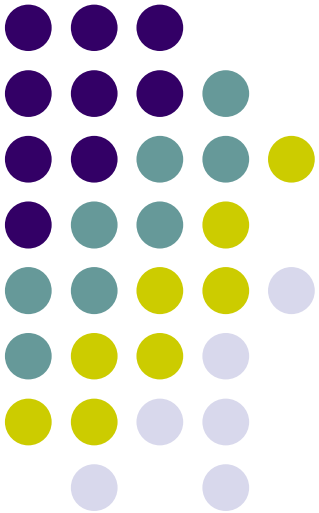
Training Module on Social Research Methods

1. Social Action Research
2. Research and Critical Thinking
3. Quantitative and Qualitative Research
4. Research Design
5. Social Measurement
6. Sampling
7. Survey Research 1
8. Survey Research 2
9. Qualitative Interview
10. Focus Group Discussion
11. Case Study
12. Field Research & Observations
13. Evaluation Research
14. Participatory Action Research
15. Qualitative Data Analysis
16. Quantitative Data Analysis 1
17. Quantitative Data Analysis 2
18. Introduction to SPSS 1
19. Introduction to SPSS 2
20. Using Existing Statistics
21. Reading Sources
22. Ethics and Politics
23. Unity and Coherence in Report
24. Paragraph Structure in Report
25. Sentence Structure in Report
26. Supporting Details in Report
27. Writing a Report
28. Policy and Advocacy Brief
29. English Syntax 1
30. English Syntax 2



Notice to Users

As any translated teaching materials, this training module on social research methods can not follow systematic rules. Instead, the development of its contents was directed by practical considerations, especially because the module will be taught to an audience not well-acquainted to this topic yet.

Social research methods have so far been taught at very few places in Myanmar and no work has been undertaken at any level (official or other) to provide a comprehensive and consistent Myanmar terminology. Therefore, the field of social research methods relies mainly on the English language.

The terminology used in the training module is an attempt to provide, whenever possible, a reliable and fair translation of English terms. In some cases, the translation is literal. In others, the translated term, with no correspondence with the English term, nevertheless conveys a similar meaning in the Myanmar context as the original term in the context of a Western society. Finally, for certain terms, it was decided to keep them in the English language, transliterate them in the Myanmar language, and provide a definition of the term in the Myanmar language. These various options for the proposed terms may not be accepted by all senior and junior experts in the field. Time and more widespread work on social research, however, will eventually sanction the most appropriate terms.

By using these different options, we have tried our best to convey the meaning of the technical terms used in the field of social research methods.

In doing so, the training module on social research methods hopes to contribute to the dissemination of practical and analytical tools used in social research in Myanmar.

These Powerpoint presentations require “win researcher” font.

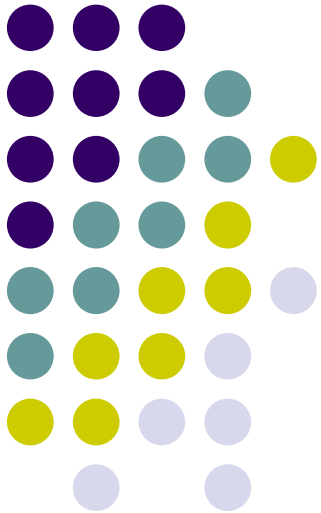
The presentations included in this training module are a flexible teaching tool that can be amended according to needs. Trainers are also encouraged to bring their own thinking and experience into the teaching of these lessons.

Inya Institute, Yangon, July 2013

1. Social Action Research Introduction

Presentation Objectives

- *To advance students/trainees' knowledge of the concepts of social action research and advocacy*
- *To introduce students/trainees to a typical outline of advocacy strategies*
- *To advance students/trainees' understanding on the role research can play in advocacy strategies*



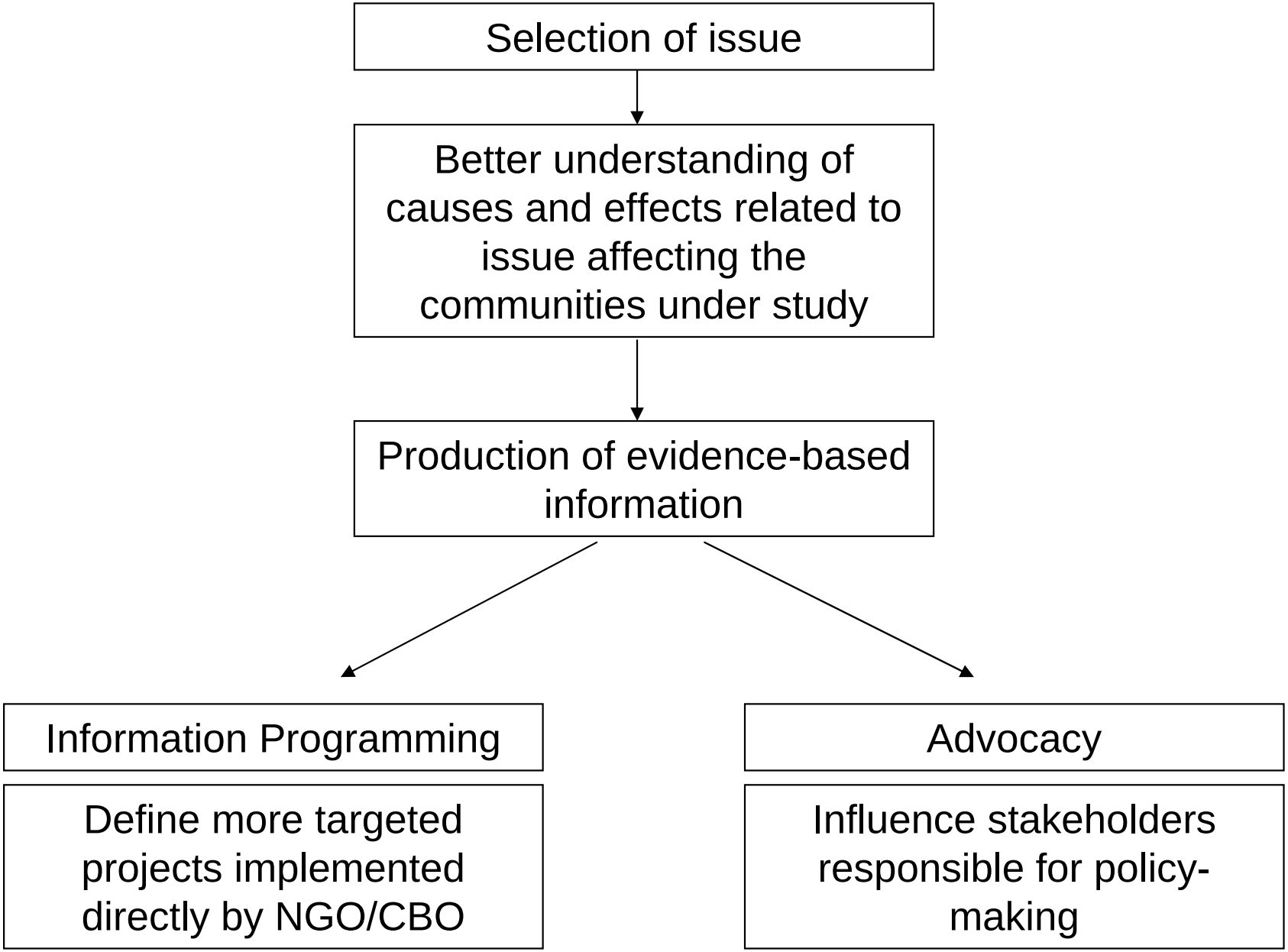
Social Action Research

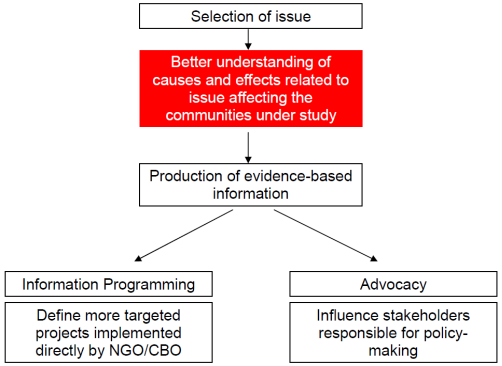
Conducting social action research has the following objectives:

- put into question what we think we know already about a key problem or issue
- enquire about this key problem or issue in a open-minded way
- address this key problem or issue and its causes so as to bring change for communities

Social Action Research: **CONTEXT**

Social Action Research





Better understanding of causes and effects related to issue affecting communities under study

When trying to understand these causes and effects, here what is typically done:

•Interview people to ask them about the problems they are facing

•Report about these problems

What should be done, however, is:

•Stakeholder analysis and preliminary problem tree

•Interview people about the problems they are facing

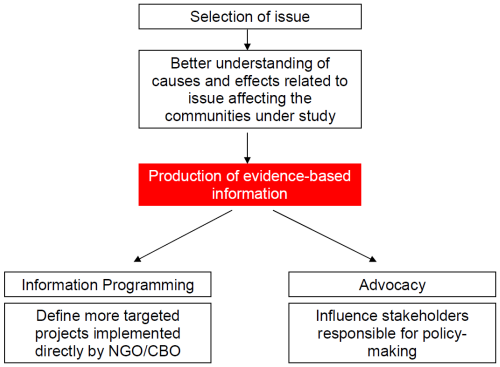
•Compare interviews, identify similarities and differences

•Quantify problems: translate problems and needs into figures/percentages

•Analyse findings

•Make a new problem tree showing the extent of problems

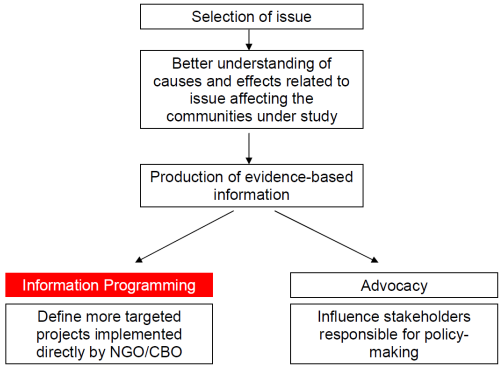
•Report about these problems and make recommendations



Production of evidence-based information

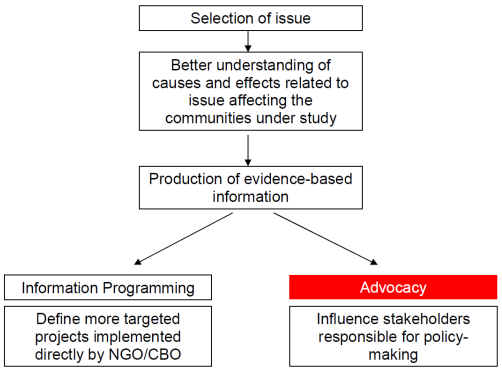
Based on a better understanding of causes and effects about issues affecting communities under study:

- Information produced will be more reliable and valid as it is based on a proper inquiry
- Report will be accepted by the different stakeholders more easily
- Report will come up with better recommendations as they are based on reliable information
- Improved capacity to produce information for future programs



Information Programming

- research-based evidence will help identify more precise or additional problems and needs
- research-based evidence will also be used as a support for developing new programs targeting specific communities
- research-based evidence will also be used to write reports, essays, or articles that can raise public awareness about specific issues



Advocacy

- research-based evidence can be used for defining an advocacy action plan
- this way, the advocacy action plan will be more grounded and straightforward
- the recommendations made on the basis of the evidence produced can be the goal of the advocacy action plan

Advocacy

There is no universally accepted definition of ‘advocacy’. Yet, the most common dimensions of advocacy are the following:

- Advocacy is a deliberate and planned process.

- It is a strategy which will influence those in charge of making policy decisions.

- It takes place around a policy position held by an organisation.

- And in today’s case, advocacy is based on social action research. This means that evidence-based research will be crucial to maintain the organisation’s policy position.

Capacity for Advocacy

Myanmar NGOs, CBOS, and CSOs are encouraged to develop advocacy as part of their activities on the following conditions:

- Identify staff willing to conduct the research
- Ensure there is sufficient staff capacity to support the researcher through the process
- Be willing to engage with the policy and legal environment of the topic under study
- Be willing to use the research findings so as to inform the organizations's existing programmes and practices
- Check that the political environment is such that research and advocacy is possible
- Make sure the organization is legitimate in addressing the issues of the advocacy campaign; plan the advocacy strategy accordingly.

Advocacy strategy: overview

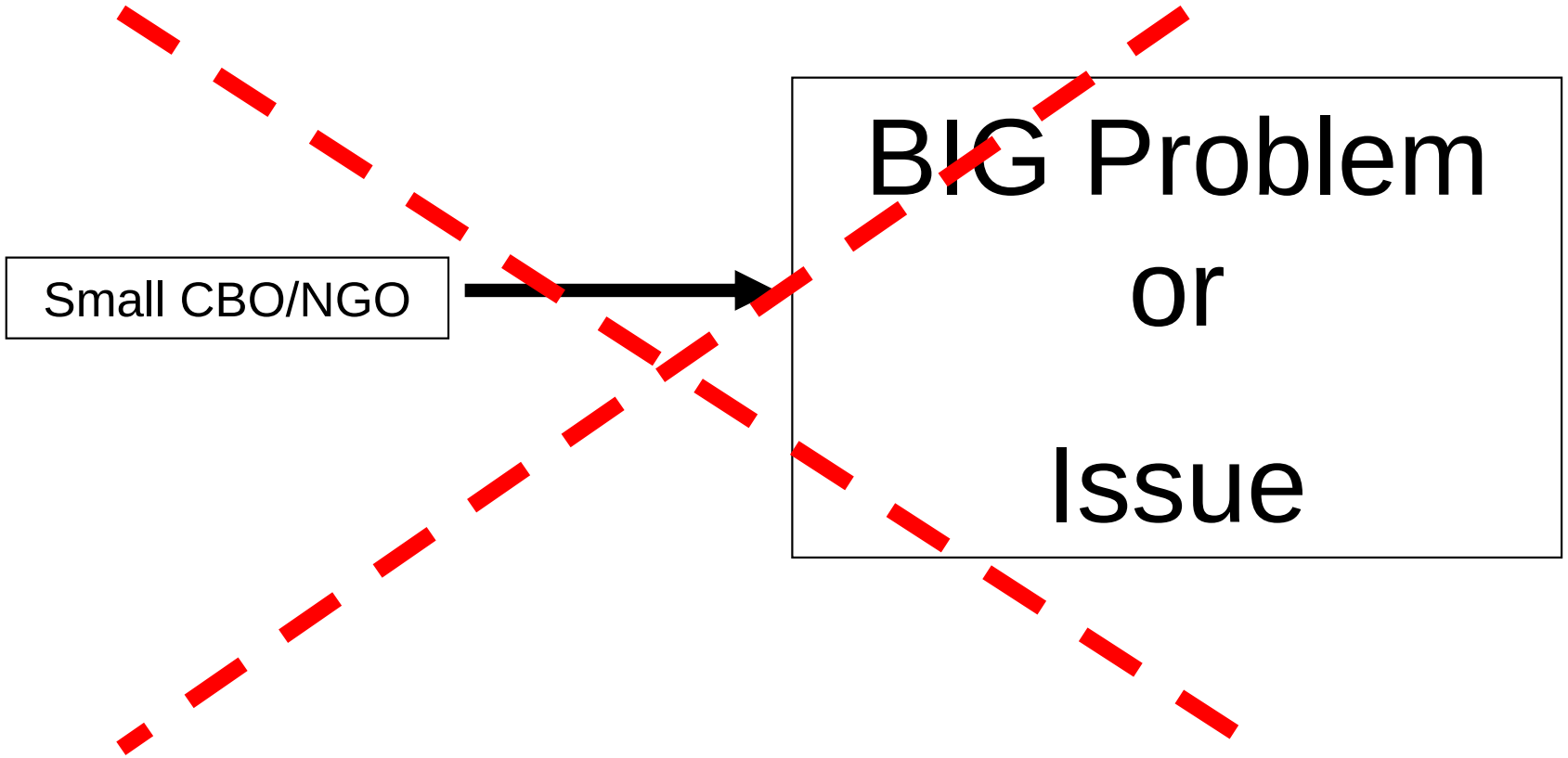
An advocacy strategy will develop along the following steps:

- identify the issue
- analyse the issue and set objectives
- design the advocacy action plan
- implement the advocacy plan
- monitor and evaluate
- revise the advocacy plan

Advocacy strategy

Identify the issue

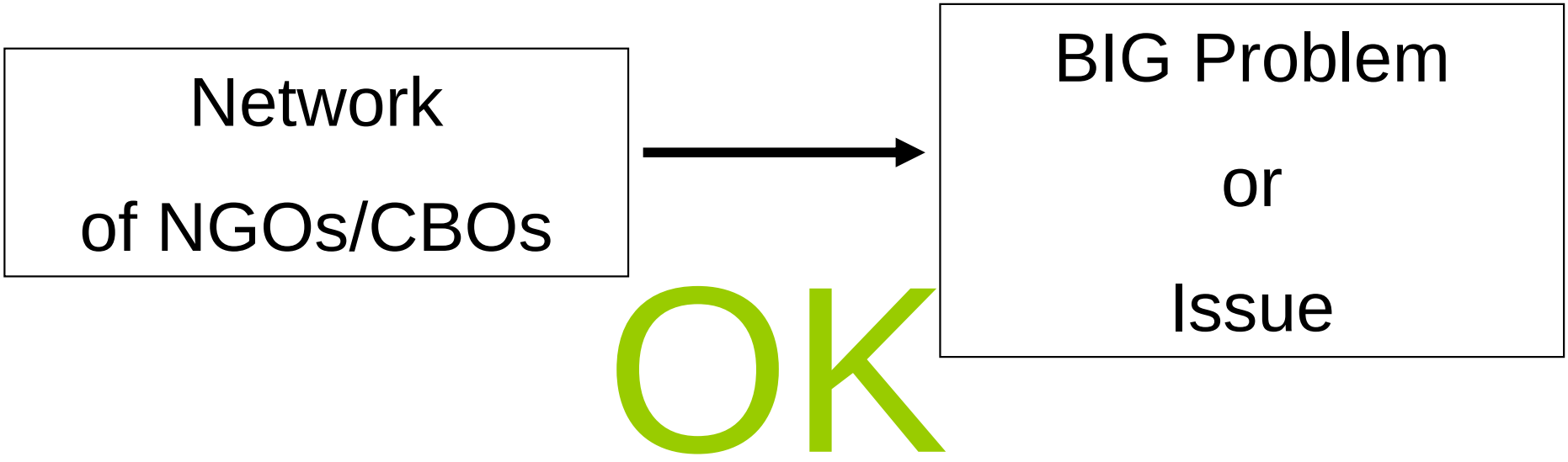
- identify the issue
- analyse the issue and set objectives
- design the advocacy action plan
- implement the advocacy plan
- monitor and evaluate
- revise the advocacy plan



Advocacy strategy

Identify the issue

- identify the issue
- analyse the issue and set objectives
- design the advocacy action plan
- implement the advocacy plan
- monitor and evaluate
- revise the advocacy plan



Advocacy strategy

Analyse the issue and set objectives

- identify the issue
- analyse the issue and set objectives
- design the advocacy action plan
- implement the advocacy plan
- monitor and evaluate
- revise the advocacy plan

- Based on the evidence-based research, explain what will change?

- Who will make these changes happen?

- For whom?

- To what degree?

- And possibly when this/these change(s) can happen?

Advocacy strategy

Design the advocacy action plan

- identify the issue
- analyse the issue and set objectives
- design the advocacy action plan
- implement the advocacy plan
- monitor and evaluate
- revise the advocacy plan

- Objectives

- Strategy and activities

- Timeline, budget

- Success criteria, milestones, outcome, and impact indicators

Advocacy strategy

Implement the advocacy plan

- identify the issue
- analyse the issue and set objectives
- design the advocacy action plan
- implement the advocacy plan
- monitor and evaluate
- revise the advocacy plan

- Communication of the plan

- Carry out activities defined in the plan

- Adjust these activities according to the evolving political context

Advocacy strategy

Monitor and evaluate

- identify the issue
- analyse the issue and set objectives
- design the advocacy action plan
- implement the advocacy plan
- monitor and evaluate
- revise the advocacy plan

- Record details of activities

- Assess at regular intervals the effectiveness of the advocacy activities

- Review objectives and see whether they can be achieved in the on-going context

- In short, review what things works and what things didn’t work

Advocacy strategy

Revise the advocacy plan

- identify the issue
- analyse the issue and set objectives
- design the advocacy action plan
- implement the advocacy plan
- monitor and evaluate
- revise the advocacy plan

- Revise the advocacy plan can be done while monitoring and evaluating the advocacy plan

- Focus on activities that worked well and those that could be further developed in future advocacy plans

Exercise time: drawing a problem tree

- A research on an outbreak of cholera was conducted somewhere in a very poor area. Several causes for the outbreak of cholera and the effects of the outbreak have been identified.
- It is now time to do a problem tree: place the terms listed randomly below on the left in the different sections of the diagram on the right.

Contamined water supply

Poor maintenance of water

Poor sanitary conditions

Increased morbidity and mortality

Low levels of income

Outbreak of cholera

Reduced productivity

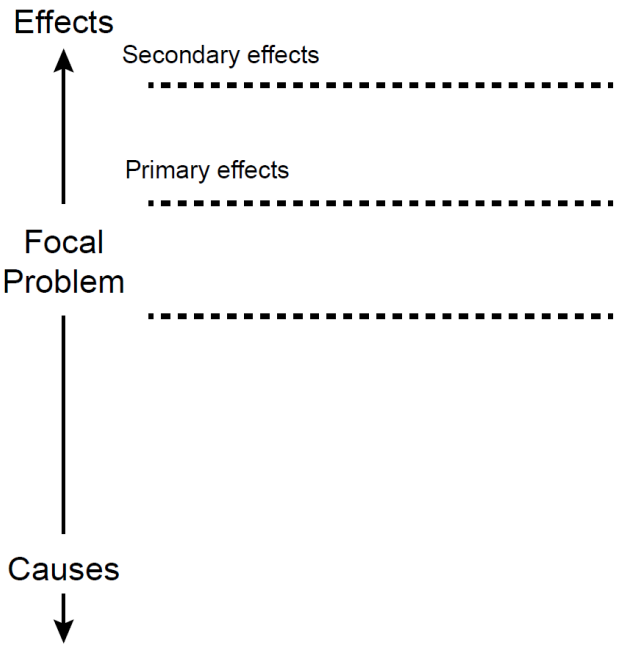
Flooding in urban areas

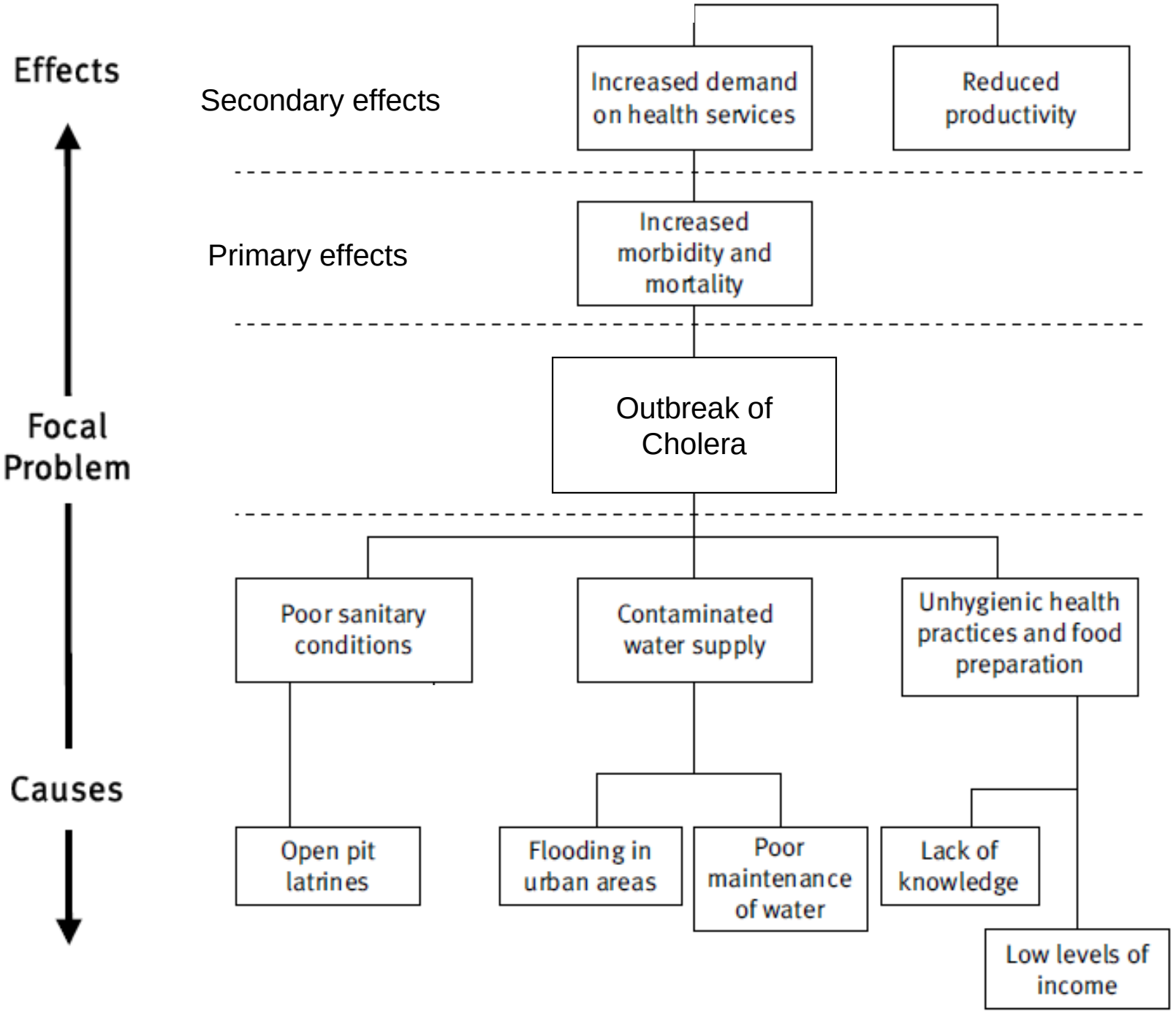
Increased demand on health services

Open pit latrines

Unhygienic health practices and food preparations

Lack of knowledge



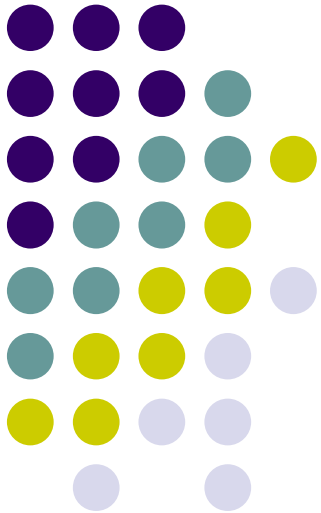

Effects
Secondary effects
Primary effects
Focal Problem
Causes
Increased demand on health services
Reduced productivity
Increased morbidity and mortality
Outbreak of Cholera
Poor sanitary conditions
Contaminated water supply
Unhygienic health practices and food preparation
Open pit latrines
Flooding in urban areas
Poor maintenance of water
Lack of knowledge
Low levels of income

Thank you!

2. Research and Critical Thinking

Presentation Objectives

- *To advance trainee's understanding of the nature of research and critical thinking*
- *To expose trainees with concrete examples of arguments*



Research

- Although this training module is specifically concerned with social action research, the expression ‘social action research’ includes ‘research’.

- As such, research focuses on new ideas, perspectives, and arguments.

- The researcher seeks relevant information from various sources (articles, books, interviews, surveys, and other sources) about the issue under study.

- The researcher then develops a ***critically-informed*** point of view: this means that an issue is examined from every possible aspect. Questions about what is right/wrong, fair/unfair, or neutral/biased of the issue under study can therefore be answered.

Research

- Research work is **not simply about gathering data**, evidence, or "facts," then compiling this information into a paper.

- It is **also about inquiry** —asking questions and developing answers through serious critical thinking and thoughtful reflection.

- When conducting research, critical thinking is an essential part of the thinking process.

Critical Thinking: a 3-step process

- Critical thinking is about using our ability to reason, to think independently, and to express ideas that are generated by our own thinking.
- It's about being active learning (as opposed to passive learning).
- It is about not taking for granted what is said in a text or told by someone.
- Critical thinking is a three-stage process:
    - 1. Evocation
    - 2. Realization of meaning
    - 3. Reflection

Adapted from *Reading and Writing for Critical Thinking*, Steele J. , Meredith K.S. & Temple C., 1998.

1. Evocation

- When reading or hearing something new about a topic, we must think firstly about what things we know about the topic.

- This is the ***evocation*** stage.

- One good way to visualize what we know about the topic is to draw a problem tree, that is, a diagram showing what we know about the causes (direct and indirect) of the issue under study, and the consequences (direct and indirect) of the problem or issue under study.

- At this evocation stage, the problem tree might not be very precise which is not a problem.

2. Realization of meaning

- Secondly, we must connect what we just read or heard with what we know already.
- It is about connecting the new knowledge to what is known already.
- This is the ***realization of meaning*** stage.

- After reading sources or collecting data about the topic, we will know more about the topic under study. New knowledge is gained from this reading and data collection.
- We can now connect what we knew already about the topic (problem tree made in the preceding stage) and what we gained from reading sources and collecting data.

3. Reflection

- Thirdly, we actively evaluate the new knowledge:
    - how the new knowledge can be applied to previous understandings?
    - OR how previous understandings may be altered to accommodate the new information?
- This is the ***reflection*** stage.
- At this stage, it can be useful to draw a new problem tree, that is, a new diagram showing how the new knowledge gained from reading sources and collecting data improves the understanding of the topic under study.
- By comparing the first problem tree (evocation stage) and this problem tree (reflection stage), it will be easier to formulate arguments about the topic under study.

Critical thinking and research

- Critical thinking helps to formulate arguments.

- Arguments, here, are not squabbles between people. Arguments, here, are the way in which ideas are developed and organised into a line of reasoning.

- This line of reasoning moves in a logical order to the conclusion. It aims to persuade the reader or listener of the validity of the point of view presented.

- Being able to discern and create structured, reasoned arguments is central to critical thinking.

- In turn, research and social action research will be better-received if they are built on structured arguments.

Arguments

- What is an argument?
- An argument consists of *statements.*

Statement 1 + Statement 2 + Statement 3 + …Statement N = Argument

- To become an argument, this set of statements has to have one statement which is supported by the others.
- In other words, one of these statements has to be the logical consequence of all the other statements combined.

Example

- Suppose a research topic is about school drop-outs in Yangon. Below is a possible argument based on research findings:
  - Statement 1: Survey research shows that school drop-out is much higher in Hlaingthayar than in Kamayut.
  - Statement 2: National statistics indicate that household income in Kamayut is thrice higher than in Hlaingthayar.
  - Statement 3: Therefore, while other factors may exist too, the great poverty in families residing in the Yangon's suburbs generates more school drop-outs.

The argument is:

> Survey research shows that school drop-out is much higher in Hlaingthayar than in Kamayut. National statistics indicate that household income in Kamayut is thrice higher than in Hlaingthayar. Therefore, while other factors may exist too, the great poverty in families residing in the Yangon's suburbs generates more school drop-outs.

- Note that an argument does not have to include three statements; some arguments include more.

Example

- Another example of argument:
- Statement 1: Survey research shows that lack of knowledge in hygiene matters was a major contributing factor in the HIV transmission among the PLHIV.
- Statement 2: Interviews highlighted that the discovery of their blood status undermined their self-esteem and self-confidence, resulting in an aggravated sense of discrimination.
- Statement 3: Therefore, any public health programme addressing the needs of PLHIV should not only focus on hygiene education but also on psychological assistance.

The argument is:

> Survey research shows that lack of knowledge in hygiene matters was a major contributing factor in the HIV transmission among the PLHIV. Interviews highlighted that the discovery of their blood status undermined their self-esteem and self-confidence, resulting in an aggravated sense of discrimination. Therefore, any public health programme addressing the needs of PLHIV should not only focus on hygiene education but also on psychological assistance.

Critical thinking and research

- What all this means is that: We’re constantly evaluating what we read, hear, think, experience and observe.

- We’re always questioning whether the ideas, arguments and findings we're coming across are the whole picture and we're open to finding that they're not. We're identifying, analysing and, where possible, solving problems systematically.

- We're assessing how well ideas, statements, claims, arguments and findings are backed up so that we can make a reasoned judgement about how convincing they are.

Critical thinking and research

Critical thinking will be essential when research work is carried out. Critical thinking will be needed when:

-research questions are formulated;

-literature reviewed;

-research method selected and implemented;

-data analysed;

-report written.

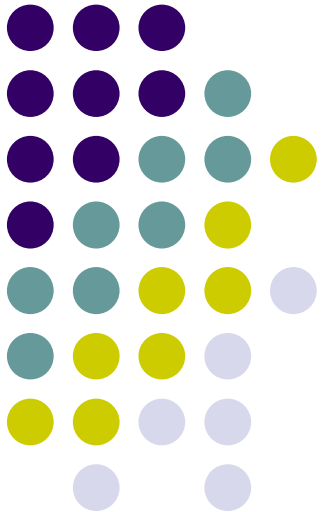
These are all steps of the research process that will be presented in details in the next presentations.

Thank you!

3. Quantitative and Qualitative Research Introduction

Presentation Objectives

- *To advance students/trainees' understanding of the nature of both quantitative and qualitative research*
- *To equip students/trainees with the capacity to apply the tools used in both types of research*
- *To advance students/trainees' interest in using both types of research equally*



Social action research

The first presentation look at how social action research and advocacy were linked and how social action research could help advance the goals of advocacy.

Today, we will present the different ways of conducting social action research.

Ways of doing social action research

Social action research can be done through the three following ways:

-**Exploratory**: rough understanding of the situation under study.

-**Descriptive**: precise measurement and reporting of the characteristics under study.

-**Explanatory**: discovery and reporting of relationships between different aspects of the situation under study.

In many research projects two of these three (and sometimes the three) aspects are combined: for example, the first part of the research can be descriptive, the second part explanatory.

Each of these three ways of doing social action research can carried out either by quantitative research or qualitative research.

Example

A research project examines the citizens' political affiliation in a township of Yangon, this means what political party people in this township support.

Exploratory purpose: in this case, the research will investigate the extent to which residents of a township are politically affiliated, that is what is the percentage of people out of the overall population who identify themselves as politically affiliated.

Descriptive purpose: in this case, the research will examine political affiliation in relation to level of education, that is whether there is link between political affiliation and level of education.

Explanatory purpose: in this case, the research will investigate the people's reasons for supporting specific political parties.

Quantitative and Qualitative Research

- Now, for each of these three ways of conducting social action research, the data produced during the research may emphasize more the qualitative aspect of the issue or problem under study, or a quantitative aspect.

- Research on this issue or problem can therefore be either qualitative or quantitative.

Quantitative Research

Quantitative research is about using statistical analysis to obtain findings. It is focused on measurement.

In this, it usually tries to answer questions about “why” and looks for a comparison of people or groups of people.

It intends to establish an association, a relationship, or a cause and effect between people or groups of people.

Qualitative Research

Qualitative research is about studies that are **not** focused on measurement and are more concerned with interpretation and sorting out meaning.

It tries to answer questions about “how” and “what”.

It is typically more focused on individual cases, interviews, and observations without formal measurement.

Variable

Both types of research will be concerned about collecting information on variables.

A variable is anything that can take on different values.

For example, height, weight, age, race, attitude are variables
because there are different heights, weights, ages, races, attitudes.

It is a logical set of attributes.

By contrast, if something cannot vary, or take on different values, then it is referred to as a constant.

Quantitative researchers work with a few variables and many cases.

Qualitative researchers rely on a few cases and many variables.

Exercise Time

As a variable is a logical set of attributes, please answer the following questions:

- If gender is a variable, what are the attributes?
- If employment status is a variable, what are the attributes?
- A research project investigates the following topic: “Environmental awareness of the educated city-dweller”. What is the variable here?
- A recent research found out that: “the average household income was 100,000 kyats in 2010”. What is the variable?

Exercise Time

The answers to the questions are the following:

- If gender is a variable, what are the attributes? man and woman
- If employment status is a variable, what are the attributes? full-time employed, part-time employed, jobless
- A research project investigates the following topic: “Environmental awareness of the educated city-dweller”. What is the variable here? environmental awareness
- A recent research found out that: “the average household income was 100,000 kyats in 2010”. What is the variable? income

Variable and Attributes

- Very closely related to variable are the attributes: attributes are characteristics and qualities that describe a person, an object, and an abstract thing.

- For *one* variable to be studied, there will be *many* attributes. The research project therefore uses different research methods to study this variable. It investigates this variable in quantitative and qualitative ways with the help of attributes that define this variable.

Exercise time

Variable and Attributes

Below is a list of variables, please identify attributes associated with each of them

Age

Gender

Occupation

Citizenship

Social class

Political views

Exercise time

Variable and Attributes

Below on the right are some possible answers

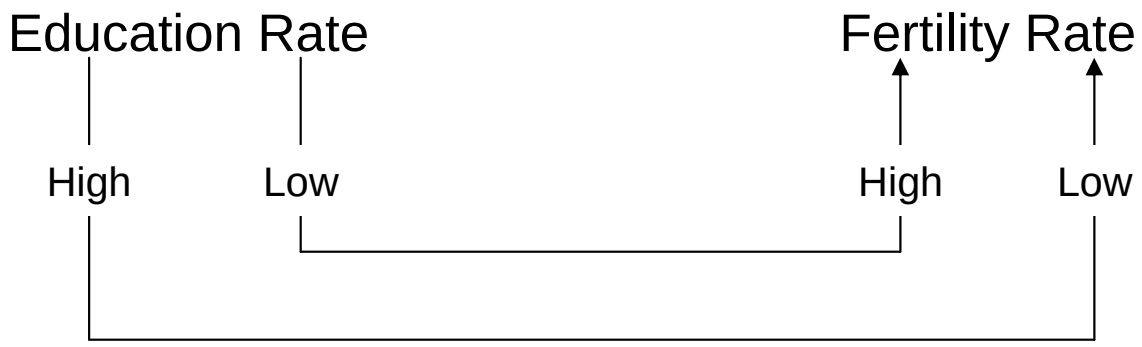
Age	young, middle-aged, old
Gender	male, woman
Occupation	clerck, journalist, ….
Citizenship	Myanmar, Japanese, Swiss
Social class	low-class, middle-class, upper-class
Political views	conservative, non-partisan, liberal

Types of variable

It is very often the case that a research project will investigate more than one variable, usually two variables and their possible association or relationship. Then, the purpose is **explanatory**, this means that the research project tries to clarify how one variable influences the other variable.

Independent variable: A variable that, researchers think, **influences** another variable
Dependent variable: A variable that, researchers think, **is influenced** by another variable

In one specific study, the research findings are as follows:



Independent variable

Dependent variable

Exercise time

In the list below, identify which one is a dependent variable and which one is a independent variable:

Environment awareness and level of education

Household income and computer access

Number of Children in households and success at school exams

Hygiene awareness and urban/rural residence

Exercise time

	Independent variable	Dependent variable
Environment awareness and level of education	level of education	environment awareness
Household income and computer access	household income	computer access
Number of Children in households and success at school exams	number of children	success at exams
Hygiene awareness and urban/rural residence	urban/rural residence	hygiene awareness

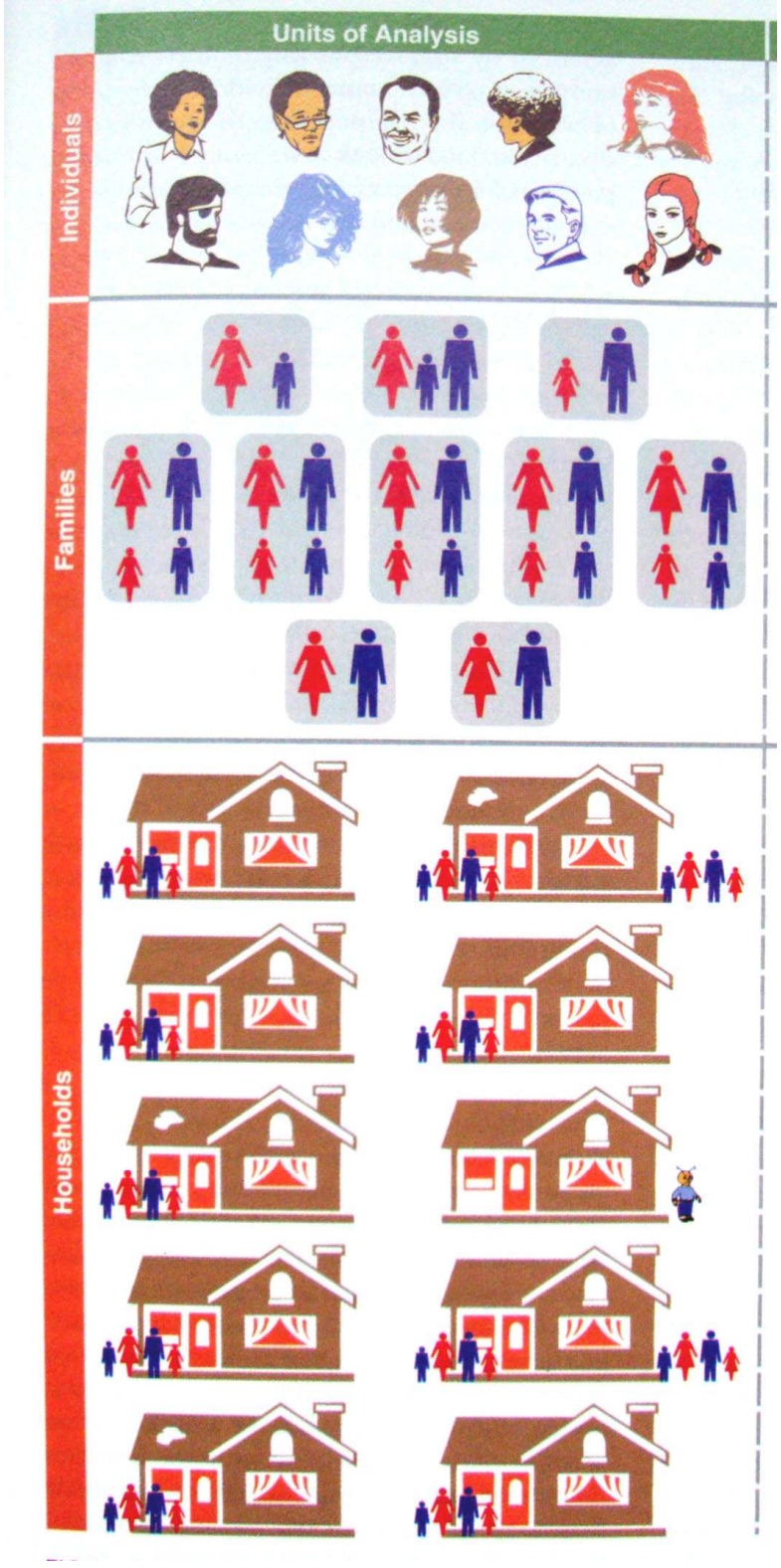
Unit of Analysis

To examine the variables of the research topic that is investigated it is necessary to measure these variables. In order to measure these variables, units of analysis have to be identified.

A unit of analysis is a unit about which information is collected.

The units of analysis are the people or things whose researchers will observe, describe, and explain.

Typically, the unit of analysis in social research is the individual person, but it may be a social group, a formal organization, etc…



Units of Analysis

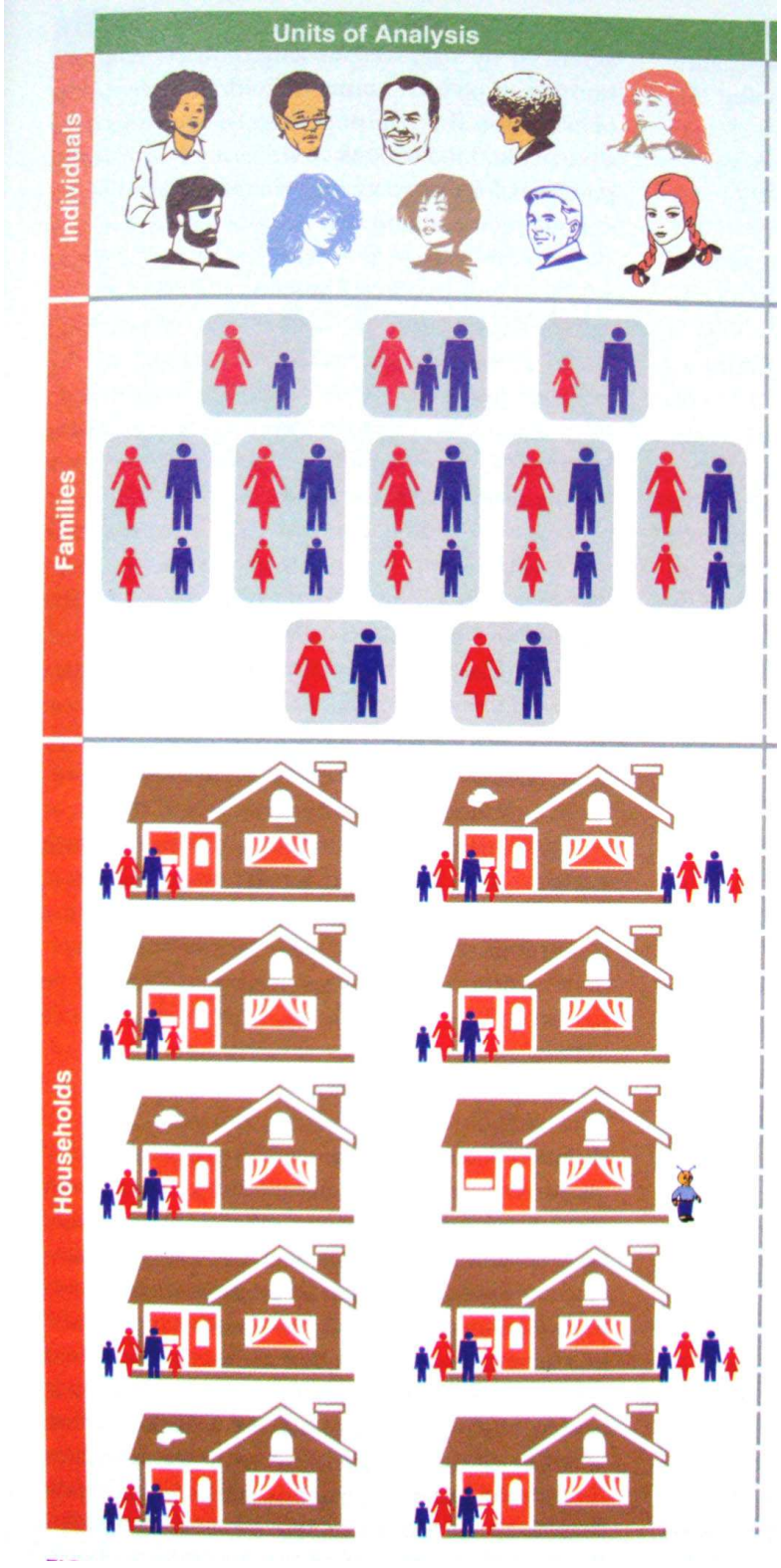
As can be seen on the left, units of analysis can be very diverse:

-individuals;

-families;

-households.

Illustration from: Introduction to Social Research (5th edition), E. Babbie, Wadsworth, 2011, p.77.

