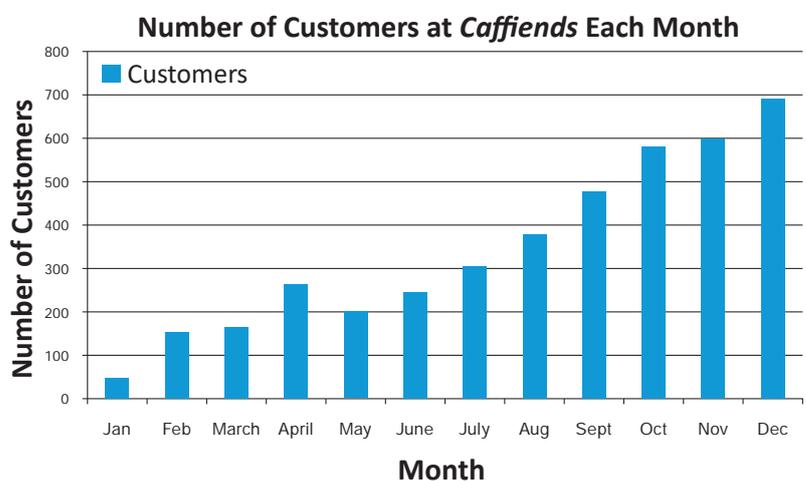


EXERCISE: True or False? (If False, Say Why)

Look at the bar chart showing the numbers of customers at Caffiends Café over a year.

Are these sentences true or false? If false, say why.

- 1 Caffiends Café was most popular in November.
- 2 More people visited Caffiends during the first half of the year.
- 3 Each month the number of customers visiting Caffiends increased.



ACTIVITY: Make a Bar Chart

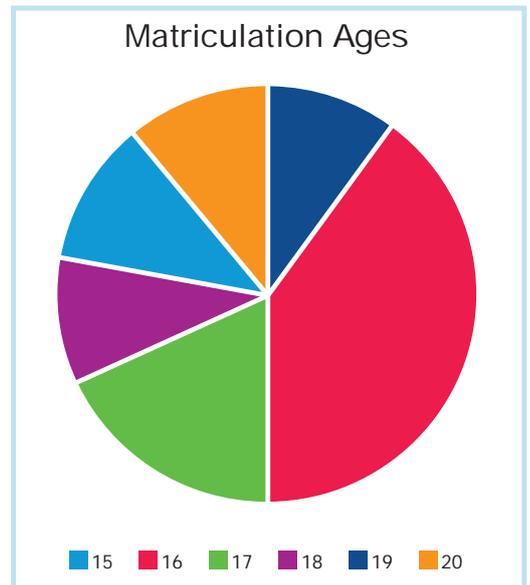
- 1 Read the *Electronics in the Home* frequency table on the right. Make a bar chart presenting the data from Question 1. Make sure that it has a title, key, X-axis label, Y-axis label and the data entered correctly (see the example bar chart on the previous page as a guide).
- 2 How could you present data from more than one question? Look at the data from Question 2, and make a bar chart presenting the data from both Question 1 and Question 2.
- 3 In pairs, check each other's charts.

Electronics in the Home		
Number of devices	Q1 – How many laptop computers does your home have?	Q2 – How many mobile phones does your home have?
	Frequency of Respondents	Frequency of Respondents
0	3	0
1	3	1
2	1	2
3	2	2
4	1	4
5	0	1
Total	10	10

EXERCISE: Identify the Correct Statement

Based on the pie chart:

- 1 60% of people matriculated when they were more than 16 years old.
- 2 90% of people matriculated when they were less than 20 years old.
- 3 20% of people matriculated when they were 18 years old.



EXERCISE: Make a Pie Chart

- 1 Read the data from the *Electronics in the Home* frequency table and make a pie chart of percentages based on the data from Question 2. Make sure that it has a title, a key and the data entered correctly.
- 2 In pairs, check each other's charts.

ACTIVITY: Working with Quantitative Data

Look at the *Community Survey on Water Problems* (i) and the data table that records respondents' answers (ii).

- 1 Answer the questions.
 - a Which questions are numerical and which are categorical?
 - b How many of the respondents have easy access to clean water on a daily basis?
 - c What percentage of respondents have easy access to clean water on a daily basis?
 - d What is the most common source of water?
- 2 Read the report (iii) and fill the gaps with the correct words and numbers.
- 3 What do the two charts on the opposite page (iv) show?
- 4 What words should go in the gaps in Chart B?

Community Survey on Water Problems		
Questions	Answers	Code
Q1. How old are you?	Under 18	1
	18-29	2
	30-39	3
	39-50	4
	over 50	5
Q2. Where do you live?	Urban	1
	Rural	2
	Semi-rural	3
Q3. What is your housing situation?	Own	1
	Rent	2
	Live with family	3
	Other	4
Q4. How many people live in your home?		
Q5. Do you have easy access to clean water on a daily basis?	Yes	1
	No	2
Q6. Where do you get drinking water?	Tap	1
	Bottle	2
	Well	3
	River	4
	Other	5

Data Table

Respondent	Q1	Q2	Q3	Q4	Q5	Q6
1	2	1	3	3	2	2
2	1	1	3	6	1	2
3	3	1	2	1	1	1
4	4	2	4	6	2	2
5	3	2	2	2	2	1
6	4	2	1	5	2	4
7	5	3	1	9	2	3
8	3	3	2	1	2	3

Intro

Water problems in Myanmar have always been relatively common but the demand for water is increasing. This research looks at the extent of Myanmar's water problems and compares access to water for people from different areas.

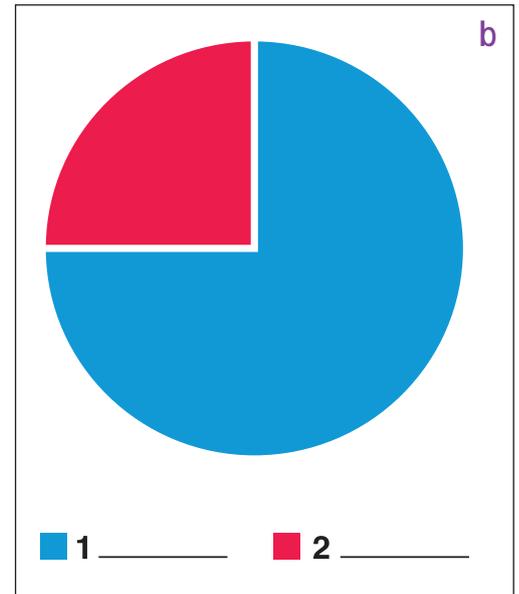
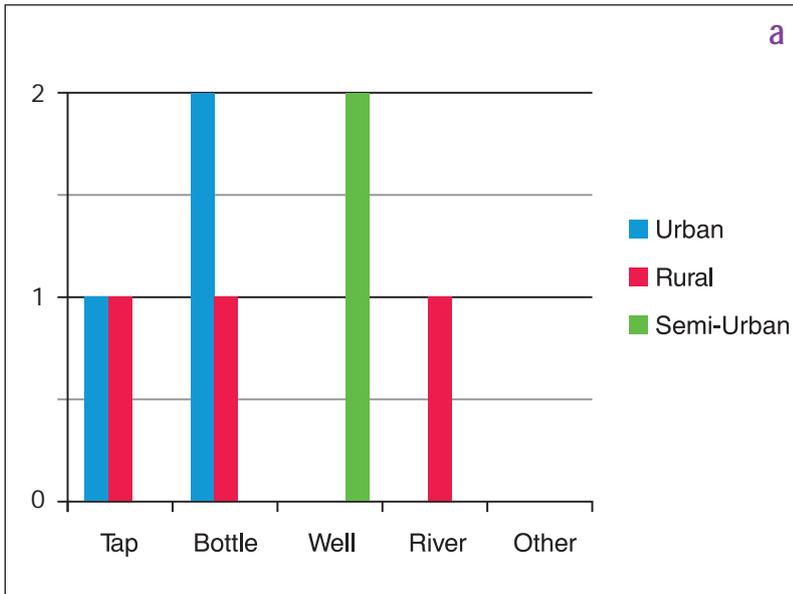
Methods