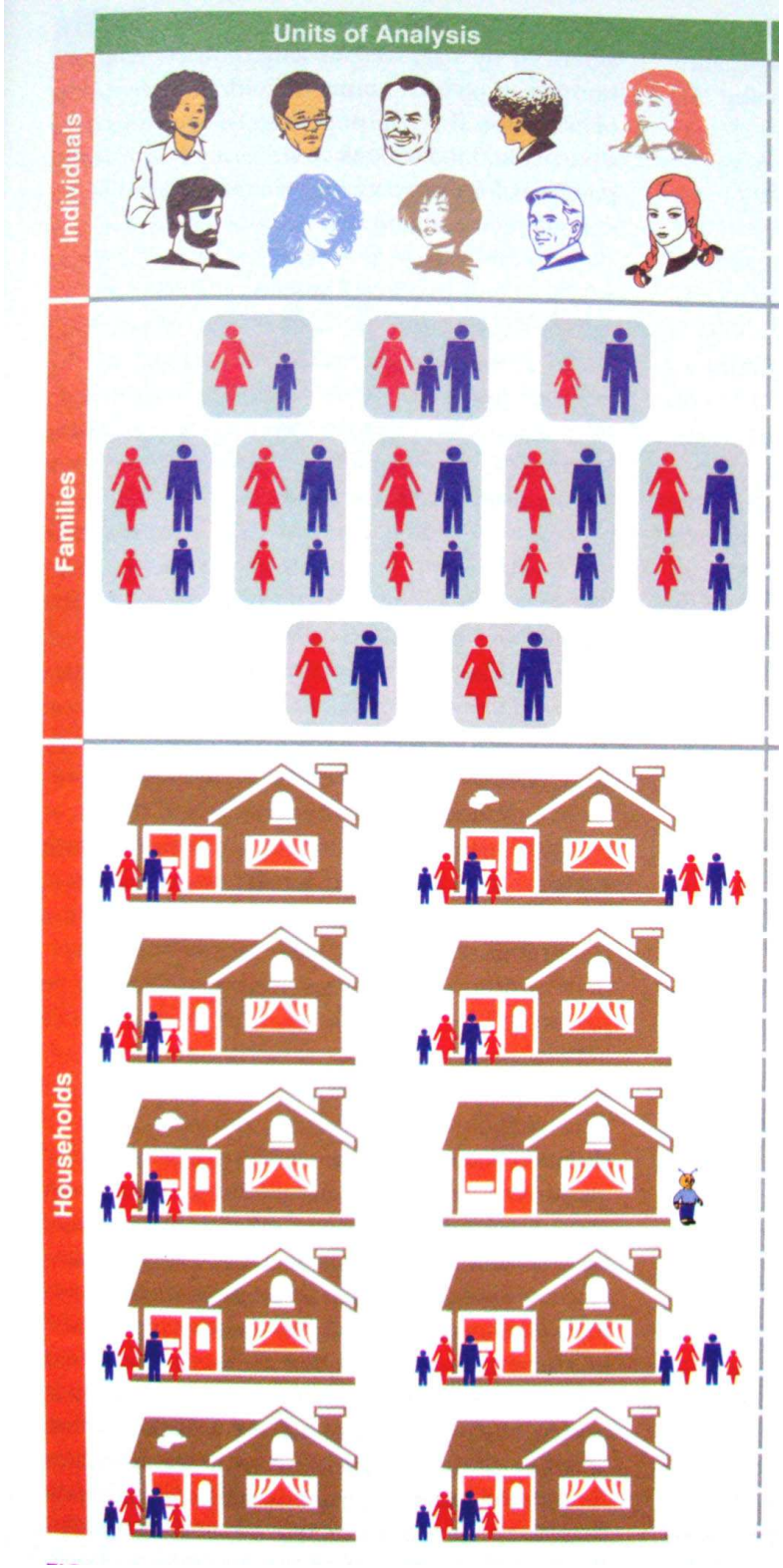


Link each of the topics listed below with the most relevant unit of analysis shown on the left

Number of Children and success at school exams

Household income and access to computer

Environment awareness and level of education



Environment awareness and level of education

Number of Children and success at school exams

Household income and access to computer

Categories

Measuring a variable means creating categories for classifying units of analysis.

There are *two* requirements for creating these categories.

These categories should first be exhaustive: the number of categories has to be large enough to classify every subject in the research.

These categories should be mutually exclusive: every unit of analysis can only fall into one and only one category. This means that the categories can not overlap.

Exhaustive categories

For example, study about political affiliation in Myanmar:

If the research defines only two categories:

1. affiliation with USDP
2. affiliation with NLD

the research findings will not be reliable

If the research defines more categories:

1. affiliation with USDP
2. affiliation with NLD
3. affiliation with NDF
4. affiliation with ethnic parties
5. no affiliation

the research findings will be reliable

Mutually exclusive categories

For example, study about political affiliation in Myanmar:
Age as a major variable: try to find out if and how political affiliation and age are related.

If you create the following categories:

1. below 25 years
2. between 25 and 65 years
3. 65 years old and above

is this mutually exclusive?

NO, because some person 25 years or 65 years old can choose two categories.
For a reliable research, the categories should be:

1. below 25 years
2. between 26 and 65 years
3. 66 years old and above

In conclusion

Quantitative and Qualitative Research are complementary. They also use similar key concepts that will help the research design. The key concepts are the following:

- **Variable**: the topic under investigation is one variable or the combination of two variables that will be measured during the research process.

- **Unit of analysis**: In order to measure this variable or these variables, units of analysis have to be identified. It is from these units of analysis that information will be collected so as to measure the variable(s)

- **Attributes and Categories**: Attributes are usually characteristics associated with the variable(s) under investigation. Categories are created to help measure the variable when attributes do not exist.

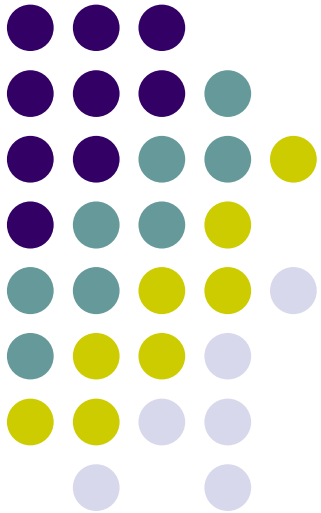
- To ensure validity in the measurement of the variable, the categories created have to be exhaustive and mutually exclusive.

Thank you!

4. Research Design

Presentation Objectives

- *To introduce students/trainees to the wide variety of research designs available*
- *To further students/trainees' ability to specify who or what is to be studied when, how, and for what purpose*
- *To develop students/trainees' capacity to structure a research proposal*



Choosing a Research Topic

- The selection of a research question is often the result of many factors.
- Among these factors, there are personal interests, experiences, values, and passions.
- There is also the wish to satisfy one’s curiosity, to question work(s) previously written on a related topic, and to address topics that relate to the current political, economic, and social climates. In this, critical thinking will be crucial for starting the research.
- In social action research, the selection of the research topic will be mostly driven by the problems you identify and by your NGOs/CBOs/network’s activities.

Formulating a Research Question

In formulating a research question the most important thing is to avoid confusion and to indicate clearly what is being studied.

The research question should clearly identify the variables that will be studied. And the terms and concepts included in the research question should be clarified.

For example, a research topic about ‘unemployment among young people’ is very vague. The two variables ‘young people’ (independent variable) and ‘unemployment (dependent variable) have to be precisely defined:

What age limit will be put for ‘young people’? Where will these ‘young people’ surveyed?

Also regarding the ‘unemployment’ variable:
Are these people not employed in a company, government service, or at a farm?
Or are these people who do not have any kind of income-generating activities?
Or are people who are not registered or do not have legal activity defined as unemployed people?
These are all details that you need to define.

Research design in relation to time

- Three types of research design in relation to time:

- A ***cross-sectional study*** collects observations representing a single point in time. Cross-sectional studies often have large samples and usually have data that can be used for statistical analyses.

- A ***longitudinal study*** is about data collected at different points in time. The longitudinal study allows to see how changes occur through time.

- A ***case study*** is about studying one case (an individual, a group, an organisation) within its social context at one point in time, even if that one time spans months or years.

Exercise time

Consider the three research topics on the left and decide which type of research they relate to.

- A study of political affiliation in Hlaing Township, Yangon.

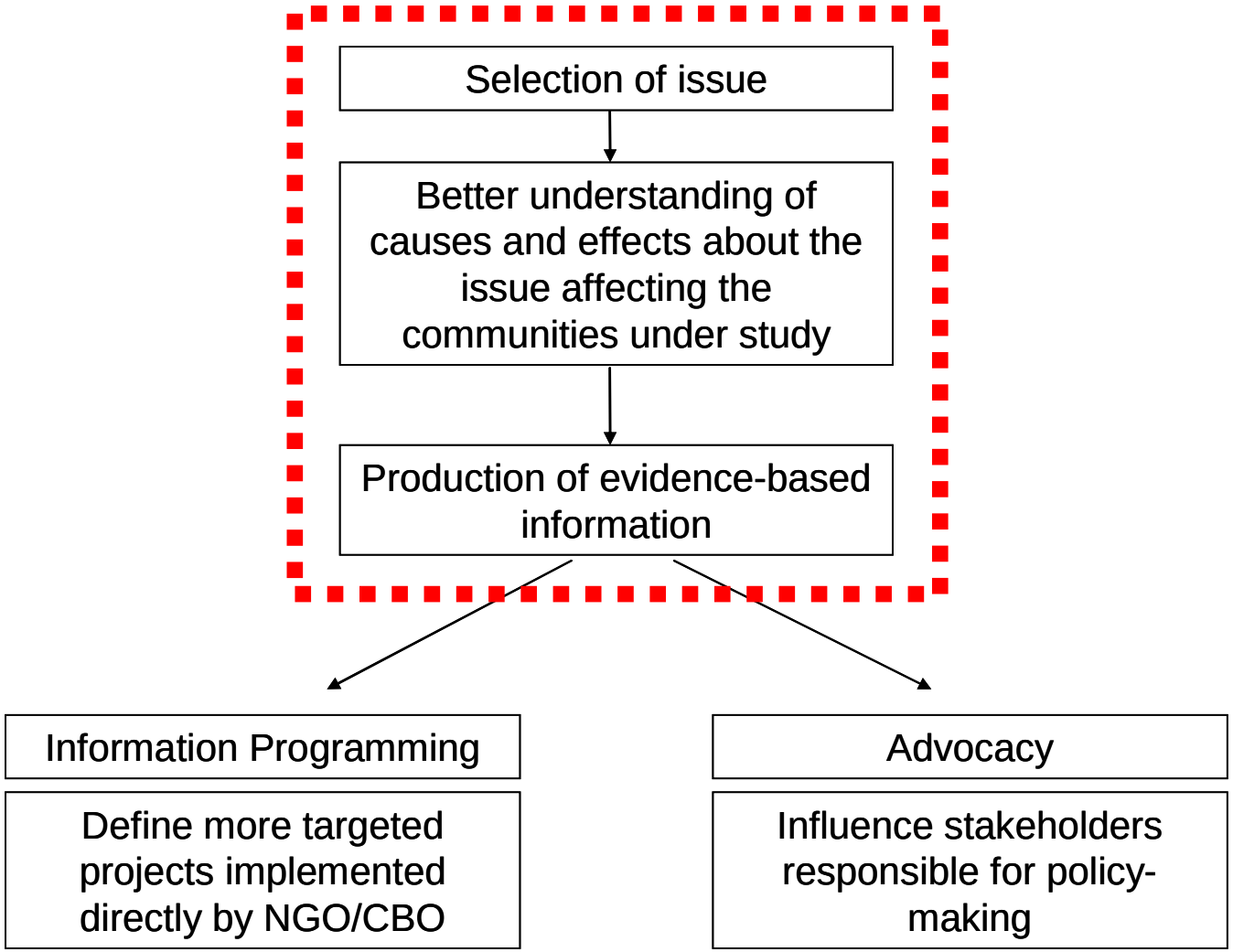
- A study of political affiliation in Yangon after the April 2012 elections.

- A study of people's political affiliation from the 2008 vote on the constitution up to the 2012 April elections in Yangon.

Exercise time

- A study of political affiliation in Hlaing Township, Yangon. **Case study**
- A study of political affiliation in Yangon after the April 2012 elections. **Cross-sectional study**
- A study of people's affiliation from the 2008 vote on the constitution up to the 2012 April elections in Yangon. **Longitudinal study**

Social action research: process



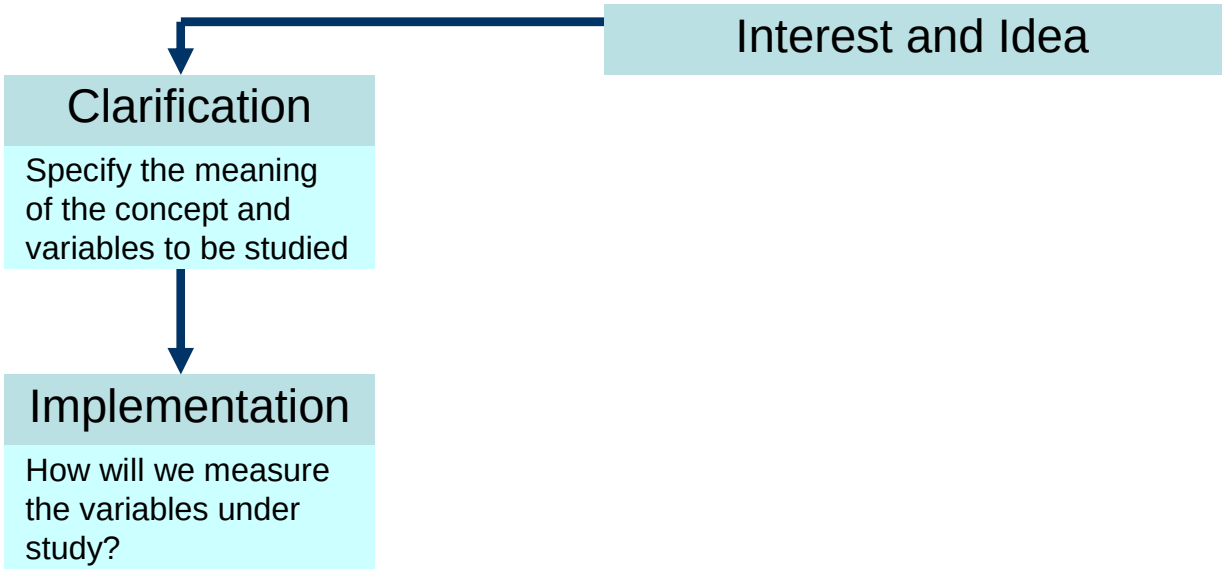
Today, we will look at the different steps included in the red rectangle

Research Process

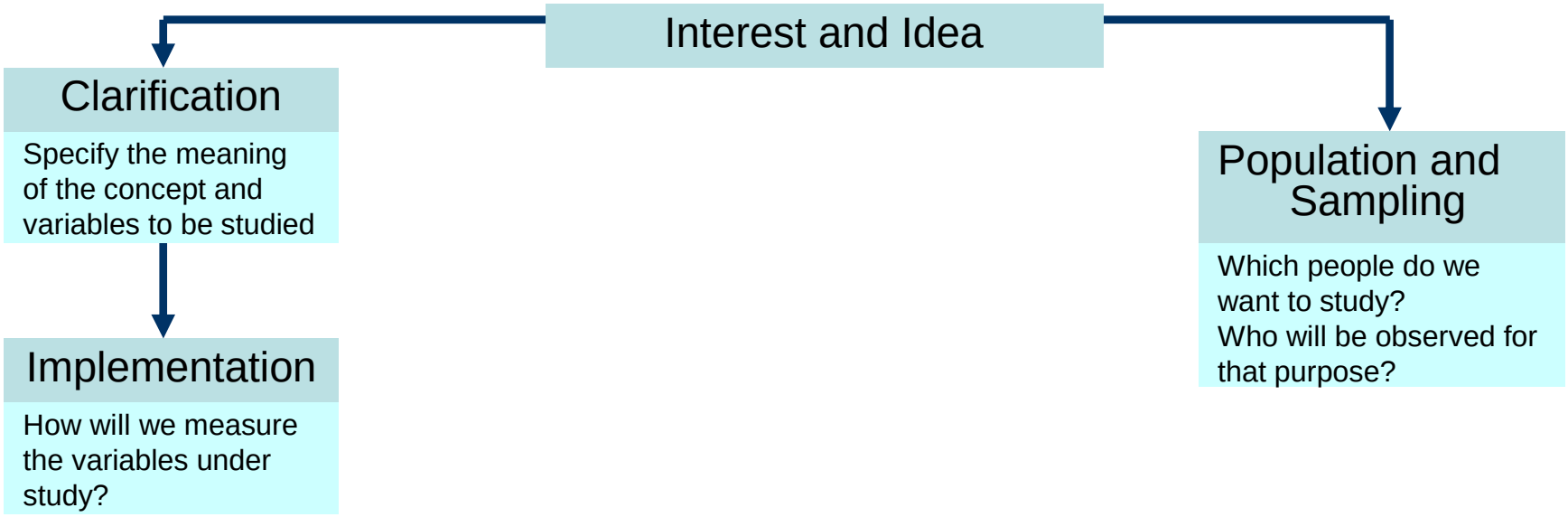
Interest and Idea

Research Process

Research Process

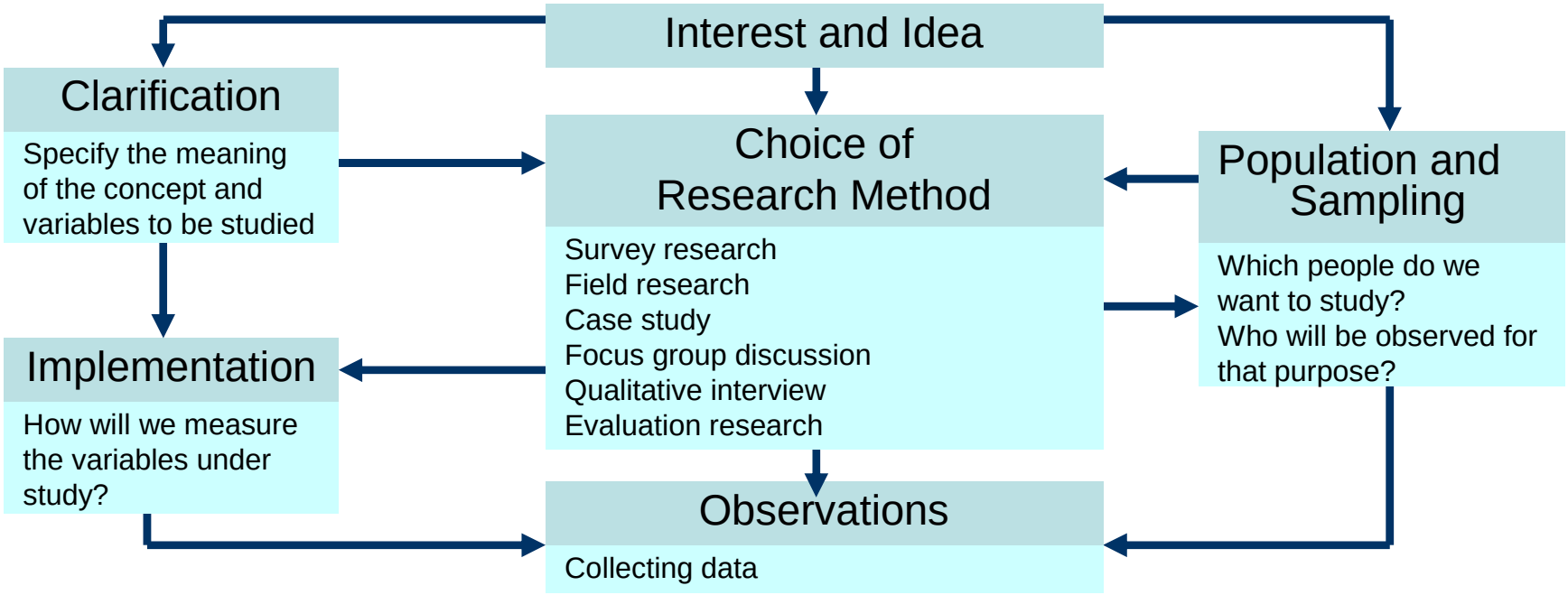


Research Process

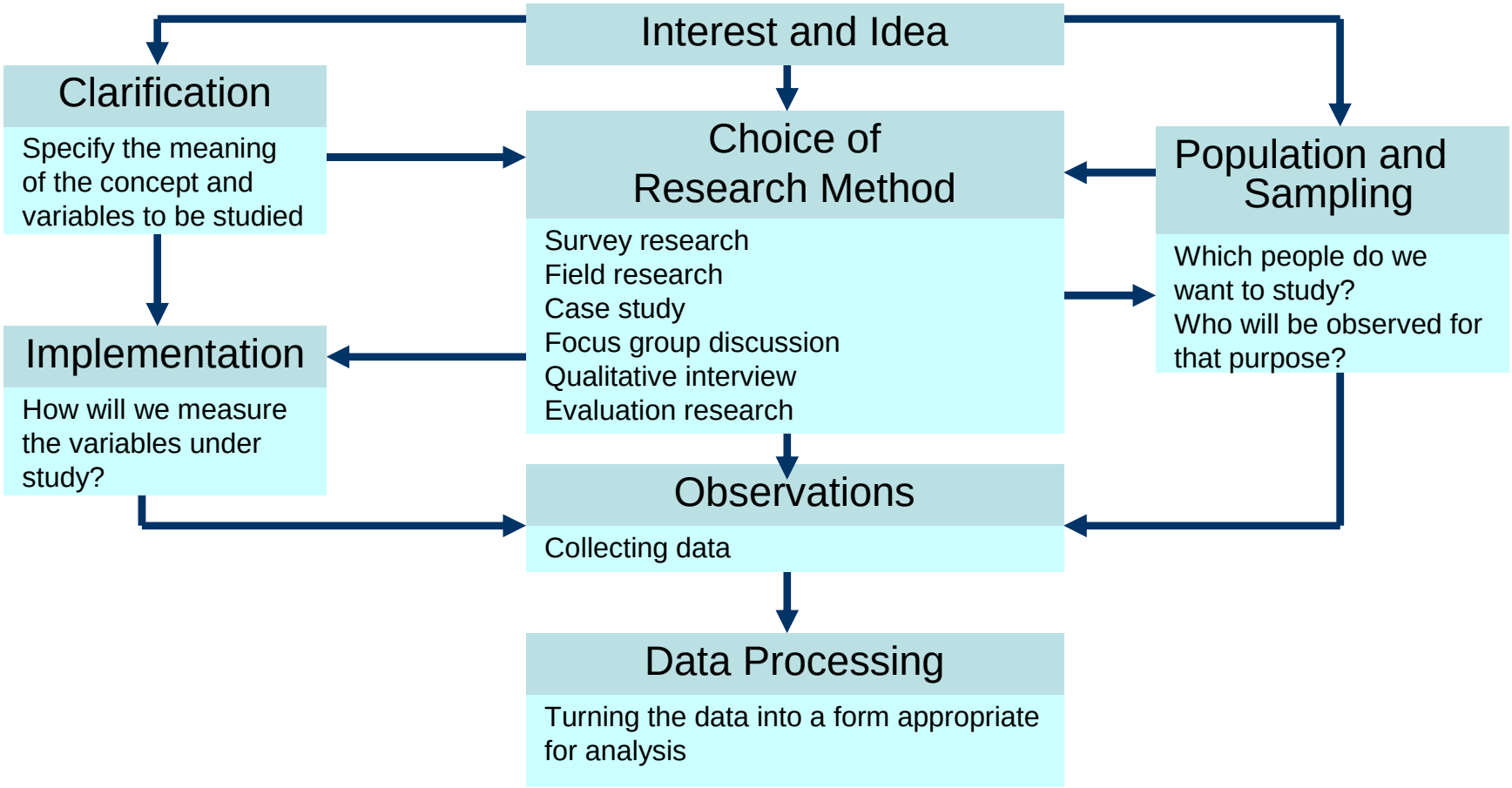


Research Process

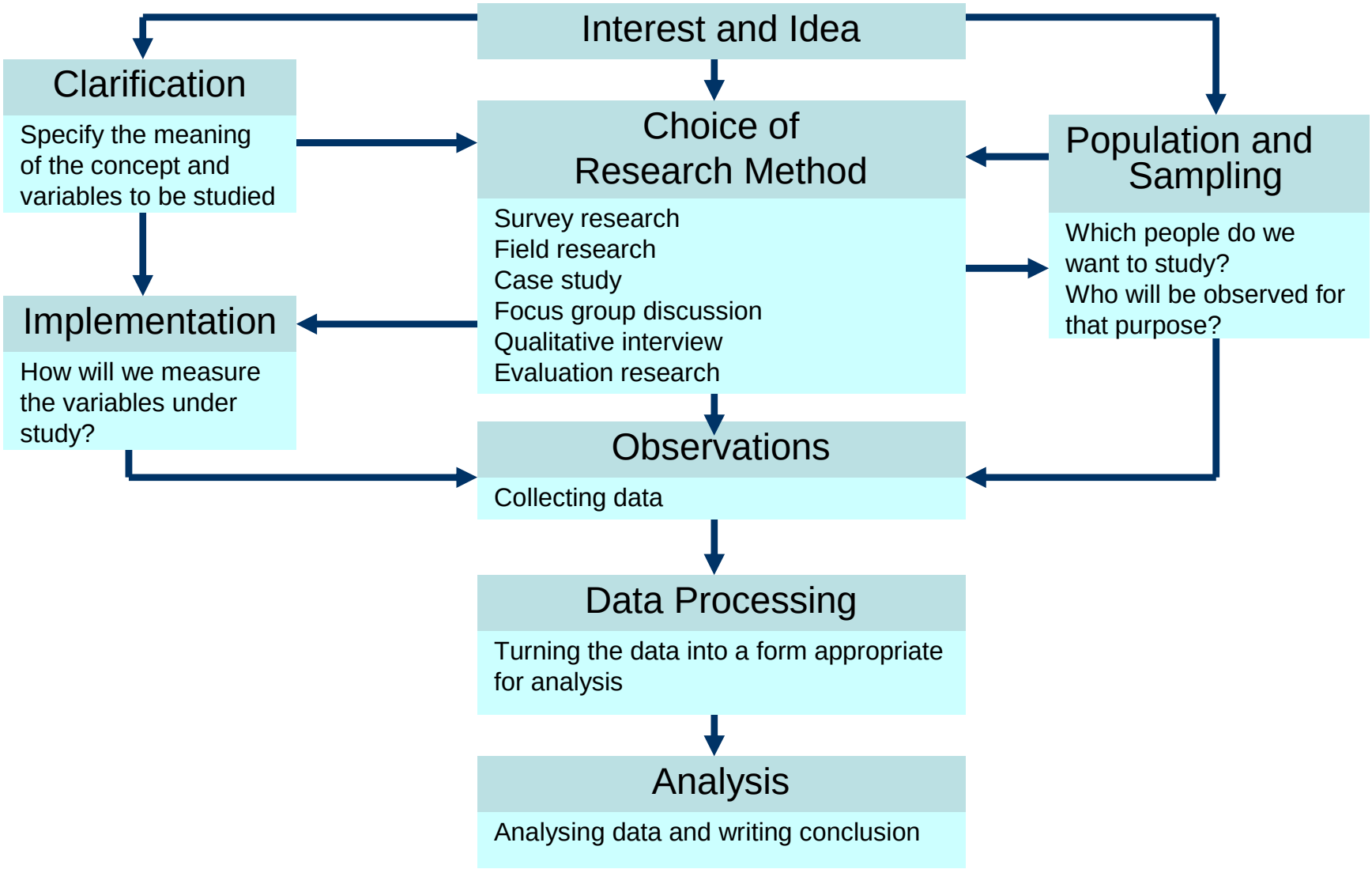
Research Process



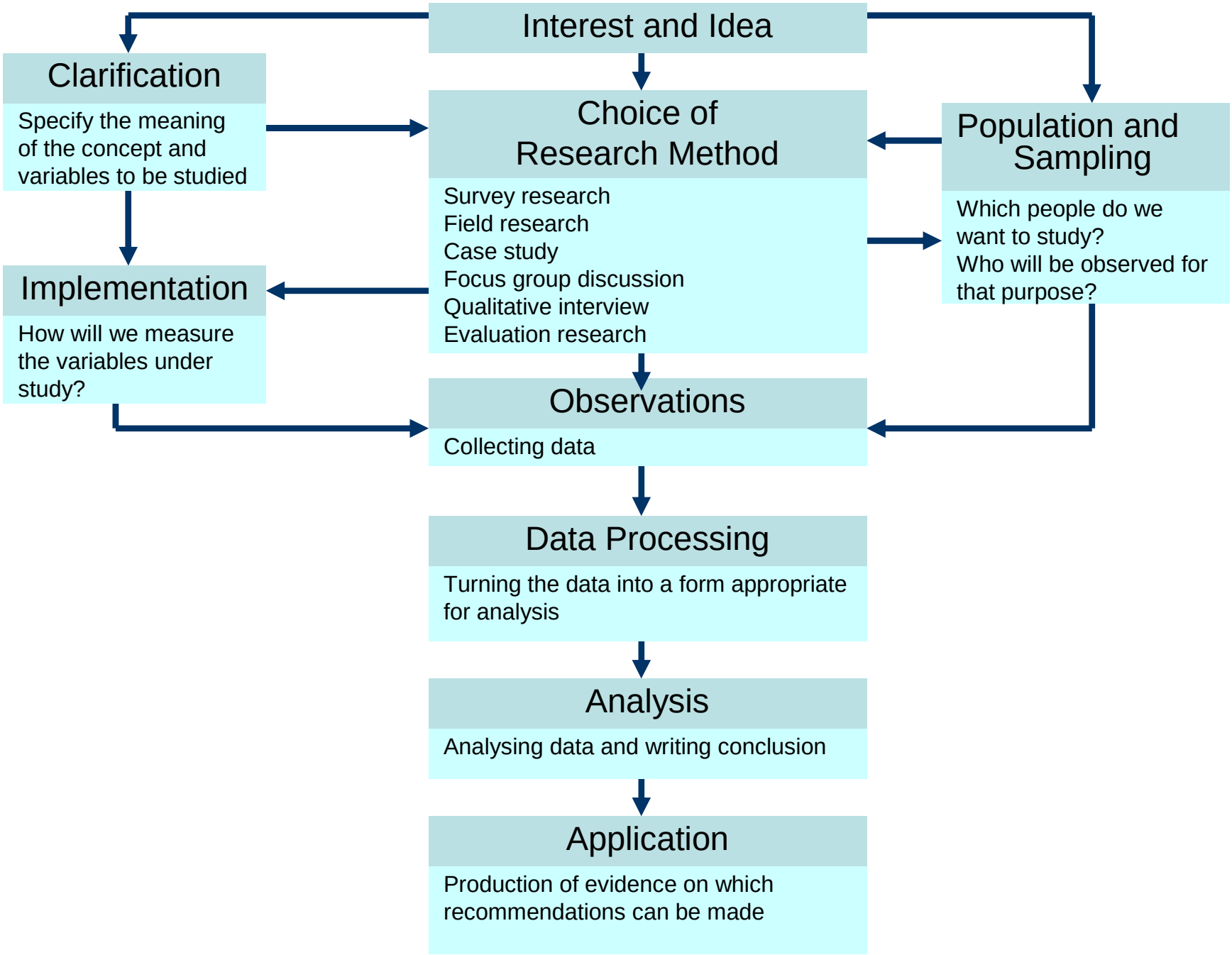
Research Process

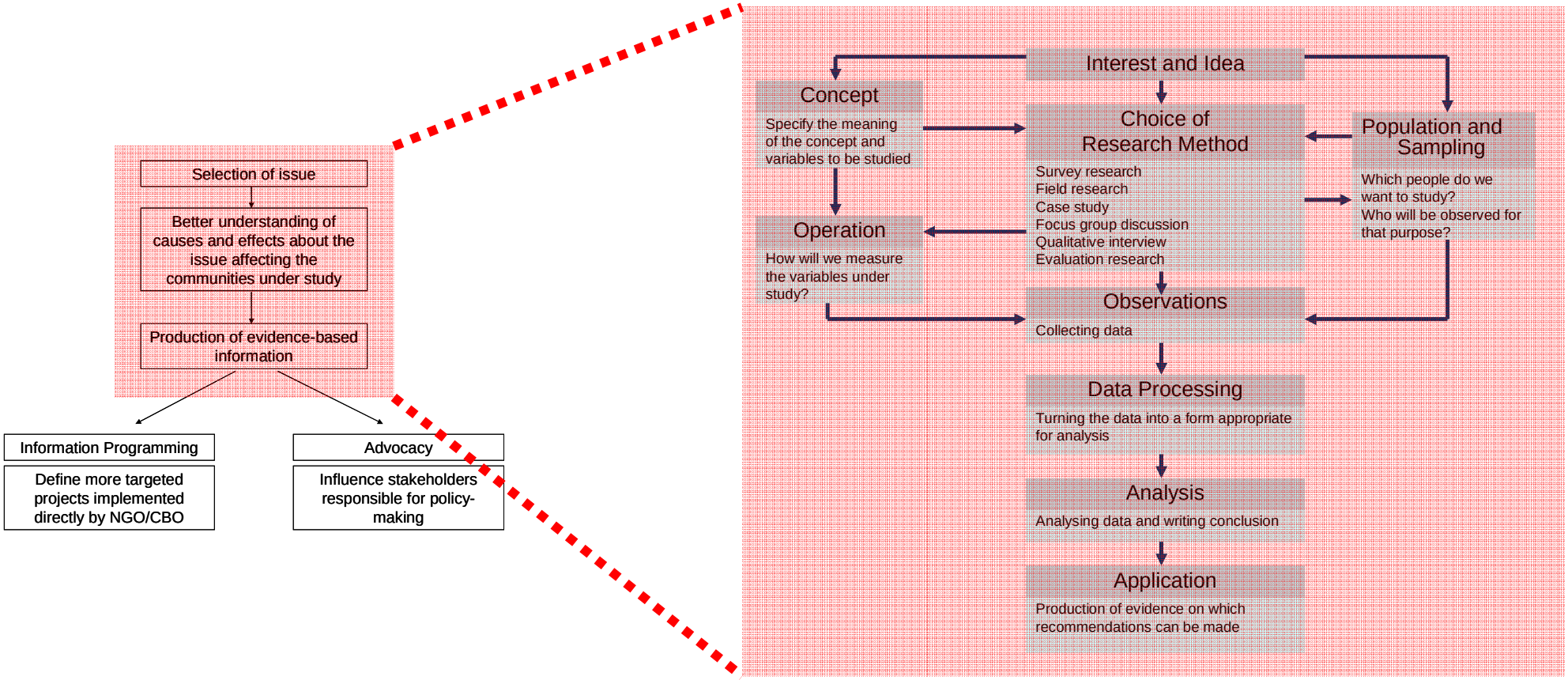


Research Process



Research Process





As detailed in the previous slides, the diagram on the right shows the different steps in the design of a research design: from the selection of the topic to the production of evidence-based research.

Limits to Research

- At the beginning of any research project, you will need to identify the limits of the project:

- Time limit;

- Geographic limit: if you choose one area for study, you have to ask why only this one;

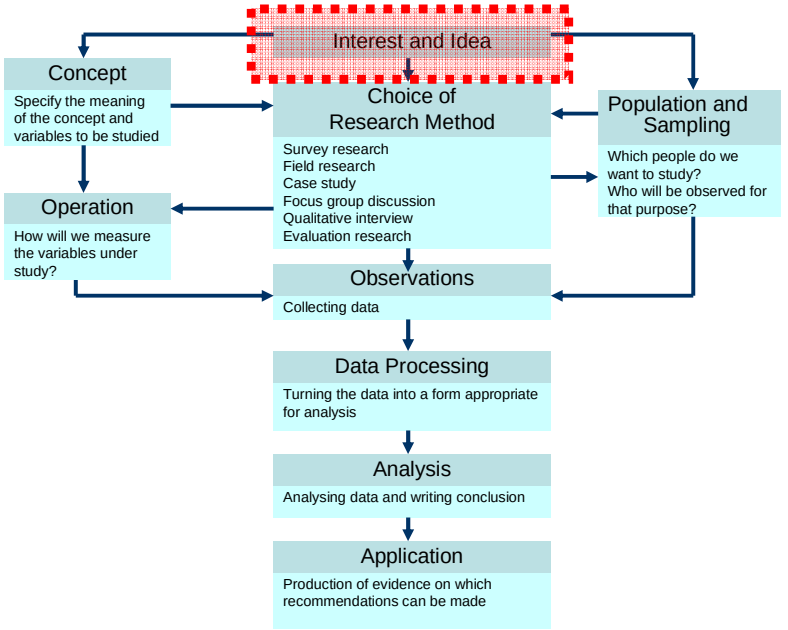
- Resources available (human resources, data already available in some reports but which needs to be updated, data existing but not available to you, …);

- When writing your research report, you will need to list all these limits clearly at the beginning of your report.

- Other limits to research will be mentioned in the report but only when the research has been conducted. For example, whether people that you studied collaborated well with you when collecting data; or whether some people were not very helpful will have to explained.

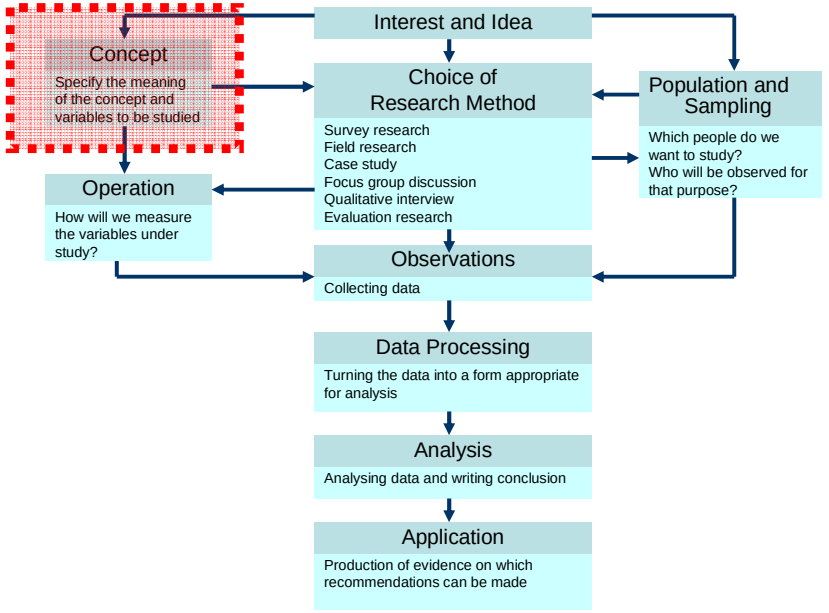
Exercise time

- Interest in ‘Environmental awareness among young people’



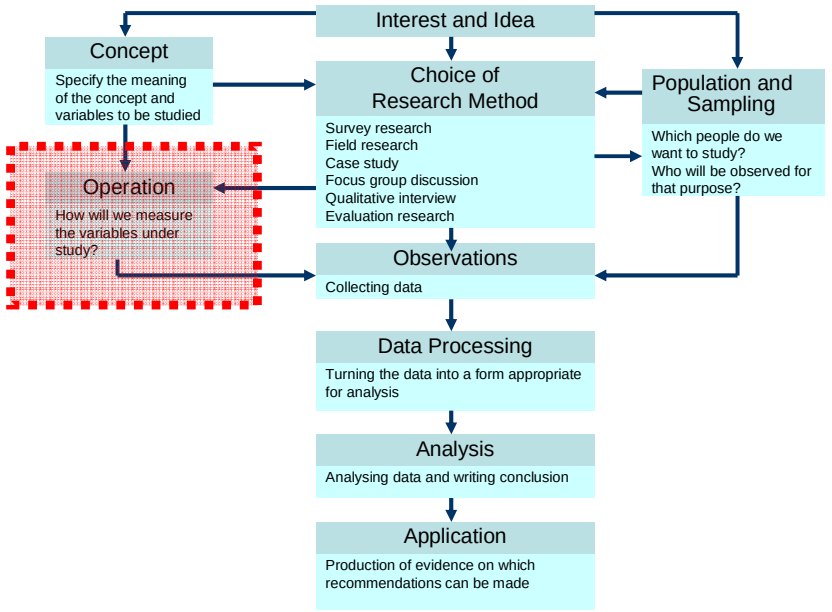
Exercise time

- Study about ‘Environmental awareness among young people’
- How will you define the concept of ‘environmental awareness?



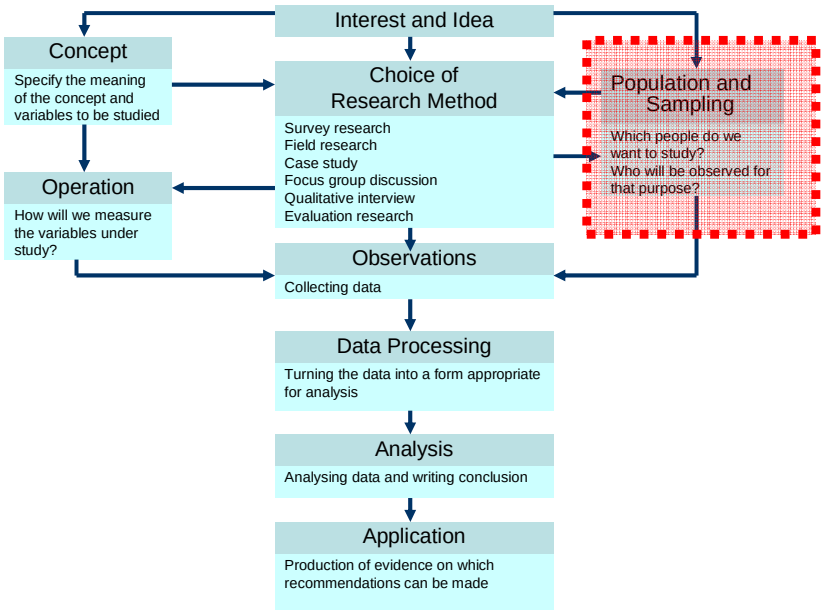
Exercise time

- Study about ‘Environmental awareness among young people’
- How will you measure the ‘environmental awareness’ variable?



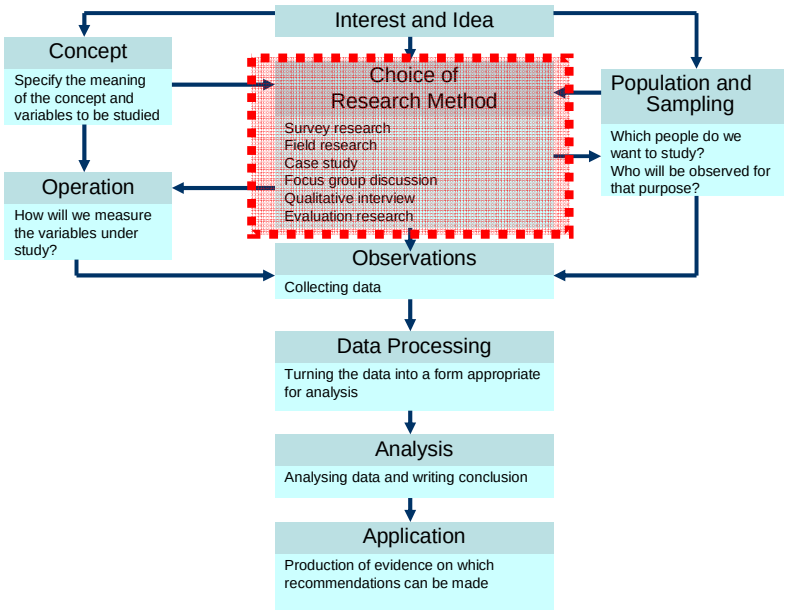
Exercise time

- Study about ‘Environmental awareness among young people’
- Which ‘young people’ will be studied? what criteria will you take into account?



Exercise time

- Study about ‘Environmental awareness among young people’
- Which research methods will you choose?



Research Proposal

A research proposal should include the following elements:

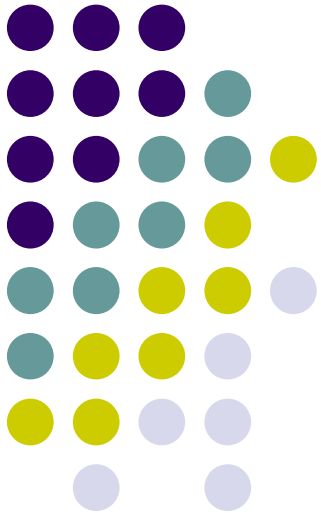
- ***Problem or objective***: What exactly do you want to study? Why is worth studying? Does the proposed study have practical significance?
- ***Literature review***: What previous research exists? Are there consistent findings, or do past studies disagree?
- ***Subjects for study***: Whom and what will you study in order to collect data? Identify the subjects in general terms; Will it be appropriate to select a sample?
- ***Measurement***: What are the key variables in your study? How will you define and measure them?
- ***Data-collection methods***: How will you actually collect the data for your study?
- ***Analysis***: Indicate the kind of analysis you plan to conduct.
- ***Schedule***: Providing a schedule for the various stages of research is often appropriate. Even if you don't do this for the proposal, do it for yourself.

Thank you!

5. Social Measurement

Presentation Objectives

- *To develop students/trainees' understanding that concepts and ideas can be measured, and that conceptualization is an important part of the research formulation process*
- *To introduce students/trainees to the various types of measurement available in social research*
- *To emphasise the importance of reliability and validity in research design*



Definition and Process

- Social measurement is a key activity of social research. Social measurement is a careful observation of the real world. The purpose of social measurement is to describe objects and events in terms of the attributes composing a variable or categories

- Social measurement is a two-step process:

  - **Clarification**: process through which the imprecise variables under investigation are made more specific and precise; in short, the variables are precisely defined.

  - **Implementation**: development of research procedures that will explain how the variable(s) under study will be measured; in short, what research methods are used and what categories are created to conduct the research on the variable(s).

What can be measured?

There are three things that can be measured in social science:

1) Things that are directly observable: like physical characteristics (sex, height, skin color) of a person being observed or interviewed.

2) Things that are not directly observable: characteristics of a person as indicated by answers given in a self-administered questionnaire.

3) Concepts that are neither directly or indirectly observable: abstract ideas that are shared by you, me, and all other people.

Example: Political affiliation

Suppose that ‘political affiliation’ is a variable under investigation.

Clarification: the variable ‘political affiliation’ can be clarified along the following:

- political affiliation is about which political ideas people like;
- political affiliation is about which party people feel close to based on these political ideas;
- political affiliation is about people’s willingness to defend and promote these ideas.

Implementation: the variable ‘political affiliation’ can be measured based on the following categories:

- membership to one specific party;
- participation in meetings organized by these parties;
- vote for one specific party;
- support or opposition to laws or decrees supported by one specific party.

The research will seek to produce analysis and findings based on the information given by individuals about ‘political affiliation’ and its different dimensions.

Another example: Religious adherence

Suppose that the ‘level or degree of religious adherence’ is the variable under study: this means how much someone adheres to religious beliefs and the principles incarnated by religious communities.

- **Clarification**: the variable ‘political adherence’ can be clarified along the following:

- religious adherence can be about the level of knowledge of religious texts (for ex. Tipitaka)
- religious adherence can be about beliefs in religious rituals;
- religious adherence can be also about accepting or refusing the mixing of various types of cults: nat spirit mixed or not with Buddhism.

- **Implementation**: the variable ‘religious adherence’ can be measured along the following categories:

- how often someone goes to the pagoda, mosque, or Hindu temple;
- how often someone is involved with religious activities and religious associations;
- how many religious books someone has read.

Exercise time

Measurement steps	Example: Social class
Clarification	What are the different dimensions of the concept of ‘social class’?
Implementation	How will these different dimensions be measured?
Measurement	What research methods will be used to measure these different dimensions?

Exercise time

Measurement steps

Clarification

Implementation

Measurement

Example: Social class

What are the different dimensions of the concept of ‘social class’?

1. Income
2. Educational attainment

‘Social class’ can be defined as representing economic differences (specifically: income) and differences in educational levels.

Research methods will include a survey research with questions like: what was your annual income last year? What highest degree do you hold?

Level of Measurement

Defining categories that are exhaustive and mutually exclusive helps calculate level of measurement for a variable.

- The lowest level of measurement is the nominal measure:
- ***nominal level variables*** are variables whose categories have names or labels.

- For example: sex is a nominal variable with only two attributes: woman/man.

- Hair color is another nominal variable with the following attributes: brown, blonde, red, black.

- Birthplace is another nominal variable which can be measured by creating the following categories: born in Yangon, born in Mandalay, born elsewhere.

Level of Measurement

- A second level of measurement is the ordinal measure:
- ***ordinal level variables*** are variables whose categories have names or labels, *and* whose categories can be rank-ordered.
- Rank-ordering means classifying with the following terms: “ very”, “moderately”, “hardly”, or “high”, “middle”, “low”.
- For example: affiliation to a Myanmar political party can be high, moderate, or low.
- So categories like ‘high’, ‘moderate’, or ‘low’ can be created to measure political affiliation.

Level of Measurement

- The third important level of measurement is the interval measure:

- ***interval level variables*** are variables whose categories have names or labels, and whose categories can be rank-ordered, *and* whose adjacent categories are a standard distance from one another.

- For example: measurement of age group can be made along the following categories: 0-20 years, 21-40 years, 41-60 years, etc….

Quality of measurement

Besides precision and accuracy, criteria that define the quality of measurement are the following ones: ***validity*** and ***reliability***.

Quality of measurement: **validity**

Validity means how well the measurement procedures meet what the research intends to measure.

In other words, validity is the degree to which a measurement adequately reflects the meaning of the concept under study.

Example of **validity**

Suppose we study working conditions in Yangon's factories and workers' satisfactions with their work.

One suggestion could be to measure workers' satisfaction by finding out whether workers are on time for their job.

Another suggestion could be to measure workers' satisfaction by finding out whether they make jokes among themselves, whether workers' relationships with their supervisor are good.

Which way of conducting the research is the most valid?

Quality of measurement: **Reliability**

Reliability means how appropriate is a particular measurement applied repeatedly to the object of study and whether the repetition of this measurement for measuring the object of study leads to consistent results;

In other words, reliability is the degree to which a measurement makes possible consistent results.

Example of **reliability**

Regarding the study of workers at Yangon's factories and satisfaction with their working condition:

One way to assess their satisfaction would be to go and observe workers at the factories and check whether they seem to be satisfied, whether they make jokes among each other, whether the relationships between the workers and their supervisor seem to be good;

Another way would to count the number of complaints and the number of strikes that workers have organized for protesting against their working conditions.

Which way of conducting research is the most reliable in this case?

Validity and Reliability

So the best research will be based on both ***reliable and valid*** measurements.

Regarding working condition at Yangon's factories and workers'satisfaction with their work:

- observing and talking to the workers;
- and counting the number of complaints or strikes

will provide a reliable and valid measurement of workers' satisfaction

`

In Conclusion

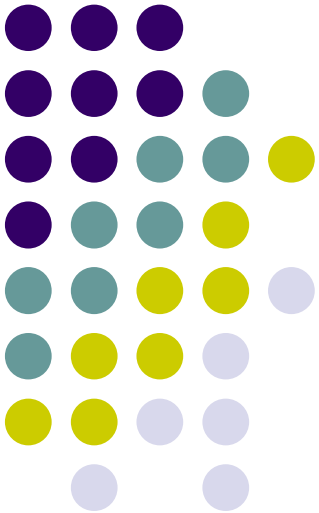
- The research topic has to be clarified, i.e. explained in the various dimensions investigated.
- The research topic has to be defined as a variable that can be measured through categories.
- Variables can fall into three types:
  - **nominal level variable** (with categories as names only);
  - **ordinal level variables** (with categories that can be ordered through different values);
  - **interval level variables**
- Measurements made of the variable(s) have to be both valid and reliable:
  - **valid** measurements mean that what is measured adequately reflects the dimensions of the variable(s) under study;
  - **reliable** measurements mean that what is measured will result in consistent findings.

Thank you!

6. Sampling

Presentation Objectives

- *To further students/trainees' understanding of the meaning of 'samples'*
- *To strengthen students/trainees' capacity to use appropriate methods of non-probability sampling*
- *To introduce students/trainees to methods of probability sampling*



Sampling

- Sampling is a research technique.
- It is a means to an end, which means that sampling helps produce research findings.
- Sampling is about the proper way to select a few people for study and discover things about them that apply to a large population which can not be studied as a whole.
- In other words, it is about learning something about a large population without having to study every member of this population.
- Understanding the logic of sampling is essential to doing social research.

Purpose of sampling

- The purpose of sampling is to ensure that the findings produced by the research on the number of people surveyed accurately represent the population of the area investigated.

- The purpose of sampling is also to allow general statements valid for the entire population considered in the study from the group of people sampled.

Sampling and informant

- Choosing a sampling technique for a research project means that the project will rely on informants.
- An informant is someone who is well versed in the social issue under study and who is willing to tell what she/he knows about it.

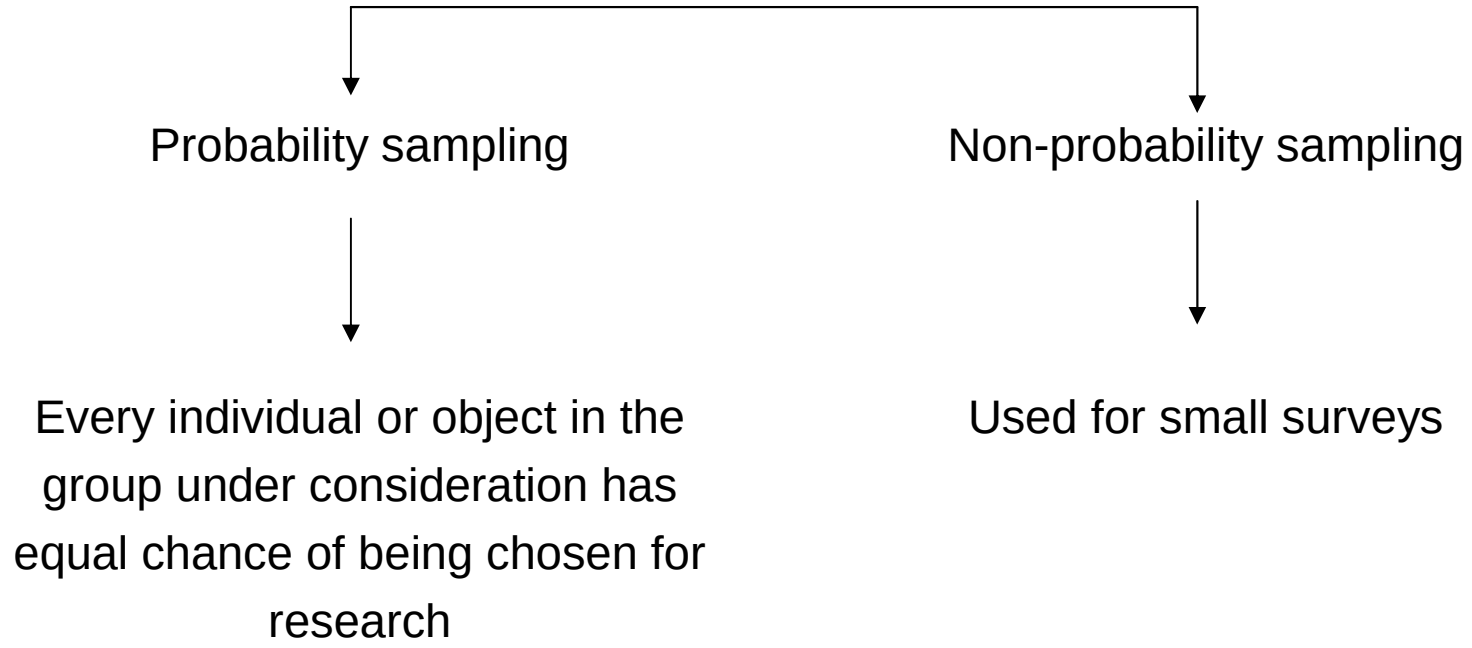
Representative sample

- A representative sample is a sample which has all the important characteristics of the population from which it is drawn. It needs to recruit enough subjects to meet the sample size requirement.

- In theory, the representative sample is what the research strives to achieve. This is the **ideal** type of sampling. In practice, this is very rare to achieve. Especially in Myanmar, where existing data on individuals and groups of people is very scarce.

Type of sampling

While ‘representative sample’ is the theoretical sampling technique, in practice there are two types of sampling.



Non-Probability sampling

Non-probability sampling is the easiest sampling technique for low-cost, staff-limited research projects.

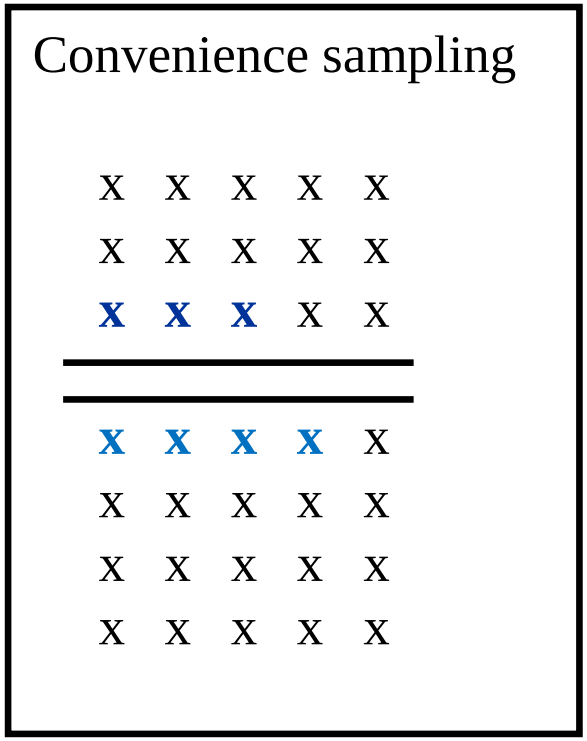
Non-probability samplings are also useful for qualitative research.

There are four types of non-probability sampling:

- Convenience sampling
- Purposive/Judgmental sampling
- Snowball sampling
- Quota sampling

Convenience sampling

- Sampling those most convenient method in which for convenience sake the study units that happen to be available at the time of data collection are selected in sample
- not frequently used in social research;
- used in a clinic-based studies;
- e.g., patients in a waiting room.



Example of convenience sampling

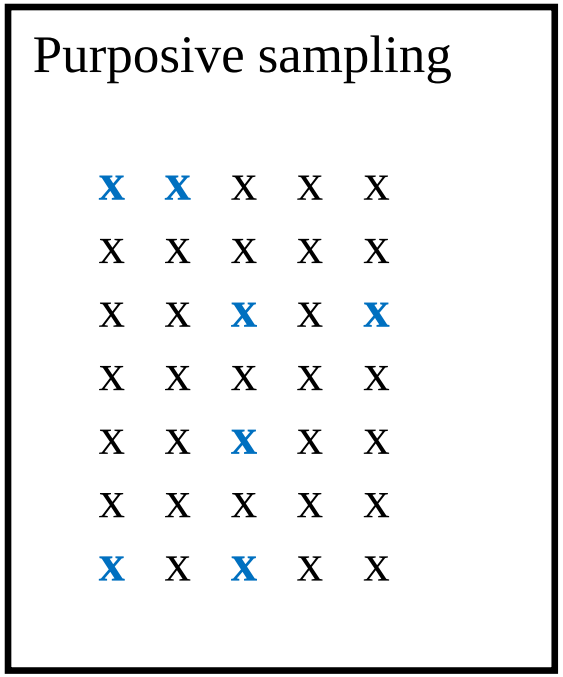
- Suppose that the topic of a research project is about patients' views of the sanitation situation in Yangon public hospitals.

- The researcher will visit several of Yangon public hospitals and pick up as many patients as needed for the research.

- Some patients surveyed will be in a severe health condition; some others surveyed will not be in a severe condition. This convenience sampling will build randomly on the group of patients with various conditions to study their views on the sanitation situation of the hospitals under consideration.

Purposive sampling

- hand-picking supposedly typical or interesting cases;
- based on the researcher's judgment about which element will facilitate the research;
- In-Depth Interview (IDI), Key Informant Interview (KII);
- used very frequently in qualitative research;



Example of purposive sampling

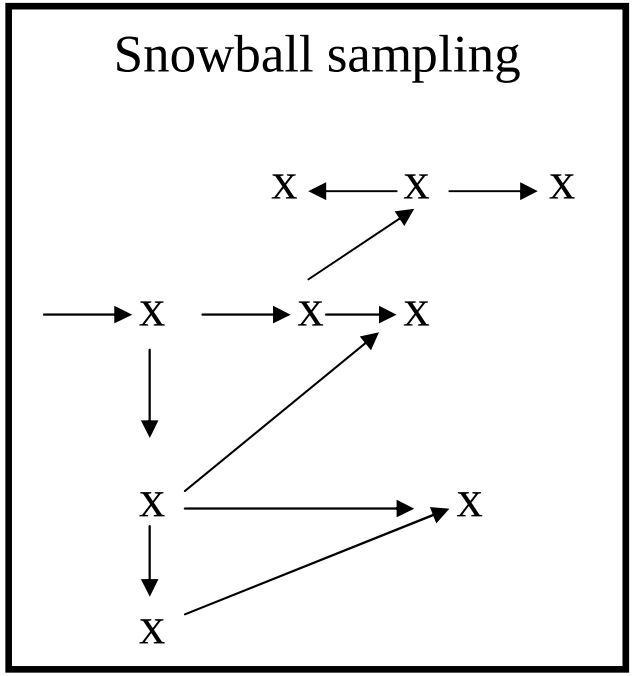
- Suppose that the topic of a research project is about successful young people aged 18-26 who have created their business or companies without the help of their parents or family relations.

- The researcher will identify a sample of young people meeting these criteria through various channels: s/he will ask around her/him for recommendations, read newspapers about successful business ventures and their owners, go the UMFCCI, etc….

- This way, the researcher will be able to build a sample of successful young individuals aged 18-26 and conduct research on the reasons that led to become successful.

Snowball sampling

- sample of persons built up through information collected while conducting research;
- useful when need to locate key informants/critical cases;
- used when population listing is unavailable;
- rely on previously identified members of a group to identify other members;
- start with one or two information rich key informants;
- used frequently in qualitative research and field research.



Example of snowball sampling

- Suppose that the topic addressed by a research project is about PLHIV widows, i.e. women who lost their husband to HIV infection.

- As data about PLHIV widows are not existing, the researcher will have to ask first around her/him whether people know PLHIV widows.

- For a first contact with 1 PLHIV widow, s/he will probably get to know more PLHIV widows and therefore be able to build the sample of informants for the research project.

Quota sampling

- close to convenience sampling but limited to groups of population;
- individuals selected based on the proportion of sub-groups needed to represent their proportion in the population considered;
- has to be used with great caution in social research

Example of quota sampling

- Suppose the topic addressed by a research project is about the reasons for youth unemployment in Hlaing township, Yangon. Suppose that youth unemployment is at 22% of the class of people aged 16-25 in Hlaing township.

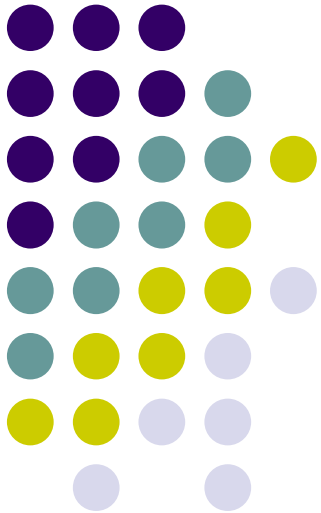
- Selecting the quota sampling method for the research project will result in surveying 7 individuals who are unemployed out of 30 individuals aged between 16-25 (i.e. the same percentage as available from the statistics related to Hlaing township.

Thank you!

7. Survey Research Part 1

Presentation Objectives

- *To increase students/trainees' capacity to use survey research for collecting data.*
- *To develop students/trainees' understanding of the steps in formulating survey questionnaires*
- *To increase students/trainees' knowledge of the best ways to conduct survey interviews*



What is ‘survey research’?

- Surveys are studies in which the same data are collected through either questionnaires or interviews from a sample of individuals serving as *respondents* or *informants.* These data are then analyzed statistically.

- Some surveys describe what people say they think and do. Other surveys attempt to find relationships between the characteristics of the respondents and their reported behaviours.

- Surveys can be classified in many ways. One dimension is by **size** and **type of sample**. Surveys also can be used to study either **human or non-human populations** (e.g., animate or inanimate objects -- animals, soils, housing, etc.).

- In the present context of this training module, most of the surveys considered will be about human populations.

What is ‘survey research’?

- A survey can be anything from a short paper-and-pencil feedback form to an intensive one-on-one in-depth interview; it involves **asking questions to respondents**.
- A survey is a **systematic method** of collecting data from a population of interest.
- To collect information from a **sample of the population** such that the results are representative of the population within a certain degree of error.
- **The purpose of a survey is to collect quantitative information**, usually through the use of a structured and standardized questionnaire.
- Survey research is one of the most important areas of measurement in **applied social research**.

How to plan a survey research?

- First, it is important to consider if the required information can even be collected by the survey. This is important, especially in the context of Myanmar, where certain areas and certain questions are still highly sensitive.

- When this consideration is clarified, the next step is to lay out the objectives of the investigation.

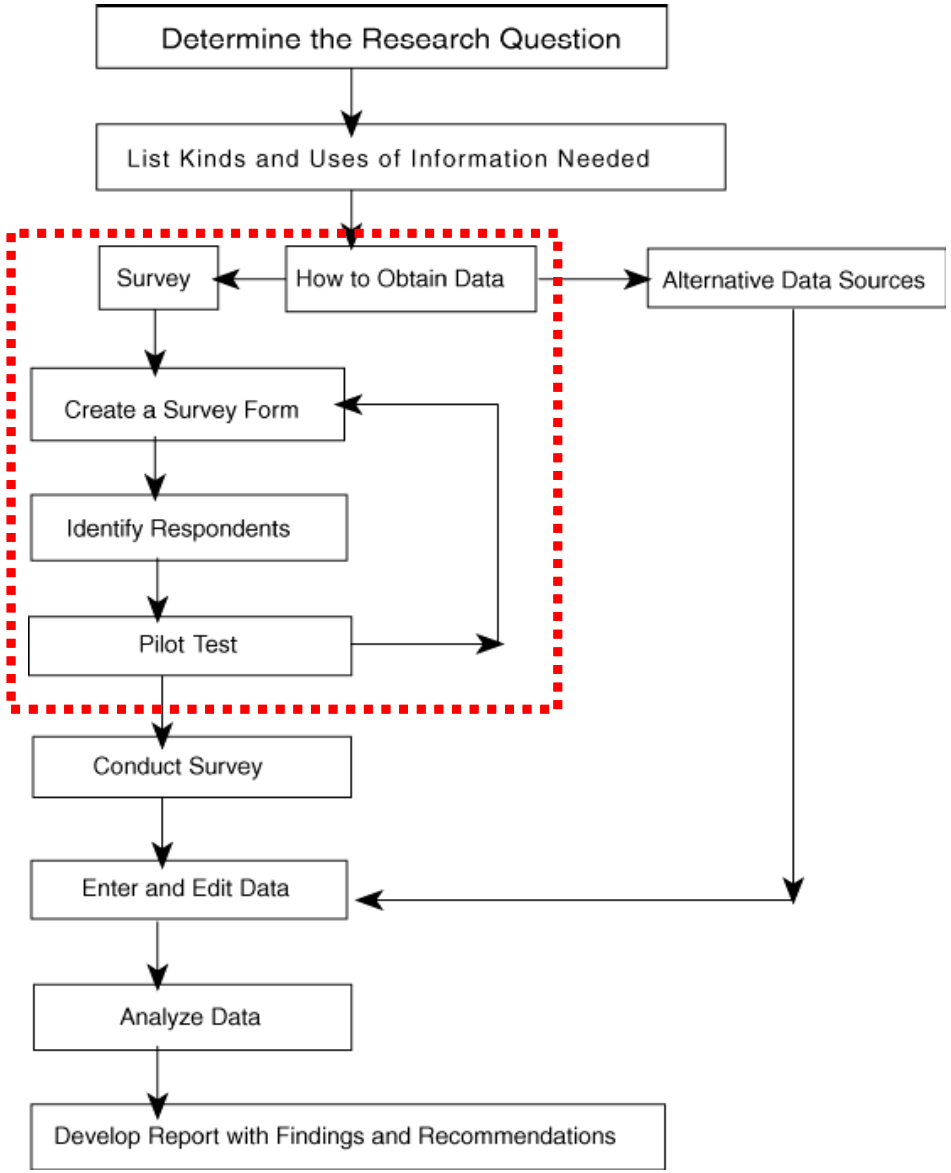
- The objectives of a survey should be as specific, clear-cut, and unambiguous as possible.

How to plan a survey research?

- Survey research almost always involves a request that respondents give researchers information about themselves that is not readily available. Questions can sometimes be embarrassing for respondents. So it is important to carefully prepare the contents of the questionnaire so as to minimize potential risks of embarrassment.

- It is also important to take into account the interviewer effect. The interviewer effect means the change in the respondent’s behaviour or answer that is the result of being interviewed by a specific interviewer.

How to plan a survey research?



Today's presentation is mostly concerned with the steps of the survey research within the red rectangle

Survey and its contents

Before starting the drafting of the survey form, the following steps should be considered by the researcher(s):

- Take the objectives and variables as starting points
- What exactly do the researcher(s) want to know? i.e. clarification of the research question/topic
- Of whom shall the researcher(s) ask the questions?
- How large will be the sample interviewed and investigated?
- What interview technique will the researcher(s) use?

How to create a survey form?

As there is no one to explain the meaning of questions to respondents (not like interviews as will be seen in the next presentations), it is important that questions are clear and easy to understand.

- Construct a detailed outline according to required information
- Is it relevant to ask this or these question(s)?
- Consider the most relevant types of questions in relation to the information expected
- Start with simple questions directly related to the subject
- Pose more sensitive questions as late as possible
- Use simple and every day language

•In short, the order of questions in a questionnaire is very important. It is usually better to start with interesting, non-threatening questions. All sensitive questions should be asked towards the end of the questionnaire.

How to formulate questions?

The structure and way to formulate questions in a survey form are very important. They will have an effect on the type, precision, and quality of information obtained from respondents.

- Formulate one or more questions for each variable
- Check each question to measure one thing at a time
- Formulate control questions to cross check responses
- Avoid questions which have ambiguous meanings
- Avoid words with double or vaguely defined meanings

How to formulate survey questions

The survey form will have the following types of questions:

❑**Open Ended Questions**: the respondent is asked to give his/her own answer to the question. The respondent writes down the answer to the question in his/her own words. The resulting data are not necessarily uniform, making data analysis not so easy;

Free responses about opinions, attitudes, respondent's own words

Facts with which the researcher(s) is not necessarily familiar

❑**Closed Ended Questions**: the respondent is asked to select an answer from a list provided by the researcher. Closed-ended questions are quite popular in survey research. They result in more uniform data, and they are easier to process and analyse;

Choose from lists items

Fixed-choice questions

The selection of Open-ended questions or Closed-ended questions for the survey form is dependent on the information the researcher(s) expect to get from the respondents.

How to formulate survey questions

Closed-ended questions include the following types:

Rating Scales

4. How would you rate this product?

- ☐ Excellent
- ☐ Good
- ☐ Fair
- ☐ Poor

5. On a scale where "10" means you have a great amount of interest in a subject and "1" means you have none at all, how would you rate your interest in each of the following topics?

Domestic politics .. __
Foreign Affairs ..... __
Science & Health .. __
Business ..... __

Agreement Scale

6. How much do you agree with each of the following statements:

	Strongly Agree	Agree	Disagree	Strongly Disagree
My manager provides contructive criticism	☐	☐	☐	☐
Our medical plan provides adequate coverage	☐	☐	☐	☐
I would prefer to work longer hours on fewer days	☐	☐	☐	☐

Example of the survey form

No.	Question	Answer	Code	Skip
1.2	How satisfied are you by these activities? အဲဒီ လုပ်ငန်းများကို ဘယ်လောက်ကျေနပ်မှု ရှိပါသလဲ။	Not satisfied.....1 ကျေနပ်နှစ်သက်မှုမရှိ .....1 Satisfied.....2 ကျေနပ်နှစ်သက်မှုရှိ .....2 Very satisfied .....3 အလွန်ကျေနပ်.....3		
1.3	Did you learn any new techniques from this activity? If yes which ones? (MA) အဲဒီ လုပ်ငန်းများမှ မည်သည့် နည်းပညာအသစ်များကို လေ့လာသင်ယူခဲ့ရပါသလဲ။ ။ (အဖြေတစ်ခုမကဖြစ်နိုင်သည်)	Composting .....1 မြေဆွေးပြုလုပ်ခြင်း၊ .....1 seed production .....2 မျိုးစေ့ထုတ်ယူခြင်း၊ .....2 pest management.....3 ပိုးမွှားနှိမ်နင်းခြင်း.....3 mushroom cultivation.....3 မှိုစိုက်ပျိုးခြင်း .....3 other .....4 အခြား၊ 4		
1.4	Did you get additional income from these activities? အဲဒီ လုပ်ငန်းများမှ အပိုဝင်ငွေ ရခဲ့ပါသလား။	Yes.....1 ရသည် .....1 No.....2 မရပါ.....2		If 2,
1.5	If yes, by how much did your monthly income increase ? ရခဲ့ပါက နဂိုလစဉ်ဝင်ငွေထက် ဘယ်လောက်ပိုရခဲ့ပါသလဲ။	.....Kyats .....ကျပ်		

Ranking

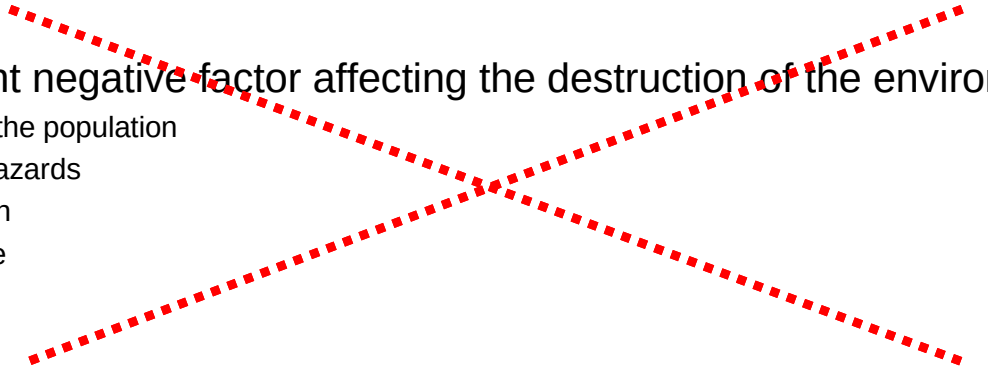
Multiple choice

Close

Open

Example of don’ts

- A close-ended question such as the following one is far too vague; the choice among the answers is also not consistent and not based on scientific grounds:
  - What is the most important negative factor affecting the destruction of the environment:
    - » Pressure of the population
    - » Forest fire hazards
    - » Deforestation
    - » Car pressure
    - » Don’t know



- There are actually many more factors contributing to the destruction of the environment which are not included in the possible answers.

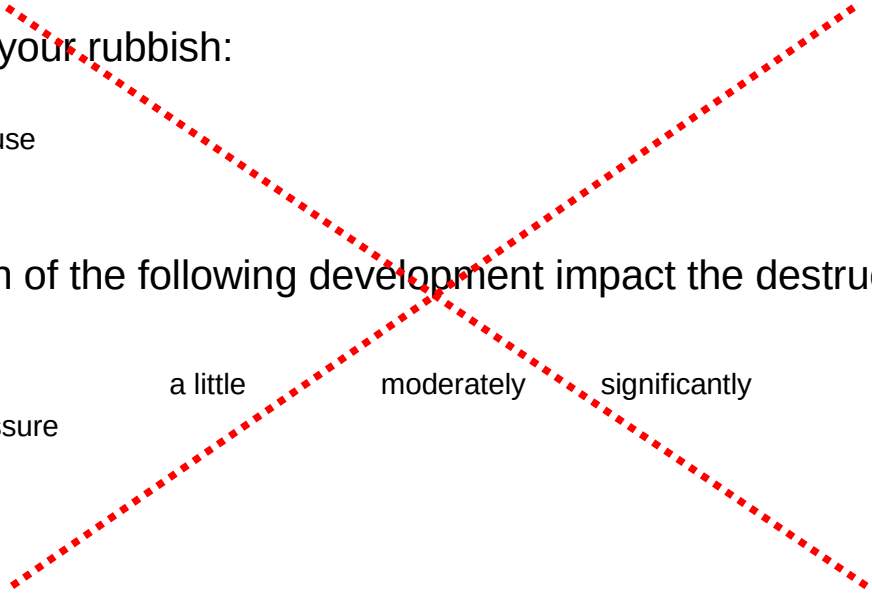
- Because the issue of environmental destruction is far too large to address in a single question, it is also difficult to offer answers that are not inter-related; for instance, the two last possible answers (deforestation and car pressure) result from population pressure.

Another example of don’ts

- Survey questions should not be ordered randomly like in the following example:
  - At home, where do you put your rubbish:
    - » In a rubbish bin
    - » Outside the house
    - » Others;
  - In your view, how does each of the following development impact the destruction of the environment:

a little moderately significantly

    - » Population pressure
    - » Fire hazards
    - » Deforestation
    - » Car pollution



- The survey form should have different sections. Some sections will address very general matters about the topic under investigation (typically placed at the beginning of the survey form). Some other sections will address more precise matters, especially domestic matters, about the topic under study (typically in the middle or end of the survey form).

Another example of don’ts

- Each question will deal with no more than one aspect of a matter at the same time. The following question is not appropriate for a survey:

  – How often and how much time do you spend at a pagoda on each visit

- The question has two parts and should therefore divided into two separate questions;

- The question is also ambiguous as it doesn’t ask “how often’ in a week? In a month? In a year?

Example of do’s

- Precise close-ended questions such as the following one are encouraged:
  - If your children don’t go to school and help you at home, what are the duties they do:
    - Cooking
    - Washing clothes
    - Cleaning
    - Taking care of the younger siblings
    - Others, if yes, what are they:

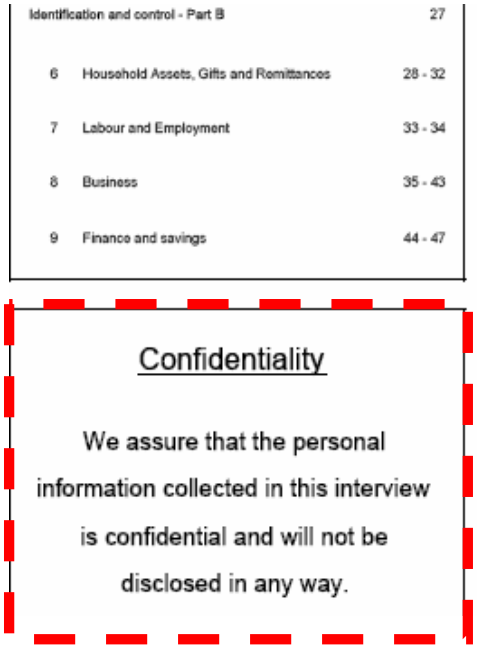
- Another example of precise and clear questions:
  - Would you go to school if your parents allowed and supported you to go to school?

yes no

Format of the survey form

The survey form before being submitted to respondents should the following sections:

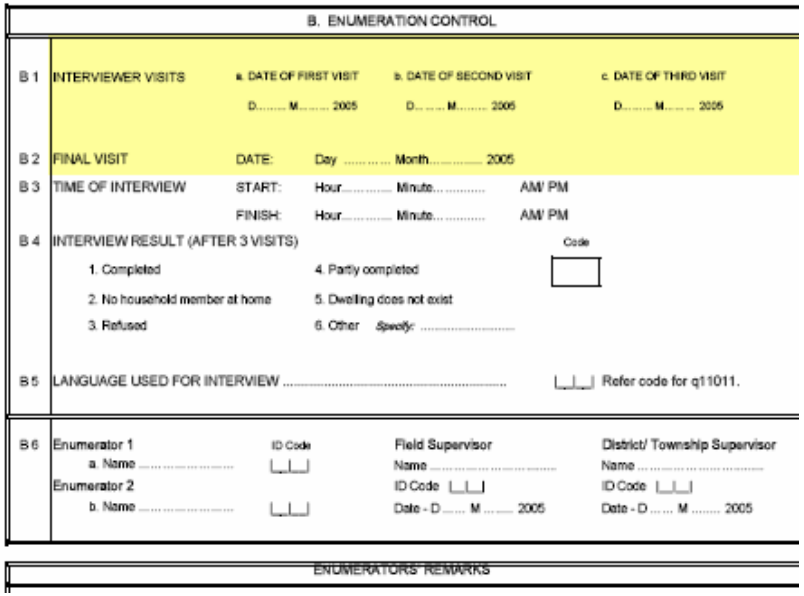
- a separate introductory page to explain purpose of the study;
- a heading, date, location and name of interviewer;
- the series of questions;
- a clause on confidentiality at the end of the questionnaire (as shown below).



Identification and control - Part B		27
6	Household Assets, Gifts and Remittances	28 - 32
7	Labour and Employment	33 - 34
8	Business	35 - 43
9	Finance and savings	44 - 47

Confidentiality

We assure that the personal information collected in this interview is confidential and will not be disclosed in any way.



B. ENUMERATION CONTROL

B 1	INTERVIEWER VISITS	a. DATE OF FIRST VISIT D..... M..... 2005	b. DATE OF SECOND VISIT D..... M..... 2005	c. DATE OF THIRD VISIT D..... M..... 2005
B 2	FINAL VISIT	DATE: Day ..... Month..... 2005		
B 3	TIME OF INTERVIEW	START: Hour..... Minute.....	AM/ PM	
		FINISH: Hour..... Minute.....	AM/ PM	
B 4	INTERVIEW RESULT (AFTER 3 VISITS)			Code
	1. Completed	4. Partly completed		
	2. No household member at home	5. Dwelling does not exist		
	3. Refused	6. Other *Specify:*		
B 5	LANGUAGE USED FOR INTERVIEW			Refer code for q11011.
B 6	Enumerator 1 a. Name	ID Code	Field Supervisor Name ..... ID Code	District/ Township Supervisor Name ..... ID Code
	Enumerator 2 b. Name		Date - D..... M..... 2005	Date - D..... M..... 2005

ENUMERATORS' REMARKS

How to conduct pilot test

Finalize the draft of the survey form and have a pilot test

- Perform a pilot test of the survey form with 3 or 4 persons in your neighborhood to check whether all questions are easily understood

Revise

- Read as a respondent
- Image all possible ways to misinterpret questions
- Look for words/phrase that could be ambiguous
- Discuss with colleagues, experts

Exercise time

Step 1	Step 2	Step 3	Step 4
Topic under study: To assess 'environmental awareness' of young Myanmar graduates	Main and associated research questions:	Information required:	Questions:

Suppose a research project is about 'assessing the environmental awareness of young Myanmar graduates'.

Try to fill the columns for Steps, 2,3,4.

Various possibilities exist: the ones given in the following pages are just an example.

Exercise time

Step 1	Step 2	Step 3	Step 4
Topic under study: To assess 'environmental awareness' of young Myanmar graduates	Main and associated research questions: -What is environmental awareness? When you use the terms, what does it mean to you? -How much are young graduates knowledgeable about environmental questions? -To what extent are young graduates apply their knowledge of environment in their daily life? To what extent does their environmental awareness have a practical dimension?	Information required:	Questions:

Exercise time

Step 1	Step 2	Step 3	Step 4
Topic under study: To assess 'environmental awareness' of young Myanmar graduates	Main and associated research questions:	Information required:	Questions:
	-What is environmental awareness? When you use the terms, what does it mean to you?	-Perception of 'environmental awareness'; How much is the family and education backgroung important for the level of environment awareness.	
	-How much are young graduates knowledgeable about environmental questions?	-Awareness and interest of young graduates in general environment issues; -Willingness to actively participate in the debate about environment protection.	
	-To what extent are young graduates apply their knowledge of environment in their daily life? To what extent does their environmental awareness have a practical dimension?	-Awareness of daily practices contributing to environment protection; -Capacity to encourage people around to follow similar practices.	

Exercise time

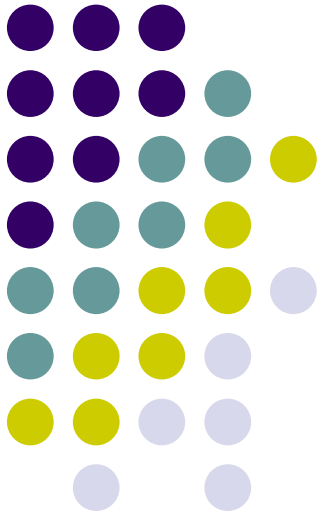
Step 1	Step 2	Step 3	Step 4
Topic under study: To assess 'environmental awareness' of young Myanmar graduates	Main and associated research questions:	Information required:	Questions:
	-What is environmental awareness? When you use the terms, what does it mean to you?	-Perception of 'environmental awareness'; How much is the family and education backgroung important for the level of environment awareness.	Q.1.1 How old are you? Q.1.2. Are you a male? a female? Q.1.3. What degree do you hold? Q.1.4 How many brothers and sisters do you have?
	-How much are young graduates knowledgeable about environmental questions?	-Awareness and interest of young graduates in general environment issues; -Willingness to actively participate in the debate about environment protection.	Q.2.1 How do you get your knowl edge about environmental issues? -newspapers -tv -friends -others, if so: what are they? Q.2.2 What is your view of the government's policy on dam building in the country? Q.2.3 Would you consider become a member of pro-environment organizations?
	-To what extent are young graduates apply their knowledge of environment in their daily life? To what extent does their environmental awareness have a practical dimension?	-Awareness of daily practices contributing to environment protection; -Capacity to encourage people around to follow similar practices.	Q.3.1 How do you dispose of batteries? Q.3.2 How do you dispose of plastic bags? Q.3.3 Do you happen to persuade your friends not to use plastic bags?

Thank you!

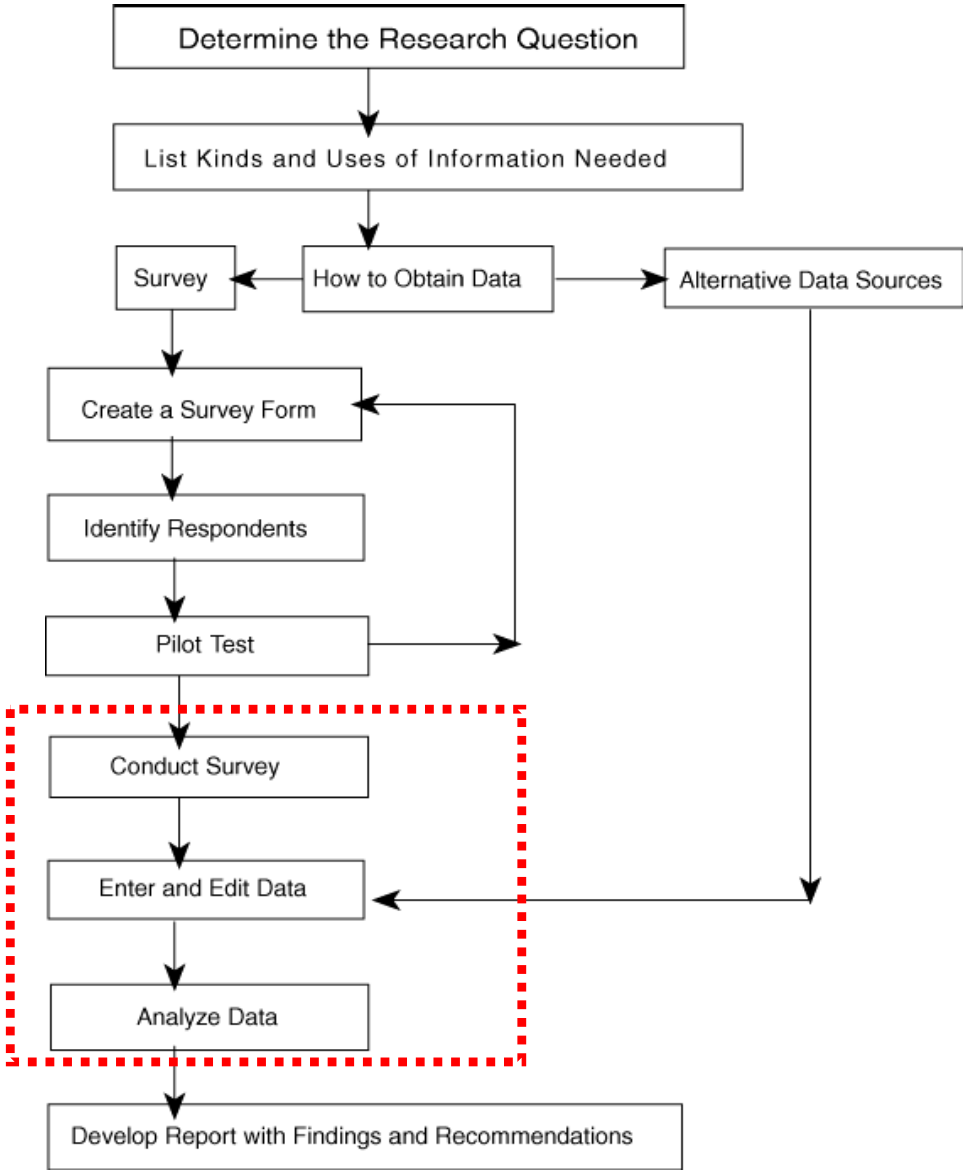
8. Survey Research Part 2

Presentation Objectives

- *To increase students/trainees' capacity to use survey research for collecting data.*
- *To develop students/trainees' understanding of the steps in formulating survey questionnaires*
- *To increase students/trainees' knowledge of the best ways to conduct survey interviews*



Conduct of the survey



Today's presentation will be about the steps show in the red rectangle shown in the left:
-conduct survey
-enter and edit data
-analyze data

How to prepare the survey?

Conducting the survey and submitting the questionnaires to respondents involves selecting interviewers/field workers with the following profile:

Healthy

- Fieldwork can be strenuous and the workers must have the stamina required to do the job.

Outgoing

- The interviewers should be able to establish rapport with the respondents. They should be able to relate to strangers.

Communicative

- Effective speaking and listening skills are great asset.

Pleasant Appearance

- If the fieldworkers' physical appearance is unpleasant or unusual, the data collected may be biased.

Educated

- Interviewers must have good reading and writing skills, preferably a graduate.

Experienced

- Experienced interviewers are likely to do better job in following instructions, obtaining respondent cooperation, and conducting the interview.

How to prepare the survey interview?

- The main requirement for good interviewers is an ability to approach strangers in person and persuade them to participate in the survey. Once a respondent's cooperation is acquired, the interviewers must maintain it, while collecting the needed data- data that must be obtained in exact accordance with instructions.

- For high-quality data to be collected, interviewers must be carefully trained.

- Good interviewer techniques are stressed, such as...how to make initial contacts... how to conduct interviews in a professional manner...and how to avoid influencing or biasing responses. Training generally involves practice interviews to familiarize the interviewers with the variety of situations they are likely to encounter.

- If needed, time must be spent between the survey interviewer and the respondent going over survey concepts, definitions, and procedures.

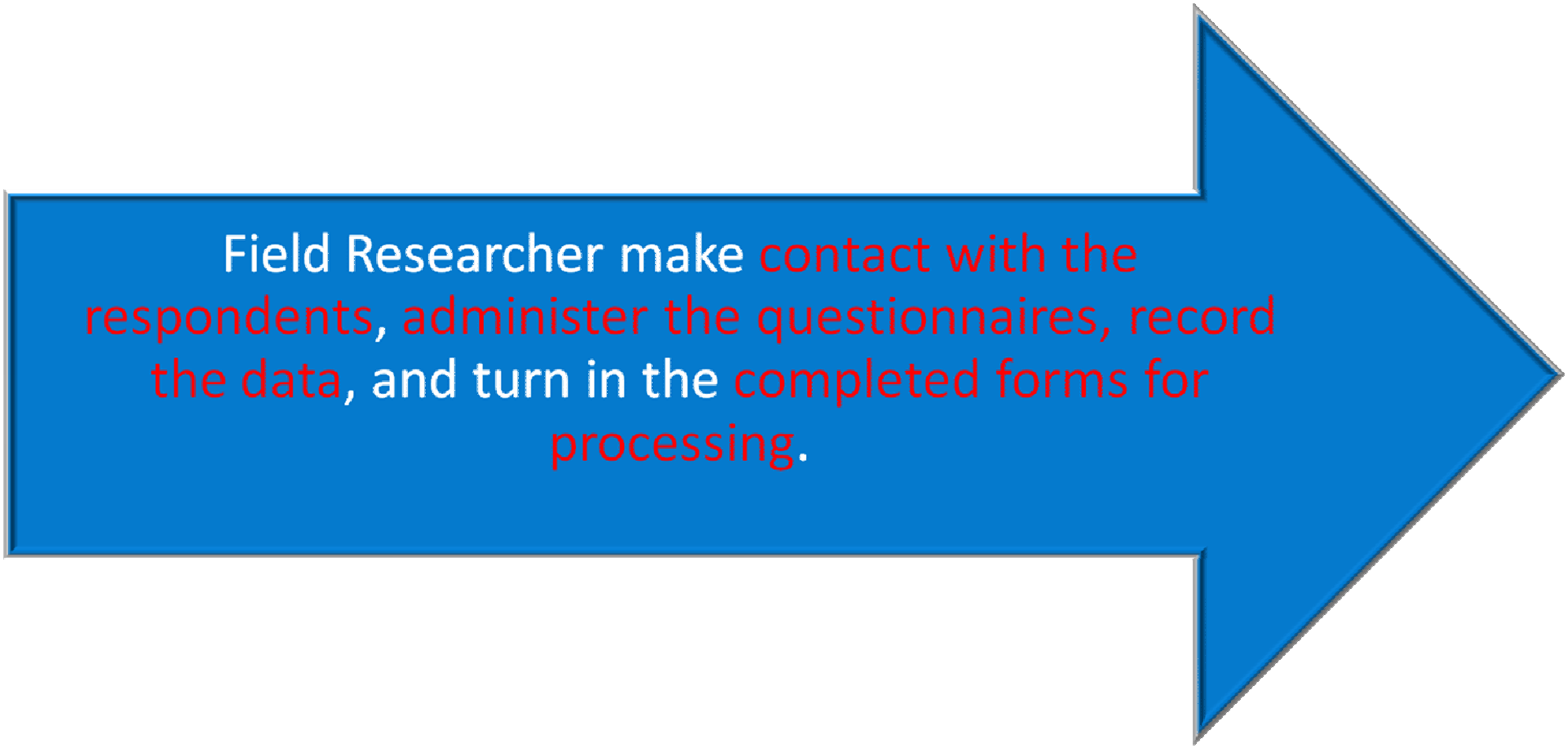
How to prepare the survey interview?

- Survey materials must be prepared and handed in to all interviewers prior starting the survey interviews. Preferably, a session introducing the survey questionnaire to all interviewers should be organized so as to clarify any questionnaire-related problems.

- Before conducting in-person interviews, survey organizations frequently send an advance letter to the sample respondents, explaining the purpose of the survey and that an interviewer will be visiting soon. This usually happens in countries where survey interviews have become quite frequent. For the time being, this is not yet the case in Myanmar, however.

- Visits to respondents should be scheduled with attention to such considerations as the best time of day and expected availability.

How to conduct the survey interview?



Collecting field data

One to one interview

Interviewer’s responsibilities

- Introduction
- Asking the questions
  - structured or semi-structured questionnaire
  - unstructured questionnaire
- Building trust with respondents
- Keep the eyes contact with respondents
- Keeping the conversation and control the direction
- Focus on words of respondents
- …/….

Interviewer’s responsibilities

…/… Continued from previous page

- ❑ Check the data & answer
- ❑ Analysis /consider the answer of respondent
- ❑ Repeat some question for validation or make sure
- ❑ Take some available documentary
  - •Photo
  - •Paper or report
  - •Pamphlet
  - •Business Cards

Interviewer's responsibilities

One important point about survey interview:

After introducing the purpose of the survey interview to the respondents and before starting the interview, respondents should be informed that they can refuse to answer to the interview or that they can interrupt an interview at any time without having to state reasons, and that such refusal or interruption will bear no consequence whatsoever.

How to ask the survey questions?

- Not mislead respondents as to the length of the interview
- Not reveal the identity of the ultimate client unless instructed to do so
- Be thoroughly familiar with the questionnaire
- Ask the questions in the order in which they appear in the questionnaire
- Use the exact wording given in the questionnaire
- Read each question slowly/ clearly
- Repeat questions that are not understood
- Ask every applicable question

How to record answers to survey questions?

The rules for recording answers to **structured** questions vary with each specific questionnaire, but general rule is to check the box (circle the code) that reflects the respondents' answer.

The general rule for recording answers to **unstructured** questions is to record the responses verbatim.

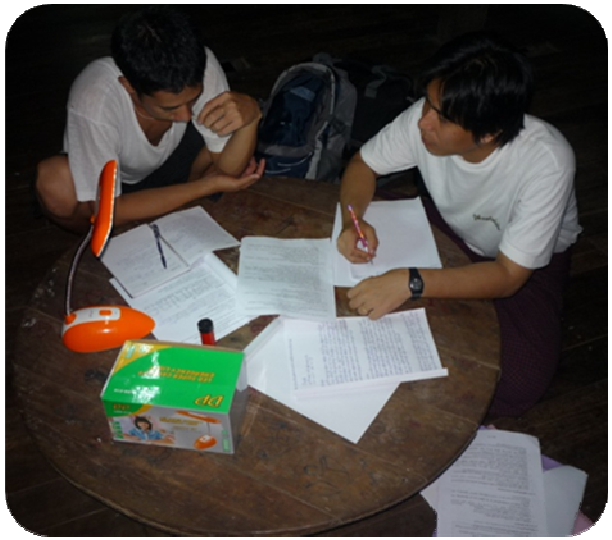
Specific guideline:

- Record response during the interview
- Use the respondent's own words
- Do not summarize or paraphrase the respondent's answers
- Include everything that pertains to the question objectives
- Include all probes and comments
- Repeat the response as it is written down

How to terminate the survey interview?