The research used surveys and collected data from (a) _____ (*six/eight*) people. As we wanted responses from people in both urban and rural areas, we used a (b) _____ (*random/purposeful*) sampling approach. To make a more (c) _____ (*valid/reliable*) comparison we used a questionnaire with closed questions. The questionnaire had six questions. The questionnaire was handed out in Kamayut Township in Yangon and Kawa Township in Bago. The surveying was done in February 2018.

Results

We found that approximately (d) _____ (*25/75*) % of people said that they had had problems with access to clean water. When we compared between urban and rural areas we found that (e) _____ (*urban/rural*) areas have a higher number of people saying that access to clean water is a problem

iv



ACTIVITY: Collect and Analyse Quantitative Data

- 1 Ask four people the questions from the *Community Survey on Water Problems*. Record their responses in the data table.
- 2 In pairs or groups, combine your data. Write it into a data table.
- 3 Create a bar chart and a pie chart based on the data. Make sure that they have titles, key and the data entered correctly. Make sure that the bar chart has an X-axis label and a Y-axis label.

Data Table

Respondent	Q1	Q2	Q3	Q4	Q5	Q6
1						
2						
3						
4						



CASE STUDY: Analyse the Case Study

Read the case study and answer the questions/

- 1 What is SPSS?
- 2 What can SPSS create from data that would be useful for a report?
- 3 What types of research project would SPSS be useful for? Why?

Statistical Package for the Social Sciences (SPSS)

Statistical Package for the Social Sciences (SPSS) is used for quantitative data management and analysis. It is a computer program that is used for accurate and fast statistical analysis of data. SPSS is used with numerical and categorical data, which is put into tables.

SPSS is usually used with data from other programs, like **spreadsheets**, text documents or other **databases**. You import the data into SPSS. Once there, it can be used to calculate basic descriptive statistics (such as the mean) and more advanced statistics (such as t-tests, regression and cluster analysis). These advanced statistics can help to show relationships between data that is too complicated to calculate without a computer. SPSS can also create charts and tables that can be used in your publications.

For example, a researcher is researching the use of plastic bags in shops. She asks questions about how many plastic bags people use when

shopping for different things. She then uses SPSS to calculate the average number of plastic bags that people use when shopping for food, cleaning products and stationery, and what happens to these bags afterwards. In total she surveys 3,000 people. She uses SPSS because it makes analysing a large amount of data faster and easier. It allows her to make conclusions such as:

- 76.2% of people take three or more bags when they go to the supermarket.
- 97.8% of plastic bags used to carry meat go directly into the bin.
- 12% of bags used to carry stationery are reused.
- The higher a person's income, the more likely they are to reuse plastic bags when they go to the supermarket.

SPSS is one of many quantitative data analysis tools. Others include R, Python, State and Tableau.



Your Research Project: Charts and Tables

Think of a research question. This could be on the topic that you used previously or a different one that you are interested in.

- 1 Are charts and tables appropriate for your research question? How could charts and tables be used to present your research findings?
- 2 In pairs, discuss this.



DISCUSSION

- 1 When is it best to use descriptive statistics?
- 2 When is it best to use charts and tables?

CHAPTER 9: Analysing Qualitative Data



Learning Goals

Knowledge

In this chapter, you will increase your knowledge of:

- analysis of qualitative data;
- coding qualitative data;
- thematic analysis;
- computer assisted analysis.

Skills

In this chapter, you will practise the ability to:

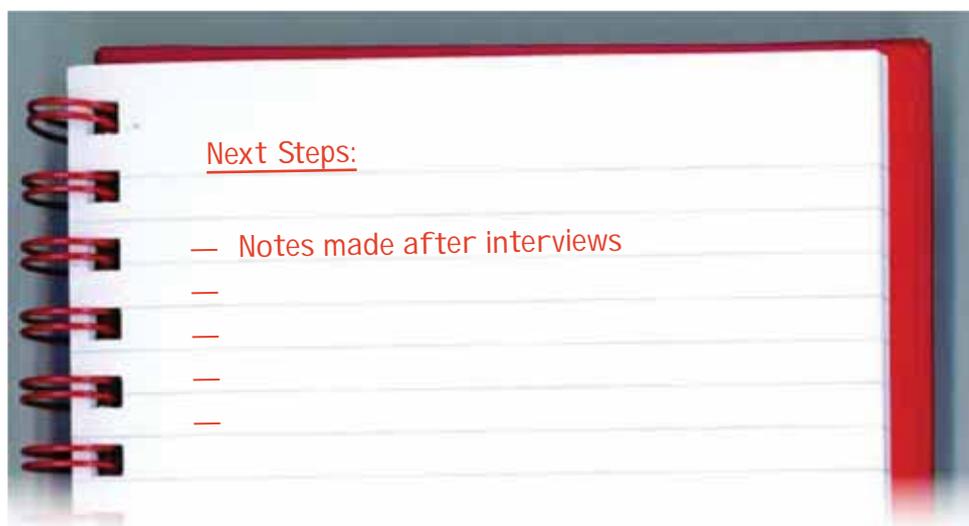
- describe the steps for analysis of qualitative data;
- distinguish between coding of quantitative and qualitative data;
- apply thematic analysis to qualitative data.

9.1 Analysing Qualitative Data



PREVIEW

A researcher interviewed restaurant workers as part of a project on knowledge about food safety. The researcher did three interviews. She recorded the interviews on her phone and wrote additional notes after each interview. What steps should she take after the interviews?