- The interview should not be closed before all the information is obtained.
- Any spontaneous comments the respondent offers after all the formal questions have been asked should be recorded.
- The interviewer should answer the respondent's questions about the project.
- The respondent should be left with a positive feeling about the interview.
- Its is important to than the respondent and express appreciation.

Collecting data from the field involves sometimes some arduous adventures



Survey research: Summary and Conclusion

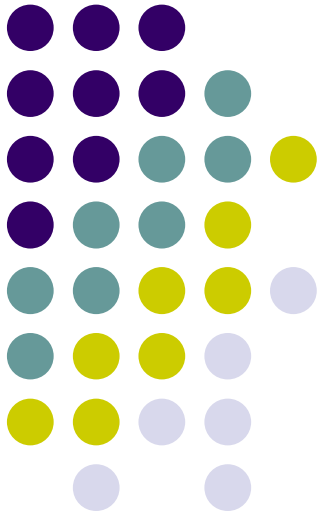
Organization	• The survey taker determines who is to be sampled and what is to be learned about the sample.
Questionnaire Design	• Based on the goal of the survey, questions for survey respondents are prepared and arranged in a logical order to create the survey questionnaire.
Sampling	• A repeatable plan is developed to randomly choose a sample capable of meeting the survey's goals. Then a sample is selected.
Data Collection	• A plan for contacting the sample and collecting information from participants is developed and carried out.
Data Processing	• Collected data are entered into the computer and checked for accuracy.
Analysis	• The results of the survey are compiled and disseminated.

Thank you!

9. Qualitative Interview

Presentation Objectives

- *To develop students/trainees' understanding of the types of qualitative interviews available to social researchers*
- *To introduce students/trainees to the different procedures used to conduct qualitative interviews*
- *To increase students/trainees' capacity to use qualitative interviews in combination with other types of research methods*



Definition of Qualitative Interview

- A qualitative interview is an interaction between the interviewer and the respondent. Before interviewing the respondent, the researcher must have a general plan of inquiry related to the topic which is studied.

- The researcher does *not* have a set of questions that must be asked with particular words and in a particular order.

- A qualitative interview is a conversation in which the interviewer gives the general direction for the conversation and asks further details about topics raised by the respondent. In general, the respondent does most of the talking.

- In this, it is different from the questionnaire which uses a set of questions already defined.

Advantages of Qualitative Interview

- The interview is more appropriate for complex situations as the interviewer has the opportunity to prepare respondents before asking sensitive questions and to explain complex ones to respondents directly in person.

- This way, in-depth information can be obtained.

- Questions can be explained. It is less likely that a question will be misunderstood as the interviewer can either repeat a question or put it in a form that is understood by the respondent.

- Interviewing has a wider application: an interview can be used with almost any type of population: children, handicapped, illiterate, or elder people. This is particularly relevant in rural areas, where some segments of the population might not be able to read questionnaires.

Type of Qualitative Interviews

- Qualitative interviews can vary from **unstructured to semi-structured interactions**.
- **Semi-structured interviews** are prepared in advance but are usually changed as appropriate for each participant.
- By contrast, **unstructured interviews** start only with a sense of what information is needed. This type of interviews is most likely to be conducted by very well-trained interviewers.
- In both cases, the person who will answer the researcher's questions will be called an informant, and possibly a key informant. This is because of the specific knowledge of the person is supposed to have on the topic under study.
- An informant is different from a respondent, who has no special knowledge of the topic under study.

Procedures for Conducting Qualitative Interviews

Six stages can be mentioned for conducting qualitative interviews:

- defining the theme: clarifying the purpose of the interviews, and the concepts to be explored;
- designing: laying out the sequence of themes to be explored, and the transition from one to the next; transitions should be smooth and logical;
- interviewing: doing the interviews (and recording them);
- transcribing: writing the text of what has been said between the interviewer and the respondent;
- analysing: determining the meaning of the gathered details in relation to the purpose of the interview;
- reporting; telling others what has been learned

Using or not using ‘informed consent’?

- What is an informed consent: it is an agreement signed by the respondent/interviewee and given back to the interviewer allowing him/her to make available all information included in the interview.
- The use of an informed consent in the context of the research project has to be widely discussed before qualitative interviews are conducted.
- While it is regularly used in research projects in Western countries, it may not be relevant for projects developed in Myanmar and for specific communities around which spec
- Because signing papers is seen as very formal in the Myanmar context, people may feel uncomfortable about signing an informed consent. In many cases, in Myanmar, as long as the interviewer has a verbal agreement of the respondent/interviewee, the qualitative interview can take place and the information given be used for research purposes.
- However with the changes currently happening in Myanmar and the introduction of international standards, the use of informed consent will probably become more frequent, at least for certain types of research projects.

Template for an Informed Consent

Informed Consent

Respondent's Name:
Respondent's Address:

I agree that the tapes of the interview(s) given by me on the following date(s) _____ should be made available by _____ (name of the organization in charge of the research project).

I agree that _____(name of the organization in charge of the project) may publish or cause to allow to be published all or part of the interview transcripts.

I wish the following restrictions to be placed on the use of the tapes and transcripts (if no restrictions, write 'none')

_
_
_

Respondent's Signature Date

How to prepare for the qualitative interview?

- In some cases, because of the expected length of the interview and due to the sensitivity of the research topic, it is better to have an interviewer of the same sex as the respondent/interviewee.

- In research projects addressing ethnic matters, it is also often (but not systematically) a good option to have interviewers of a similar ethnic origin as the respondent/interviewee.

- However, in more general terms, when the research topic is not sensitive or when the ethnic question is not central to the research, the interviewer’s background does not have such an importance.

- In all cases, the question of the interviewer’s ethnicity and sex are questions that should be addressed prior to conducting the qualitative interview.

How to prepare for the qualitative interview?

- If the research project involves the participation of a certain number of interviewers, it is important to make sure that all of them are interested in the topic and have an understanding of the issue under investigation.
- In some cases where the research topic is technical, it is important that interviewers have some technical knowledge of the issue.
- Very importantly, it is crucial that the interviewers do ***not*** feel superior to the respondents/interviewees, and do ***not*** show that they feel superior to them.

How to prepare for the qualitative interview?

- As qualitative interviews are a conversation between the interviewer and the respondent/interviewee, they are not based on a set of questions that has to be rigidly followed.

- In qualitative interviews, follow-up questions, questions that invite the respondents/interviewees to further express their view on a specific issue initially addressed are very important.

- Prior to starting the qualitative interviews, it is crucial that all interviewers are informed that situation will arise whereby they will have to encourage respondents/interviewees to explain further their views or feelings, if they wish so.

- Although qualitative interviews is mainly about listening to the respondents/interviewees, interviewers will also, in certain situations, have to take the lead and invite the respondents/interviewees to say more about themselves.

Outline of a qualitative interview: recommendations

Qualitative interviews will invite respondents/interviewees to express themselves on a specific issue along the following line:

- Values
- Perceptions
- Experiences
- Priorities

To have respondents/interviewees express themselves on these four dimensions, it can be useful to ask the following questions to them:

- How did this happen? and why did this happen according to you?
- What was your feeling about this?
- Did this affect you? Did it have an direct impact on you?
- What decision did you take after this? Why did you take this decision?

Example

- With these four dimensions recommended, here is an example of how a qualitative interview of Internally-Displaced Persons (IDP) addressing the question of their life conditions could be conducted.

- Bear in mind that this is a just an outline, preparations for qualitative interviews for sensitive and complex issues usually require more time than permitted here in this example. In particular, the wording of questions may have to be changed to make it easier to understand for respondents/interviewees.

  – What does it mean for you to have to leave the place where you formerly lived? Were you forced to relocate here? Or was it a collective decision of your community? **(Value)**

  – How did you feel about it? How did it affect you and your family? **(Perceptions)**

  – How is your daily life here? What are the main difficulties? What are the things that are really bad? Are you affected by these bad things? Are there things that are good? What are they? Do you have a chance to experience these good things? **(Experiences)**

  – What are your priorities now? Do you have a sense that you are now settled here for good? Or do you hope you can come back to your former place of residence? **(Priorities)**

Other Interview Techniques

- Sometimes, questions can be quite difficult to ask, and may not necessarily be well-received by the respondent/interviewee.
- In these cases, one option is to show the respondent/interviewee an object or a photograph that is related to the topic under investigate and ask him/her what s/he feels about this object or photograph.
- The object or photograph can be one that is located in the room where the interview is conducted.
- The object or photograph can also be brought by the interviewer for the purpose of the interview.

Recording the Qualitative Interview

- A tape-recorder for recording qualitative interviews is a good option for newly-trained interviewers.

- This way, the interviewer does not struggle between taking notes about what the respondent/interviewee has just said and proceed with the questions of the interview.

- If using a tape-recorder, make sure that it is tested before conducting the interviews and that you have enough tapes on hand while conducting interviews in case the interview might be longer than the tape's recording time.

- The interviewer has to record the name's of the respondent/interviewee first by asking him/her:

  We are talking to _____ , is that right? Have I pronounced your name correctly?

Transcribing the interview

- For better results, the interviewer is encouraged to transcribe the interview after its completion as soon as possible.

- Transcribing the interview in written form involves putting all the questions and answers in written form so that it can be shared and read by other people.

- No details should be discarded when transcribing the interview; in other words, the everything which has been said during the interview should be fully transcribed.

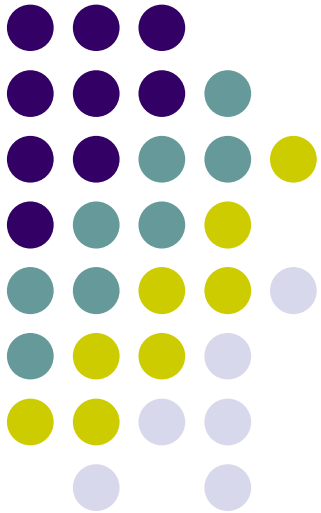
- When transcription of the interview is finished, a separate page at the beginning of the transcription will be inserted with the interview number mentioned and the basic details of the respondent/interviewee.

Thank you!

10. Focus Group Discussion

Presentation Objectives

- *To introduce students/trainees' understanding of the importance of focus group discussion for qualitative research*
- *To develop trainees' understanding of the strengths and weaknesses of focus group discussion*
- *To increase trainees' capacity to use focus group discussion in combination with other types of research methods*



Definition

- Focus groups are formally organised, structured groups of individuals brought together to discuss a topic or series of topics during specific period of time. They are useful techniques for obtaining people's impressions and concerns about certain issues or events.

- Focus group discussions allow for interaction between the moderator and the participants and among the participants themselves. However, most of the interaction is between the participants, not so much between the moderator and the participants.

- They are typically composed of several participants (usually 6 persons; with a minimum of 3 and a maximum of 12) and a trained moderator. The participants usually share a particular characteristic, demographic, or interest that is relevant to the topic being studied.

- However, participants on focus groups are not likely to be chosen through rigorous sampling methods. In other words, the participants will not represent any sample of the general population.

Strengths of FGDs

- There are mainly six advantages for focus group discussion:

  -research method resulting in in-depth findings;

  -flexible research method;

  -research method that has high face validity;

  -research findings are immediate;

  -low cost research method;

  -excellent method for formulating questions for a possible future survey.

Weaknesses of FGDs

- There are also four potential challenges:

  -less control by the researcher on the group (one respondent can dominate the focus group);

  -difficulty to analyze the collected data;

  -difficulty in recruiting the participants and assembling the group;

  -discussion has be conducted in a favourable environment (quiet room).

Features of FGDs

- In a focus group discussion, the researcher explores the perceptions, experiences, and understandings of a group of people who have some experience in common with regard to a situation or event.

- FGDs should be organized when sensitive questions can ***not*** be asked through a survey questionnaire.

- Broad discussion topics are developed beforehand, either by the researcher or by the group. These provide a broad frame for discussions which follow. Members of a focus group express their opinions while discussing these issues.

- FGDs are mostly based semi-structured interviews and usually last 60-100 minutes.

- For specific and sensitive research topics, FGDs will be more effective if all participants have the same sex: having groups mixing men and women might undermine people's willingness to express oneself freely.

Features of the FGDs

- In research projects addressing ethnic or religious matters, it is also often (but not systematically) a good option to have moderators of a similar ethnic origin as the group of participants.

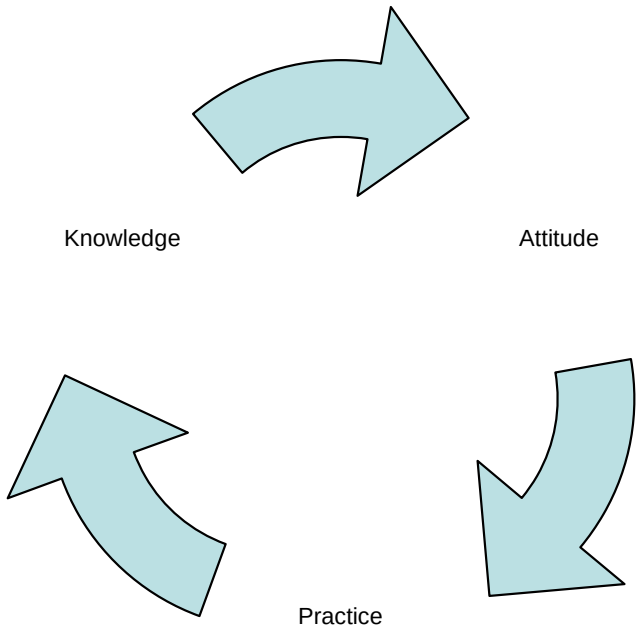
- However, in more general terms, when the research topic is not sensitive or when the ethnic or religious question is not central to the research, the moderator's background does not have such an importance.

- In all cases, the question of the moderator's ethnicity, religion, and sex are questions that should be addressed prior to conducting the qualitative interview if the research question is deemed sensitive.

Example of FGD outline

- Before conducting the FGD, it may be useful to develop an outline which the moderator will follow as a way of directing the discussion. It is, by no means, a rule to strictly observe; it is just a recommendation that has to be adapted according to the nature of the topic investigated.

- The Knowledge-Attitude-Practice (KAP) model is a useful tool for directing a FGD: the moderator will divide the FGD in to three discussion times:
  - the ‘Knowledge’ discussion time will have questions about the knowledge participants have of the topic under investigation’
  - the ‘Attitude’ discussion time will have questions about the attitude participants observe in relation to the topic under investigation
  - the ‘Practice’ discussion time will have questions about the practice participants have in relation to the topic under investigation



The moderator

- Permission must be obtained by the moderator from the participants for tape recording the conversation that will take place.

- The moderator is careful not to introduce his/her own point of view in an attempt to influence the discussion. S/he should encourage everyone's participation in the discussion.

- Very importantly, it is crucial that the moderator does ***not*** feel superior to the respondents/interviewees, and do ***not*** show that s/he feels superior to them.

- The moderator opens the discussion asking a broad question and should be prepared to introduce 3 or 4 more questions during the conversation.

- The moderator should not read the outline of questions related to the FGD; s/he should know it by heart so as to keep the momentum of the conversation going.

The participants

- Focus groups are effective when
  - People have something to share (motivations)

- Focus groups are not effective when
  - People are divided or angry
  - The goal is to gather factual information or statistical data

Everything that is be said by the participants has to remain confidential.

The seating arrangement of the participants (how they are seated) will have to be made by the moderator or his/her assistant. Identifiers (not the participants' proper names) will make it possible to know who told what.

Starting the FGD

When the group meets, the moderator will have to do the following:

- Thank people for coming;
- Have all participants successively introduce each other to the others;
- Review the purpose and goals of the present discussion;
- Explain how the meeting will proceed and how participants can contribute;
- Set the tone by asking an opening question and making sure all opinions on that question are heard;
- Ask further questions in the same general manner.

During the FGD

The moderator is expected to observe the following recommendations:

- ***Be aware of recording:*** better to use non-verbal prodding while someone is talking (that is, to encourage someone with hands when s/he says something the moderator wants him/her to further develop; or, on the contrary, wave the hand in order to signal that someone should leave the others speak)

.

- ***Be neutral:*** don't react for or against anyone's statement

- ***Body language:*** nodding head, continued eye contact

- ***Vocalizations:*** "uh, huh…"; "yes…oh, okay…"

- ***Re-affirming:*** "what I understood you to say was…"; "Let me see if I understood you correctly…"

During the FGD (continued)

Here are some additional recommendations for the moderator to follow:

- ***Clarification:*** “I’m not sure I understand… can you tell me more…”; “Can you tell me more about why you think it is important”
- ***Substitution:*** “How often do you…”
- ***Other examples:*** “Is there anything else…”; “Could you explain that to me… I want to be sure I understand…”
- ***Timing:*** Listen for natural breaks in the conversation or repetition before you move on to the next question.

Recording information during FGD

Recording the information given by the FGD participants is, in most cases, tape-recorded.

•The moderator and the researcher(s) need to ensure that whatever is expressed is recorded accurately.

•The moderator is invited to use the method of recording that suits him/her the best: audiotape discussions, employ someone else to record while the moderator manages the discussion.

•The moderator will try to avoid losing something of importance because of his/her involvement in the discussion.

•Focus Group Discussions usually take between 1h30 and 2 hours.

Recording information during FGD

- If tape-recording is not done by the moderator, an assistant will have to be in charge of this responsibility.
- This assistant will have to test and place the tape-recorder in the best location of the room so that everyone’s words are recorded.
- The assistant will have to sit in the room during the entire discussion;
- The assistant will serve as the time keeper and make sure that there are enough tapes for the recording of the discussion all along the 1h or 1h30 that it is expected to last.
- The assistant is expected to observe only and not to take part in the discussion

Advantages of recording FGD

- Because of the interaction between the participants, it is necessary that the moderator concentrates on the conversation rather than on note-taking. Therefore, tape-recording will be an essential part of the FGD.

- Tape-recording will then give the moderator more time to listen and respond more rapidly without worrying that information will be lost.

- As the moderator does not have to worry about taking notes, it will be easier for him/her to build contact and confidence with the participants of the FGD.

Disadvantages of recording FGD

- Tape-recording may cause the moderator to listen less to what is being said, since the discussion is all recorded. The risk then is that the moderator will lose its role as moderator.

- It is possible that using a tape recorder will make the participants less open what they really feel or think about the topic under investigation (although the moderator will mention at the beginning of the session that all what will be said is confidential).

- The tape-recording make it difficult to identify specific participants who have expressed distinctive views or feelings

After the FGD

After the meeting meets, the moderator will have to do the following:

- Make a transcript or written summary of the meeting: in some research projects, a transcript would be required, in other, only a summary. All this will depend of the decision made by the organizations which conduct the research project.

- Examine the data for patterns and main themes;

- Highlight what seem to be confirming ***or*** contradicting what was though about the research topic at the beginning of the research project;

- Draw conclusions based on the information given during the discussion;

- Share the results with the group;

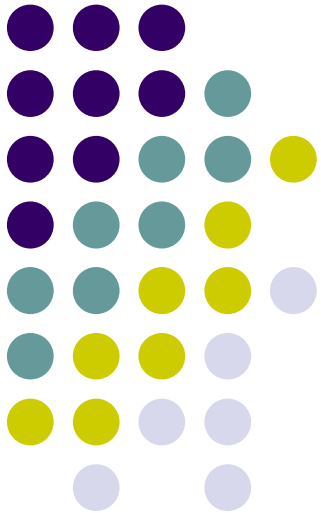
- Use the results and make recommendations.

Thank you!

11. Case Study

Presentation Objectives

- *To increase students/trainees' capacity to use case study as a research strategy*
- *To develop students/trainees' understanding of the strengths and weaknesses of case study*



Definition

- The case study is a research strategy that focuses on one individual, one group, one organisation, …. within its social context at one point in time, even if that one time spans 1 month or many years.

- It is an important approach of qualitative research as it uses multiple sources of evidence.

- It is ***not*** a sampling research.

- The case study involves:

    - the study of a particular situation or problem;
    - OR
    - the comparison of several cases related to the same situation or problem.

Overall objectives of case study

Choosing the case study as a research strategy is made with the following objectives in mind:

-To explain all the causes related to the problem or the situation under investigation **(causes)**;

-To describe the context in which the problem or the situation have occurred; **(context)**;

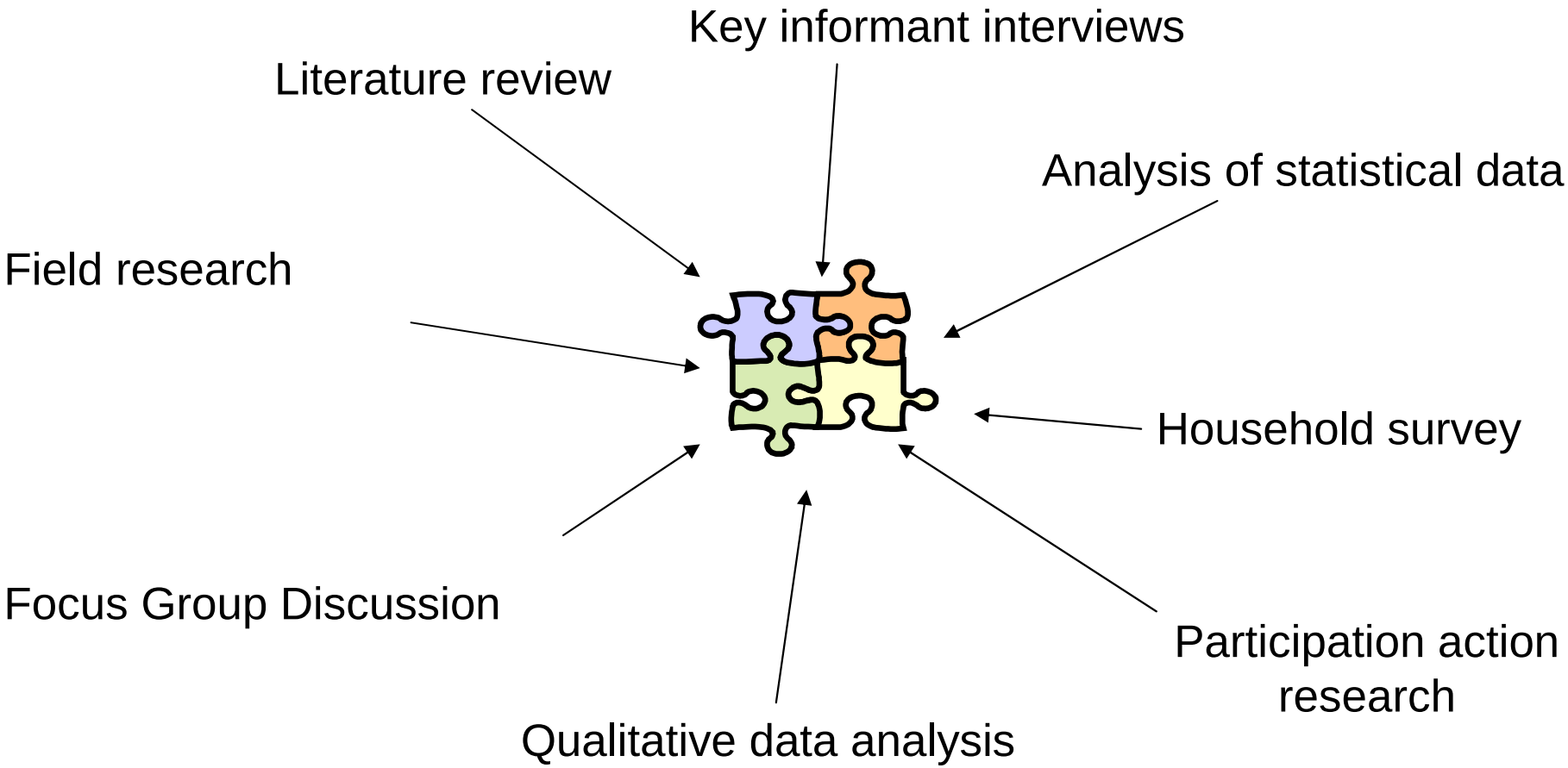
-To describe the problem or the situation itself **(description of the problem or situation under investigation)**.

Research Process of Case Studies

- The previous slide showed the three overall objectives of case studies:
    - Explanation of causes
    - Description of the context
    - Description of the problem or situation under investigation

- To achieve these objectives, the research process of cases studies requires the support of various research methods.

Case study supported by various methods



All research methods featured here do **not** have to be used for case studies, but the more research methods are used, the better.

Benefits of case studies

Because of the multitude of sources examined and research methods used, case studies will be most successful if they present different perspectives.

Different descriptive or critical accounts help present a balanced study.

Strengths of case studies

A major advantage of case studies is that they allow a deep understanding and close reading of social life and certain aspects of social life.

Another advantage is that the researcher has to use several research methods.

It also makes it possible to cross-check the findings of one research method (for instance, observation) with the findings of another research method (for instance, household survey).

Weaknesses of case studies

Unlike random sample surveys, case studies are **not representative** of entire populations.

The case study researcher should take care not to generalize beyond cases similar to the one(s) studied.

How to conduct a case study?

- There are usually four steps in the conduct of case studies:
  - **1. Background;**
  - **2. Description;**
  - **3. Analysis;**
  - **4. Evaluation and Recommendations.**
- If the research project involves the comparison of several case studies, an additional step will be needed: the research findings of the different case studies will have to be compared against one another.

1. Background

The background of the case study means the investigation of the context in which the problem or situation under study have arisen.

Investigating the context for the case study involves the following components:

- literature review: the topic under investigation might have been addressed in some newspapers' articles, tv news, NGO-CSO reports, etc….; it will be necessary to have knowledge of the information and compare against what the research finds out.

- collection of facts about the actors pertaining to the problem or situation under study and which are relevant to the understanding of it, such as personal history, family background, cultural and social information;

2. Description

The second step of the case study involves, at least, one of the following components depending on the topic under investigation:

- description of the particular problem or situation which is the focus of the case study including how the researcher came to be involved, what happened, what was said, what action was taken and with what consequences;

- description of the boundaries of the case study: what will be the focus of the case study? What is not the focus of the case study and why?

- description of who are the persons involved in the research process;

3. Analysis

The third step of the case study include at least one of the following components:

- analysis of what was involved in the situation or problem;
- analysis of the direct and indirect causes that led to this situation or problem;
- analysis of the short-term and long-term impact of the situation or problem.

4. Evaluation and Recommendations

The fourth step of the case study might include one of the following elements:

- evaluation of the case study as opposed to general trends and developments;

- who stands to gain from the situation or problem and why?

- who stands to lose from the situation or problem and why?

-recommendations.

Example

Case study: “Youth unemployment in Hlaing township”

1. **Background**:- literature review about youth unemployment in Myanmar
   - recent trends in the job market for young people
   - any possible links between the economic and political reforms recently implemented

2. **Description**: - survey research that will allow to assess the extent to which youth unemployment is widespread among the entire population under investigation.
   - in-depth interviews with key informants

3. **Analysis**: - explain the reasons why youth does not find jobs matching their skills; what are the groups of young individuals that are mostly concerned by unemployment?

4. **Evaluation and Recommendations**: - how is this situation likely to evolve in the current political and economic context? who is likely to gain? who is likely to lose?

Exercise time

- **Problems of Primary School-Based Children-centred Approach Training in Vietnam: A Case Study of Bac Giang Province**

- In Vietnam, despite the introduction of a new teaching method based on a child-centred education approach, there exist many problems and challenges in the educational process. To overcome these problems, the Vietnamese and Japanese governments have been conducting a teacher-training programme, including school-based observation and reflection of lessons as a major activity. This study investigates the problems encountered in these schools. The results reveal that (1) the lesson is extremely fast-paced, (2) teachers tend to evaluate their colleagues and students, (3) teachers need to learn about how to learn and (4) promoting dialogue among teachers is considerably challenging.

Read the following article's abstract

Exercise time

- **Problems of Primary School-Based Children-centred Approach Training in Vietnam: A Case Study of Bac Giang Province**

- In Vietnam, despite the introduction of a new teaching method based on a child-centred education approach, there exist many problems and challenges in the educational process. To overcome these problems, the Vietnamese and Japanese governments have been conducting a teacher-training programme, including school-based observation and reflection of lessons as a major activity. This study investigates the problems encountered in these schools. The results reveal that (1) the lesson is extremely fast-paced, (2) teachers tend to evaluate their colleagues and students, (3) teachers need to learn about how to learn and (4) promoting dialogue among teachers is considerably challenging.

Now Identify:

-Purpose of the research

-Reseach strategy used

-Major findings

You have 4 minutes before the answer is given!

Exercise time

- **Problems of Primary School-Based Children-centred Approach Training in Vietnam: A Case Study of Bac Giang Province**

- In Vietnam, despite the introduction of a new teaching method based on a child-centred education approach, there exist many problems and challenges in the educational process. To overcome these problems, the Vietnamese and Japanese governments have been conducting a teacher-training programme, including school-based observation and reflection of lessons as a major activity. This study investigates the problems encountered in these schools. The results reveal that (1) the lesson is extremely fast-paced, (2) teachers tend to evaluate their colleagues and students, (3) teachers need to learn about how to learn and (4) promoting dialogue among teachers is considerably challenging.

The purpose of the research is to study the problems of primary school-based children-centred approach training in Vietnam

The research strategy used is the case study

The research findings are (1), (2), (3), and (4)

Exercise time

“Case study of one township in Yangon”

- Select one township in Yangon which you wish to examine as a case study.
- Select one event/situation/problem you want to investigate in this township.
- Formulate a research question that the case study developed in this township would attempt to address.
- Identify the variable and the unit of analysis.

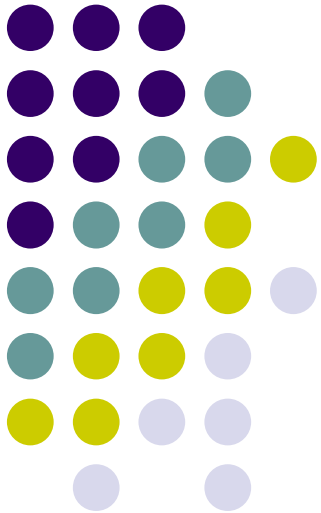
- You have 5mn for answering these questions.

Thank you!

12. Field Research and Observation

Presentation Objectives

- *To consolidate students/trainees' understanding of the importance of participant and non-participant observation for qualitative research*
- *To develop students/trainees' understanding of the strengths and weaknesses of observation techniques*
- *To increase students/trainees' capacity to use observation techniques in combination with other types of research methods*



What is field research?

Field research is about conducting research in the settings in which the event, the situation, or the problem under study take place.

Depending on the research topic under study, field research can be done in different settings.

If the research is about farmers' livelihoods in the Ayeyawaddi division from a qualitative perspective, the researchers will have to go to the villages selected for the study in the division.

If the research is about working conditions in garments factories in Hlaingthaya township from a qualitative perspective, the researchers will have to conduct their field research in these factories and collect data there.

If the research is about sanitation awareness in Yangon's public hospitals from a qualitative perspective, the researchers will have to visit public hospitals of the city.

What is observation?

Observation during field research allows an immediate and direct view of human behaviour. It takes place in a natural setting where the persons under study are not necessarily aware that they are being observed.

It is a significant method of qualitative research as the evidence produced from observation can not be reduced to numbers (like quantitative research).

It can be useful when the researcher does **not** know much about the topic under study.

They are two techniques of observation:

1. **Participant Observation**

2. **Non-Participant Observation**

1. Participant Observation

- Participant observation is an accurate method of qualitative data collection.
- The data are obtained and collected by living in close proximity with the group of persons examined.
- It is crucial that the researcher established rapport with the group of persons observed. This means that s/he has to establish an open and trusting relationship with the people that are observed during the research.
- But before going to the field, the research will have to decide how much s/he is willing to explain about the research topic to the groups of persons that will be observed.

2. Non-Participant Observation

- Non-participant observation is conducted by researchers who are as distant from their subjects of study as possible.

- Non-participant observation is difficult to conduct in Myanmar; mostly available in Western countries.

How to choose between the two techniques?

The choice of one or the other of these two techniques depends on:

- how sensitive the topic under investigation is;

- how well-acquainted the researcher is with the group of persons under study;

- how well-acquainted the researcher chooses to be with the group of persons under study.

Choosing between participant and non-participant observation should be discussed at the very beginning of the research project.

Gaining access to the site of observation

The access to the site of observation is a matter to be discussed before the starting field research, especially if the research topic is a sensitive matter.

For a research addressing some ethnic or religious matters, a researcher that does not belong to the community to be observed might simply be rejected.

Not so serious, but still important to consider is the question about reactivity caused by the researcher’s actions while conducting research. This means how much people’s behaviour and intentions are altered because of the presence of the researcher as an observer.

Results of observation

Some social scientists mention that observation techniques can result in ***thin*** or ***thick*** description:

- ***thin*** description is simply the barebone description of acts;
- ***thick*** description offers a sense of the intentions, motives, and meanings behind the behaviour.

The resulting observation will be very much dependent on how easy the access was to the site of observation, how much time was spent there, and how productive the data collection was.

Combining qualitative research methods

It is quite frequent that **observation techniques**, whether participant or non-participant, are complemented with **qualitative interviews** as explained in a previous presentation.

In both cases, as previously mentioned for qualitative interviews, it is crucial that the researcher does **not** feel that s/he is superior to the persons observed and interviewed, and that s/he does **not** show that s/he feels superior to them.

Recording the data

The three conventional techniques for recording observations are:

- to write down observations while the researcher observes;
- to record them (with a camera);
- to record them in one's memory to be written down shortly after.

Strengths of observation

There are several advantages to observation techniques:

-to allow researchers to understand how others experience life;

-to make it possible to study quickly-changing situations;

-to use methods relatively inexpensive;

-to make it possible to explore poorly understood problems and situations;

-to be relatively flexible.

Weaknesses of observation

The disadvantages of observation techniques are the following:

-findings can not be generalized as those observed are not chosen as part of a sample;

-the persons examined during the observation may change their behaviour as they know they are observed;

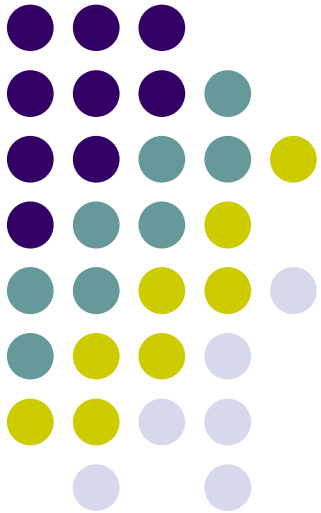
-time-consuming;

Thank you!

13. Evaluation Research

Presentation Objectives

- *To consolidate students/trainees' capacity to conduct evaluation research*
- *To increase students/trainees' capacity to measure specific outcomes through qualitative and quantitative research techniques*
- *To develop students/trainees' understanding of the various tools available for conducting evaluation research*



Evaluation research: definition

- Evaluation research is concerned with assessing whether social programs have succeeded or failed.
- It is ***not*** a research method, but it uses research procedures to investigate the effectiveness of social intervention programs.
- In this specific case, research methods are used to assess, help improve social programs.
- Evaluation research can therefore be an important step towards defining plans for further projects and advocacy plans.

Evaluation and research methods

- Sometimes, evaluation research can also be called *program evaluation* or *outcome assessment* referring to a research purpose rather than a specific method.
- This purpose is to evaluate the impact of social interventions such as new teaching methods, health project, environmental project etc…
- Many methods, like surveys, focus group discussion, or qualitative interviews can be used for evaluation research.
- Use of both qualitative and quantitative research methods is therefore encouraged.

Evaluation and measurement

- A key issue of evaluation research is the **measurement** of the outcome of the social intervention. If the social intervention is to accomplish a specific goal, the question of the evaluation research will be how to measure this goal.

- The following questions will help determine how the measurement will be made:
  - What is the desired outcome?
  - Is the outcome to be short or long term?
  - How should change be determined?
  - Should all aspects of the program be studied or only certain parts?
  - Should all the targets of an intervention be studied or only some of them?

Types of evaluation research

The three main types of evaluation research are the following:

1. Outcome evaluation: this is a research that ‘sums up’ the effects of a program, policy, or law in accomplishing the goal or intent of the program, policy, or law in question.

2. Cost-benefit analysis: this is a research that compares all expenses of the program (its cost) to its benefits (monetary estimates of the program’s benefit).
   - » If the benefits outweigh the cost, keep the program going.
   - » If the reverse, ‘junk it’.

3. Needs assessment: this is an analysis of the existence and severity of a problem and the number of the people affected.

Design of evaluation research

- What evaluation question needs to be answered?
  - Questions may be related to program implementation and/or program impact. Also questions derived from the logical framework of a certain project.

- What type of evaluation design?
  - E.g before-after studies, case studies

- What research methods should be used?
  - Direct Observation
  - Records and Documentation
  - Information from relevant stakeholders (KII,FGD, structured Questionnaire)

- How to collect data?
  - Data collectors need training and necessary permission to collect data

Tools for evaluation research

Besides both qualitative and quantitative research methods frequently used for conducting evaluation research, two important tools are typically used by researchers for the design of evaluation research:

- 1. Stakeholders analysis
- 2. SWOT analysis

Stakeholder Analysis

- This analysis makes it possible to analyze the attitudes of stakeholders towards a certain project.

- The purpose is to find out who may be involved directly or indirectly in the proposed activities (including participants, beneficiaries and people who may be negatively impacted). It is also to identify the persons or organizations who can be impacted by other organizations, government etc.

- The evaluation research will attempt to work out a way to engage them in the program or to manage or minimize the negative impacts on them

- The participants (also known as actors) include Government, LNGOs, INGOs and other implementers; private sector education (Vocational Education Training)

SWOT Analysis

- SWOT analysis is a technique to analyze: **S**trengths, **W**eaknesses, **O**pportunities and **T**hreats of a place, decision, problem etc..

- It illuminates what needs to be done and put the problems into perspective

- Based on the SWOT analysis, strategic planning can be implemented.

SWOT Analysis

- Strengths
  - What are the advantages/strengths of community based projects?
  - What did community based project contribute to your learning experience?
  - What did it contribute to other organizations?

SWOT Analysis

- **W**eaknesses
  - What could be improved?
  - What didn’t work?
  - What should be avoided next year?
  - etc,.

SWOT Analysis

- **O**pportunities

  - Opportunities of project and missed opportunities.
  - Also look at weakness and consider if these could become opportunities by changing something.
  - What are the good opportunities facing your project?
  - What opportunities were not taken advantage of from the community etc?

SWOT Analysis

- Threats
  - What are the threats to a successful community project in general terms?
  - What has to be overcome to increase opportunities?
  - What external factors threaten development projects?

Exercise time

Identify a problem or a situation that needs to be evaluated and make a stakeholder analysis of it.

Exercise time

The Myanmar government implemented a car-swapping scheme about two years ago whereby owners of old cars could replace them with new cars bought at a reduced price.

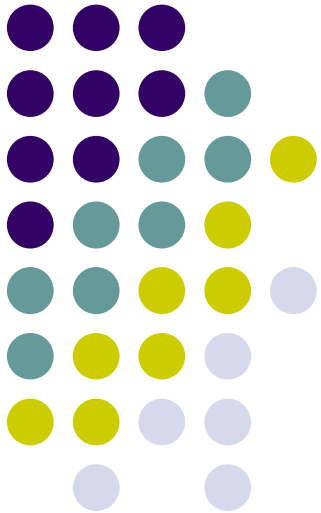
You have 10 minutes to make a SWOT analysis of this scheme.

Thank you!

14. Participatory Action Research

Presentation Objectives

- *To advance students/trainees' understanding of the PAR method and its possible role within their respective organisation*
- *To emphasise the qualitative aspect of the PAR method*
- *To develop students/trainees' capacity to conduct PAR in the field and use PAR tools*
- *To develop students/trainees' understanding of the possible dangers and limitations of PAR process*



Definition

Participatory Action Research is a research method that makes it possible the **active participation of members of the community under study** for producing the research findings.

The production of these findings is achieved with the collaboration of **researchers working here as co-participants or facilitators** along with the members of the community.

PAR is not only participatory; it is also **aimed at taking action**.

PAR is therefore specifically relevant for advocacy when plans are made to improve the livelihoods of certain communities.

Approach to PAR

- **Gaining Knowledge for Action**

- Participatory Action Research, PAR, is the use of participatory strategies that allow local people to participate in research. Ultimately, their participation into the research must lead to their empowerment.

- PAR focuses on producing '**knowledge for action**' and following a '**bottom-up approach**'. In this, implementation of the research findings and recommendations is essential.

- PAR pays particular attention to qualitative aspects such as local peoples' knowledge and the way they organise and control their resources: this is called 'Indigenous Knowledge System' (IKS).

Approach to PAR

- **Learning by Experience**

- PAR researchers must be prepared to constantly learn from, and with the community within which the research is conducted. They should not assume that they know everything and that ‘modern scientific knowledge’ is always right. They should explain to the community that they want to know more details about the life and organisation of the community and build upon existing knowledge.

- Participation of certain low-profile groups such as women, average and poor farmers, the unemployed, elderly and children, should be particularly given attention.

- Learning by experience will be fostered by exposure to **indigenous knowledge systems** which covers a wide range of fields: agronomy, health practices, environmental knowledge,…

Role of the researcher

The researcher in the PAR process is rather like in the FGD: s/he is a **facilitator** and encourages the participants to express their views and feelings.

The researcher should never feel superior to the participants. The researcher should also never show that s/he feels superior to the participants.

The success of a research using PAR is **not** dependent on the expertise of the researcher about the topic under study.

The success of a research using PAR is **dependent on the researcher's ability to communicate and to be proactive**.

The research initiates the discussion with the participants, explains them the different options available for research, and let them decide which options the participants want to go for.

Responsibilities of the researcher

While conducting PAR, the researcher must:

- open his/her mind to deal with complex ideas that s/he is not necessarily familiar with;
- be a proactive interlocutor in the dialogue with the group of persons under study;
- listen to these persons with great attention;
- Show curiosity towards the different, genuine, and authentic views and feelings expressed by these persons;
- be respectful of the way ideas, views, and feelings are expressed by these persons;
- not to interfere in the way they are illustrated.

Learning about the community

Before gaining entry into the community under study the researcher has first to gain an understanding of the community itself and an understanding of the attitude and interests of its members.

Therefore it is needed to find out sufficient information about the community before trying to visit it.

This can be done for example by finding out any organization or institution that has worked in this community previously and the type of work that was done by this organization.

It will be also important to find out who are considered the leaders of the community. These persons will probably become the key informants of the research.

Tools for PAR

Once basic information about the community has been obtained, there are three important tools used by researchers for conducting Participatory Action Research

1. *Walk and On-the-spot analysis*

2. *Diagrams*

3. *Participatory mapping*

1. Walk and on-the-spot analysis

A simple walk of the researcher with key informants in the area under study will result in preliminary observations useful for the future steps of the research project.

The walk will also provide the occasion to learn further about the community.

More precise questions will be formulated that can be asked later as part of the research interviews.

Following this first walk attempts at gaining an entry into the community should be made.

Additional walks with other informants can be arranged which make it possible for the researcher to do ‘on-the-spot analysis’: the researcher can constantly review and analyse his/her findings.

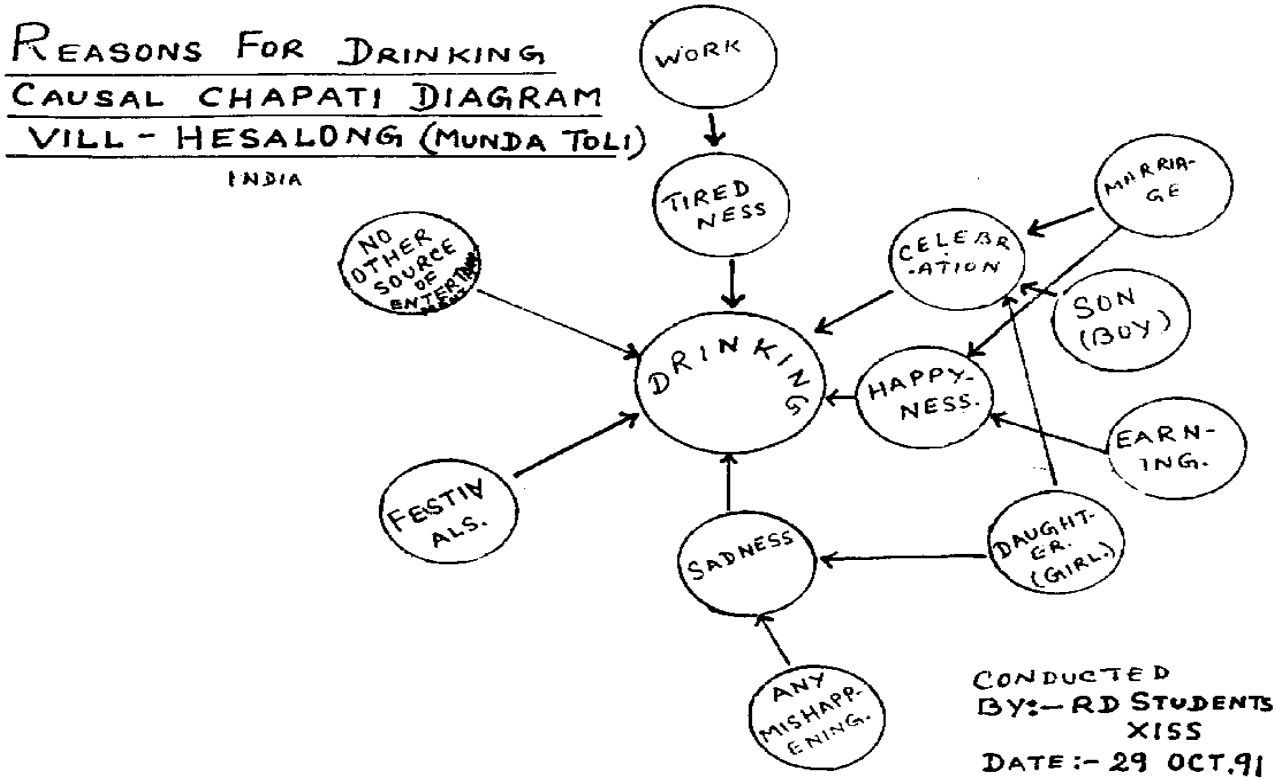
2. Diagrams

Diagrams should allow all members of the community studied to fairly express their views. The use of diagrams can empower low-profile groups: this allows a broad cross section of the community to participate.

The most commonly used diagrams are:

- Venn diagram, an analytical map showing the links between the key actors of the topic under study, their relationships, and their importance;
- Resource flow diagram with details about the products and services that flow inside and outside from the community under study; the diagram has an economic dimension;
- Seasonal calendar with information about agricultural cycles, religious festivals, etc…;
- Knowledge attitude practice diagram, an analytical map about the issue or problem under study.

Example of Venn diagram



The main issue is central to the diagram (here: drinking). All other concerns are directly or indirectly linked to it.

Other Venn diagrams are more elaborate: colors refer to different actors of social life, size of circles refer to the weight/scale of the problem in relation to the other concerns.

Source of the diagram's picture: downloaded from internet

3. Participatory mapping

The participatory mapping helps to understand how people within the community studied perceive their physical environment and to share their knowledge about it.

Here follow some of the participatory mapping most commonly used with the PAR method:

- Land use and resources maps, with details about the physical environment of the site under study (open spaces, built spaces, cultivated land, …);

- Social maps, with details on the type of buildings located in the area under study, and details about the families and number of family members living in houses;

Example of participatory mapping

Participants in the research project draw themselves the map while discussing about the issue under study.

The resulting map ideally should reflect a consensus of all participants to the mapping.

Source of the picture: downloaded from internet

Limitations of PAR

- Although PAR is intent on actively involving members of the community in the research process, it may give more weight to the articulated and educated members of the community. Those that are uneducated or too shy to participate might feel embarrassed to participate.

- The detailed information of participants might be turned into broad generalizations.

- Ethnic and religious matters might make the participation of women into the research process a tricky issue. The issue of their participation (which should be encouraged by all means) will have to be discussed right at the outset of the research project.

- Cross-checking the information produced with the participation of the community members will have to be done through further interviews.

Don’ts

- Do not impose your own time schedule for producing the research findings;
- Do not dominate the discussion and impose your own views and criteria;
- Do not judge the local customs, persons’ views, and feelings as bad, strange or negative;
- Do not talk all the time.

Do’s

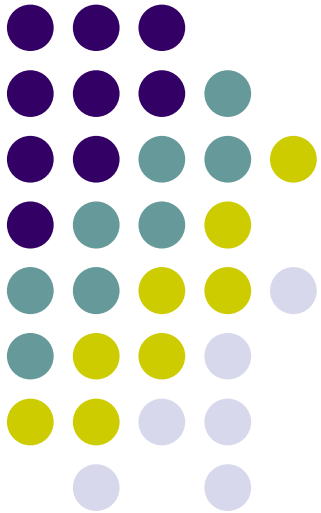
- ✓ Obtain permission and agreement to work with the members of the community you want to study;
- ✓ Present yourself and the purpose of your research clearly;
- ✓ Behave as a guest within the community studied;
- ✓ Show your interest in local customs, persons views and feelings;
- ✓ Treat the persons you work with as equal partners.