Steps in the analysis of qualitative data

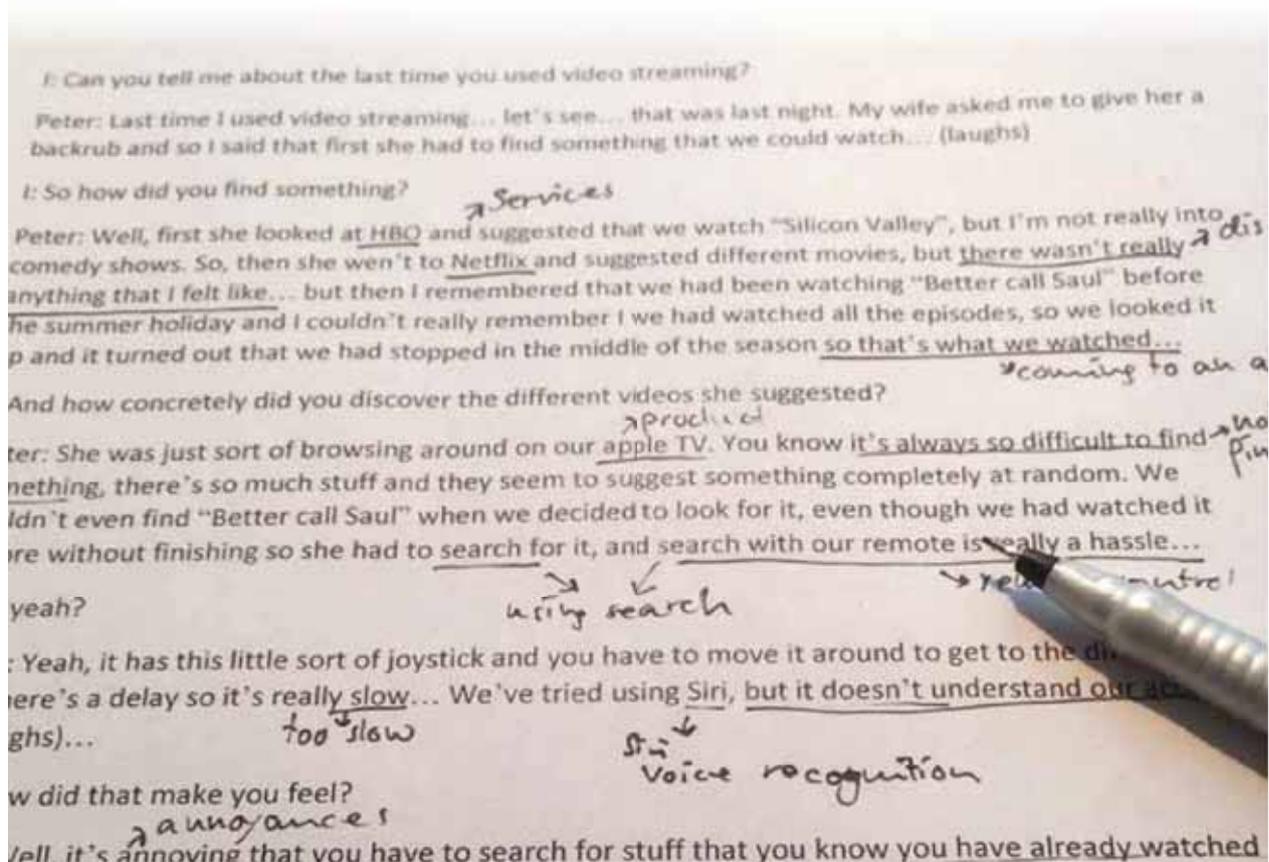
Analysis of qualitative data also has three steps. They are:

<p>Step 1: Organise</p> <ul style="list-style-type: none"> • Organise the data in an appropriate format for analysis. • Transcribe the data if necessary. • Label your data and summarise what is being said (coding). 	<p>Step 2: Analyse</p> <ul style="list-style-type: none"> • Explore relationships between different parts of your data. • Look for similarities and differences between groups within the data. • Identify any themes that are patterns in your data. 	<p>Step 3: Conclude</p> <ul style="list-style-type: none"> • Develop conclusions. • Ensure that your conclusions link to your research question(s). • Explain different perspectives held by participants about themes in the data (if necessary).
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ACTIVITY: Compare and Contrast

Compare the qualitative analysis process with the quantitative analysis process (see page 97). What are the similarities and differences?



Coding in qualitative analysis

In qualitative analysis, coding means to label parts of the data to help identify important ideas. Often, coding involves putting a word (or words) next to a piece of text. This word might describe or summarise a larger piece of text. For example, for research about business challenges, a research participant might talk about the challenges of 'rent'. A researcher could write the word 'rent' next to the notes so that it can easily be found again. Other mentions of 'rent' would also get coded the same. It is useful to make a list of the codes you use.

Two types of codes are *pre-set* and *emergent* codes.

Pre-set codes are arranged before analysing data. For example, if researchers studied challenges for market businesses, they might have a pre-set code called 'rent'. You identify 'rent' as a code because you are sure that it is a challenge for businesses.

An emergent code is a code that a researcher identifies while analysing data. For example, while researching challenges for market businesses, a researcher might notice that a lot of research participants discuss language issues. Even though the researcher did not expect language issues to come up during interviews, the participants talk about it so often that the researchers cannot ignore it. The researcher will then identify this as a code.

Often, a researcher will use both pre-set codes and emergent codes in their analysis.

ACTIVITY: Match the Texts to the Codes

The research question is, 'Why do young Myanmar women migrate overseas for work?'

- 1 Match codes a-f to responses i-vii (more than one code can match to each response).
- 2 Which code (from a-f) did not appear in the responses?
- 3 Identify any other possible emergent codes that you can see in the responses.
- 4 If the research question was, 'What do young people want in their jobs?', which of these codes would be relevant? Which codes might you change or add?



Codes

- | | |
|---|--------------------------|
| a. Money | d. Feelings about travel |
| b. Work experience | e. Lack of skills |
| c. Limited job choice in home community | f. Politics |

Responses

- i. 'In my village, young people don't find jobs very easily. There are jobs with NGOs but people need skills. I want to work for an NGO because NGO workers get opportunities to travel.'
- ii. 'My boyfriend works in mining. He doesn't like it because it is dangerous, unhealthy and the salary is low. But his mother has cancer so he needs to work to help pay her medical bills. He can't take time to go to university.'
- iii. 'I worked at a market for a few years selling fruit. I had to wake up at 4 am each day and I was so tired I often got sick. There are no other jobs for young people like me.'
- iv. 'I'll go to Bangkok. I can learn about cooking Thai food and save money by staying with my uncle who already lives there. Then I will return and open a Thai restaurant here. I am very interested in Thai culture, especially Thai food.'
- v. 'The family farm can't support all of us, as climate change has affected our crops. Someone needed to go away and make money so that our parents have a nice place to live.'
- vi. 'I feel a bit scared because I have never travelled outside of Myanmar before. I have never worked as a nanny before – except when I looked after my younger brother and sisters.'
- vii. 'My auntie put me in contact with someone that trains and hires maids in Singapore. They said that they could help me get a visa and work there. Working in Singapore will help me get new skills and experience so that I can get better work back in Yangon.'

▶ ACTIVITY: Coding Interview Responses

The central research question is, 'What social messages do people receive from popular movies in Myanmar?' The interview questions asked about people's favourite types of films and the social messages in the films.