Thank you!

15. Qualitative Data Analysis

Presentation Objectives

- *To consolidate students/trainees' capacity to conduct independent analysis*
- *To increase students/trainees' capacity to critically think about qualitative data and analyze them*
- *To develop students/trainees' understanding of the various tools available to researchers for conducting qualitative data analysis*



Definition

Qualitative data analysis is the examination of observations gathered from interviews, focus group discussions, participant/non-participant observation techniques, participatory action research, all kinds of qualitative research techniques.

- The analysis does ***not*** involve the examination of statistics.
- Qualitative data analysis results in the reporting of views and feelings expressed by informants.
- Qualitative data analysis ***also*** results in the interpretation by the researchers of the meaning of these views and feelings.
- As the researcher puts the informants' views and feelings into the larger context of the issue under study, the analysis is mainly about searching for patterns of development, patterns of crisis, or patterns of behaviour, etc… that explain a particular issue, situation and context.

Key tools for qualitative analysis

Once data have been collected through the different qualitative research methods, there are three key tools for analysing the qualitative data:

1. **coding**
2. **writing memos**
3. **problem tree**

1. Coding

Coding is about classifying individual pieces of data collected from informants and field research.

Coding is to be done based on list of key topics.

These key topics can be the different themes around which discussions developed when conducting interviews, FGD, and participatory research.

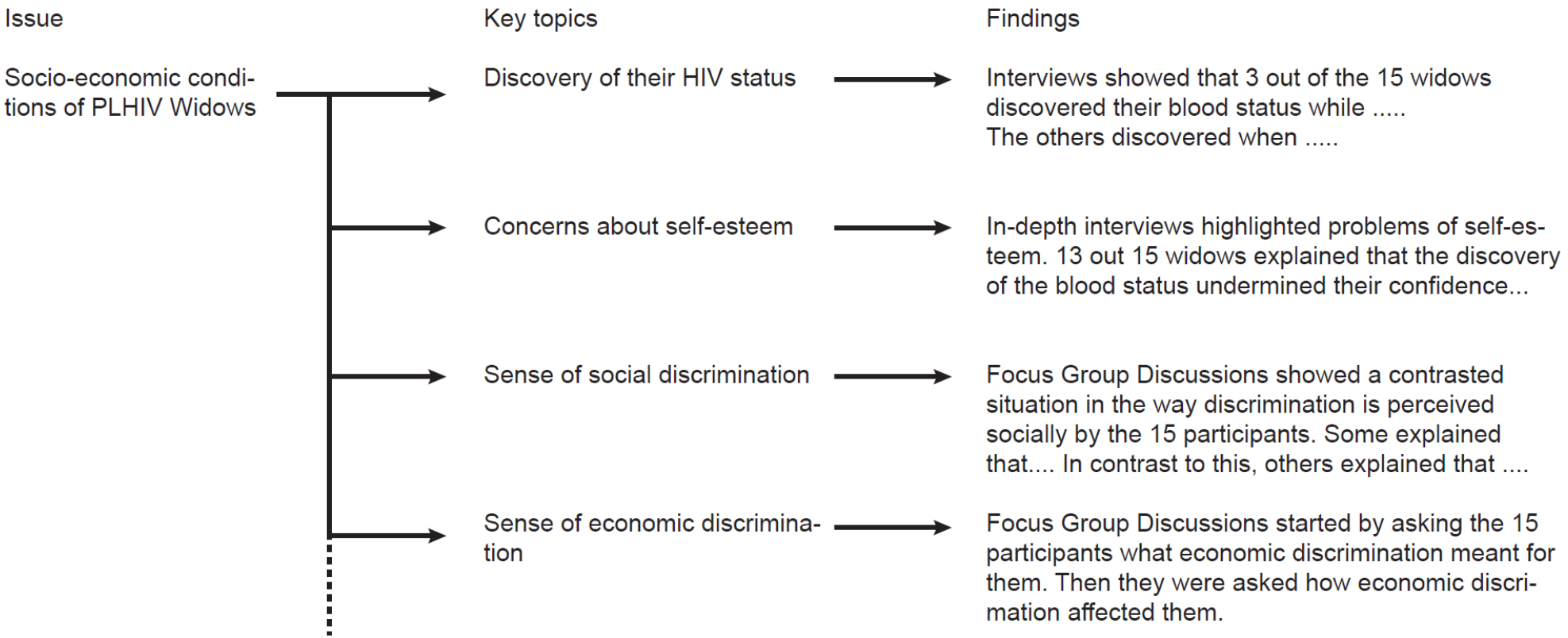
When specific themes are regularly mentioned by the informants, they have to become key topics of the research.

To these key topics will be related a certain number of findings.

Example of coding

Suppose a research project is about:
Socio-economic conditions of widows living with HIV in Yangon

Here is a possible example of information coding, i.e. classifying findings according to key topics that define the research. Other key topics could be added, based on the number of findings.



2. Writing memos

It was said earlier in this presentation that qualitative data analysis results in the interpretation by the researchers of the meaning of the views and feelings expressed by informants.

This is where writing memos is a significant part of the researcher’s qualitative analysis.

It is crucial for the qualitative analysis that the researcher(s) re-read the transcripts of interviews, transcripts of FGDs, field notes, and participatory research notes.

When transcripts and notes have been re-read, the researcher(s) should write down on memos the thoughts that come to mind.

The researcher(s) should also write down on memos what interpretation can be made of the views and feelings expressed by the informants.

3. Problem tree

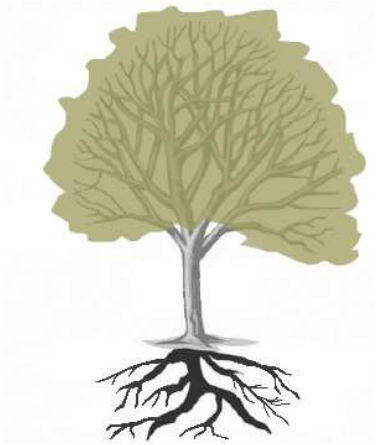
- The design of the problem tree **at the first stage of the research project** reflects the researcher(s) understanding of the issue under study. The understanding of the issue will be not comprehensive; it may also be biased.

- After data have been collected through the research process, **at the analysis stage**, a new problem tree should be drawn by the researcher(s). This time, the problem tree will be more precise, have more information, and reflect a more comprehensive understanding of the problem.

- Part of the qualitative data analysis is to explain how much change in the understanding of the issue has occurred between the beginning and the analysis stage of the research project.

3. Problem tree

Interview
FGD
PAR
Field research



Problem tree at the first stage:
roots and branches are not visible reflecting a **poor** understanding of the issue.

Problem tree at the analysis stage:
roots and branches are visible and many reflecting a **good** understanding of the issue.

The analysis will show the researcher's greater understanding of the issue under study as the problem tree after collecting data will have a much clearer profile.
In certain cases, it can be a good option to include the second problem tree (the one drawn at the analysis stage) as part of the research report.

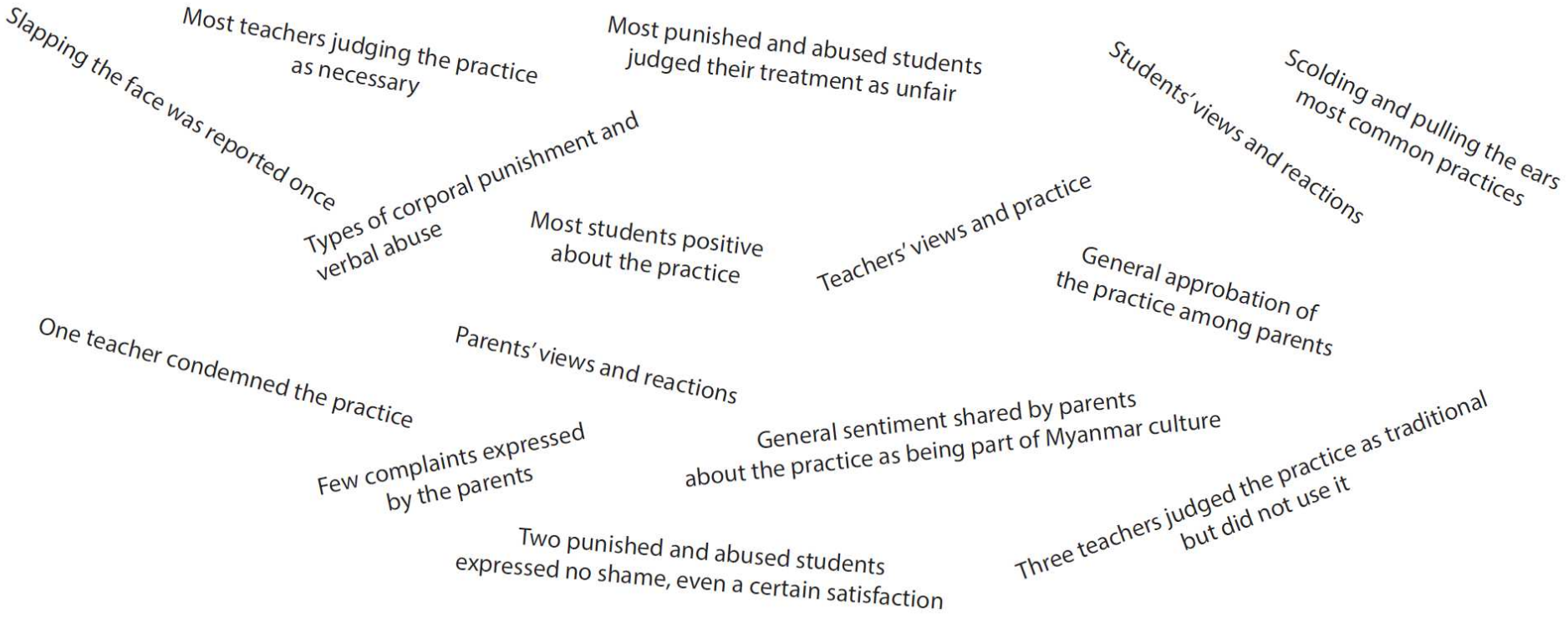
Strengths and limitations of qualitative analysis

- The main strength about qualitative data analysis is that it can produce information that more accurately describe specific issues.
- Qualitative data analysis gives an in-depth perspective of the issue under study.
- But, the main limitation of qualitative data analysis is that the research findings can not be generalized at a larger scale.

Exercise time

- Suppose that a research project is about studying **corporal punishment and verbal abuse in monastic schools**.

- Below are randomly placed the key topics and the findings related to the issue studied.
- Arrange both key topics and findings in a logical order, i.e. an order that goes from the general to the detail, and from the abstract to the concrete.



Exercise time

Below is the order in which key topics and findings should appear.

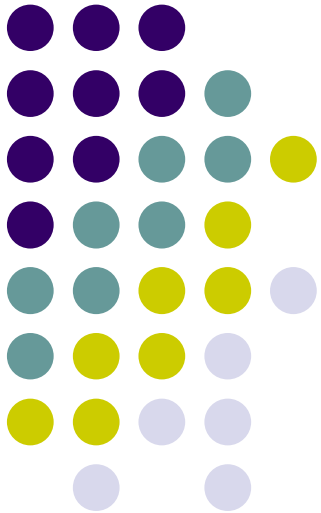
Issue studied	Key topics	Findings
Corporal Punishment and Verbal Abuse	Types of corporal punishment and verbal abuse	Scolding and pulling the ears most common practices Slaping the face reported once
	Teachers' views and practice	Most teachers judging the practice as necessary Three teachers judged the practice as traditional but did not use it One teacher condemned the practice
	Parents' views and reactions	General sentiment shared by parents about the practice as being part of Myanmar culture General approbation of the practice among parents Few complaints expressed by the parents
	Students' views and reactions	Most students positive about the practice Most punished and abused students judged their treatment as unfair Two punished and abused students expressed no shame, even a certain satisfaction

Thank you!

16. Quantitative Data Analysis Part 1

Presentation Objectives

- *To consolidate students/trainees' capacity to conduct quantitative data analysis*
- *To increase students/trainees' capacity to think critically about what tools for analysis will be most relevant*
- *To develop students/trainees' understanding of the various tools for analysis although they may not use the more elaborate ones*



Quantitative data analysis

The Quantitative Data Analysis is in 2 parts: each one will focus on one approach to the quantitative measurement of a variable.

Today the focus will be about calculating a measure of central tendency that is adapted to the sample studied.

Sampling was developed in a previous presentation. It is about learning something about a large population without having to study every member of this population.

Sampling is used when the survey of a group or population is conducted. After survey data have been compiled, these data can be analysed through the tools presented today and next time.

Central tendency ⇔ Frequency distribution (location ⇔ dispersion)

The two approaches to measurement of a variable are:

- Measure of location/central tendency/average
- Measure of dispersion/frequency distribution/spread/variability

Both central tendency and frequency distribution are opposite but complementary approach of a variable.

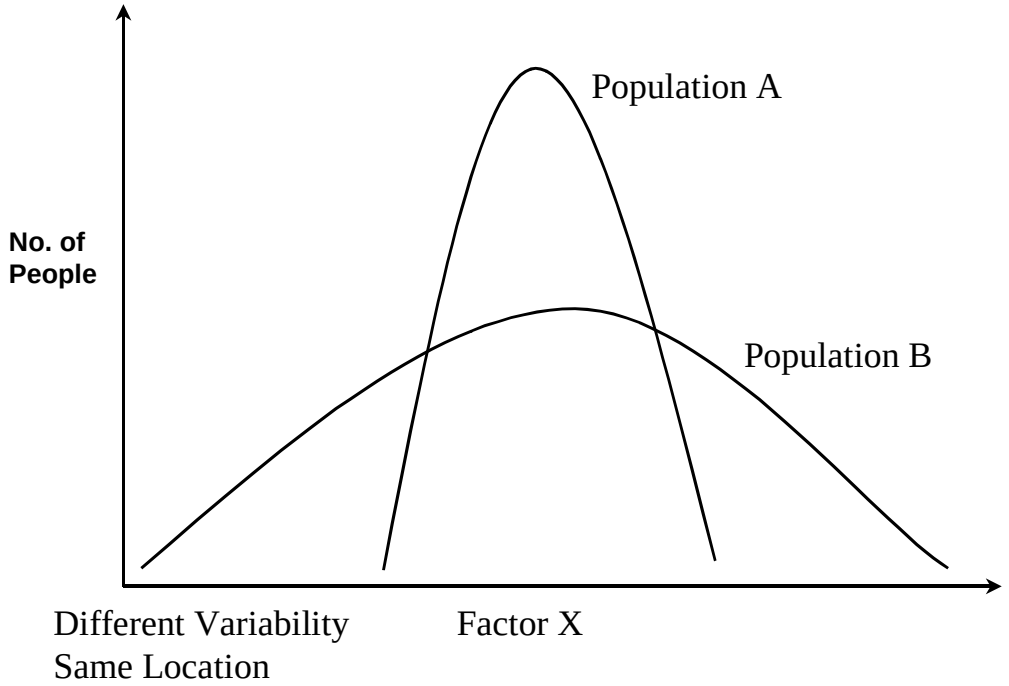
Each measurement is a single value that summarizes the observed values of a variable.

Producing these measurements is part of the quantitative data reduction process

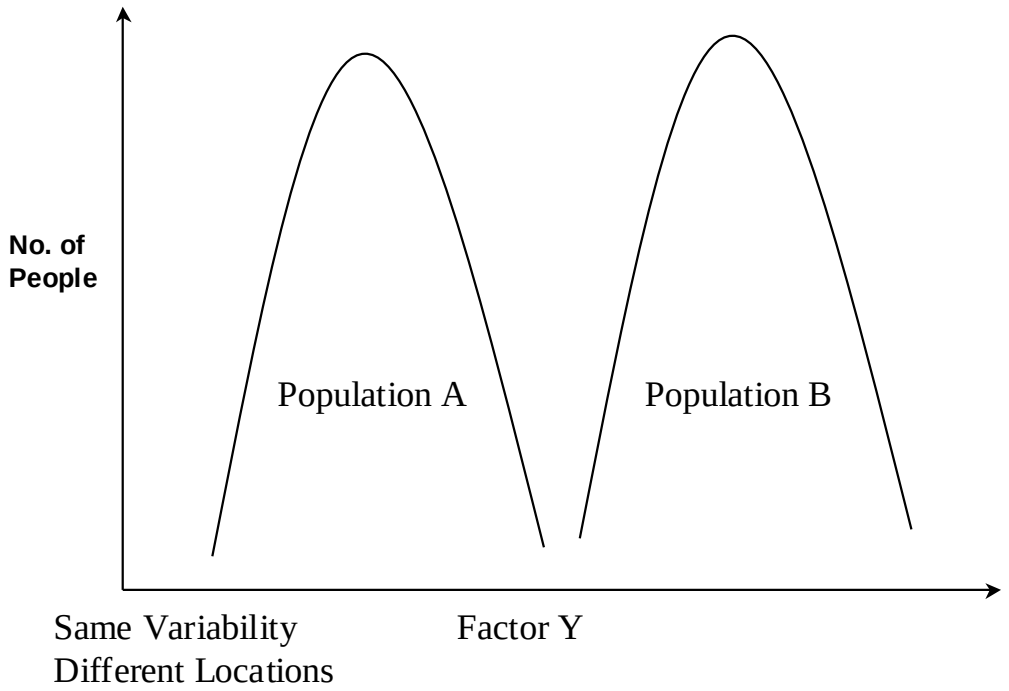
Both measurements describe the shape of the distribution of a set of observations related to a variable.

Both measurements are necessary for precise and efficient comparisons of different sets of data.

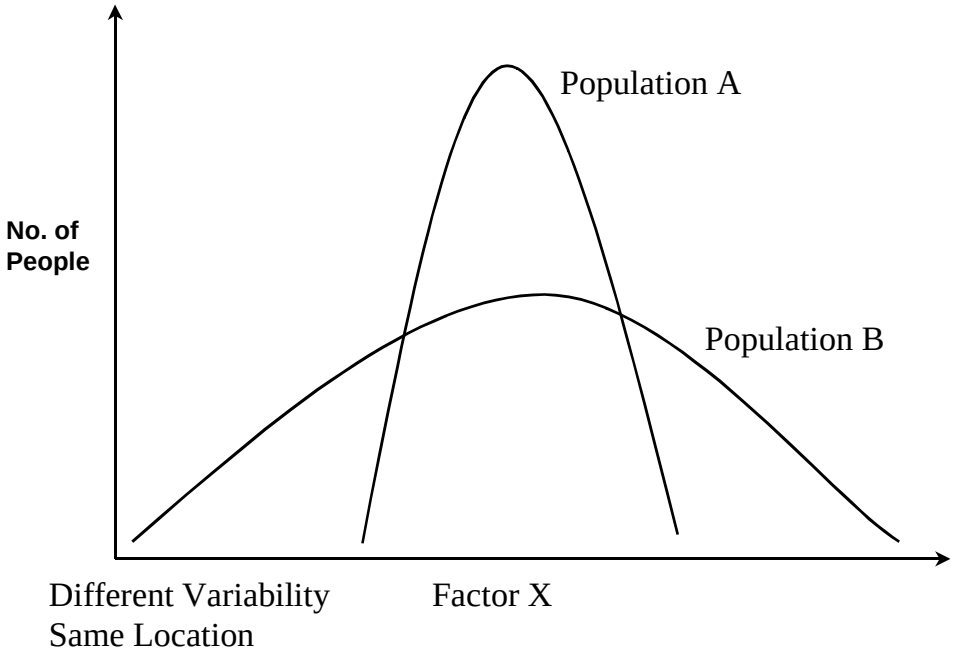
Different variability, same location



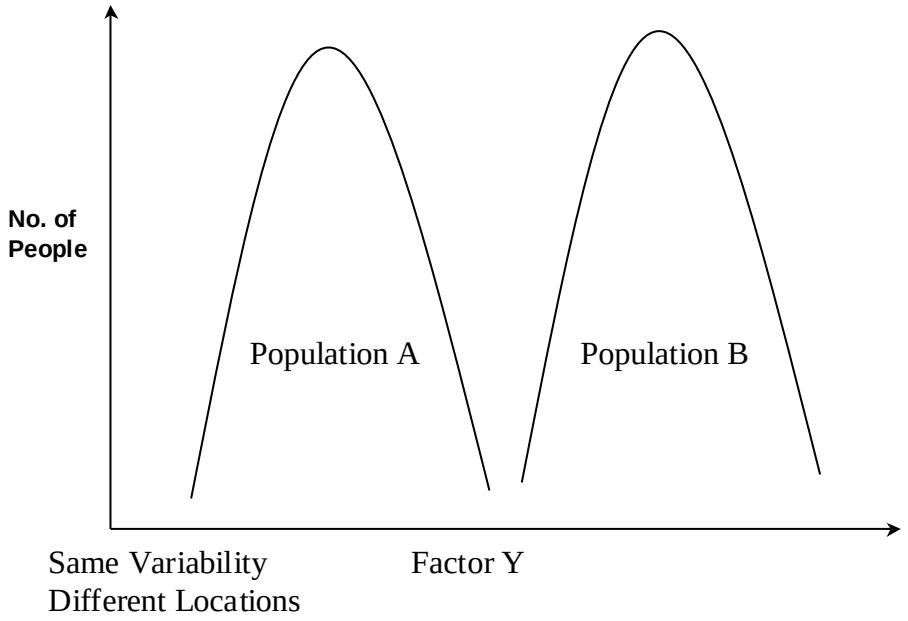
Different location, same variability



Different Variability, Same Location



Same Variability, Different Location



- Today, the focus is on measurements of central tendency.
- Next time, the focus will be on measurements of frequency distribution.

Measures of central tendency

- There exist three types of central tendency:
  - Mode
  - Median
  - Mean
- Each of them makes it possible to produce an average measurement about a specific question addressed during the survey. This measurement becomes evidence about the issue addressed by the research project.
- Today’s presentation will also introduce some appropriate applications for these three types of central tendency.

Measures of central tendency

The definitions of central tendency are as follows:

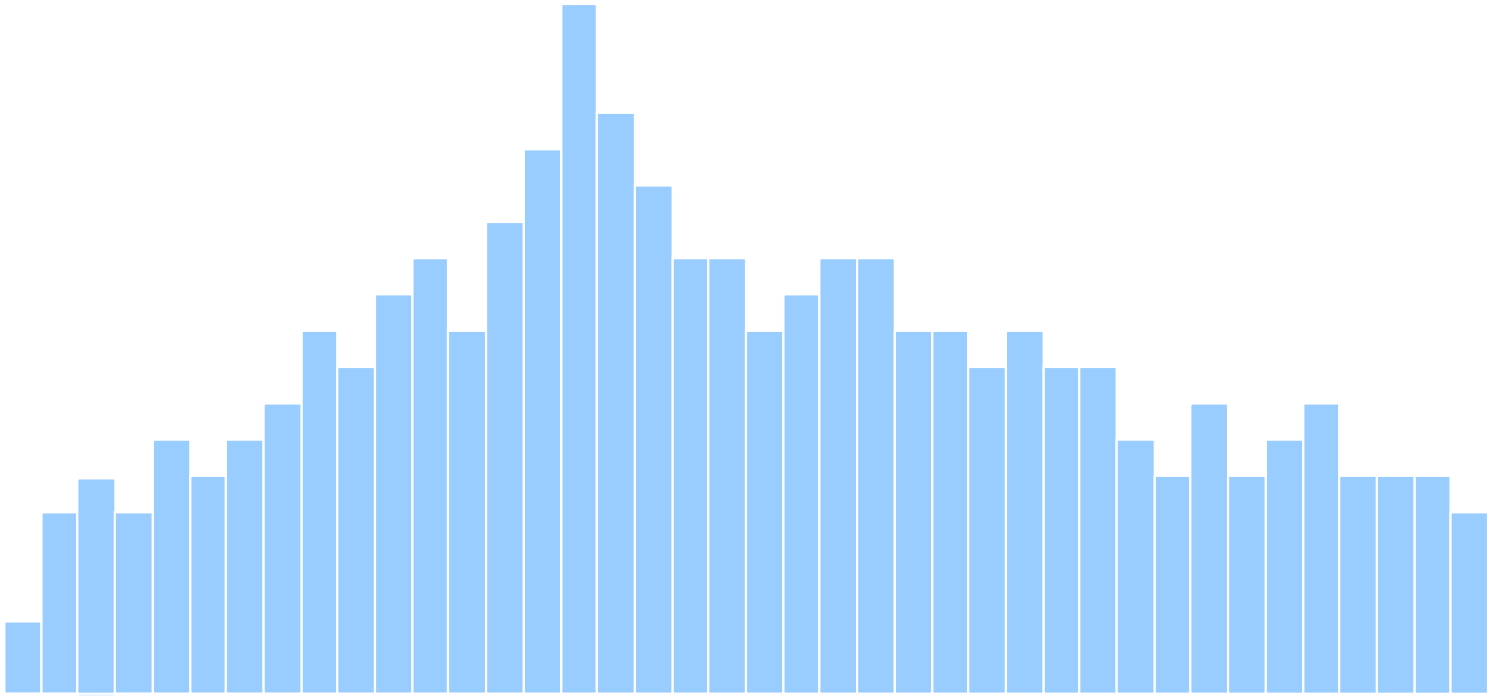
- Mode : the observation that occurs the most frequently
- Median: the mid-point of a set of ordered observations
- (Arithmetic) Mean: the product (or result) of the division of the arithmetic sum of observations by the number of observations

Mode

- Definition
  - The mode of a distribution is the value that is observed most frequently in a given set of data

- How to obtain it?
  - Arrange the data in sequence from low to high
  - Count the number of times each value occurs
  - The value occurring the most frequently is the mode

Mode



Examples of mode (1/3)

- One of the variables of a study is the ‘annual salary’ (in 100,000 Kyats).

- The result of the survey conducted on a group of households is the following:
  4, 3, 3, 2, 3, 8, 4, 3, 7, 2
  meaning the 1st household has 4 lakhs; the 2nd household 3 lakhs; etc…

- When the values observed during the survey are arranged in order, the results are:2, 2, 3, 3, 3, 3, 4, 4, 7, 8 7, 8

- Measurement of the mode as central tendency:
  The mode is four (4) times “3”

Examples of mode (2/3)

- One of the variables of a study is ‘incubation period for hepatitis affected persons’. The variable is measured in days.

- The survey of persons affected by the disease shows the following results:
  29, 31, 24, 29, 30, 25 (days)
  meaning the 1st person interviewed had 29 days of incubation: the 2nd 31 days; etc…

- After arranging the values in order shows the following result:
  24, 25, 29, 29, 30, 31

- Therefore the mode is two (2) times 29.

Example of mode (3/3)

Colour preference of people for their cars

Colour preference		Number of people
Green		354
Blue	Mode	852
Gray		310
Red		474

The mode is the only location statistics to be used when some characteristic itself cannot be measured

Features of the mode

- There may be no mode
  - When each value is unique

- There may be more than one mode
  - When more than 1 peak occurs
  - Bimodal distribution

- The mode is not based upon all observations obtained from the field, that is, only the most frequent observations are picked up for calculating the mode.

Median

- The median describes literally the middle value of the data.
- It is defined as the value above or below which half (50%) the observations fall.

Calculating the median

- Arrange the observations or data collected in order from smallest to largest (ascending order) or vice-versa;

- Count the number of observations “n”
  - If “n” is an odd number
    - Median = value of the (n+1) / 2th observation

  - If “n” is an even number
    - Median = the average of the n / 2th and (n /2)+1th observations

Example of median

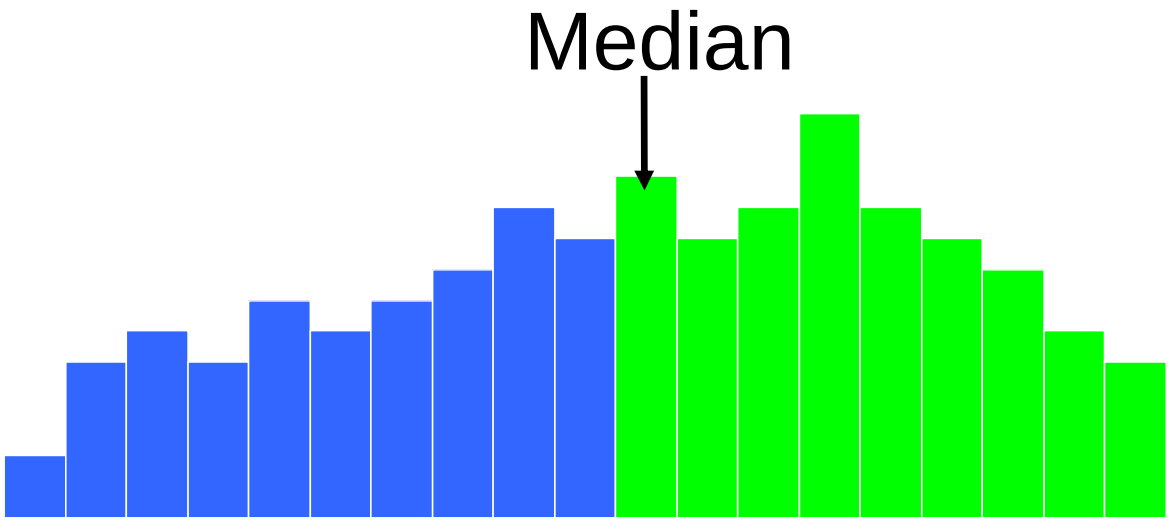
- What is the median of the following values:
  - 10, 20, 12, 3, 18, 16, 14, 25, 2
- Arrange the numbers in increasing order
  - 2 , 3, 10, 12, 14, 16, 18, 20, 25
- Median = 14
- Suppose there is one more observation (8)
  - 2 , 3, 8, 10, 12, 14, 16, 18, 20, 25
- Median = Mean of 12 & 14 = 13

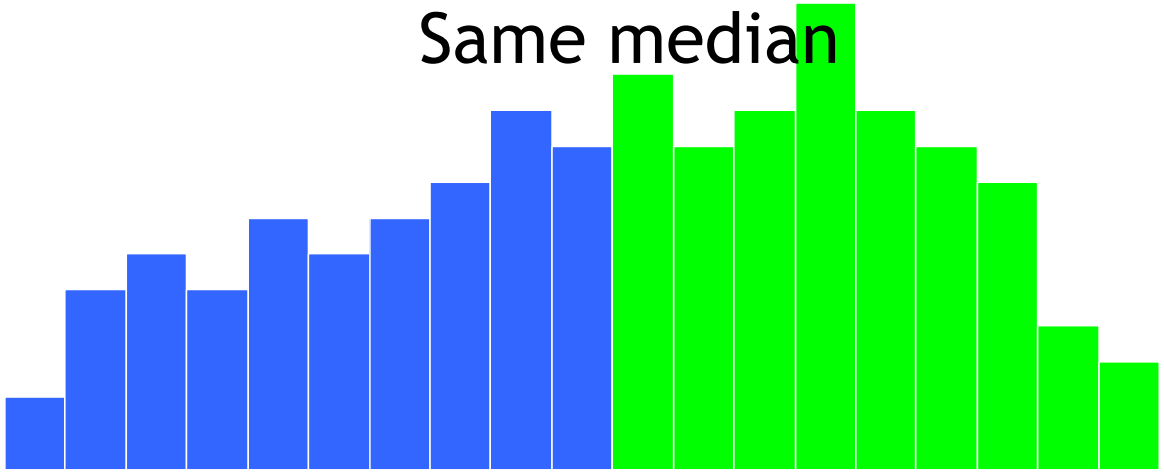
Median

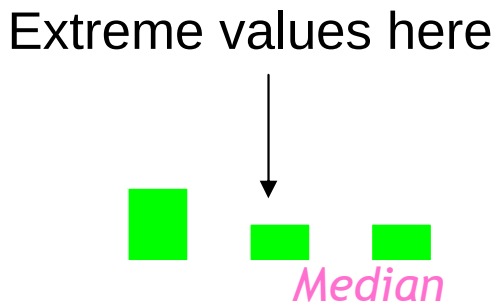
- Advantages:
  - The median is unaffected by extreme values

- Disadvantages:
  - The median does not contain information on the other values of the distribution
    - Only selected by its rank
    - You can change 50% of the values without affecting the median

The median is not sensitive to extreme values







Mean (Arithmetic mean / Average)

- The 3rd type of measurement for central tendency is the ‘mean’.
- It is the most commonly used measure of location.
- Definition
  - Calculated by adding all observed values and dividing by the total number of observations
- Notations
  - Each observation is denoted as x1, x2, … xn
  - The total number of observations: n
  - Summation process = Sigma : Σ
  - The mean: X
    - $X = \Sigma xi / n$

Calculating the mean

- Variable studied: Duration of stay in days in a hospital

  Observations of the variable collected: 8,25,7,5,8,3,10,12,9

  - 9 observations (n=9)
  - Sum of all observations = 87
  - Mean duration of stay = 87 / 9 = 9.67

- Variable studied: Incubation period in days of a disease

  Observations of the variable collected: 8,45,7,5,8,3,10,12,9

  - 9 observations (n=9)
  - Sum of all observations =107
  - Mean incubation period = 107 / 9 = 11.89

Mean

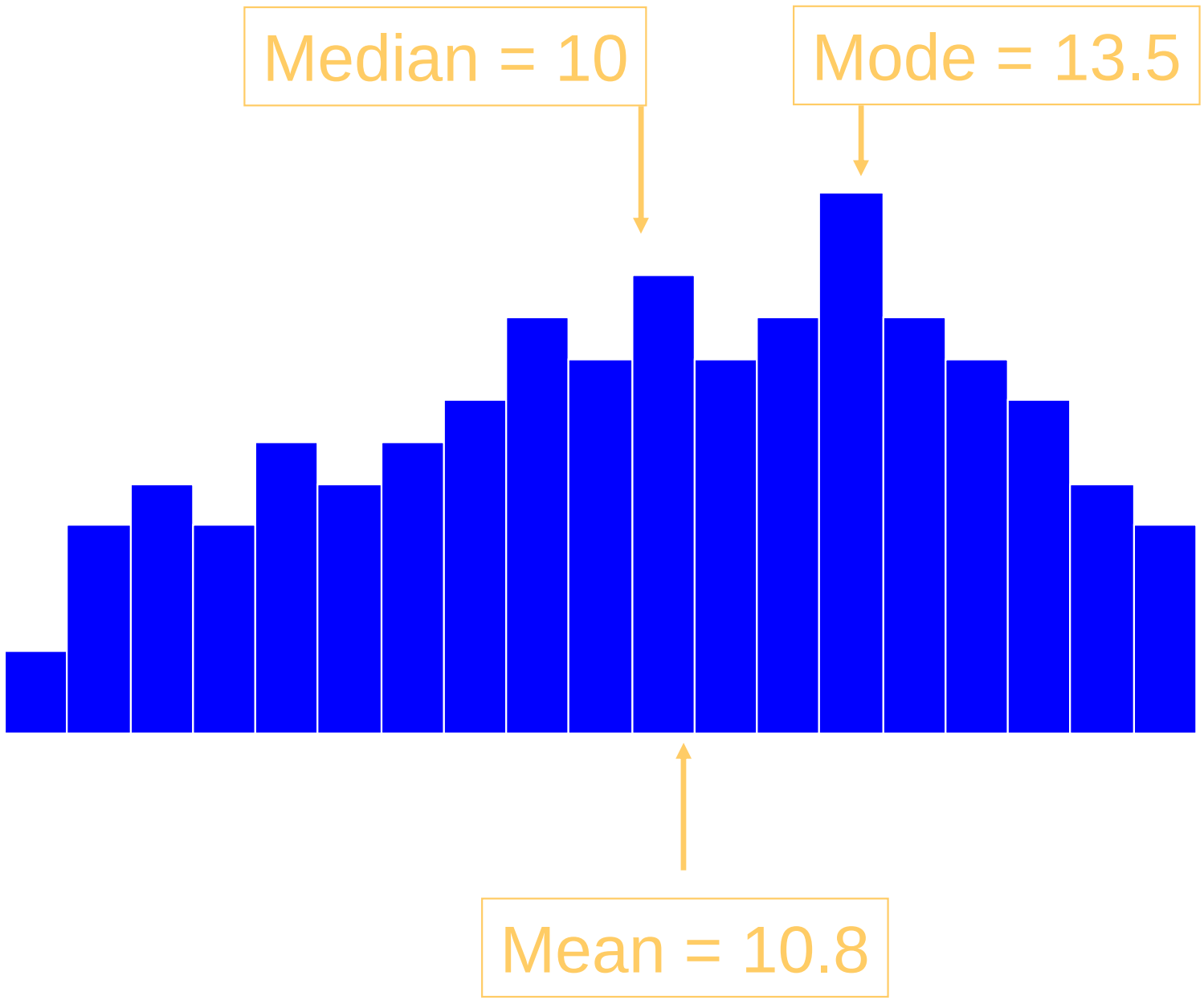
- Advantages
  - Has a lot of good theoretical properties
  - Used as the basis of many statistical tests
  - Good summary statistic for a symmetrical distribution

- Disadvantages
  - Less useful for an asymmetric distribution
    - Can be distorted by outliers, therefore giving a less “typical” value

Mean of several groups combined

Group (i)	Size (n_i)	Mean (x_i)	Sum (n_i x_i)
1	10	41	410
2	15	36	540
3	25	42	1050
Total	50	--	2000

Mean of all groups = 2000 / 50 = 40 Crude average = 39.7


Median = 10
Mode = 13.5
Mean = 10.8

What measure of location to use?

- Consider the duration (days) of absence from work of 21 labourers owing to sickness
  - 1, 1, 2, 2, 3, 3, 4, 4, 4, 4, 5, 6, 6, 6, 7, 8, 9, 10, 10, 59, 80

- Mean of the variable is 11 days
  - Not typical of the series as 19 of the 21 labourers were absent for less than 11 days
  - Distorted by extreme values

- Median of the variable is 5 days
  - Better measure

Conclusion

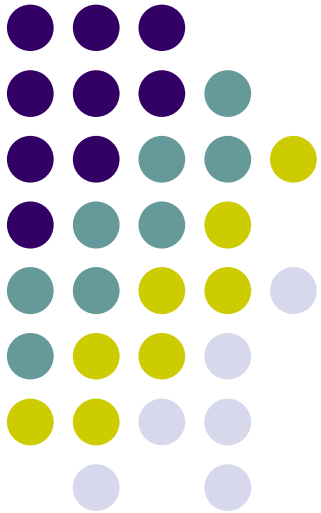
- The mode is the most common value
- The median is adapted when there are extreme values
- The mean is adapted for symmetric distribution
- The type of the distribution determines the measure of central tendency to use

Thank you!

17. Quantitative Data Analysis Part 2

Presentation Objectives

- *To consolidate students/trainees' capacity to conduct independent quantitative data analysis*
- *To increase students/trainees' capacity to think critically about quantitative data and analyze them*
- *To develop students/trainees' understanding of the various types of analyses although they may not use the more elaborate ones*

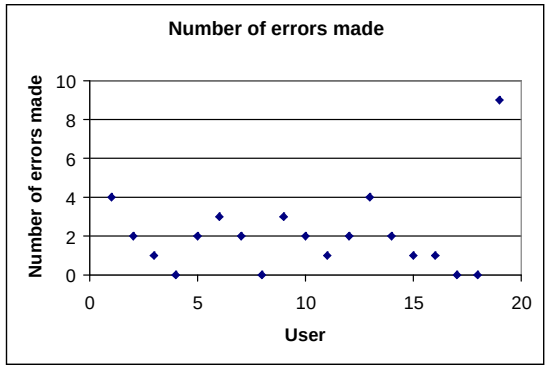


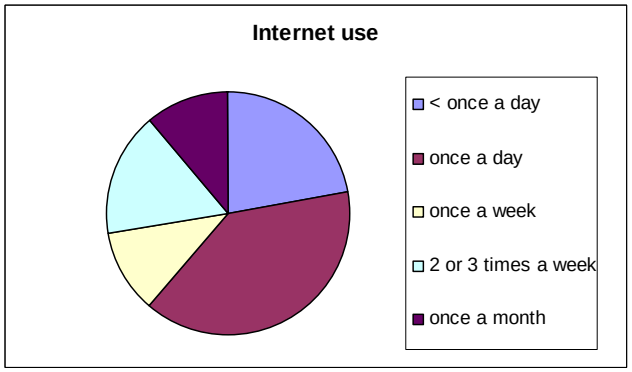
Simple quantitative analysis

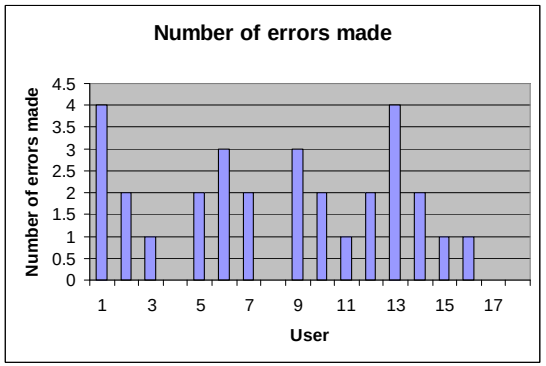
- Part 1 of the quantitative data analysis was about measurement of the central tendency.
- The types of measurement of the central tendency are the following:
  - Mean: add up values and divide by number of data points
  - Median: middle value of data when ranked
  - Mode: figure that appears most often in the data

- Other quantitative data include percentages.

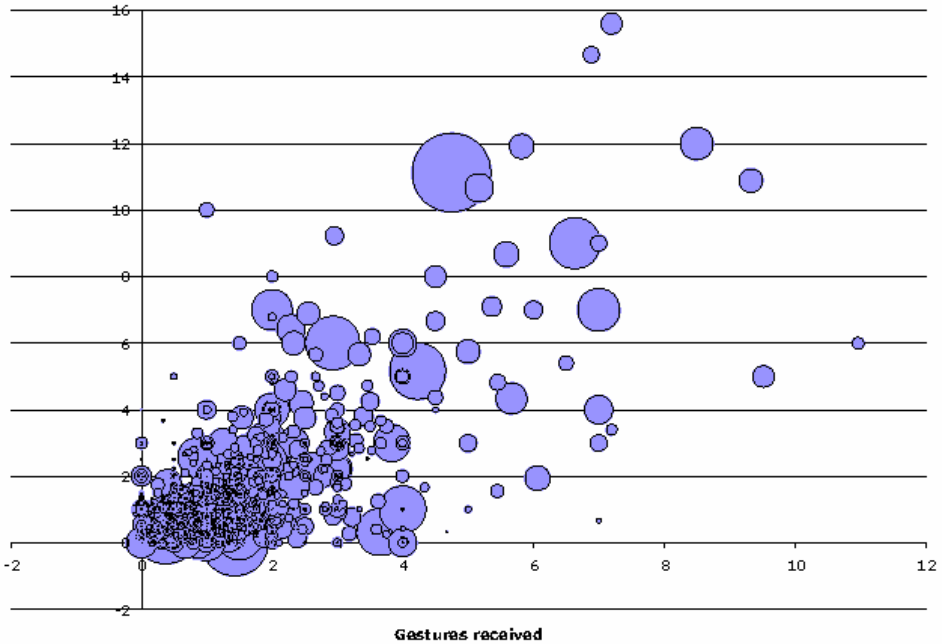
- Graphical representations give overview of data





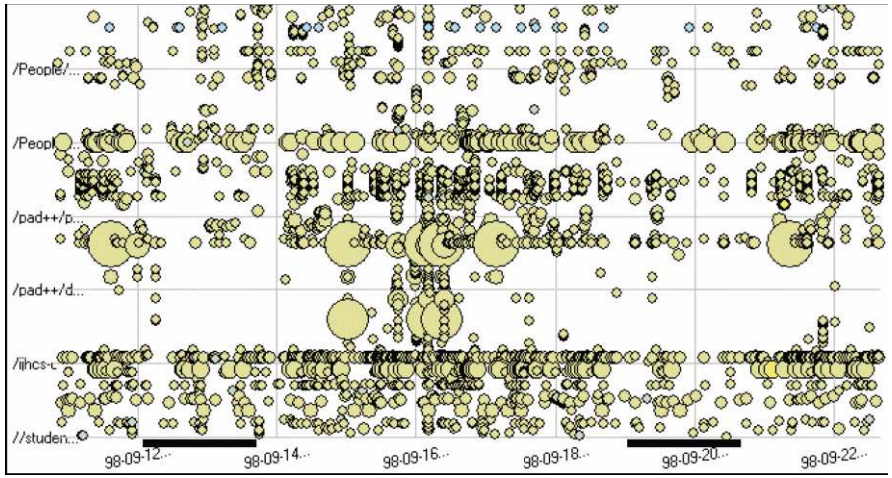


Complex quantitative data



Interaction of players in online game

Log of web page activity



Frequency distribution: features

(1/2)

Part 2 of Quantitative data analysis will introduce the second approach to measurement of a variable: **frequency distribution**.

This approach to measurement of a variable is about how **widespread, dispersed, and distributed** values of a variable are among the data collected.

In a frequency distribution, one variable is considered at a time.

A frequency distribution for a variable produces a table of frequency counts, percentages, and cumulative percentages for all the values associated with that variable

Frequency distribution: features
(2/2)

Frequency distribution is a list of all the scores for a sample or population indicating the number of times that each score occurs.

The data are grouped into mutually exclusive categories showing the number of observations in each category.

Exercise time

46 students took an 18-question quiz.
Describe the distribution.

Note: read “zero, up to, but not including 3; 3 up to, but not including 6”, etc.

Students	*f*
0 up to 3	1
3 up to 6	1
6 up to 9	4
9 up to 12	5
12 up to 15	10
15 up to 18	25
Total	46

Frequency Distribution: Graphic Presentation

- The three commonly used graphic forms are:
  - Histograms (1/5)
  - Bar charts (2/5)
  - Frequency polygons (3/5)

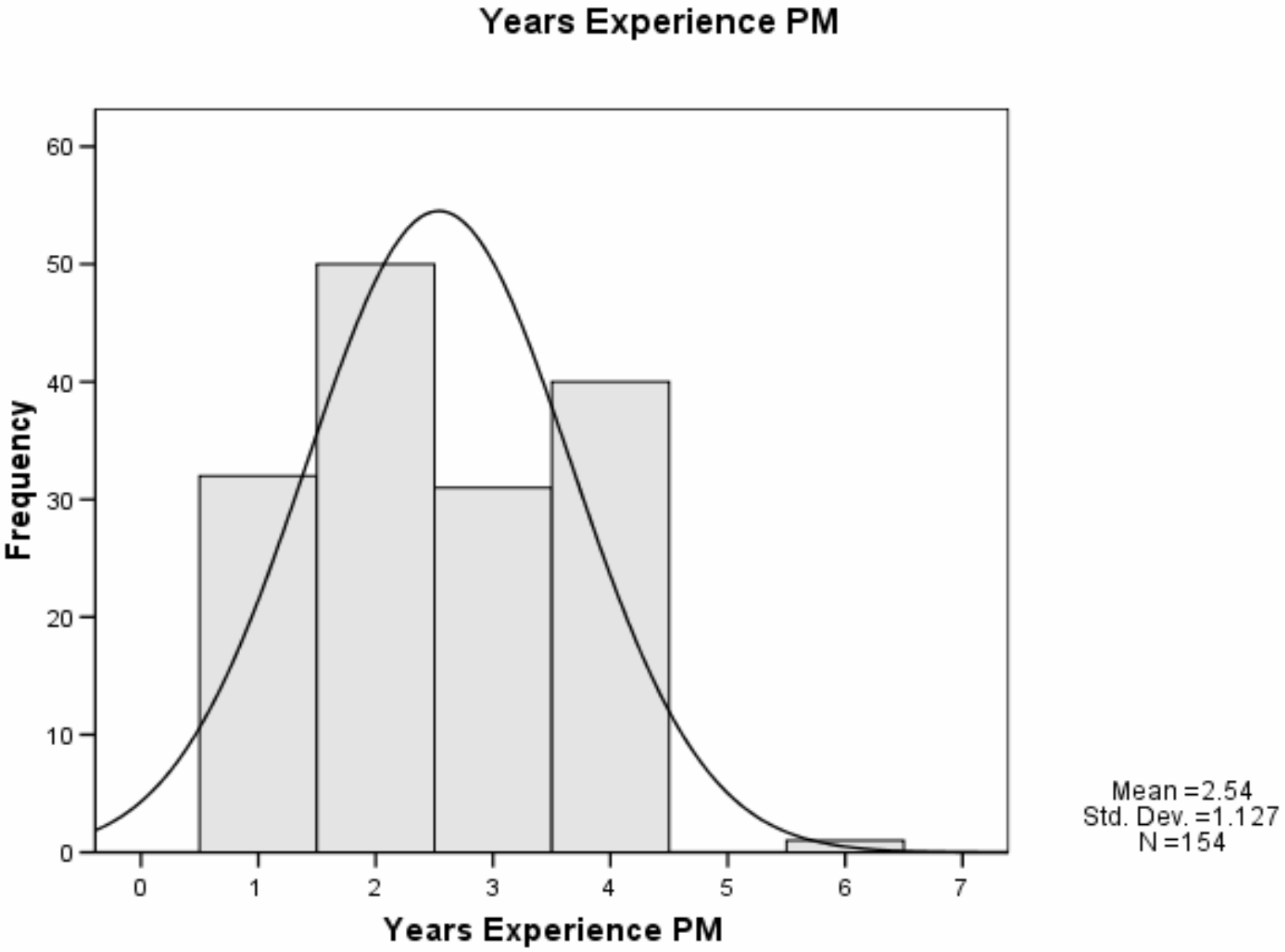
- Two more elaborate graphic forms are:
  - Stem and Leaf (4/5)
  - Scatter plots (5/5)

Histogram (1/5)

A histogram is a graph in which the classes are marked on the horizontal axis and the class frequencies on the vertical axis.

The class frequencies are represented by the heights of the bars and the bars are drawn adjacent to each other.

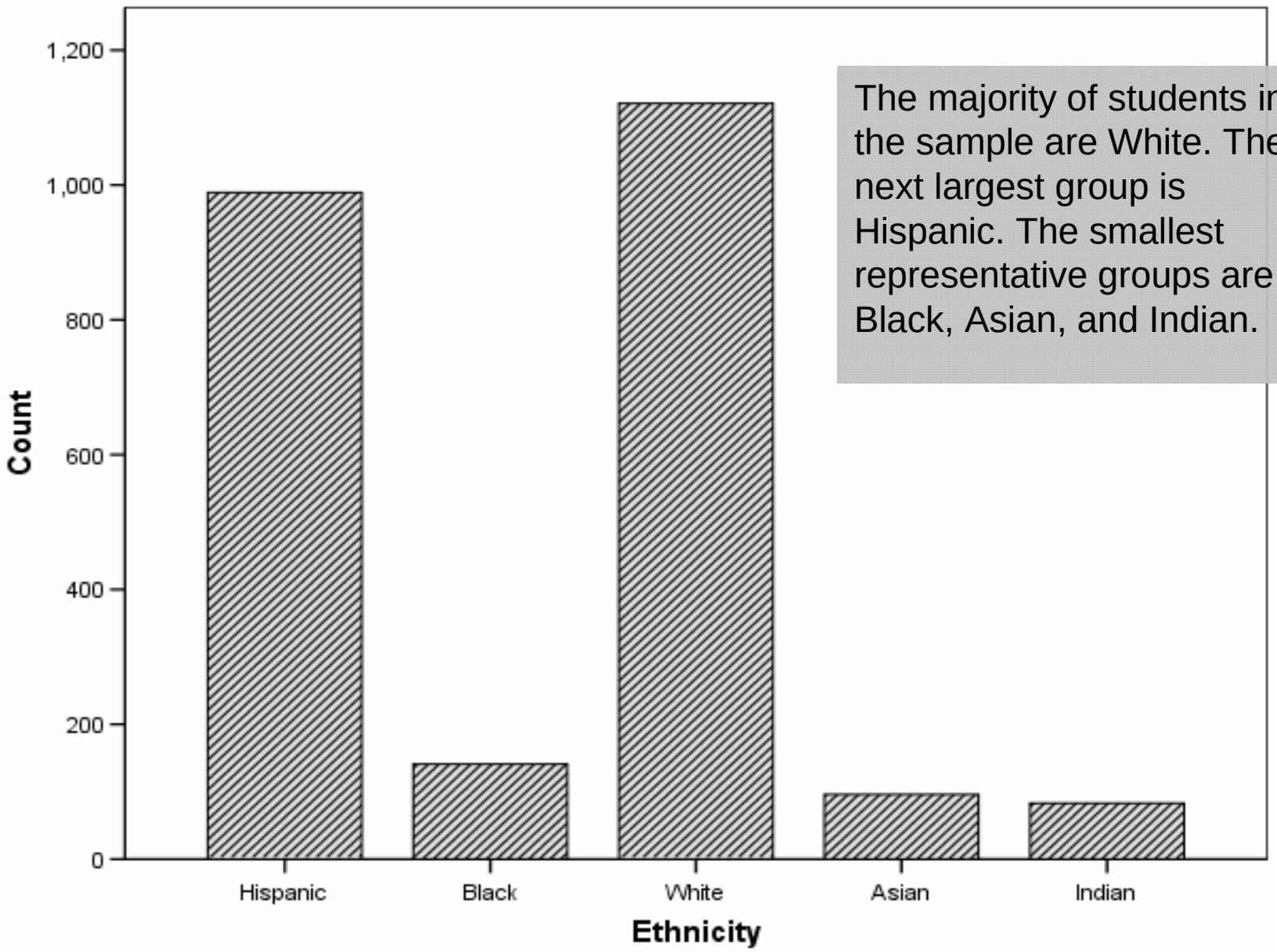
Histogram (1/5)



Bar chart (2/5)

- A bar graph illustrates nominal data with the scores/categories along the *x*-axis and the frequencies on the *y*-axis.
- The scores are not ordered.
- **The bars do not touch (*unlike a histogram*).**
- The heights correspond to the number of times the score occurs.

Bar chart (2/5)

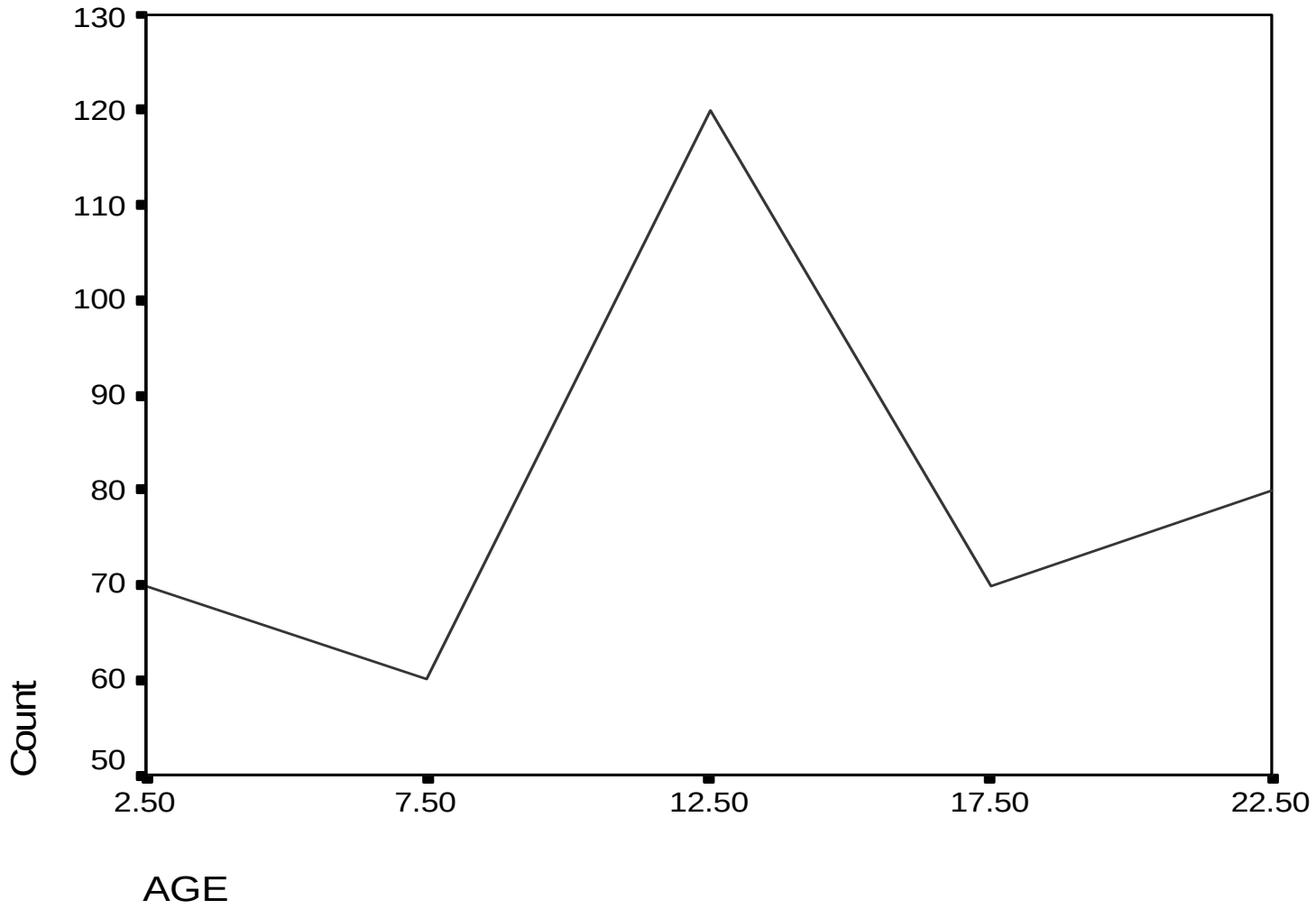


The majority of students in the sample are White. The next largest group is Hispanic. The smallest representative groups are Black, Asian, and Indian.

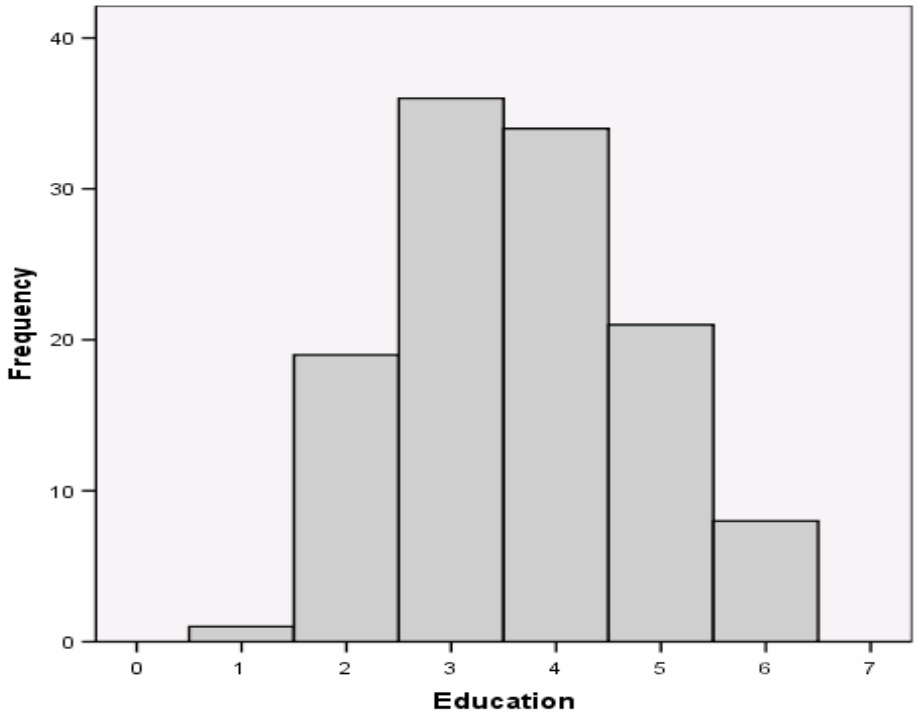
Frequency polygon (3/5)

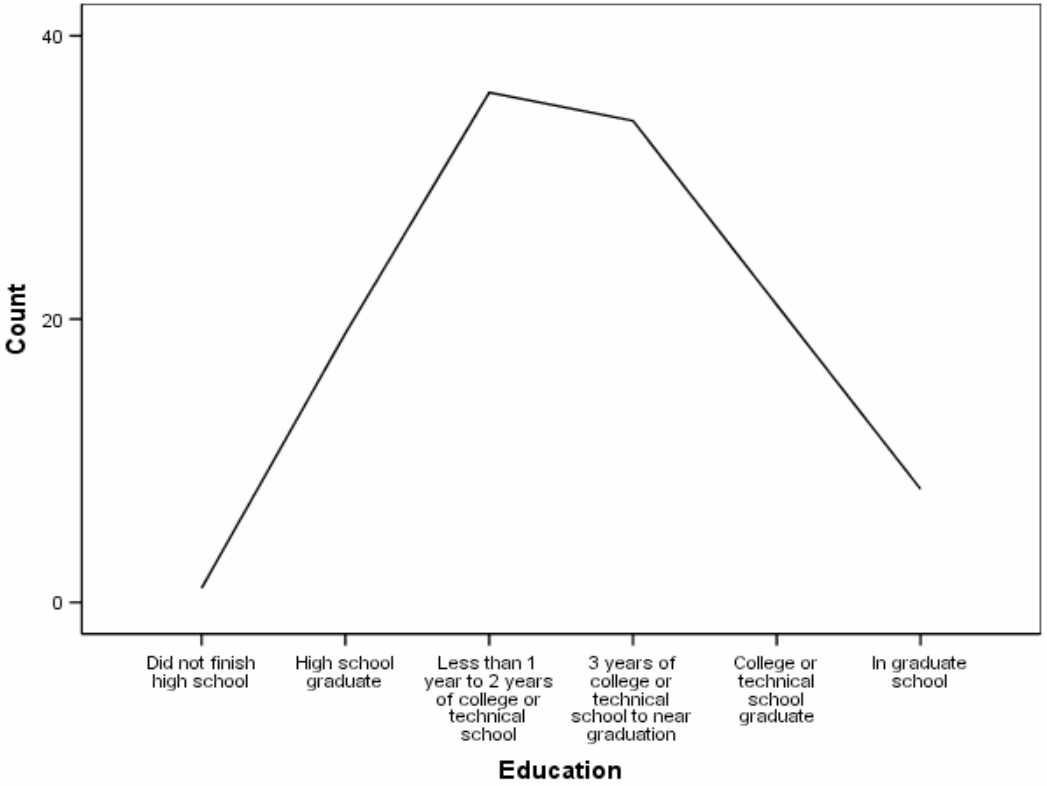
A frequency polygon consists of line segments connecting the points formed by the class midpoint and the class frequency.

Frequency polygon (3/5)



Compare Histogram/Frequency Polygon





Stem and Leaf (4/5)

A frequency distribution table that provides a visual picture of the distribution.

Each raw score has two parts:

-a stem, consisting of all but the last digit,

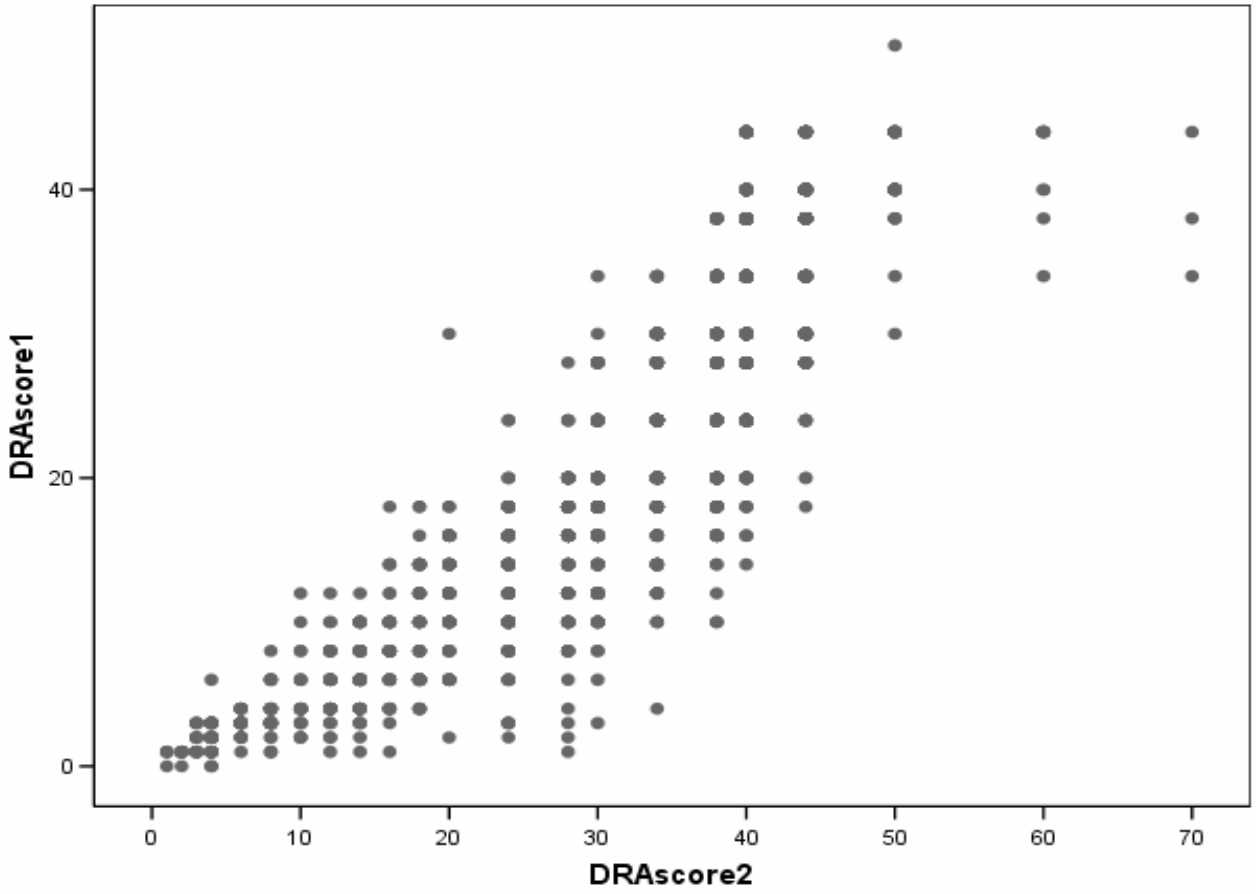
-a leaf, the last digit in the number.

Stem and Leaf (4/5)

```
Current Salary Stem-and-Leaf Plot
 Frequency    Stem &  Leaf
     2.00         1 .  55
     2.00         2 .  47
     6.00         3 .  001234
     3.00         4 .  016
     1.00         5 .  0
     2.00 Extremes    (>=81250)
 Stem width:     10000
 Each leaf:       1 case(s)
```

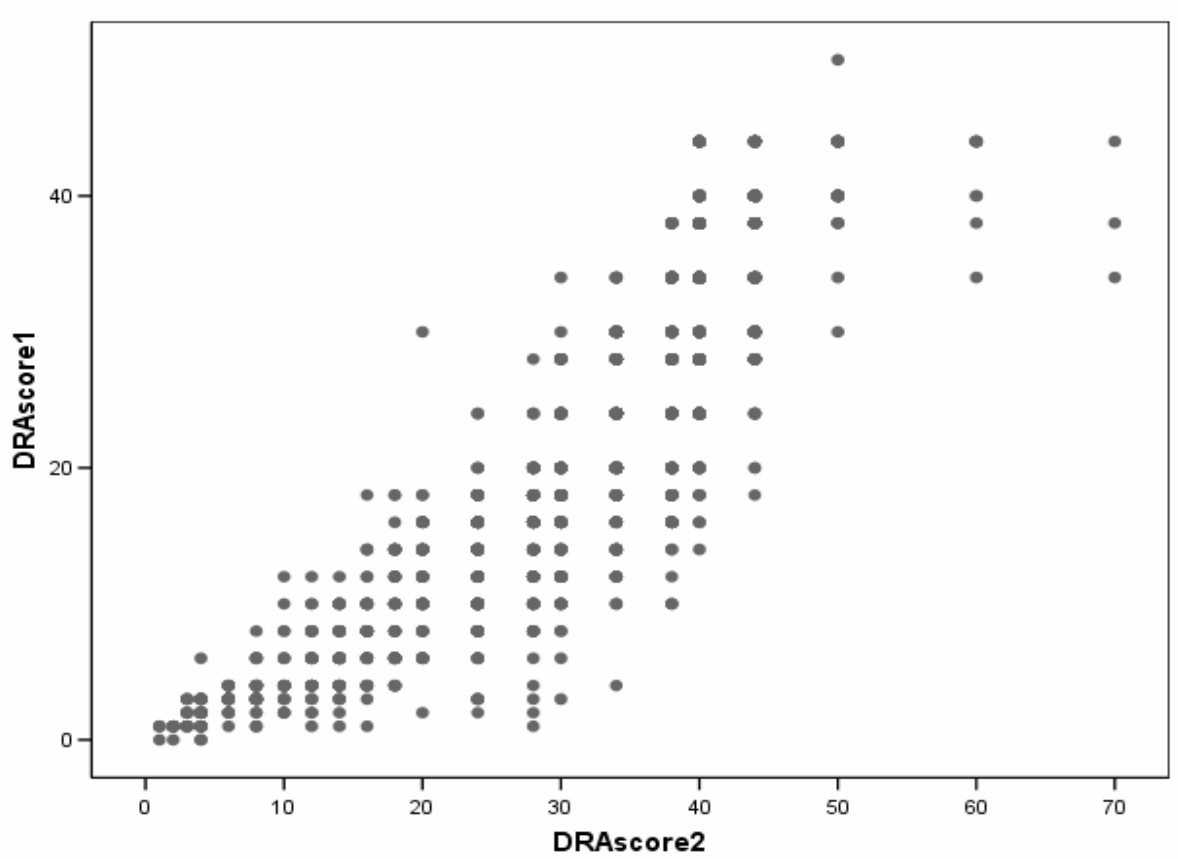
Scatter plots (5/5)

A **scatter plot** illustrates the relationship between two continuous variables.



Scatter plots (5/5)

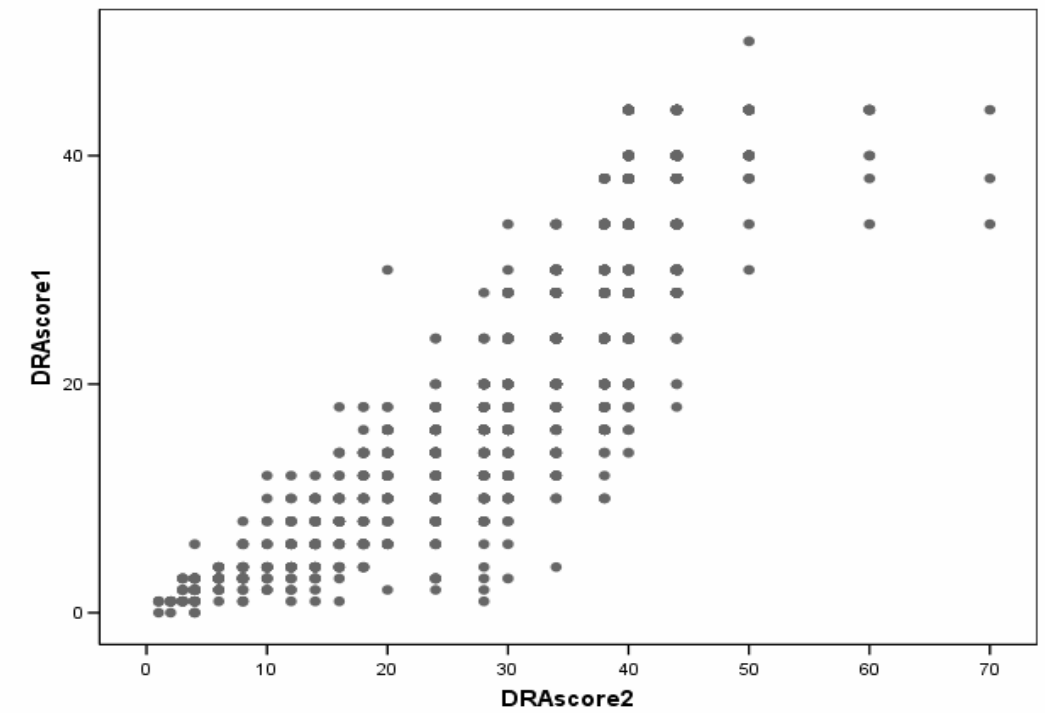
A scatter plot illustrates the values of Y (vertical axis) versus the corresponding values of X (horizontal axis).



Scatter plots (5/5)

Scatter plots can provide answers to the following question:

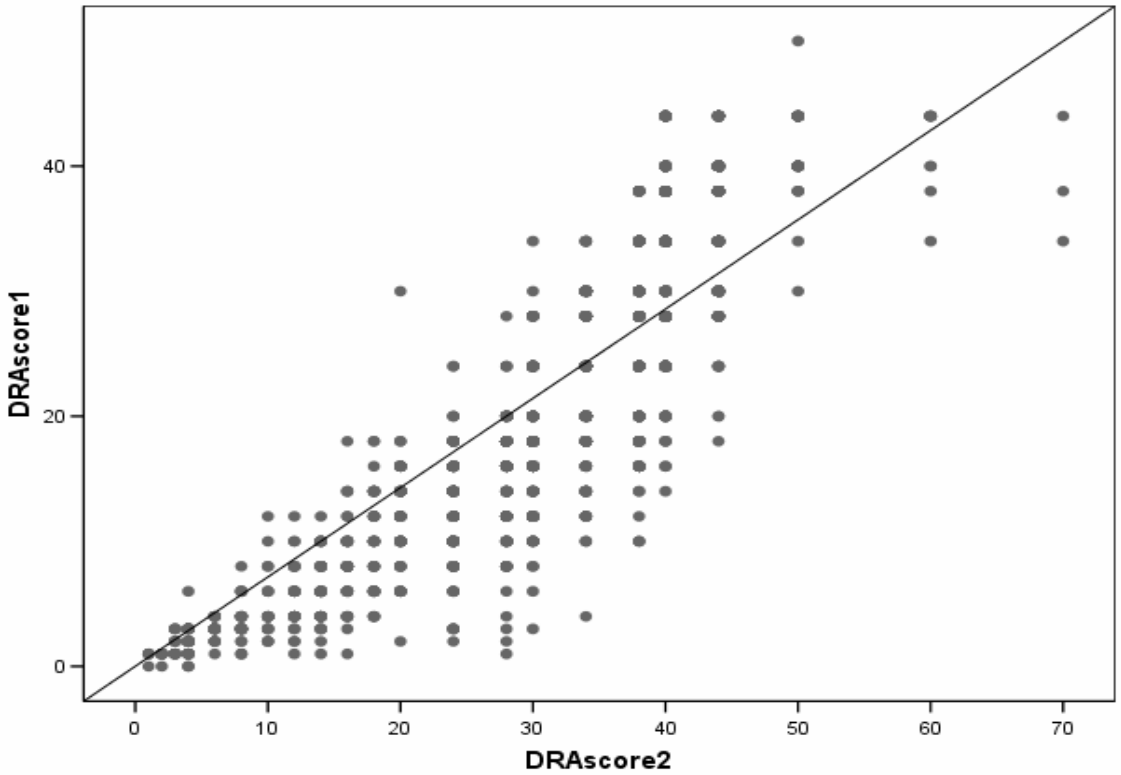
Are variables X and Y correlated? (as one variable goes up, the other variable goes up/down)



Scatter plots (5/5)

Scatter plots can provide answers to the following question:

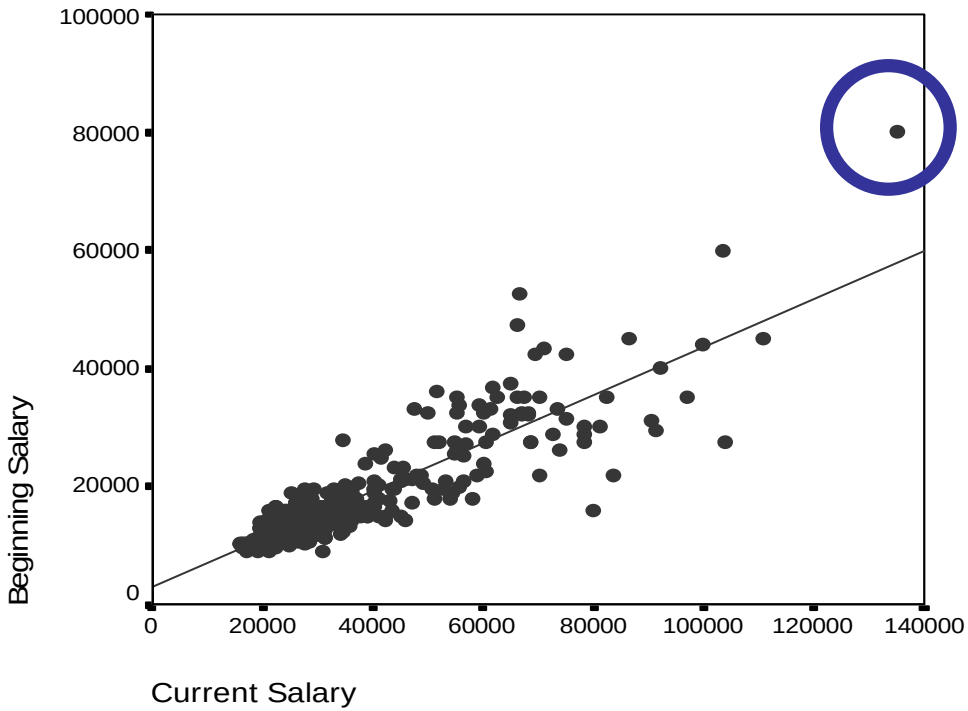
Is there a linear relationship between X and Y? (as one variable goes up, the other variable goes up/down)



Scatter plots (5/5)

Scatter plots can provide answers to the following question:

Are there outliers? (Do one or more points stray from the trend?)



Conclusion

- The last two types of frequency distribution are quite complex. They were presented here just as an illustration of what data collection can achieve at a certain level of expertise.

- It will be however important to remember the three most common types of frequency distribution:
  - Histogram
  - Bar chart
  - Frequency polygon

- Similarly, it will be important to remember the three types of central tendency:
  - Mode
  - Median
  - Mean

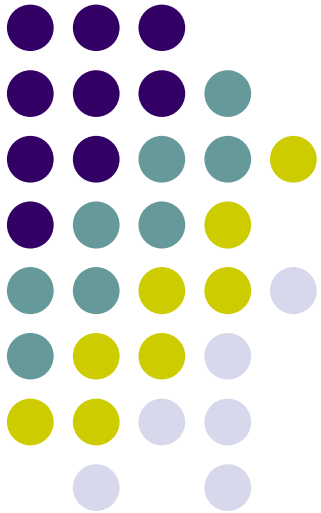
Thank you!

18. Introduction to SPSS Part 1

Presentation Objectives

- *To introduce students/trainees to SPSS's basic management tool for data analysis*

- *To introduce students/trainees to enter data in SPSS and to manage data files*



Introduction: What is SPSS?

- Originally it meant Statistical Package for the Social Science but now it stands for **Statistical Product and Service Solutions.**
- SPSS is one of the most popular statistical packages which can perform highly complex data manipulation and analysis with simple instructions.
- It allows for in-depth data access and preparation, analytical reporting, graphics and modeling.

1. The four windows

The organizing principle of SPSS is based around four windows:

1.1 Data editor

1.2 Output viewer

1.3 Syntax editor

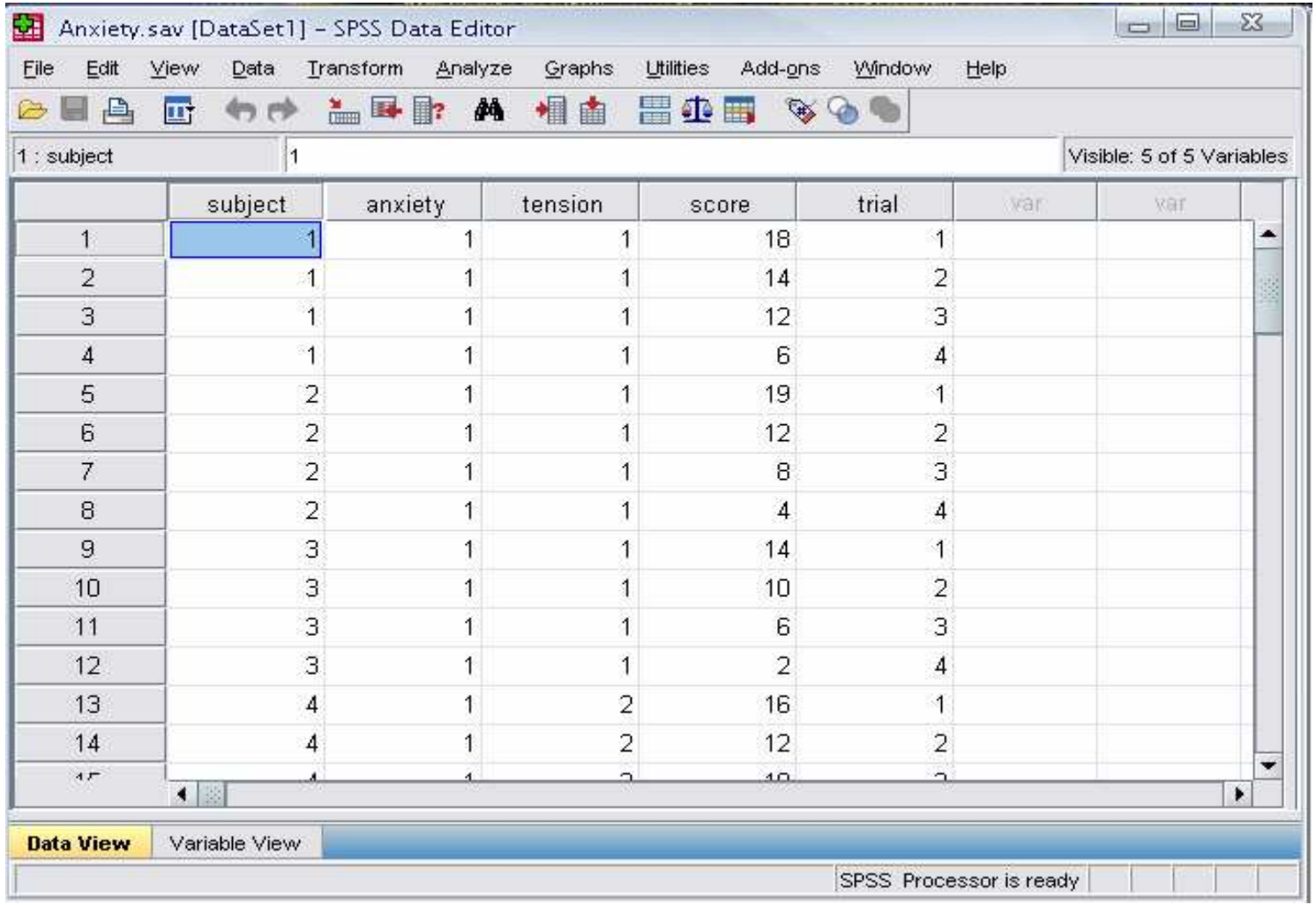
1.4 Script window

1.1 Data Editor's window

- **Data Editor**

  Spreadsheet-like system for defining, entering, editing, and displaying data.

  Extension of the saved file will be ".sav"

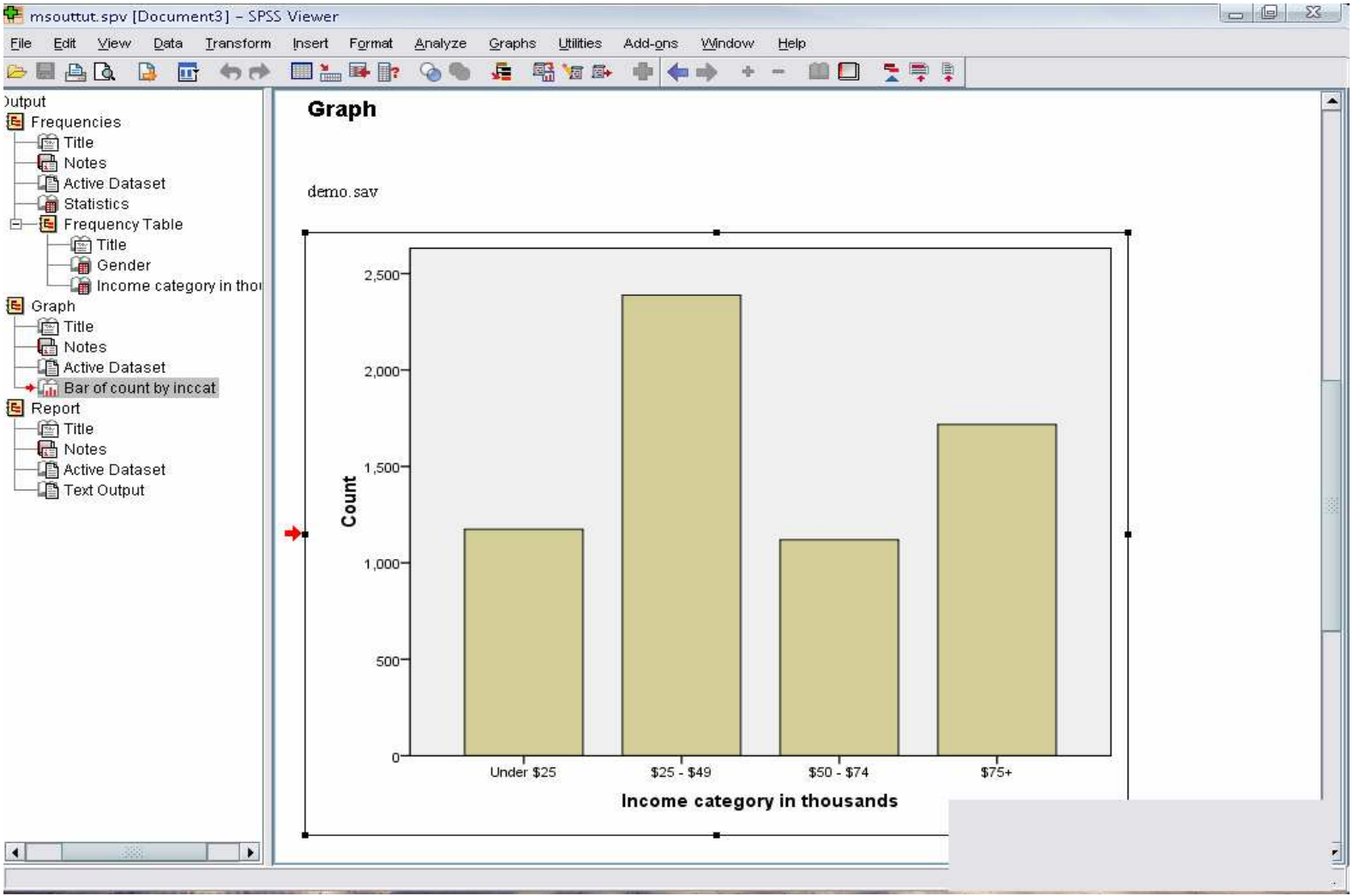


1.2 Output Viewer's window

- **Output Viewer**

  Displays output and errors.

  Extension of the saved file will be ".spv"

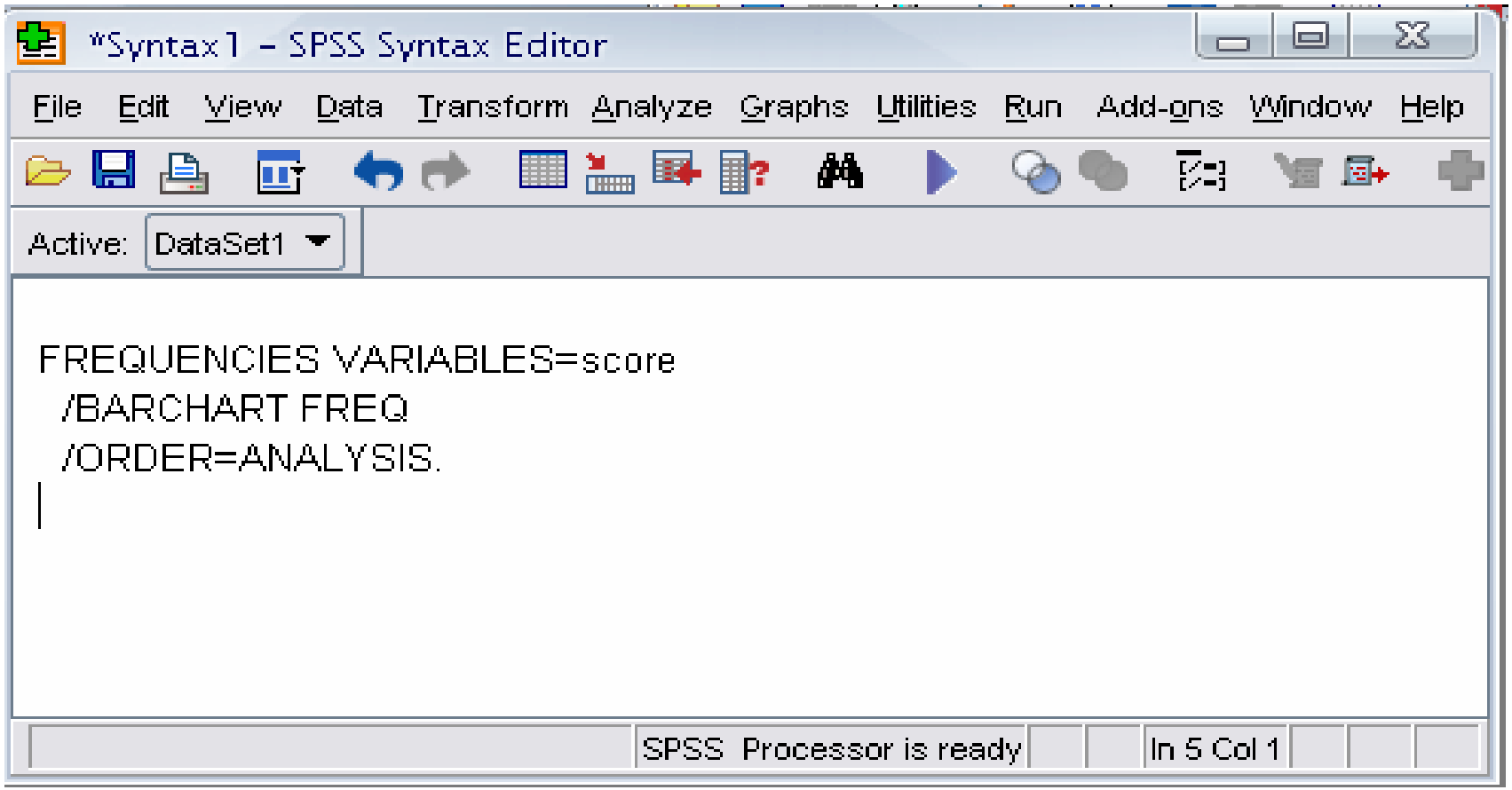


1.3 Syntax editor’s window

- **Syntax Editor**

  Text editor for syntax composition.

  Extension of the saved file will be “.sps”



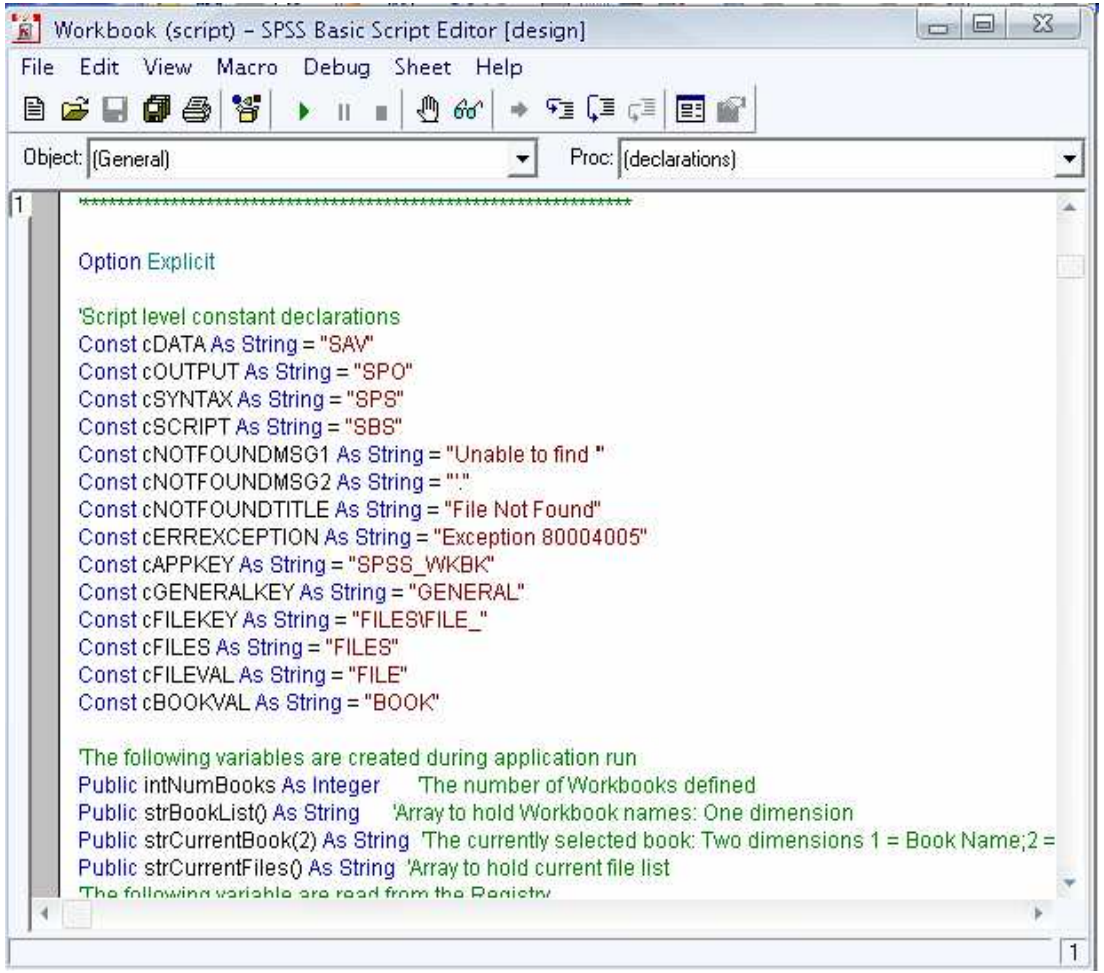
1.4 Script Window

- **Script Window**

  Provides the opportunity to write full-blown programs, in a BASIC-like language.

  Text editor for syntax composition.

  Extension of the saved file will be “.sbs”



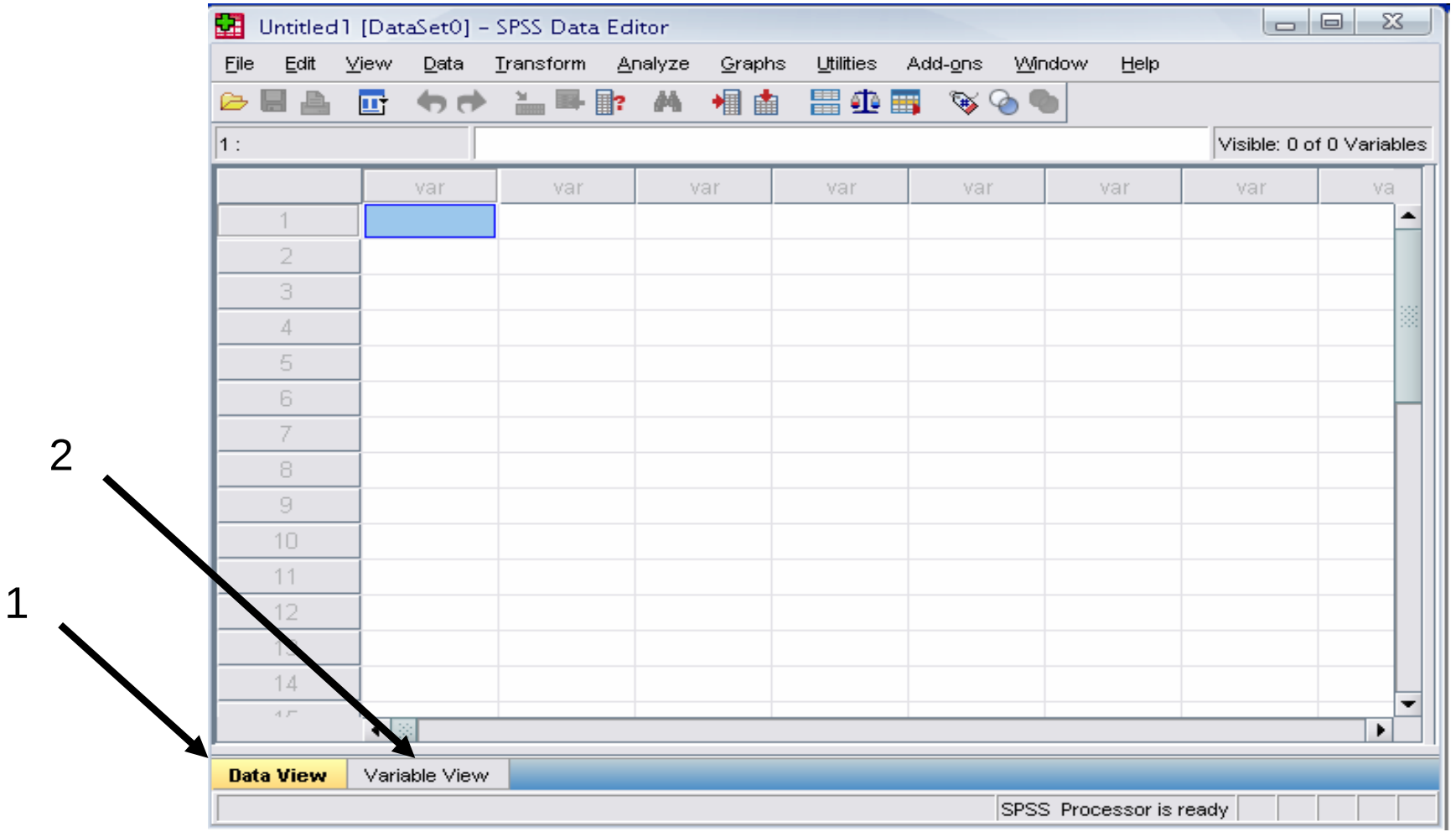
2.1 Opening SPSS

- Start → All Programs → SPSS Inc→ SPSS 16.0 → SPSS 16.0

2.1 Opening SPSS

- The **default** window will have the data editor
- There are two sheets in the window:

1. Data view
2. Variable view



Data view vs. Variable view

- Data view
  - Rows are cases
  - Columns are variables

- Variable view
  - Rows define the variables
    - Name, Type, Width, Decimals, Label, Missing, etc.