- 1 Identify the parts (a few words not whole sentences) in each interview that match to the pre-set codes 'a' and 'b'.
 - a Types of film
 - b Social messages in films
- 2 Read the interviews again carefully. What are two more possible emergent codes? Fill the gaps below with possible emergent codes.
 - c _____
 - d _____
- 3 What parts in each interview match to the possible emergent codes 'c' and 'd'?

Respondent One

Q1: What is your favourite type of film?

I like funny films the most because I love to laugh. It makes me feel happy. Myanmar has so many funny films and there are always silly characters. My favourite recent film was 'Wah Wah Lone Nay'.

Q2: What social messages do these films have?

Usually in these movies there is a love story and it is about how you should be nice to one another. Usually the love stories part of the film is about being nice to one another and making sure that you are true and faithful.

Respondent Two

Q1: What is your favourite type of film?

I like action films because they are exciting. I usually go to see action films with my friends and after we have seen the action film, we feel brave and strong.

Q2: What types of social messages do these films have?

Action films don't really have a social message. Usually the good guy is brave and strong and the bad guy is doing evil things like making life difficult for poor people. Sometimes the bad guy kills people.

Respondent Three

Q1: What is your favourite type of film?

I like Indian movies because I like the music and dancing.

Q2: What types of social messages do these films have?

A lot of Indian movies are about romance between someone from a poor family and someone from a rich family. They show traditional romance and have good messages about family and love

Respondent Four

Q1: What is your favourite type of film?

Mystery films that have a spy or crime story. It is exciting when someone has to find the person who committed the crime.

Q2: What types of social messages do these films have?

I think that the message from these films is that you need to think critically. And, also that it's important to understand how people think.



CASE STUDY: Analyse the Case Study

Read the case study and answer the questions.

- 1 What is the research about?
- 2 What possible pre-set codes are mentioned in the case study?
- 3 What are some possible emergent codes that could have come out during the research?
- 4 Why do you think that two of the authors did coding and analysis independently?
- 5 What tasks from the qualitative analysis process on page 110 can you see in this case study?

PREGNANT MIGRANT AND REFUGEE WOMEN'S PERSPECTIVE OF MENTAL ILLNESS ON THE THAI-MYANMAR BORDER

This research explores what pregnant migrant and refugee women living and working along the Thai-Myanmar border know about mental illness.

The researchers conducted thirteen focus group discussions with pregnant migrant and refugee women and the staff of health clinics from the Thai-Myanmar border. In the focus groups they discussed five main topics: symptoms of mental illness; causes of mental illness; suicide; mental illness during pregnancy; and managing mental illness.

After transcribing the focus groups, the researchers coded data according to the main topics. In their analysis, they looked at how the data was coded to see what people said about the main topics. The researchers would do this at the end of each day. They also looked for important topics that came from the conversations. One thing they discovered from the interviews was that many women did not have much support from their family or their partner during pregnancy. This meant that women felt lonely and isolated.

Two of the researchers analysed and coded data independently before comparing and discussing themes that they had identified.

https://www.researchgate.net/publication/275048385_Pregnant_migrant_and_refugee_women's_perceptions_of_mental_illness_on_the_Thai-Myanmar_border_A_qualitative_study



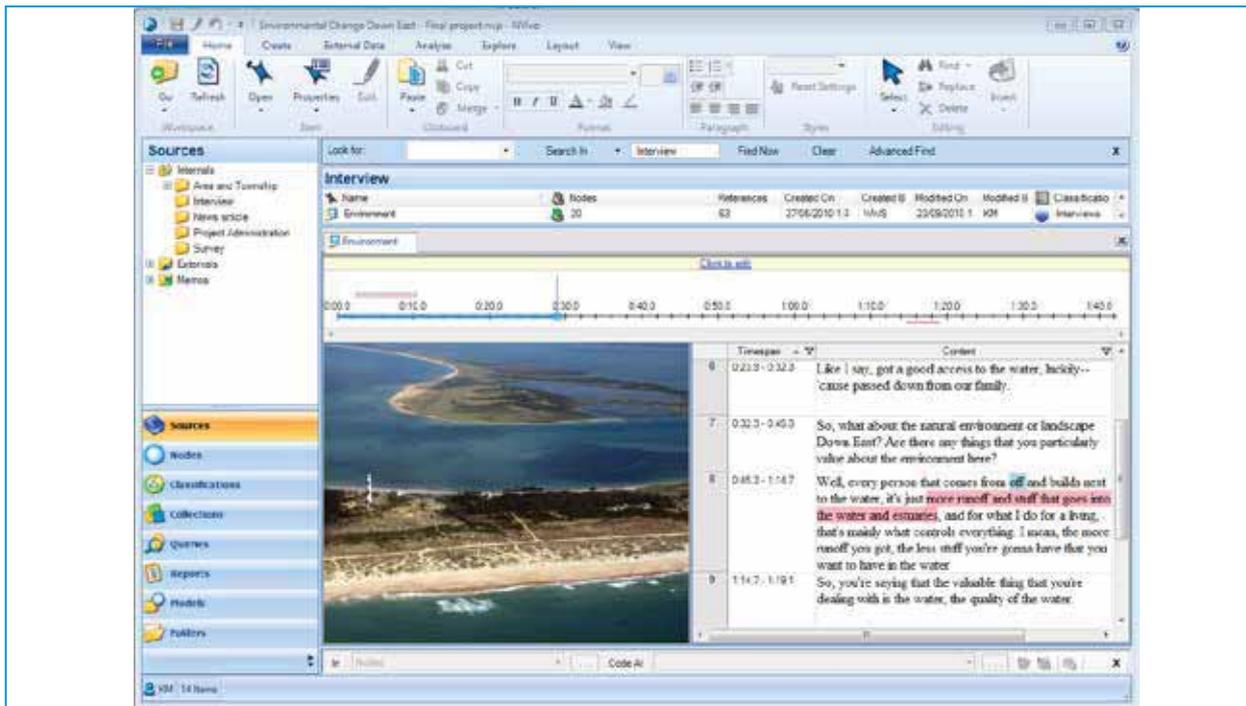


CASE STUDY: Analyse the Case Study

Read the case study and answer the questions.

- 1 What is NVivo?
- 2 What can Nvivo be used for with qualitative data?
- 3 What types of research project would Nvivo be useful for?

NVivo



NVivo is a computer program used for qualitative data analysis. It is useful for accurate and fast analysis of large amounts of text.

NVivo can be used with texts in any language or with audio and pictures.

Once you upload the content, navigating, sorting and coding data can be done very quickly. For example, a researcher doing interviews with 200 people about religion could use the program to code all the different parts of the information. A code on this topic might be 'praying'. After the transcripts and notes are uploaded to the program and classified, the researcher can quickly and easily find all instances when 'praying' is mentioned.

Using NVivo can be difficult. Usually users need training to use the program well.



DISCUSSION

How can you do coding with audio recordings of interviews?

9.2 Thematic Analysis

PREVIEW

- 1 The definition of theme is, 'an idea that appears frequently in a text.' How do you think themes apply to qualitative analysis?
- 2 How might themes be different from codes?

When there is a group of similar or related codes, they can be grouped together to become a *theme*. A theme is like a larger code made up of smaller, related codes. For example, a researcher wants to know, 'What are the roles of elderly people in Myanmar households?' They interview ten people. Some participants talk about how their elderly parents help with looking after children while parents are working (coded as 'babysitting'). Some other respondents might talk about parents picking children up from school (coded as 'transport'). Because the codes 'babysitting' and 'transport' are both relevant in this research to child raising, the researcher groups these codes together into a theme called 'child raising'.



EXERCISE: Codes and themes.

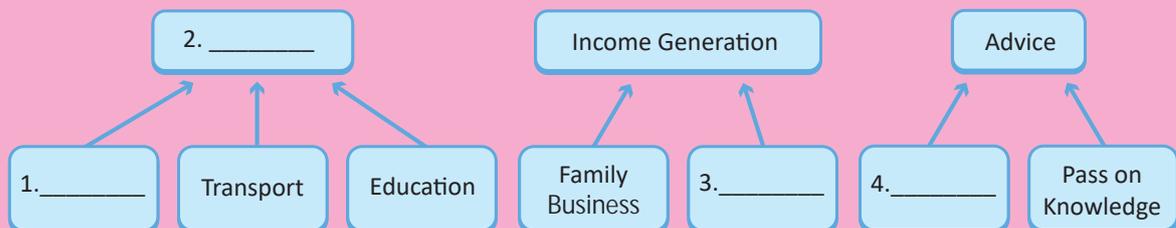
Match a-d below to the spaces 1-4 in the diagram of codes and themes for the research question 'What are the roles of elderly people in Myanmar households?'

- | | |
|-----------------|---------------|
| a Selling goods | c Experience |
| b Child raising | d Babysitting |

RESEARCH QUESTION: 'What are the roles of elderly people in Myanmar households?'

THEMES:

CODES:





EXERCISE: Match the Text to the Theme

Here are eight examples of text from research on, 'What are the roles of elderly people in Myanmar households?' The text is taken from interviews with a young mother and her grandmother. Code each piece of text (1-8) to one of the three themes in the table.

child raising	income generation	advice
1		

1 My granddaughter and her husband both work so they ask me to look after the baby during the day.

2 My sister is a tailor and she sews clothes and my grandmother helps sometimes.

3 She puts buttons on the shirts and makes the cuffs.

4 When I come home she tells me about her life when she was growing up.

5 She always asks my older son about his school and study and talks to me about his education.

6 I live with my sister, my grandmother, my auntie, my husband and my sons. My husband goes away a lot for his work.

7 My grandmother shows me how to make clothes for the children.

8 She helps for free, so we don't have to hire a worker.

▶ ACTIVITY: Thematic Analysis

Read the interview responses from participants to the following research question and follow the instructions:

'What do Dala residents think is the biggest environmental problem in their neighbourhood?'

In pairs or groups:

- 1 Add more codes (a-c) that you can identify in the responses that are related to one each of the three existing codes (insects, heavy rain, disease) already in the table.
- 2 Add themes (d and e) that could include the codes that contribute to them (the first theme has been done so you can see how the theme 'animals' is a larger group within which 'insects' and other related codes could fit).
- 3 Write a short summary (f and g) about the main points or ideas in your themes (see the example for the theme 'animals').
- 4 Join with another pair or group and compare your codes, themes and summaries.

Note: Some of the codes that could emerge from the responses are already entered in the table on the opposite page. A theme is also entered. Parts of the responses are highlighted in **green** as examples, to show how they relate to the first code, 'insects'.

Participant A (Female, 22)



Plastic bottles and plastic bags that get stuck in the drain are a serious problem. First of all, during the rainy season, this causes flooding when there is a heavy rain and the water cannot flow because they block water flow in the drains. Second, a lot of food waste including the leftover scraps from killing of chickens is thrown in the drains. The bad smell coming out of the dirty rubbish-filled drains is a problem. I have to keep the doors and windows of my room closed all the time so that the smell doesn't come in.

Mosquitoes breed in such dirty drains and every night I have to suffer from mosquito bites. I am very worried I will be infected and get fever.

Person B (Female, 50)



At the end of our street, there is a house that does the chicken business. Every morning, they kill a number of chickens and boil them to send them to the market. Our community is very crowded and the houses are very close to each other. Even though the killing is done in the morning and they clean the area, the smell lasts for the whole day. I have to pass the place every day to go to work, so I have to suffer from the smell every day. Another problem is with the food vendors around that area at night. The foods look delicious, but they are very dangerous as they are covered in flies that are attracted by the smell of chickens. I am worried that I would get diarrhea or fever and other more serious diseases.

Person C (Male, 35)



Now it is the rainy season. There is a poor drainage system in the community and people throw rubbish in the drains without thinking about the consequences. At this time of year, it is likely that the water levels will rise. When that happens, all the drains are covered in water and it is dangerous for children. The flood water is dirty and attracts **flies and mosquitoes**. It can cause skin disease for those who have to walk every day from home to work. Children at home are very vulnerable to water-borne diseases and diarrhea during this time of the year.

'What do Dala residents think is the biggest environmental problem in their neighbourhood?'		
Codes	Themes	Summary
insects	animals	<p>Example: This theme is about animals that cause community problems such as sickness from <i>flies and mosquitoes</i> as well as the smell from chickens.</p>
a. _____		
heavy rain	d. _____	f.
b. _____		
diseases	e. _____	g.
c. _____		



Your Research Project: Themes

Think of a research question. This could be on the topic that you used previously or a different one that you are interested in.

- 1 Is thematic analysis an appropriate type of analysis for your research question?
- 2 What themes could be used in answering your research question?
- 3 In pairs, discuss how thematic analysis might be relevant to your project.



DISCUSSION

What is the most difficult part about doing thematic analysis in a research project?

CHAPTER 10:

Communicating Research



Learning Goals

Knowledge

In this chapter, you will increase your knowledge of:

- research reports;
- evidence;
- oral presentations.

Skills

In this chapter, you will practise the ability to:

- identify parts of a research report;
- use evidence to support an argument;
- use checklists to write, revise and research reports;
- adapt research presentations to different settings and audiences;
- reflect on the needs of different audiences for research findings.

10.1 Research Outlines



PREVIEW

What do you need to include when writing a research report?



Research outlines

Making a *research outline* is the first thing you do before you start writing the research report. It is a list of headings and subheadings that helps you to organise your information. Most research reports contain:

- Introduction
- Background
- Methods
- Results
- Discussion

Introduction

The introduction outlines your research questions, describes the background to the research and briefly summarises the other sections. Generally, in the introduction you summarise all the significant points that you are going to make. These are usually the:

- Research Topic
- Research Questions
- Methods
- Most Important Findings

Background

The background contains information that helps the reader to understand the broader situation, such as:

- what you already know about the situation or issues;
- what other research has been done on this or similar issues.

For academic research, you also need to include a literature review. This is a summary of similar research that has already been done on your topic.