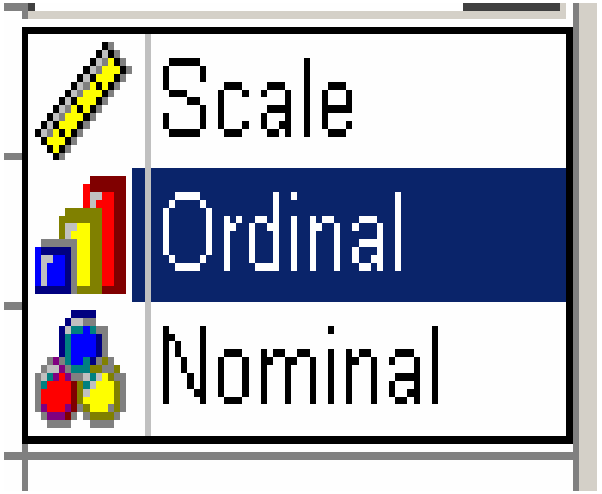
      - Nominal – categories that cannot be ranked (ID number)

      - Ordinal – categories that can be ranked (level of satisfaction)

      - Scale – age, weight, income (interval or ratio)

Types of measurement of variable

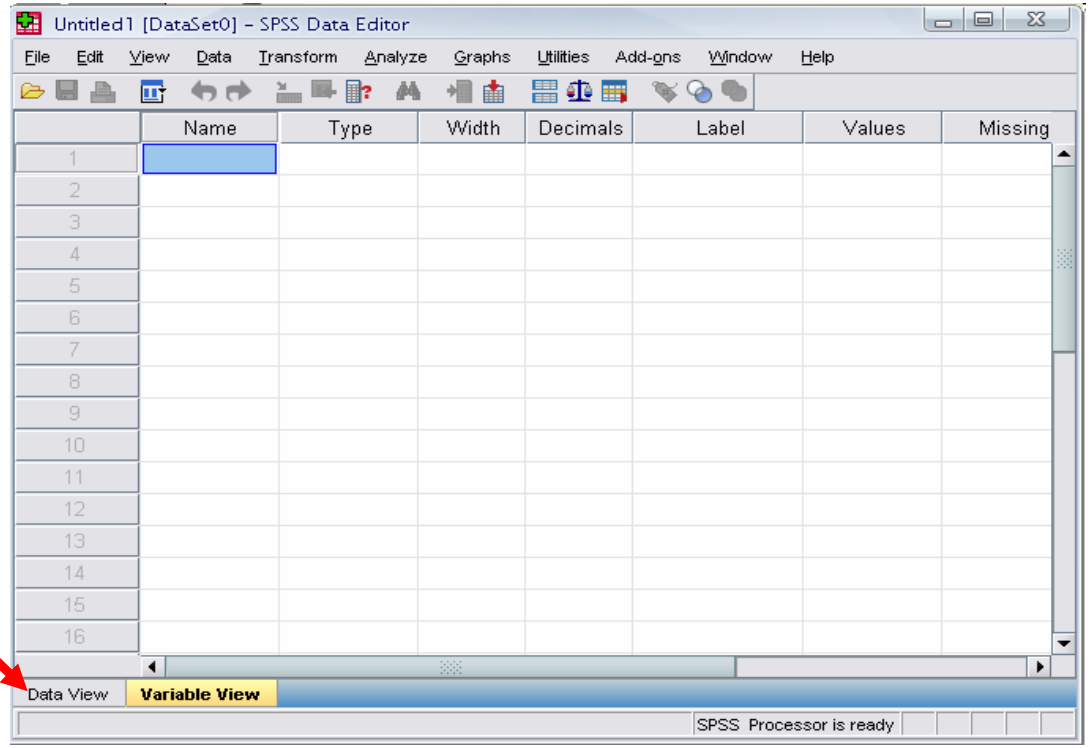
- **Nominal** - objects or people are categorized according to some criterion (gender, job category)
- **Ordinal** - Categories which are ranked according to characteristics (income- low, moderate, high)
- **Interval** - contain equal distance between units of measure- but no zero (calendar years, temperature)
- **Ratio** - has an absolute zero and consistent intervals (distance, weight)
- ***Nominal and ordinal*** *data types relate to qualitative variables*
- ***Scale*** *(Data values are numeric values on an interval or ratio scale) data types relate to quantitative variables.*



Data View window

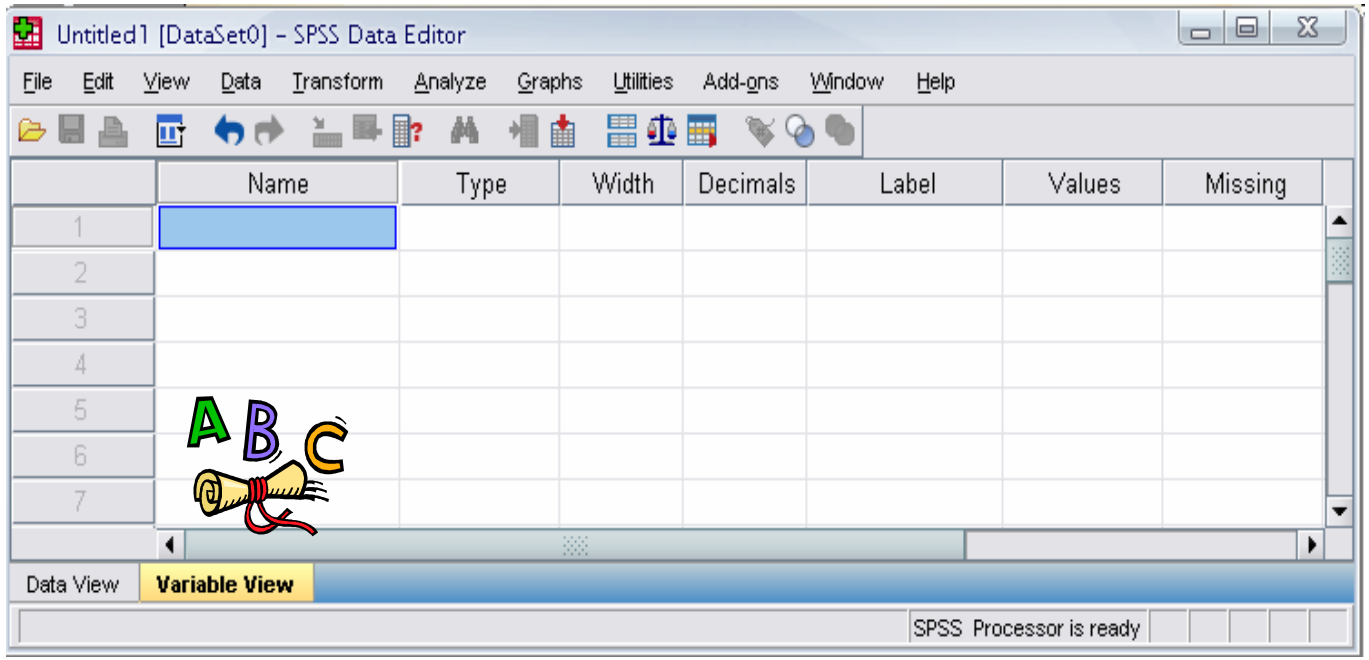
- The Data View window
  This sheet is visible when you first open the Data Editor and this sheet contains the data
- Click on the tab labeled Variable View

Click



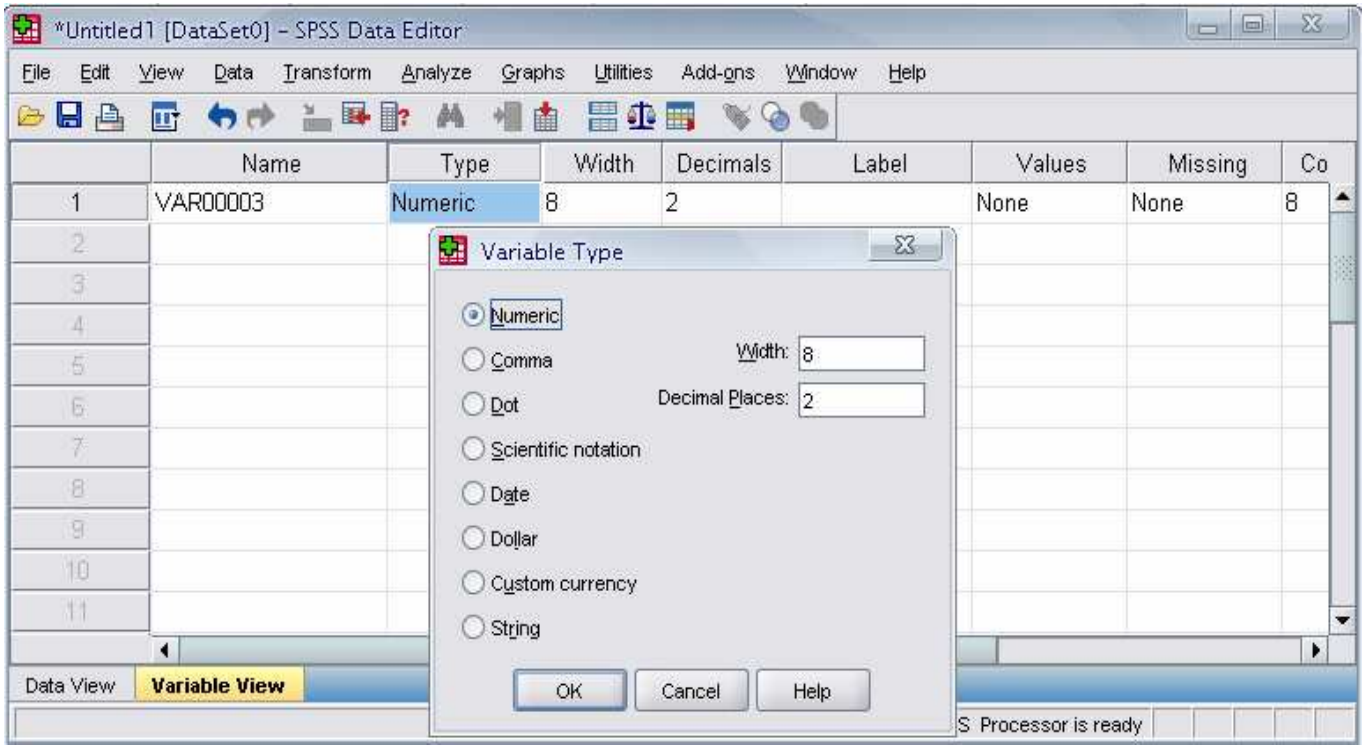
Variable View window

- This sheet contains information about the dataset that is stored with the dataset
- Name
  - The first character of the variable name must be alphabetic
  - Variable names must be unique, and have to be less than 64 characters.
  - Spaces are NOT allowed.



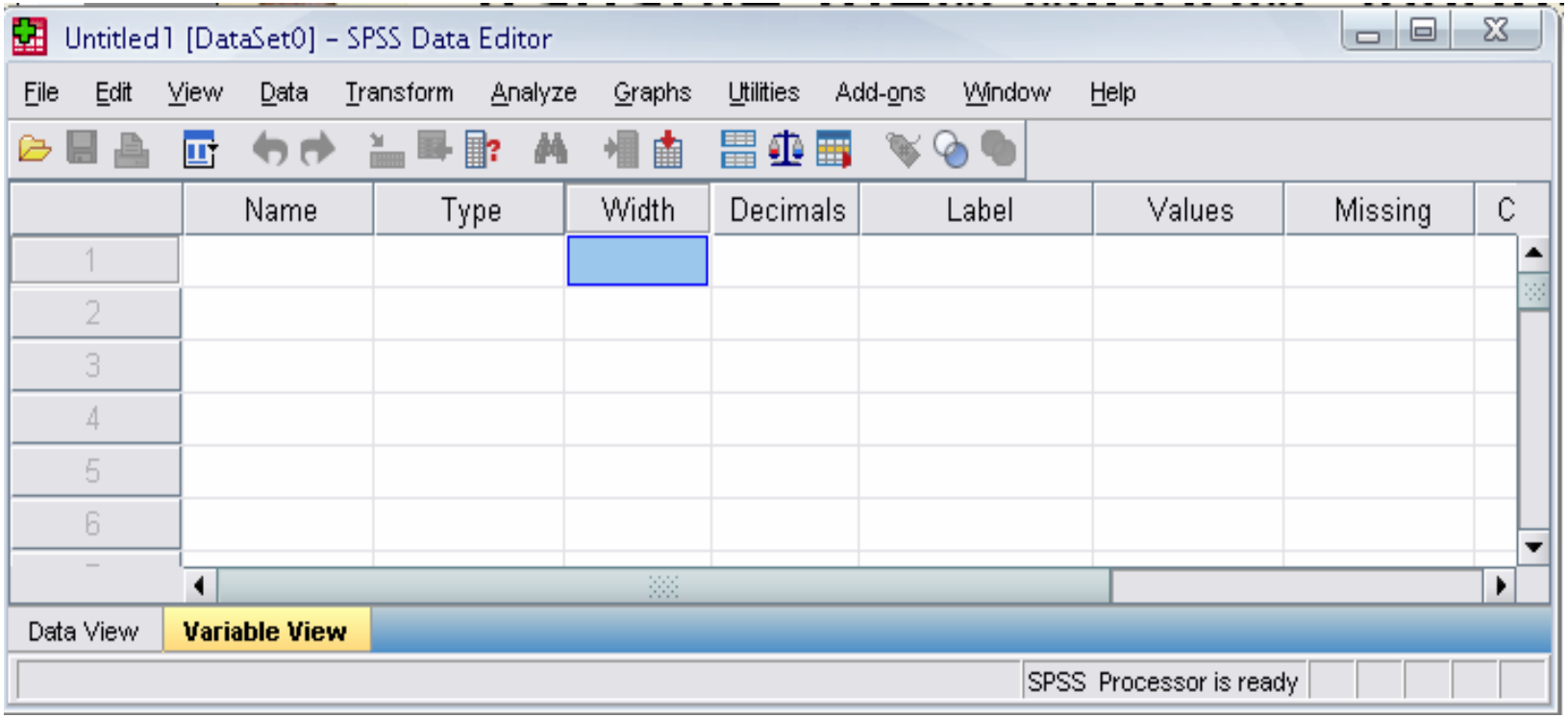
Variable View window: Type

- Type
  - Click on the ‘type’ box.
  - The two basic types of variables that you will use are numeric and string. This column enables you to specify the type of variable.



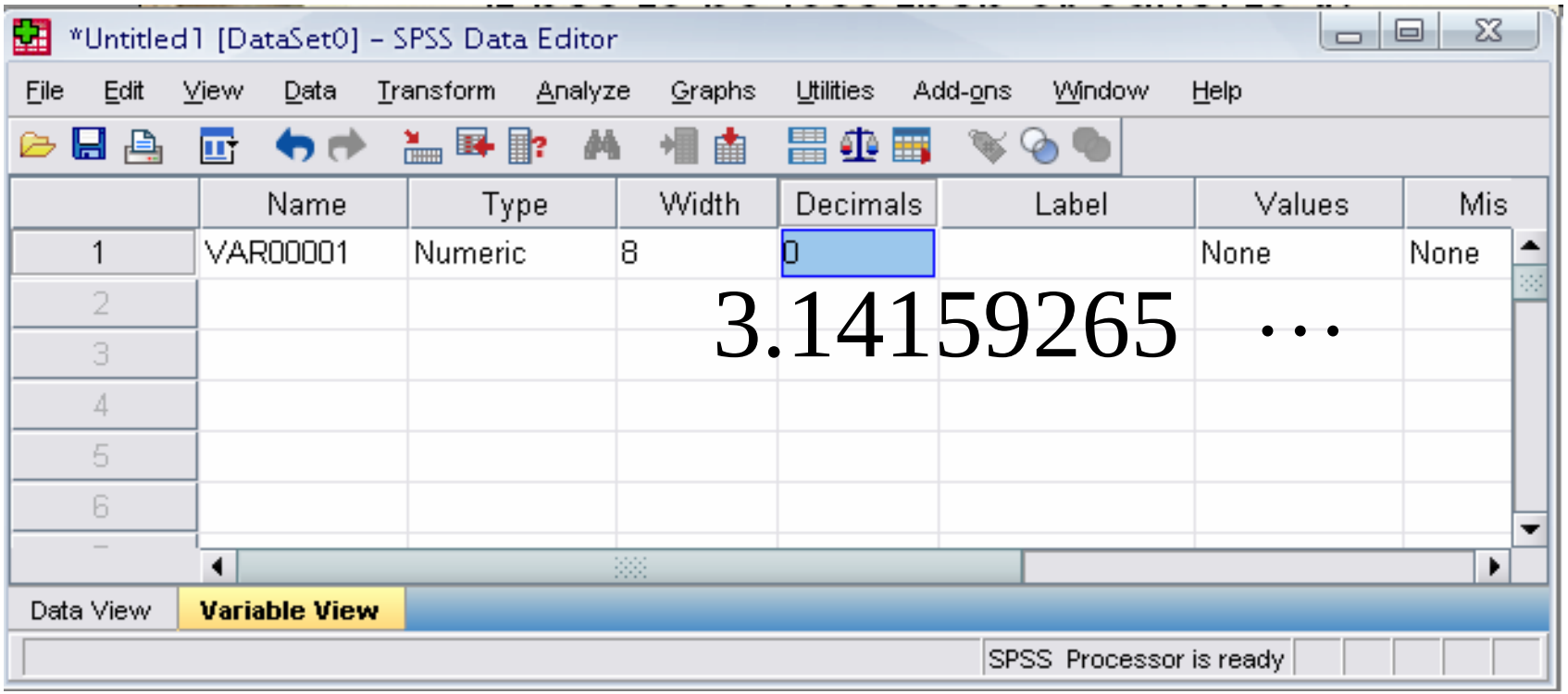
Variable View window: Width

- Width
  - Width allows you to determine the number of characters SPSS will allow to be entered for the variable



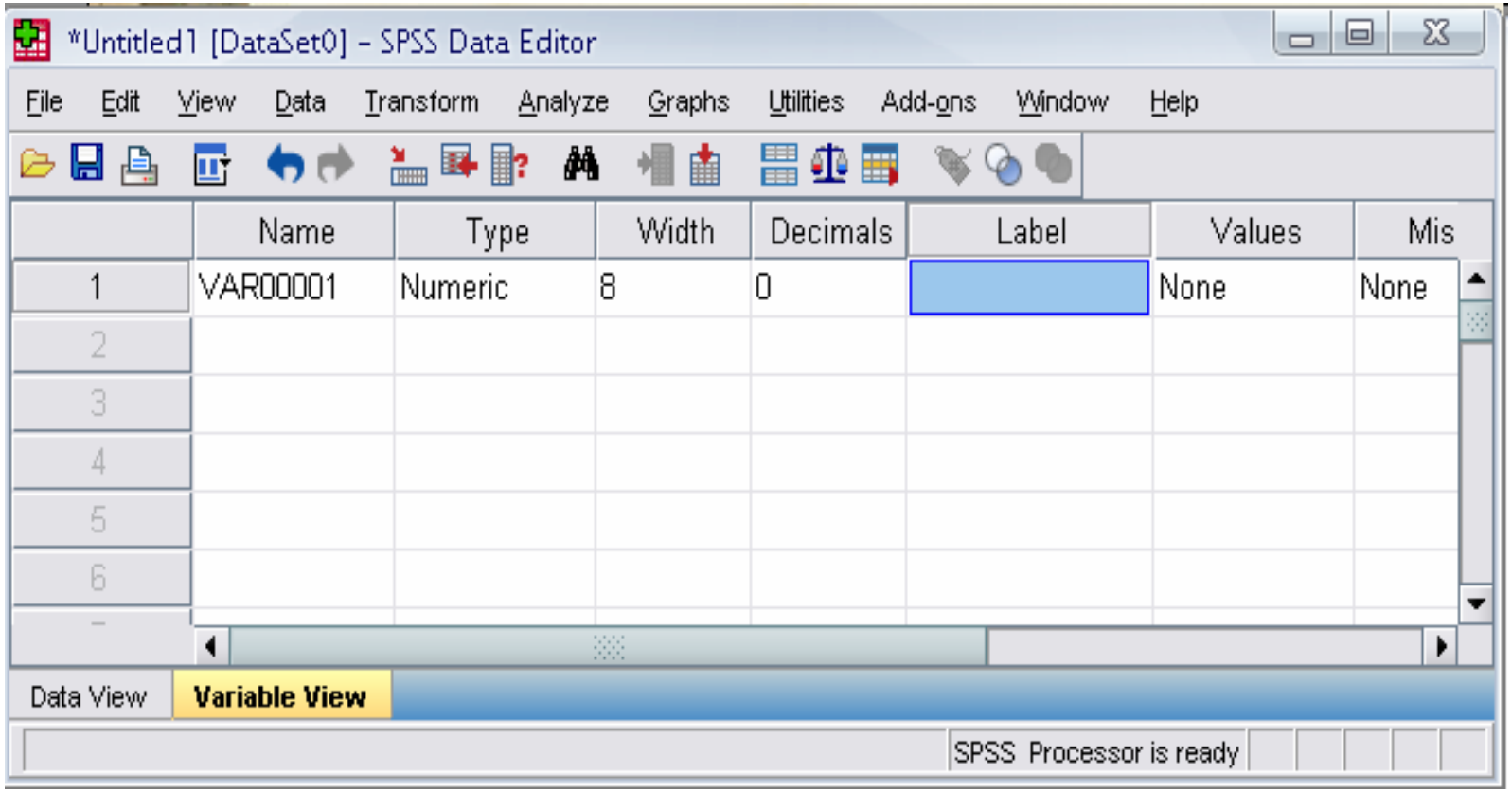
Variable View window: Decimals

- Decimals
  - Number of decimals
  - It has to be less than or equal to 16



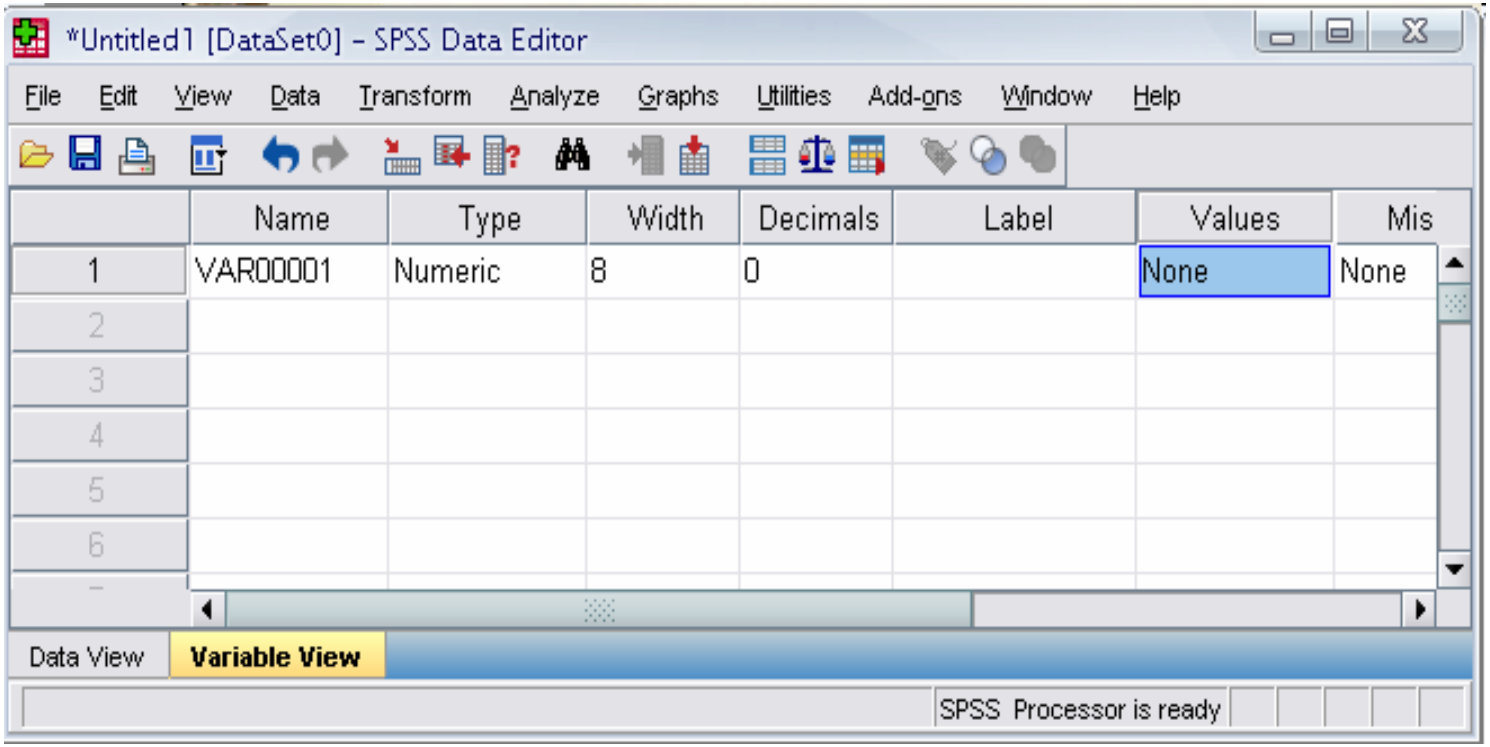
Variable View window: Label

- Label
  - You can specify the details of the variable
  - You can write characters with spaces up to 256 characters



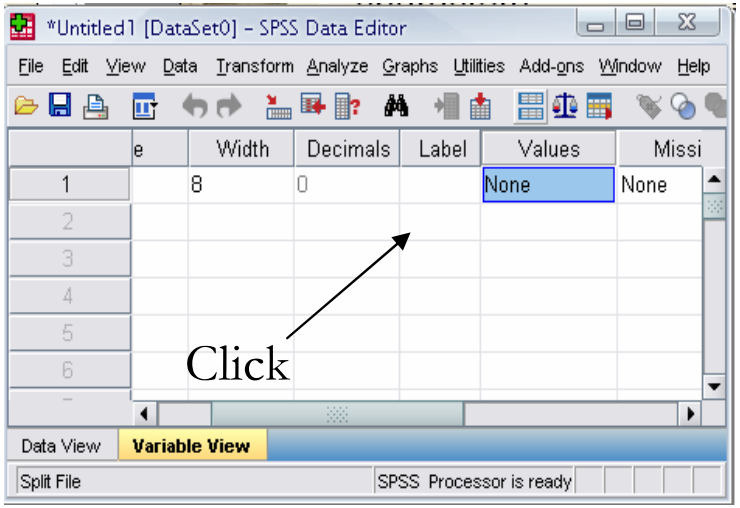
Variable View window: Values

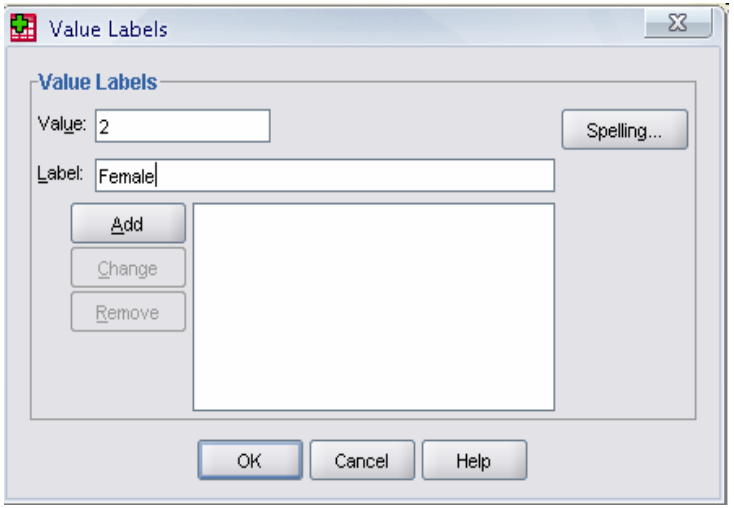
- Values
  - This is used and to suggest which numbers represent which categories when the variable represents a category



Defining the value labels

- Click the cell in the values column as shown below
- For the value, and the label, you can put up to 60 characters.
- After defining the values click add and then click OK.





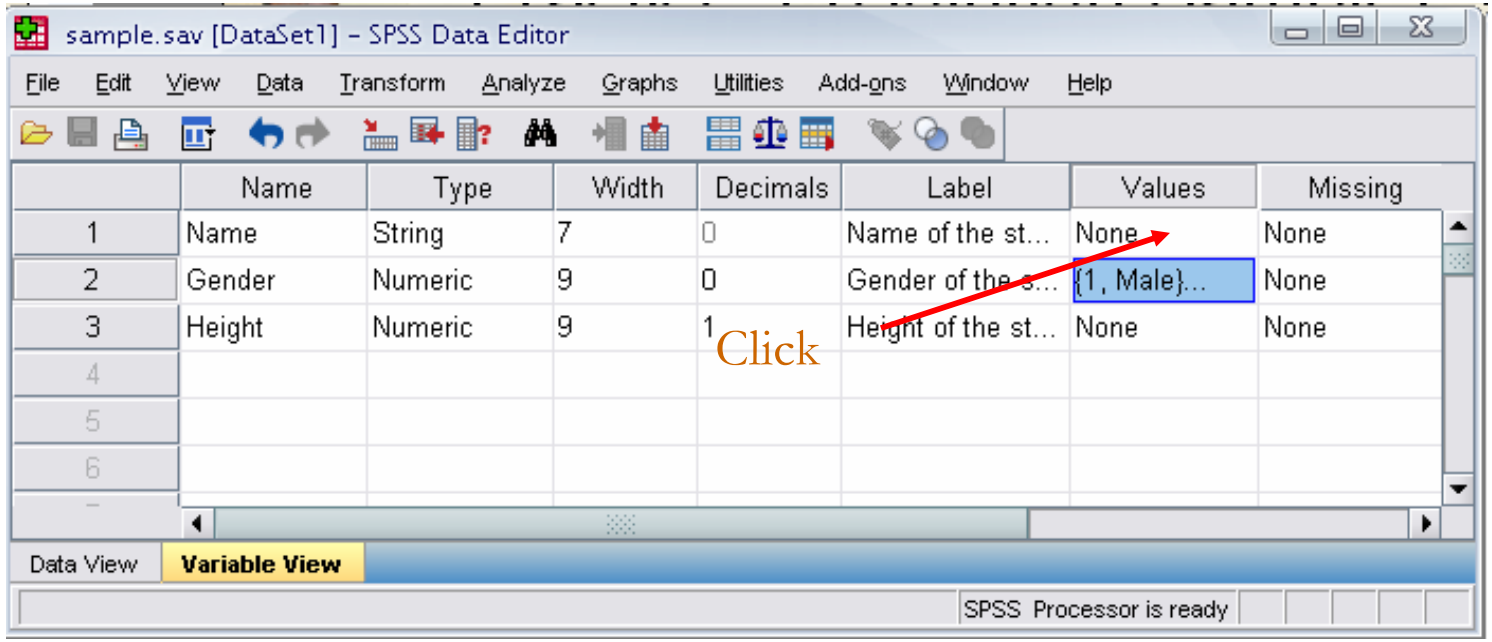
Exercise time

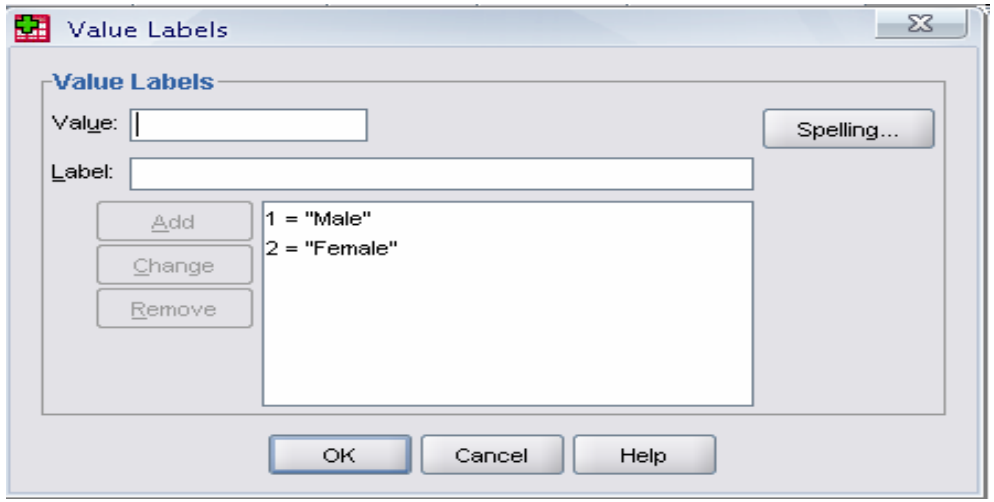
- How would you put the following information into SPSS?

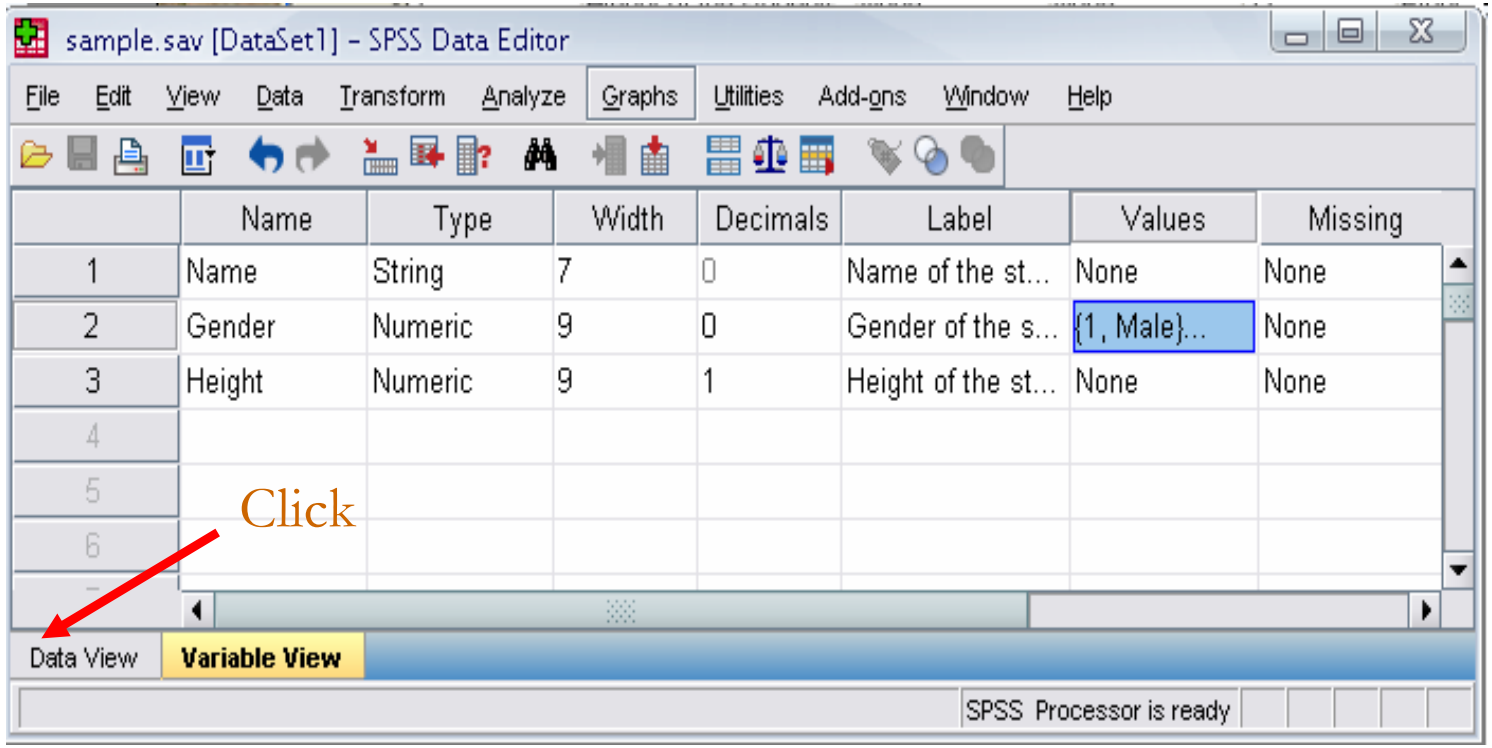
Name	Gender	Height
JAUNITA	2	5.4
SALLY	2	5.3
DONNA	2	5.6
SABRINA	2	5.7
JOHN	1	5.7
MARK	1	6
ERIC	1	6.4
BRUCE	1	5.9

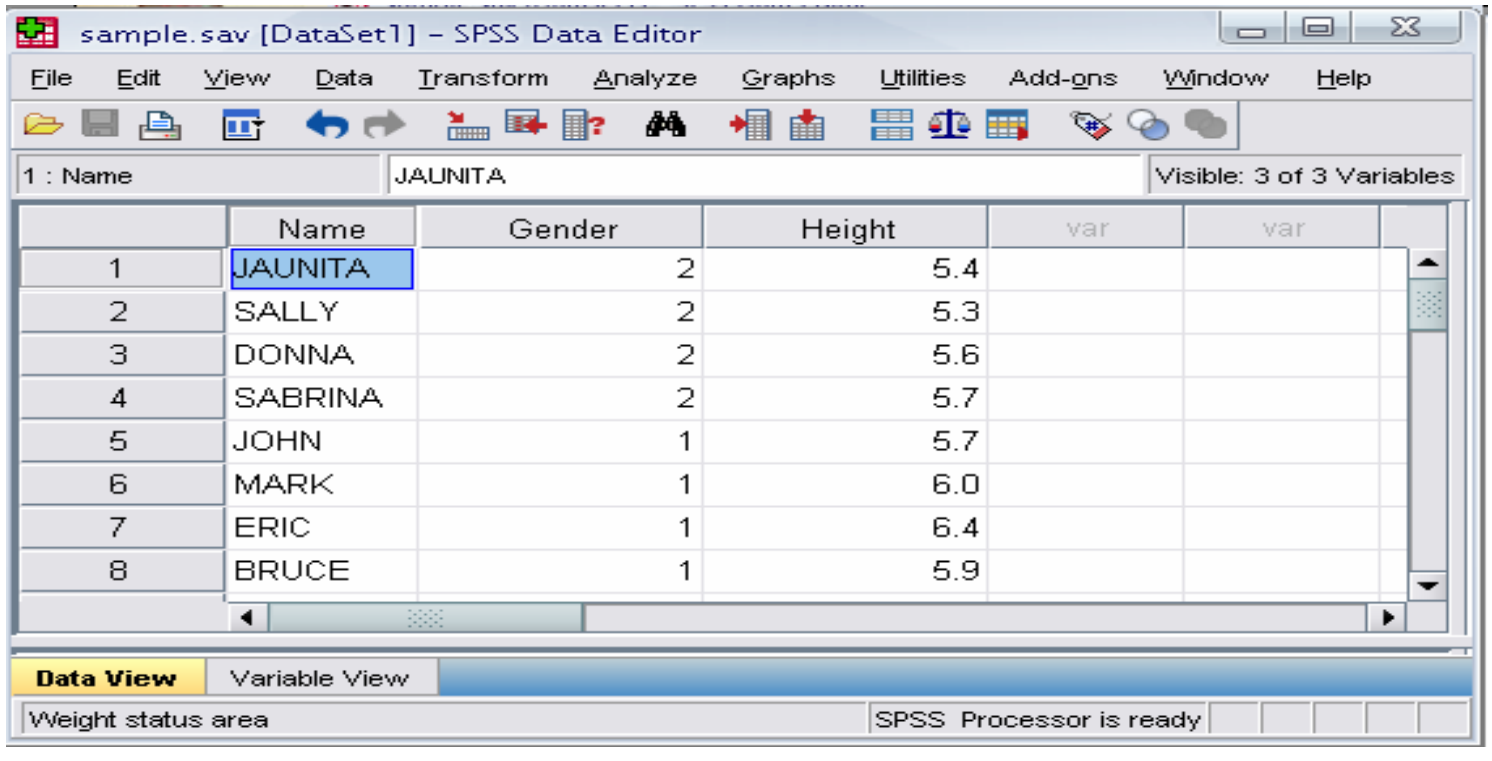
Value = 1 represents Male and Value = 2 represents Female

Exercise time (Solution Sample)



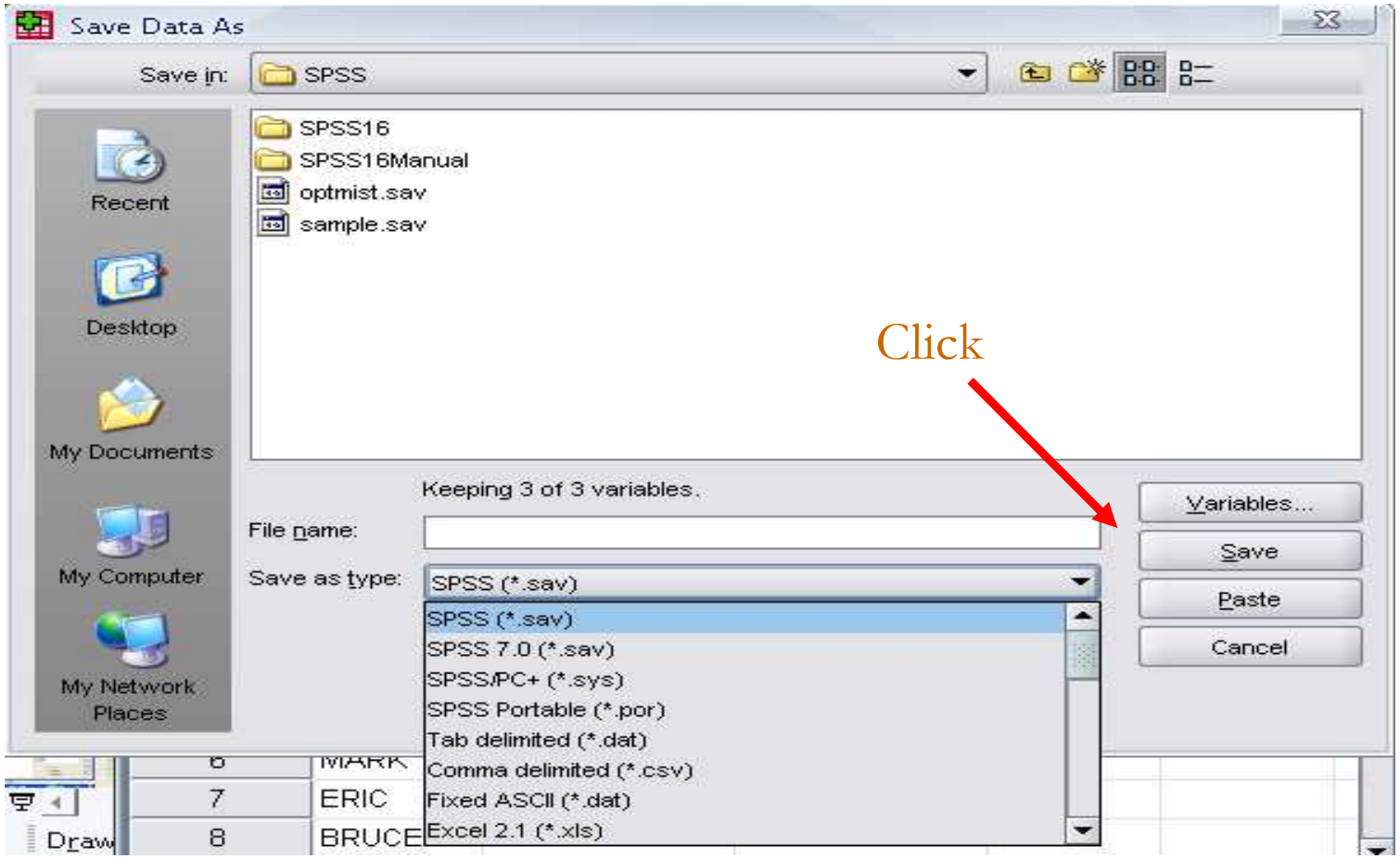



sample.sav [DataSet1] – SPSS Data Editor
File Edit View Data Transform Analyze Graphs Utilities Add-ons Window Help
Name Type Width Decimals Label Values Missing
1 Name String 7 0 Name of the st... None None
2 Gender Numeric 9 0 Gender of the s... {1, Male}... None
3 Height Numeric 9 1 Height of the st... None None
4
5
6
Click
Data View Variable View
SPSS Processor is ready


sample.sav [DataSet1] – SPSS Data Editor
File Edit View Data Transform Analyze Graphs Utilities Add-ons Window Help
1 : Name
JAUNITA
Visible: 3 of 3 Variables
Name Gender Height var var
1 JAUNITA 2 5.4
2 SALLY 2 5.3
3 DONNA 2 5.6
4 SABRINA 2 5.7
5 JOHN 1 5.7
6 MARK 1 6.0
7 ERIC 1 6.4
8 BRUCE 1 5.9
Data View Variable View
Weight status area
SPSS Processor is ready

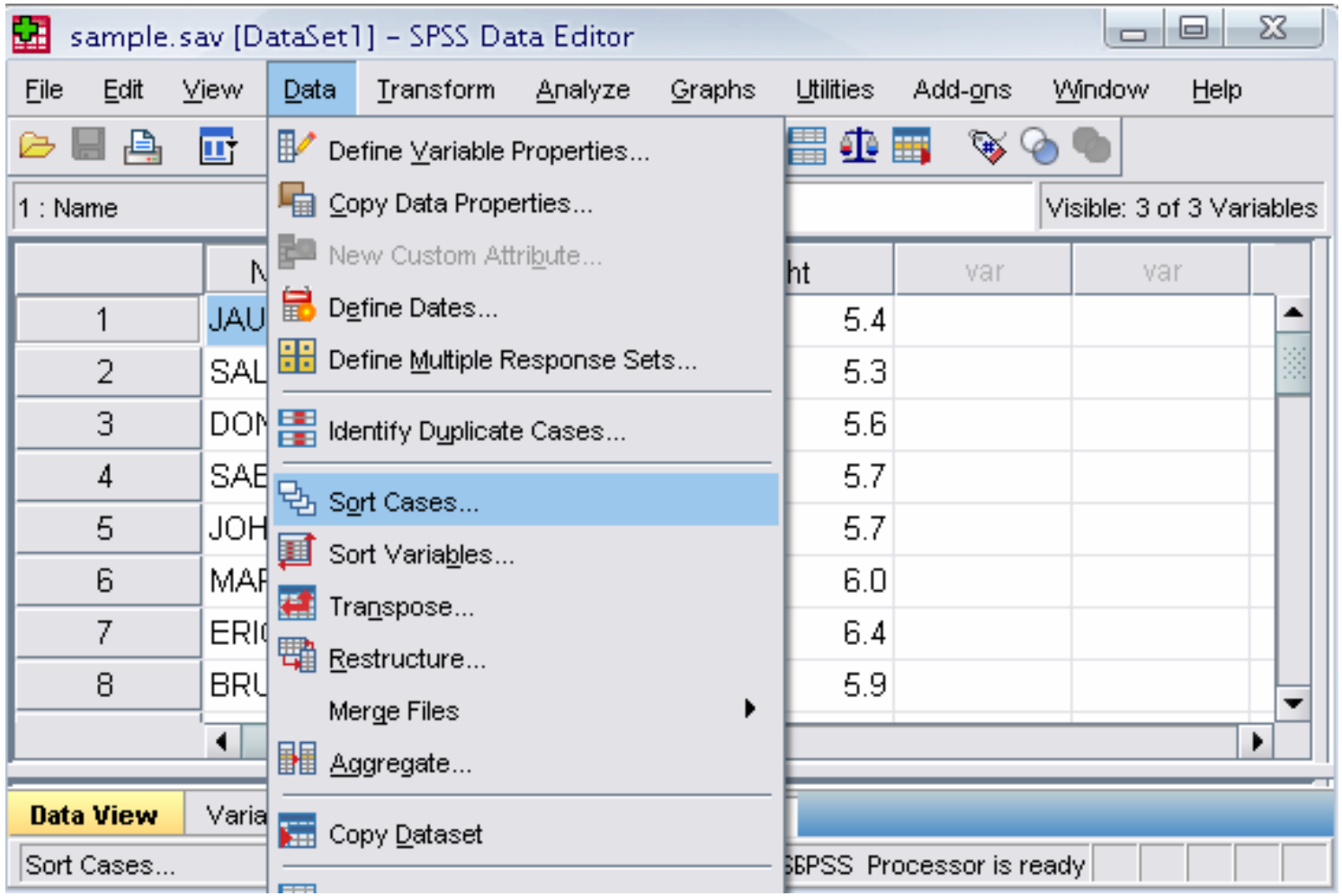
2.2 Saving the data

- To save the data file you created, simply click ‘file’ and click ‘save as.’ You can save the file in different forms by clicking “Save as type.”