Methods

The methods section describes how data was collected and analysed. Provide as much detail as possible (Who? What? Where? When? Why?) and be specific. For example, say exactly how many people you interviewed and/or surveyed. You should:

- describe the population that you are researching;
- describe the tools and approaches used for sampling, data collection and analysis (this will help to convince people that your research is reliable, valid and confirmable);
- include information about the types of questions that were asked;
- include ethical considerations such as efforts made to reduce harm to participants;
- describe any limitations of the research tools or the research process.

Results

This is where you show the most significant findings of your research, including:

- the numbers, statistics and/or patterns and themes in what people said;
- anything interesting or unusual that you found out.

Discussion

In the discussion section, you interpret the meaning and significance of the results, and discuss:

- how knowledge about an issue has improved;
- what other research could be done to understand the issue better.
- recommendations for what can be done to improve this situation. These may be targeted at specific groups such as communities, governments, NGOs, etc.



EXERCISE: Choose the Best Answer

- 1 A research outline is best described as:
 - a a description of the methods and findings.
 - b a tool to help with planning your report writing.
 - c a list of similar research by others.
 - d a photocopy of someone else's research report.
- 2 The methods section should not include:
 - a the summary of findings.
 - b the kinds of questions that were asked.
 - c the survey techniques.
 - d ethical considerations.
- 3 Which of the following is correct?
 - a The results section makes recommendations for actions.
 - b The discussion section describes the population being researched.
 - c The discussion section explains why the research is important.
 - d The results section explains how the research was conducted.



EXERCISE: Compile the Research Report

Put these sentences within the appropriate parts of the research outline (introduction, background, methods, results, or discussion) in the most likely order.

- a We surveyed health workers at 15 government hospitals in Yangon, Hpa-An and Sagaing.
- b Three hospitals said that they only provide education for nurses.
- c More research about funding for health worker education needs to be done at hospitals in other parts of the country.
- d We did in-depth interviews with three hospital managers.
- e Hospital budgets are growing but very slowly.
- f Our research found that more teaching resources need to be available for health workers.
- g We used SPSS to analyse responses from the surveys of the health workers.
- h According to research reports done by the World Health Organization, access to healthcare in Myanmar is improving.
- i Education for health workers is an important part of improving the health of people in a country.
- j All hospital staff said money and access is a problem in learning more about healthcare.
- k This research asks, 'What education is available for health workers in Myanmar to learn more about healthcare?'
- l Government records show Myanmar has over 1,100 public hospitals.
- m A project should be developed with health workers to identify gaps in their knowledge and skills.
- n 80% of doctors said that they would like to receive more training.

<u>Introduction</u>	
1. i - Education for health workers is an important part of improving the health of people in a country.	
2.	
<u>Background</u>	<u>Results</u>
3.	9.
4.	10.
5.	11.
<u>Methods</u>	<u>Discussion</u>
6.	12.
7.	13.
8.	14.



Your Research Project: Outline

Think of a research question. This could be on the topic that you used previously or a different one that you are interested in.

- 1 Develop a research outline for the report for your research project. (Use the table on the previous page, if helpful.)
- 2 In pairs, discuss your research outlines.



DISCUSSION

What other information could you put into a research outline? Which sections would it go in?

10.2 Writing and Revising



PREVIEW

What are your most common problems in report or essay writing?

Writing and editing

Writing and editing is an important skill for a researcher. You will need to be able to find mistakes in your own work and correct them. It is useful to develop a checklist of things to look for when reviewing your own work.

Some questions you might want to ask include:

- Does this research report have a clear **thesis** (main idea or argument) and research question?
- Are the methods that were used, including how data was collected and analysed, clearly explained?
- Are the facts, figures and quotes accurate?
- Is the evidence clearly explained and consistent?
- Are the spelling, grammar and punctuation correct?



ACTIVITY: Create a Checklist

- 1 Look at this checklist. Think of at least two things that you would add to it.
- 2 In groups, compare your checklists.
- 3 Develop a group checklist.

Report-Writing Checklist	
	It has an introduction and conclusion.
	The introduction contains the research question(s).
	It has a section that describes methods of data collection.
	The evidence is clearly explained and presented.
	The evidence is linked to the research questions.
	Grammar, punctuation and spelling is correct.
	It contains title page, headings and page numbers.



DISCUSSION

- 1 What are some other strategies that you can use for writing and revising reports?
- 2 Who would you choose to help you write and revise your own report?

What is evidence?

A research report (or paper) uses data as evidence to support the main findings. Evidence should come directly from the data you have collected as part of your research project. For example, if you are describing the results of research into favourite foods and you find that Indian food is the most popular food, you could include a statistic (55% of people said that Indian food was their favourite food) or a chart which compares different foods.

Evidence is facts or quotes that you use to support your **claims** and recommendations. In order for your reports to be persuasive, you need to be able to use evidence effectively.

Effective evidence:

- supports your claim;
- is clear. If a quote is **vague**, or uses complex language, summarise or simplify the words but keep the meaning (paraphrase);
- has correct **references** (citations) to sources like books, articles or websites mentioned in the report;
- is clearly labeled and titled.

Results

Our study on social problems in remote areas was carried out with 20 adults. We found that people are concerned about poverty. 70% of adults think that economic problems are the biggest problems in their community.



EXERCISE: Match the Evidence and the Conclusions

Research on peoples' considerations when they are buying clothes produced the following evidence (statistics and quotes – 1-6). Match them to the conclusions (a-d). Statistics or quotes can match to more than one conclusion.

Statistics/Quotes

- 1 80% of people said that they wanted to know more about the environmental impacts of clothing factories.
- 2 'I prefer to buy clothes from companies who treat their workers well.'
- 3 60% of people said that they are willing to spend a little bit more for ethical clothes.
- 4 20% of people said that they know about companies that make ethical clothes.
- 5 'I would pay 5% more for ethical clothing.'
- 6 10% of people know how to find out more information about different companies.

Conclusions

- a People don't know how to find out information about companies.
- b People are interested in ethical clothes.
- c People don't know which clothing companies are ethical.
- d People are willing to spend more on clothes if they are produced ethically.



DISCUSSION

- 1 When might a quote be more persuasive than a statistic?
- 2 When might a statistic be more persuasive than a quote?

10.3 Oral Presentations



PREVIEW

- 1 What is the most important thing when giving an oral presentation?
- 2 What are some of the benefits of presenting your research orally?

What is an oral presentation?

An oral presentation is where you present and explain your research to a person or a group of people. Some presentations use flipcharts, slideshows and videos.

You can structure an oral presentation like a research report, with an introduction and background, methods, description of results and discussion of the significance of the results.

The main difference is that a research report is detailed but a oral presentation is usually (but not always) shorter. Therefore, you should prepare and focus on the most important evidence and conclusions from your research.

You also have to consider what types of information you should present to different groups.

Tips for oral presentations

1. Be clear and straightforward.
2. Only focus on key facts, figures and conclusions from the research. Do not list every result of the research.
3. Prepare what you will say.
4. Think about what your **audience** will find useful and interesting.
5. Practise your presentation with peers and ask them to give feedback.



ACTIVITY: Analyse the Research Presentations

Look at the three examples of oral presentations of research.

- a What is the location?
- b Who is in the audience?
- c How much do you think the audience knows about research?
- d What would be the most effective way to verbally present your research to this group?
- e What types of evidence do you think are best to use with this audience? Why?



2.



3.



Your Research Project: Presentation

Think of a research question. This could be on the topic that you used previously or a different one that you are interested in.

- 1 Answer the questions.
 - a Would you be likely to give a presentation of your research and its results?
 - b Where and how would you do it?
 - c Who would be the audience?
- 2 In pairs, discuss your research presentation.

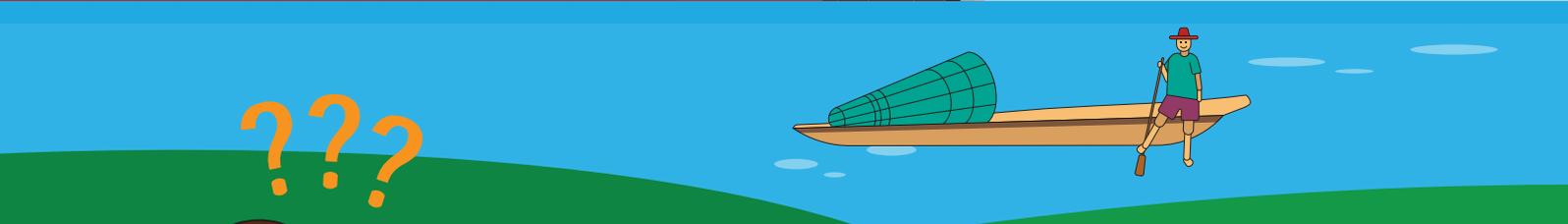


DISCUSSION

- 1 How can researchers encourage an interest in research in their communities?
- 2 How does research influence decisions made by people in your community?

FINAL RESEARCH PROJECT

Follow the steps and, in pairs or groups, work through the research process that you have been studying in this book.



Step 1



Step 2



Step 3

STEP 1: DEVELOP RESEARCH QUESTIONS

- a Brainstorm research topics that are related to important issues in your community.
- b Decide on a topic that is interesting, useful and practical (for example, you can get access to participants, it can be finished in a short amount of time).
- c Write clear, focused and researchable questions.
- d Do background research on the topic. Take note of how much information is available. How can you use this information for your research?
- e Decide on a research process that answers your research questions.
 - What primary and secondary research will you use?
 - Will you do quantitative research, qualitative research or both?
- f Discuss ethical considerations.

STEP 2: FIND ACCURATE INFORMATION

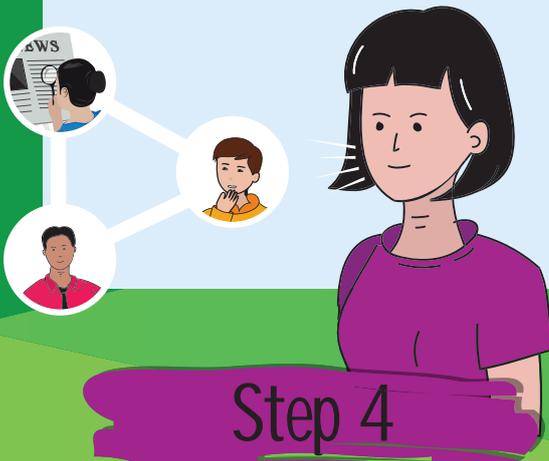
- a Make a plan for your data collection and analysis:
 - Define the research population and the sampling method;
 - Preparation (e.g.: interview questions, survey questions);
 - Contacting participants (e.g.: phone calls, visits);
 - Sample size (e.g.: you may want to do only five detailed interviews, but give out thirty surveys);
 - Recording data (e.g.: taking notes or recording interviews, using a printed survey form);
 - Ethical considerations (e.g.: telling interviewees what your research is about, ensuring their confidentiality).
- b Test (pilot) your data collection tools and fix any problems
- c Collect data by following the plan. Adapt as necessary.
- d Store data so that it is safe and organised.

STEP 3: ANALYSE THE INFORMATION & CONCLUDE

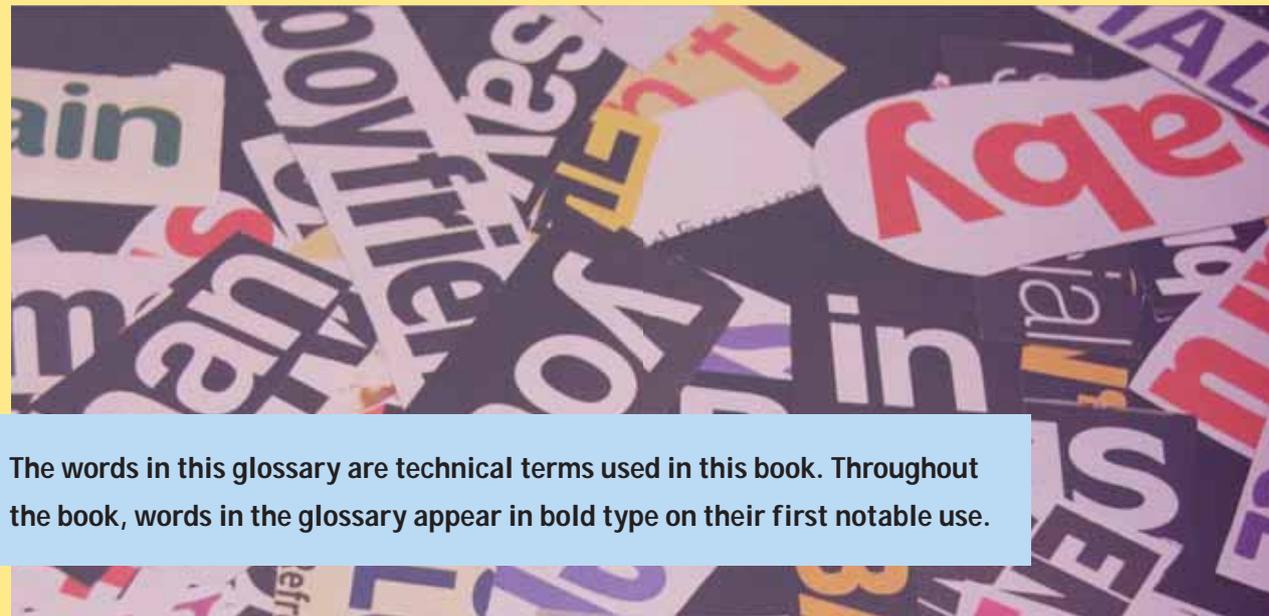
- a Gather all the data together and put it into a format appropriate for analysis.
 - If quantitative, collate data into a data table and use appropriate methods to analyse your data (e.g.: percentages, mean, median, mode).
 - If qualitative, transcribe interviews that you have recorded, or review your notes. Code them to understand and understand the most important themes.
- b Analyse the data and draw conclusions.
- c Use charts, tables, and quotes to understand and illustrate your data.

STEP 4: SHARE YOUR FINDINGS

- a Either write a research report or plan and give a presentation.
 - Presentation: A presentation should last for at least five minutes.
 - Research report: The research report should be at least 200 words.
- b Your research report or presentation should have these parts:
 - Introduction: explain your research question and why you chose to do this research;
 - Background information: describe the community that you are doing research in;
 - Research methods: explain how you collected data and analysed it;
 - Conclusion: explain what you learned from your research, using charts, tables and quotes if necessary;
 - Challenges and recommendations: explain what difficulties you faced and how your research can be used to improve your community.
- c While listening to or reading research reports by other people, ask these questions:
 - Do you believe the conclusions of this research? Why or why not?
 - If you had done this research, would you have collected data differently?
 - If you had done this research, would you have presented data differently?



Glossary



The words in this glossary are technical terms used in this book. Throughout the book, words in the glossary appear in bold type on their first notable use.

anonymous (adj) – **trnfod**

audience (n) – **pmzwly&bwf**

bias (n) – **buvlujcif**

body language (n) – **u| f[eft rit & mol|
ajymq|c|f**

categorical (adj) – **trstpm;c|mjci|q|l&m**

census (n) – **vD|a&pm&i|faumuf, |cif**

chart (n) – **y|l|um;cyf**

claim (n, v) – **tq|y|bn? awmi|q|bn?
tc|lft rmajmq|bnf**

closed question (n) – **tyw|ar;c|ef**

code (v) – **oau|w|o|u? o|u|pn|z|ih&;onf**

conclude (v) – **ed|k|y|bnf**

condition (n) – **tajctae**

confidential (adj) – **tw|f|fa&;jz|p|om**

confirmable (adj) – **tw|nj|y|k|y;E|l|om**

consent (n) – **oabmw|v|u|c|h|awmi|f|c|t|c|f?
oabmw|h|d|&, |cif**

consistent (adj) – **worw|wn|f|jz|p|om?**

w|p|y|p|l|vn|f&|om

credible (adj) – **, |un|p|w|c|&a|om?
, |un|f|u|om**

criteria (n) – **p|l|ef**

data (n) – **tc|s|u|ft|v|u|r|s|n**

database (n) – **tc|s|u|ft|v|u|r|s|n,
x|n|b|f|x|m|a|om|Z, |m**

demographic (n, adj) – **vD|a&u|y|m;ri
tc|f|t|u|s|f (Z, m? r|s|v|w|r|f)**

descriptive (adj) – **o|y|azn&|f|j|y|c|u|f|z|p|om**

emergent (adj) – **ay|x|e|f|v|ma|om?
B|u|D|m|v|ma|om? a|o|&|m|r|S|u|p|x|f|v|ma|om**

ethical (adj) – **u|s|i|D|w|E|S|n|om**

evidence (n) – **taxmu|ft|x|m**

field (n) – **e, |y, |?|u|@**

finding (n) – **&|f|az|aw|&|e|s|u|f|s|n**

focus group (n) – **oD|wn|&|m|t|y|pk**

follow up (v, adj) – **aem|u|q|u|w|f
j|y|e|v|n|q|e|p|p|bn? a|om**

generalisable (adj) – a, bk saumutsuqf
Elihom

graph (n) – ylyZ, mrsn

in-depth (adj) – tao:pw? euéuél

informed (adj) – tody;chom

interpret (v) – tcsuftvufsm;ulijeqibni

leading question (n) – Obaqmi ar;céf

market research (n) – apsuéubhwoe

mean (n) – orwúéf? ysfrúéf

median (n) – tv, uéf

mode (n) – Bufrsm;uéf

objective (adj) – &n&G tsuf

observation (n) – apmiMunhvlvncif

open question (n) – tzéar;céf

outline (n, v) – tMurfzifazmfycuf

perception (n) – ojirifrsvfem;vnjcif?
totjri? oabmxm

perspective (n) – tjri/axmi h

pilot (n, v) – prfoymv? prfoybni

preliminary (adj) – yPmr? pOP? tBuil

pre-set (adj) – BuilwicéuLúxm;jcif

primary (adj) – rvZpjrpfzpaom

protocol (n) – vlyxlvlyen

qualitative (adj) – t&nftaofpy

quantitative (adj) – ta&twépy

questionnaire (n) – ppívrfar;céf;vín

random (adj) – usyfaumuf, hom

rank (v) – tqibwrswbni

rate (n, v) – Ebfowrswbni (wpplvp&muil
tcsézi hpm;onÉéf)

raw data (n) – pepívusrcjcm;&aom;
tcsuftvufsm

recording (n) – rsvíwrfwíxmx;jcif

reference (n) – ulum;csuf

referral (n) – vñjymi fay;jcif

reliable (adj) – as relates to research =
, Munftm;xm;&aom

respondent (n) – ppívrfaumuf, hwbí
ygoihjzLum;ol

sampling (n) – erémaumuf, jcif

scale (n) – wíífwmrpep? Ebfxm? twííftwm
wíífwmon? Ebfowrswbni

schedule (n) – ar;céfpOfrsm

secondary (adj) – wpbqícttcsuftvufsm

source (n) – tcsuftvu&íjrpfrsm

spreadsheet (n) – y/ñ&rwbí tcsuftvubíh&m
Z, m;uéf

structure (n, v) – zlvni;yl zlvni;oni

subjective (adj) – wpOlvni;tjri;zpaom

survey (n, v) – ppívr? ppívrfaumubni

systematic (adj, adv) – pepívu;zpaom

theme (n) – tcefu@? acgífpO? e, y, í

thesis (n) – ohwoepmwrí

think-tank (n) – txí;tBuhy;tZ

transcribe (v) – tohíírsjyevnú, h&;cjcif

trauma (n) – pív P&m

vague (adj) – rxí&h;aom? ra&&maom?
rédgaom

valid (adj) – vutÉlihom? cilvñ&om?
ustalumi fndhóvám

visual (adj) – jriÉlirom aom

'MYANMAR LABOUR FORCE WORK SURVEY'.
This sheet accompanies the activity on page 52.

Ministry of Labour, Employment and Social Security International Labour Organisation MYANMAR LABOUR FORCE WORK SURVEY					
Name:					
Address:					
Question One: What is your main job that you have had in the last seven days?	Employer		Question Two: During this job, when did you usually work?	Early morning (from 3am)	
	Employee			During the day and evening	
	Paid intern			During the day (6am-6pm)	
	Own household/ family business			In the evening (after 6pm)	
	Helping without pay in household/ family business			On the weekend	
	Other work not getting salary			Sometimes during the day, sometimes during the evening	
	Student				
	Other				
Question Three: How long have you worked at this job?	Less than 3 months		Question Four: How many persons work at your place of work?	work alone	
	3 months-6 months			2-4	
	6 months-1 year			5-9	
	1-2 years			10-19	
	2-5 years			20-49	
	5-10 years			50-99	
	over 10 years			100 or more	
	don't know			don't know	

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