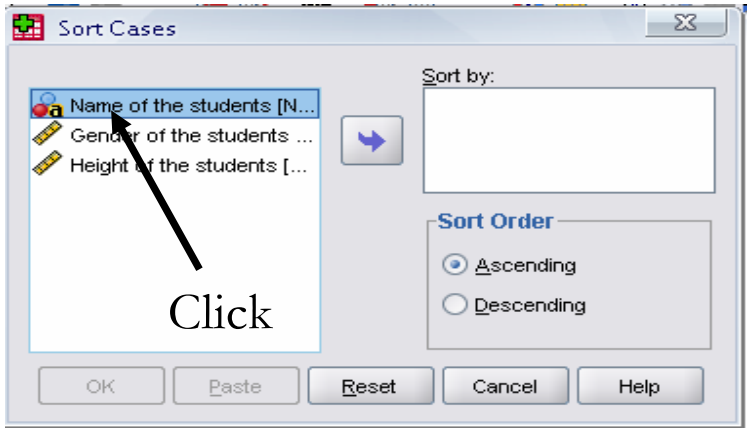
2.3 Sorting the data

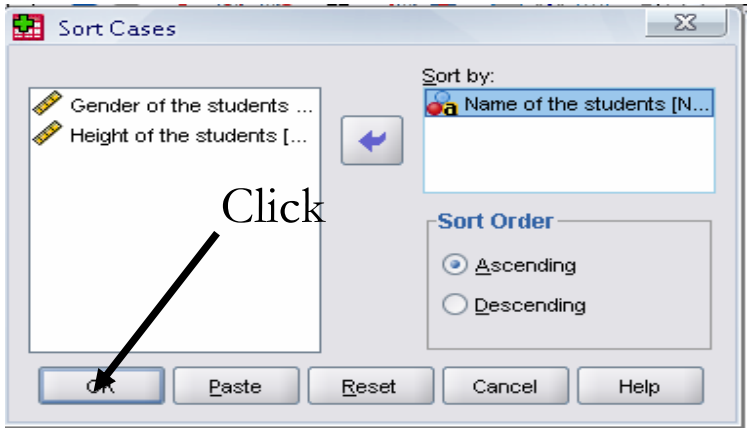
- Click ‘Data’ and then click Sort Cases

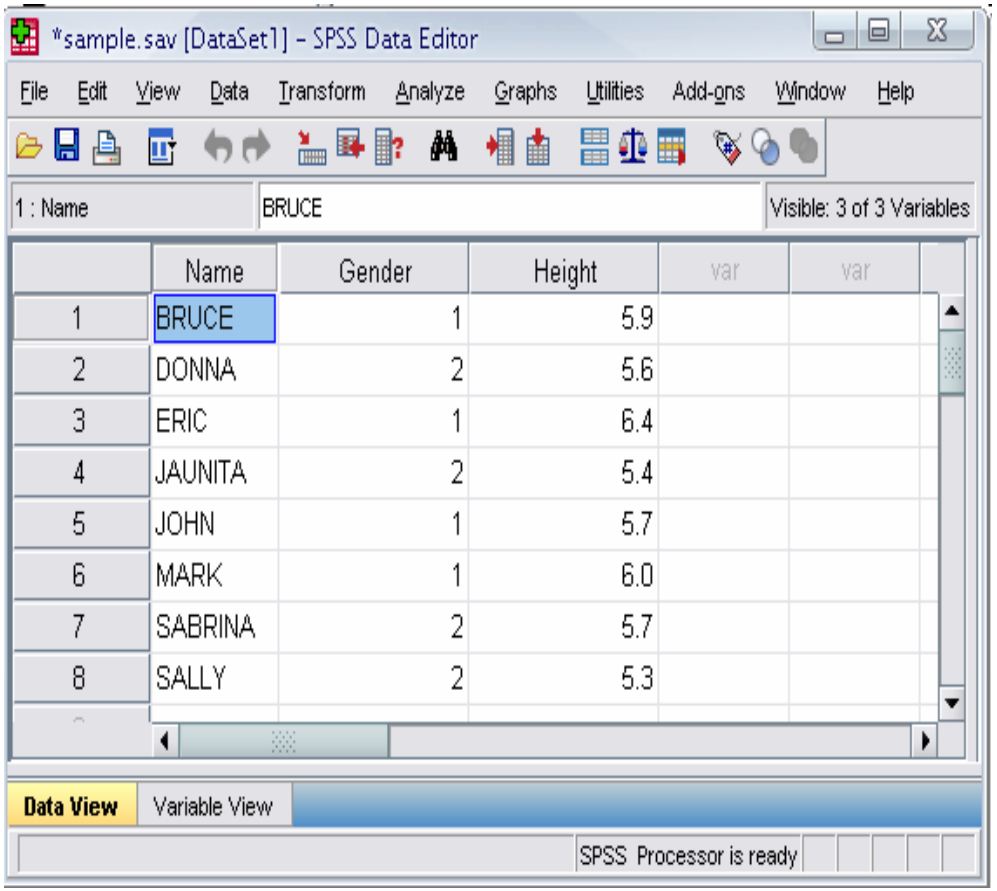


2.3 Sorting the data (cont'd)

- Double Click 'Name of the students.' Then click ok.

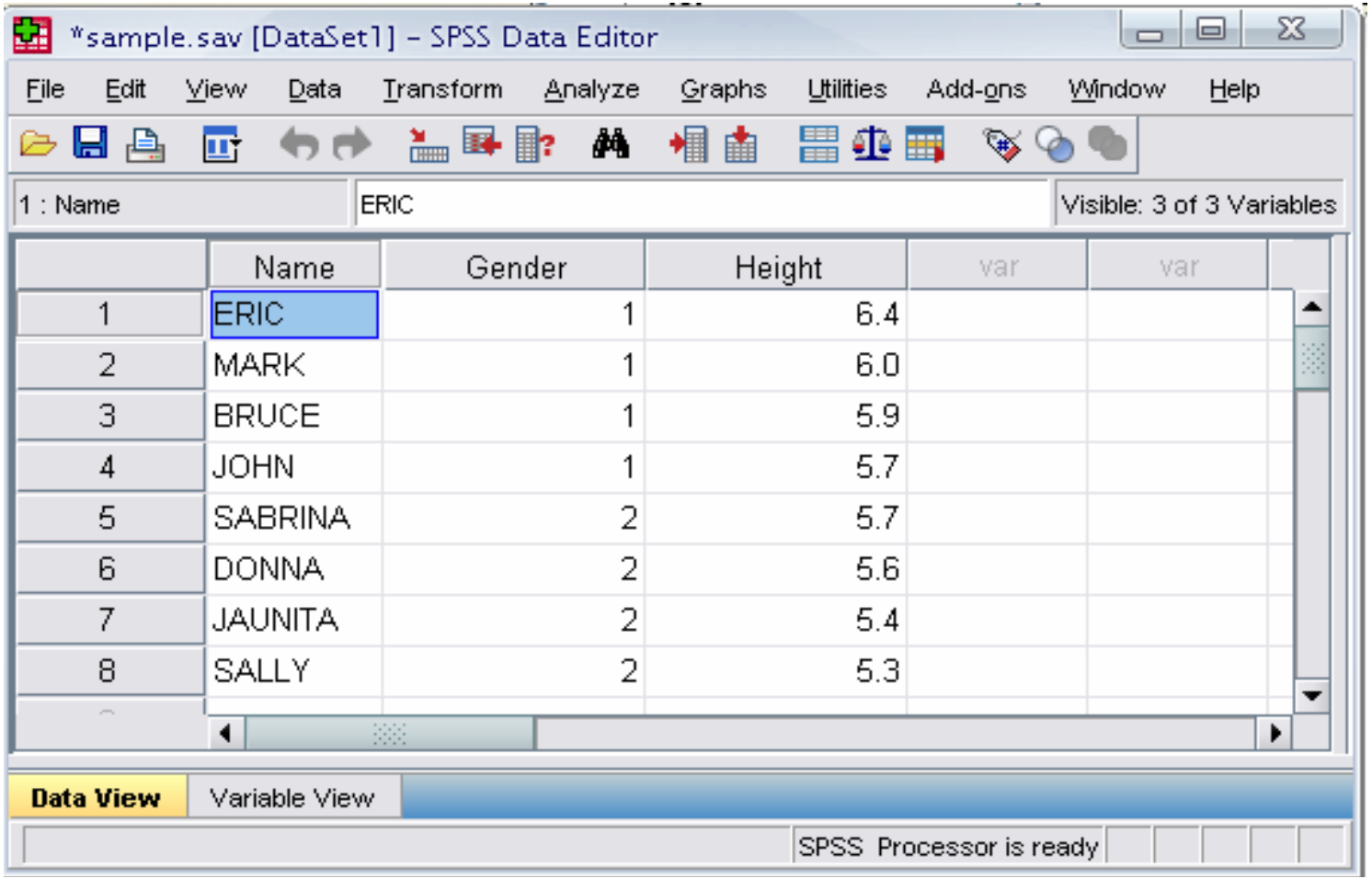






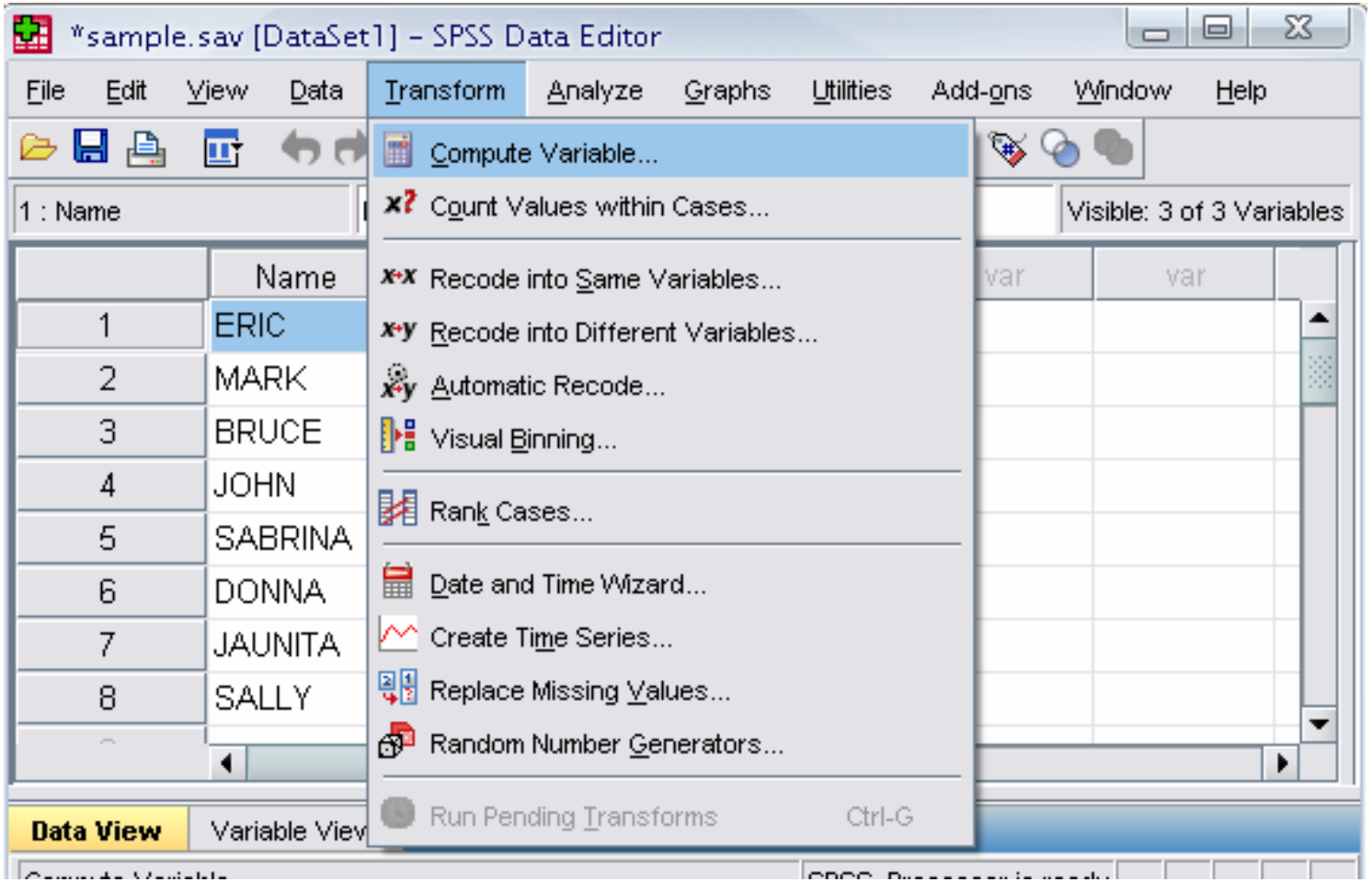
Exercise time

- How would you sort the data by the ‘Height’ of students in descending order?
- Answer
  - Click data, sort cases, double click ‘height of students,’ click ‘descending,’ and finally click ok.



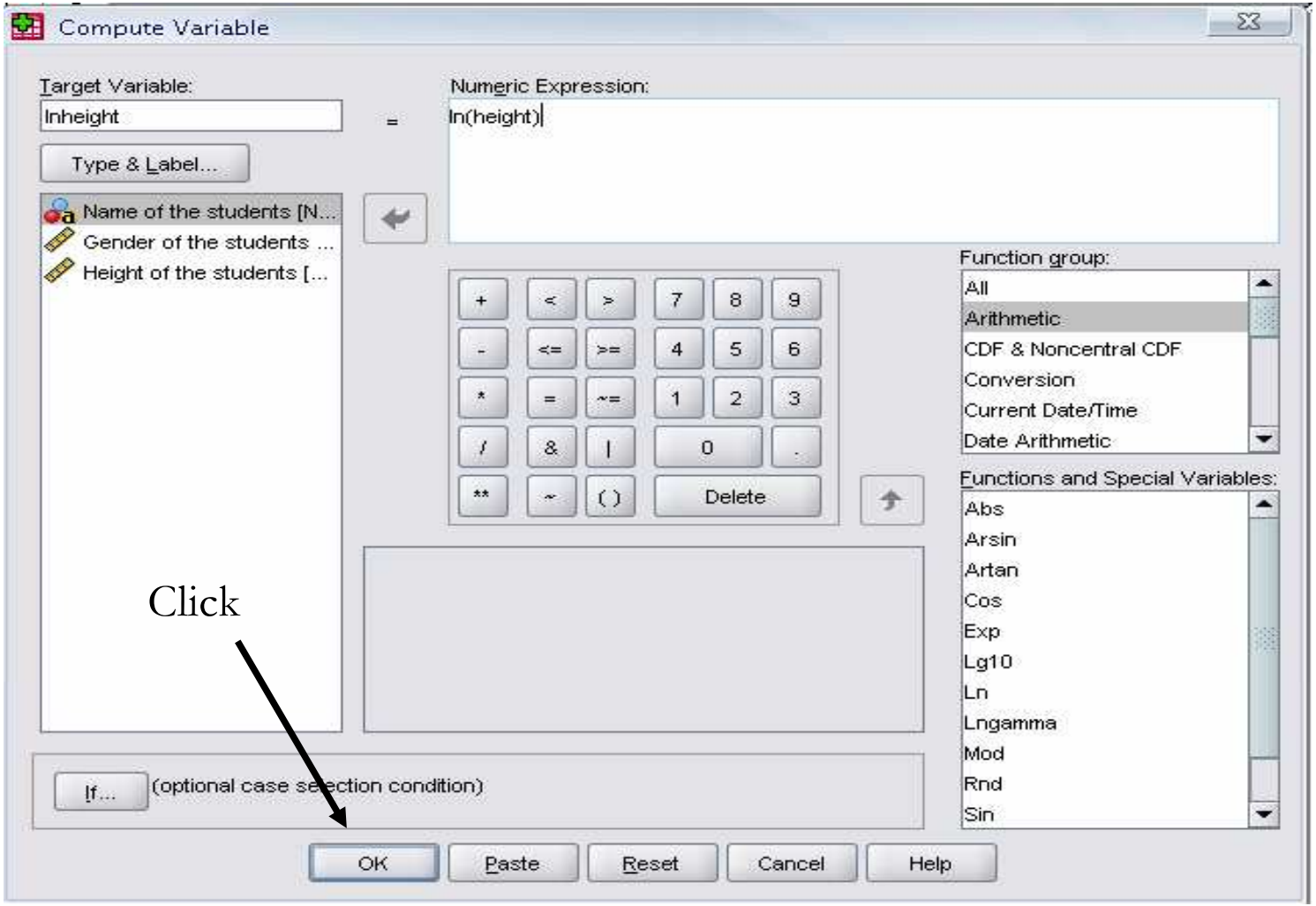
2.4 Transforming data

- Click ‘Transform’ and then click ‘Compute Variable…’



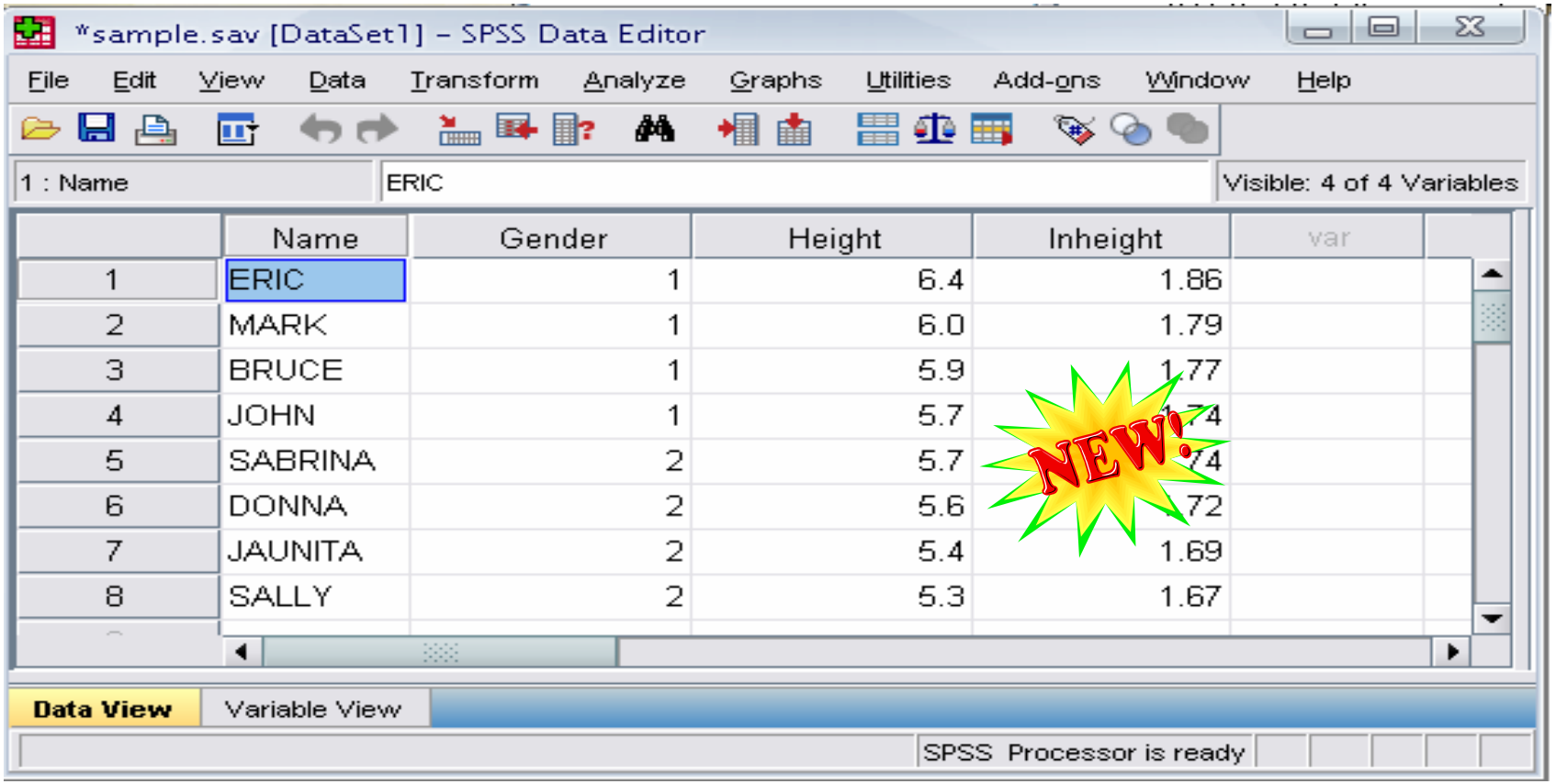
2.4 Transforming data (cont'd)

- Example: Adding a new variable named 'lnheight' which is the natural log of height
  - Type in lnheight in the 'Target Variable' box. Then type in 'ln(height)' in the 'Numeric Expression' box. Click OK



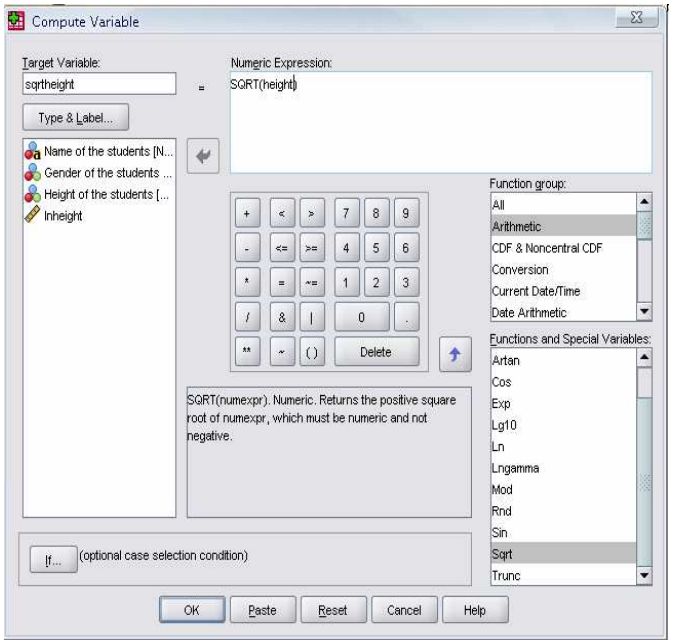
2.4 Transforming data (cont'd)

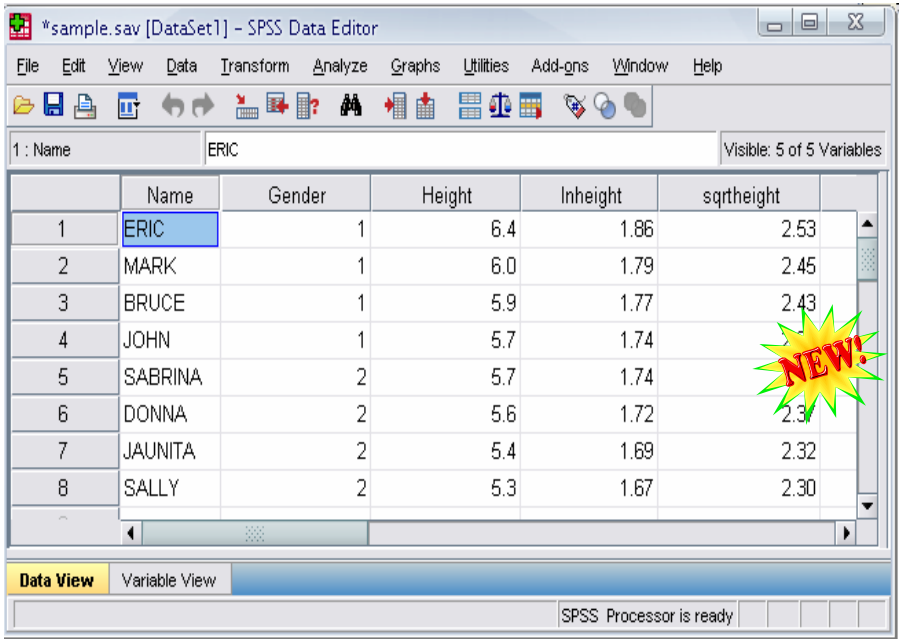
- A new variable 'lnheight' is added to the table



Exercise time

- Create a new variable named “sqrtheight” which is the square root of height.
- Answer



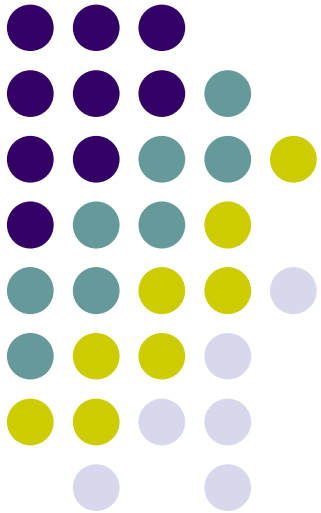


Thank you!

19. Introduction to SPSS Part 2

Presentation Objectives

- *To introduce students/trainees to SPSS's range of tools for data analysis*
- *To introduce students/trainees to SPSS's basic data calculations*



3. Basic tools using SPSS

Last time, the introduction to SPSS focused on how to enter the data collected so that they can be used in SPSS.

Today, the focus will be on how to calculate measurements of variables based on the data entered in SPSS.

3.1 Frequencies

- This analysis produces frequency tables showing frequency counts and percentages of the values of individual variables.

3.2 Descriptives

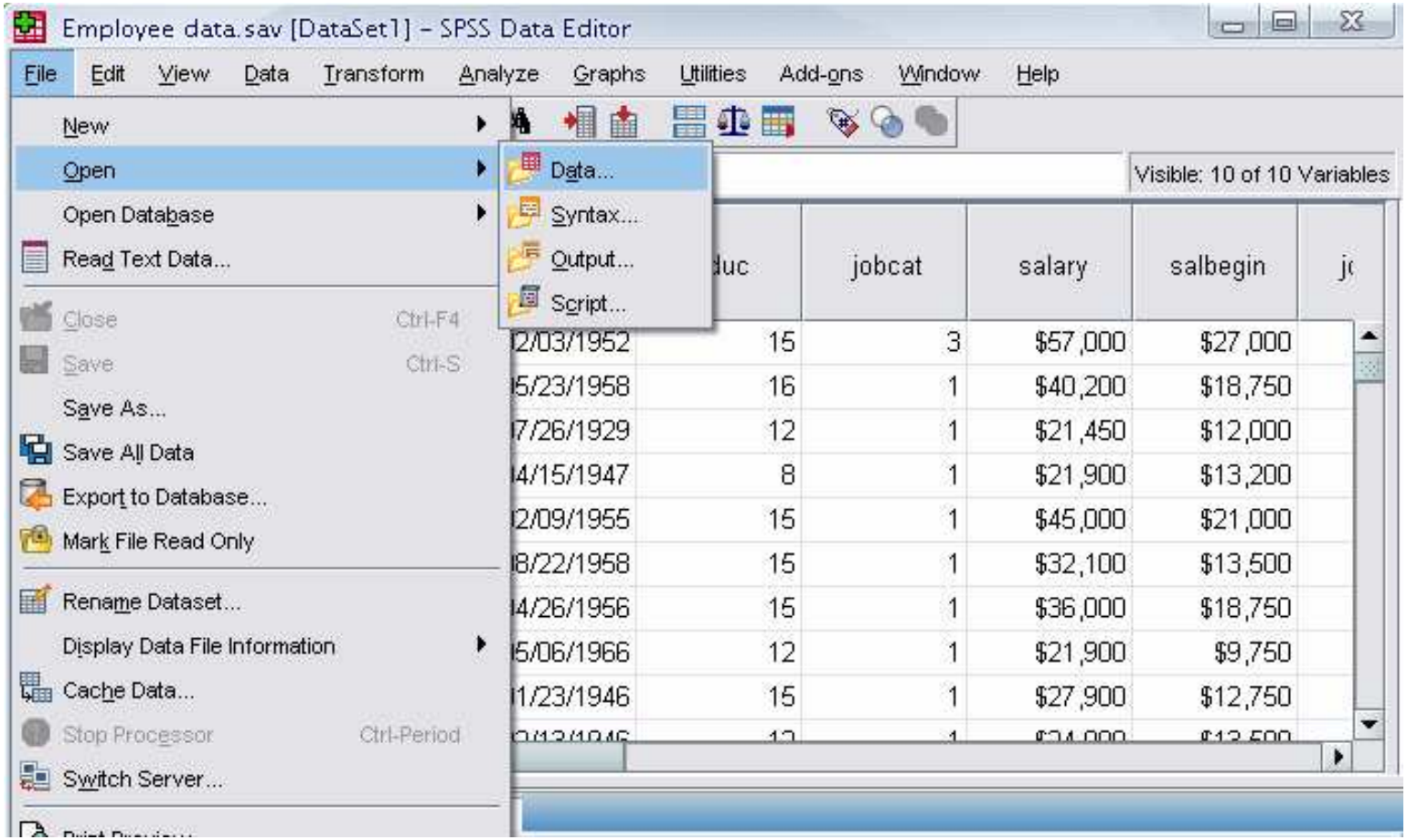
-This analysis shows the maximum, minimum, mean, and standard deviation of the variables

3.3 Linear regression analysis

-Linear Regression estimates the coefficients of the linear equation

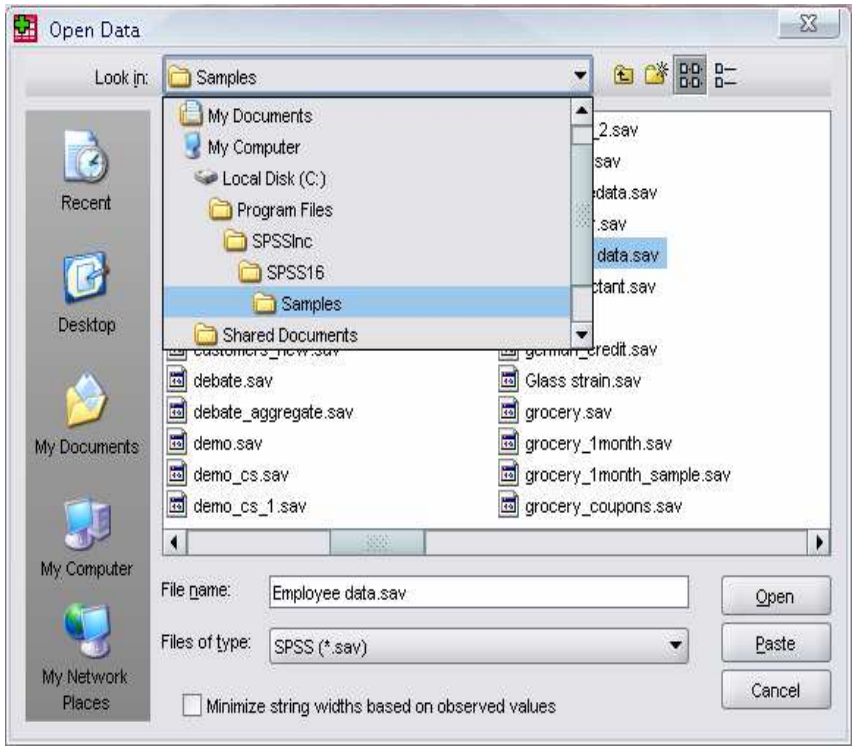
Opening the sample data

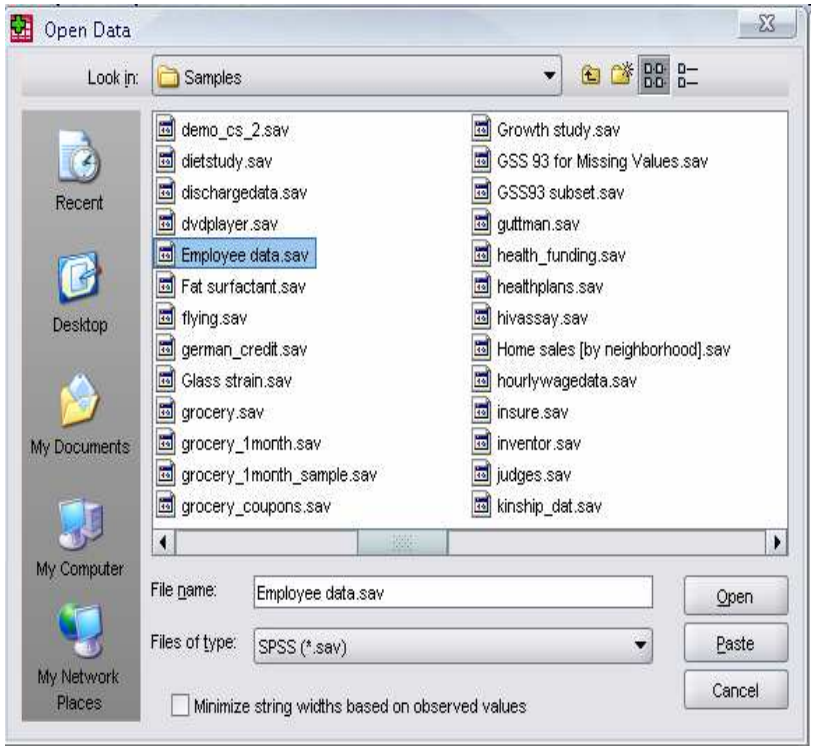
- Open ‘Employee data.sav’ from the SPSS
- Go to “File,” “Open,” and Click Data



Opening the sample data

- Go to Program Files," "SPSSInc," "SPSS16," and "Samples" folder.
- Open "Employee Data.sav" file

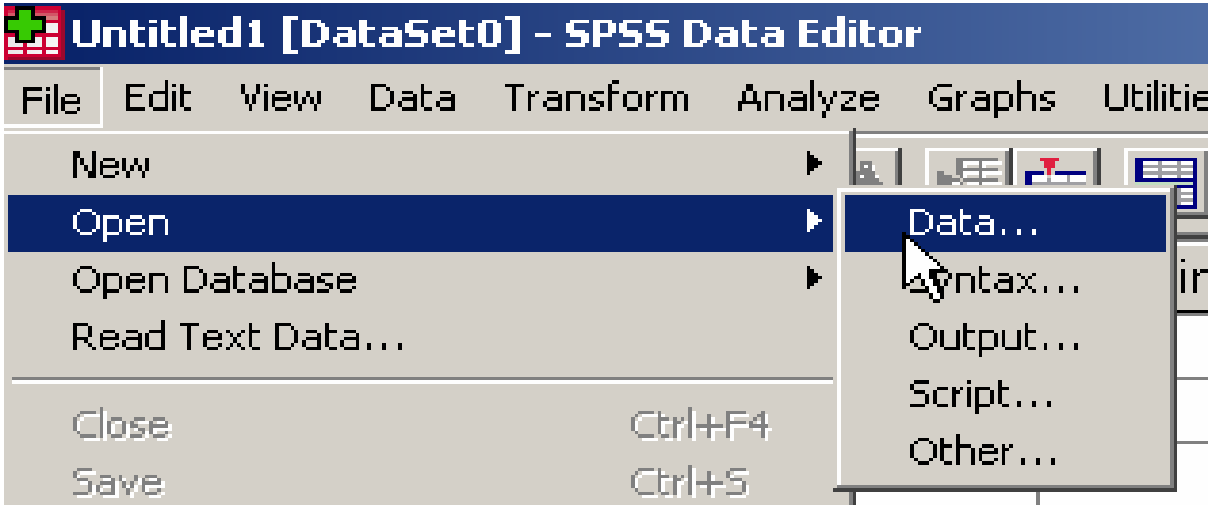


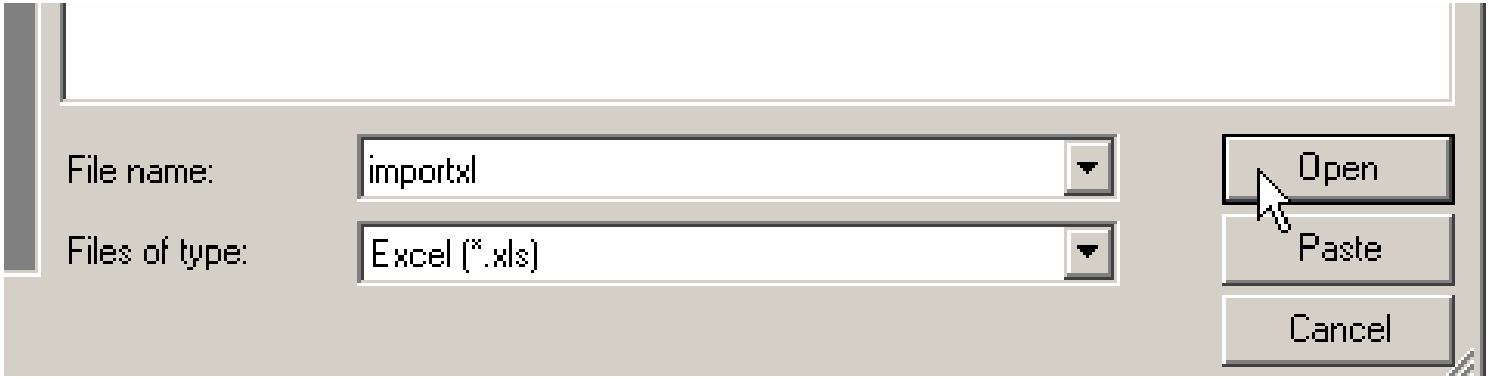


Data Entry (import from Excel)

Click Open - Data…

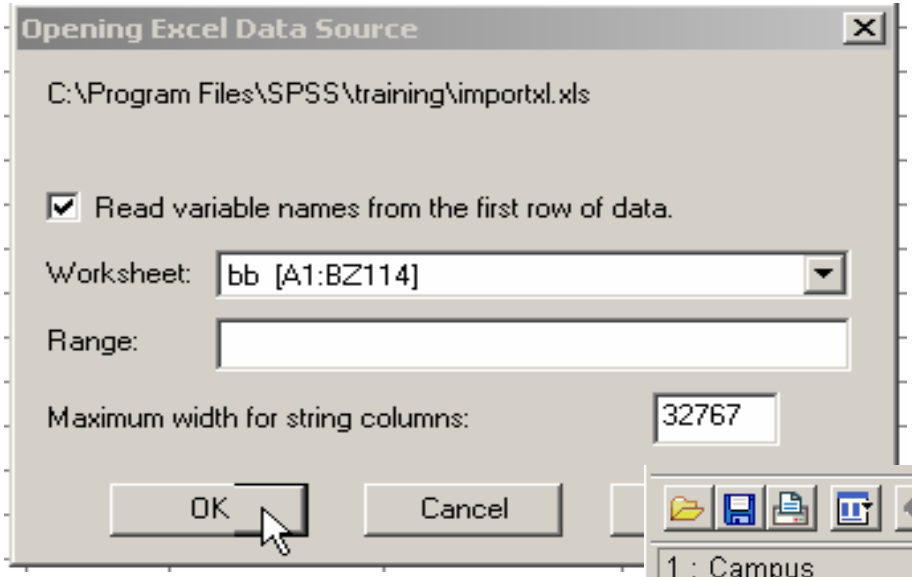
Change Files of type to Excel, then browse and open the file.





Data Entry (import from Excel)

Select the worksheet, the range (if desired), and if to read variable names- click OK



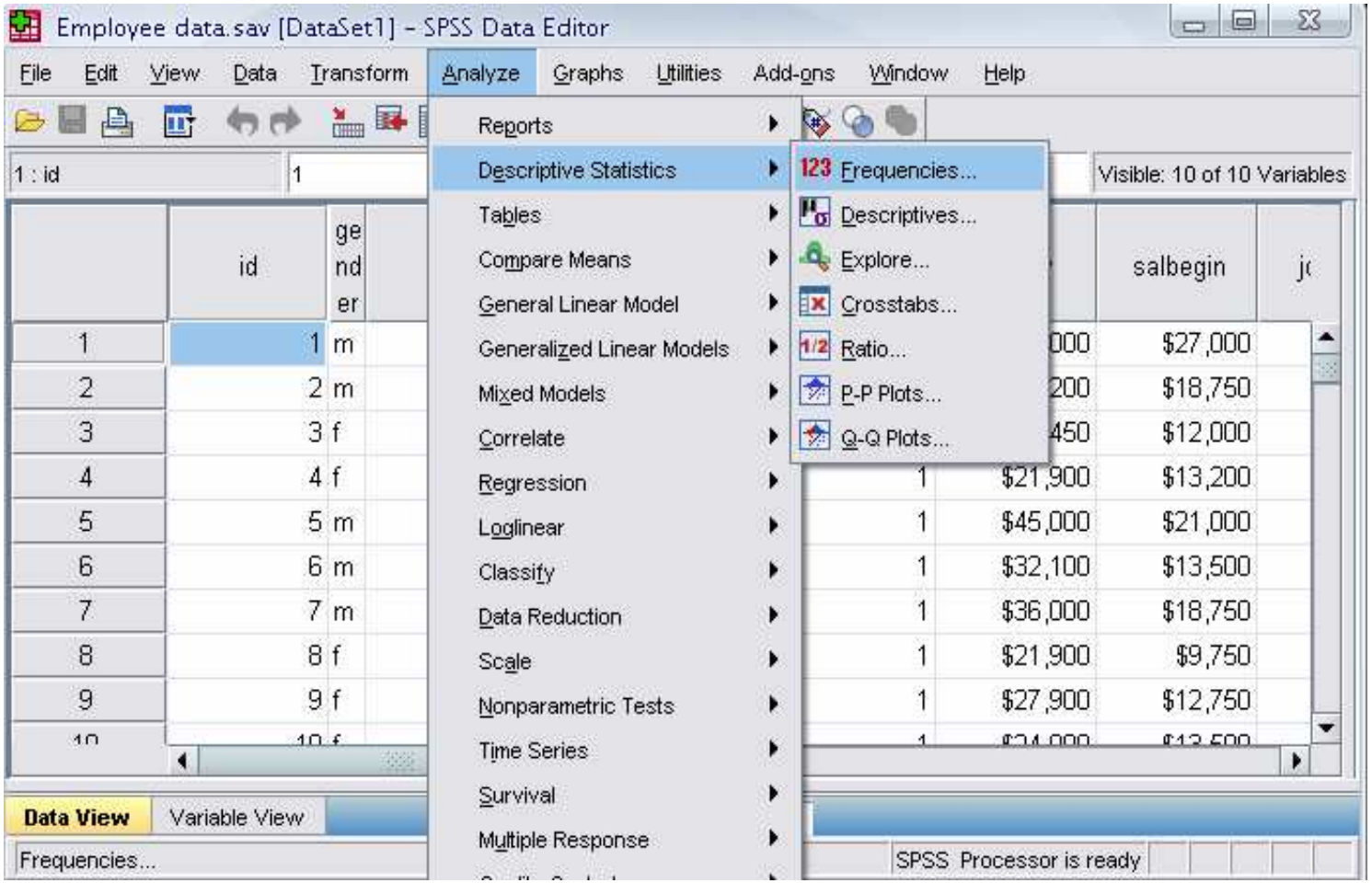
The data and variable names will appear

1 : Campus | 1

	Campus	Experience	Major	V4	V5
1	1	2	1	1	6
2	1	1	.	.	6
3	1	6	3	2	9
4	1	4	2	2	0
5	1	1	4	1	9
6	1	5	1	1	0
7	1	4	2	2	2
8	2	4	3	1	1

3.1 Frequencies

Click ‘Analyze,’ ‘Descriptive statistics,’ then click ‘Frequencies’

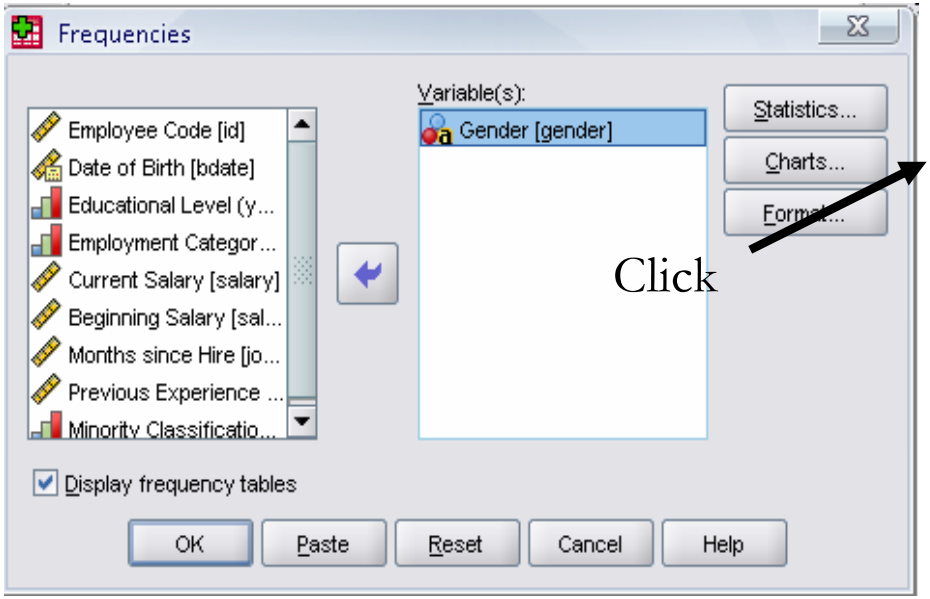


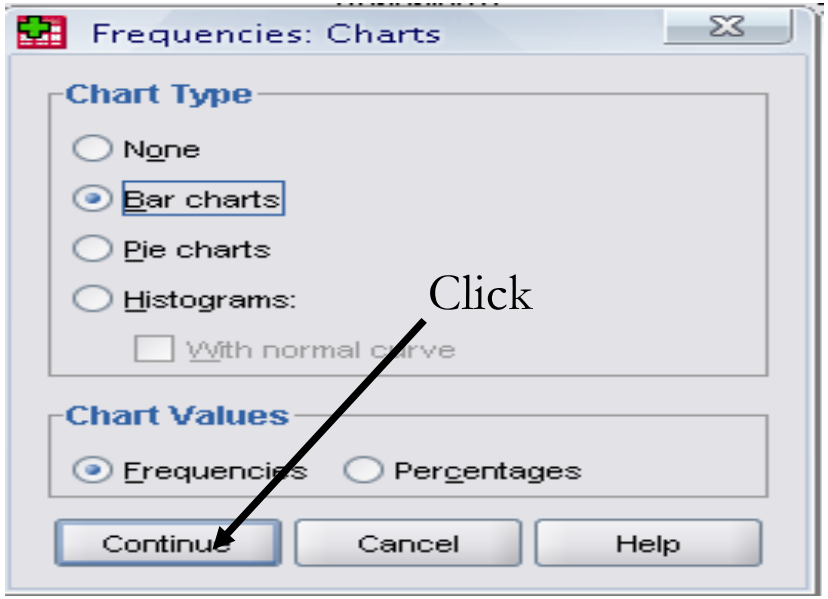
3.1 Frequencies

Click gender and put it into the variable box.

Click ‘Charts.’

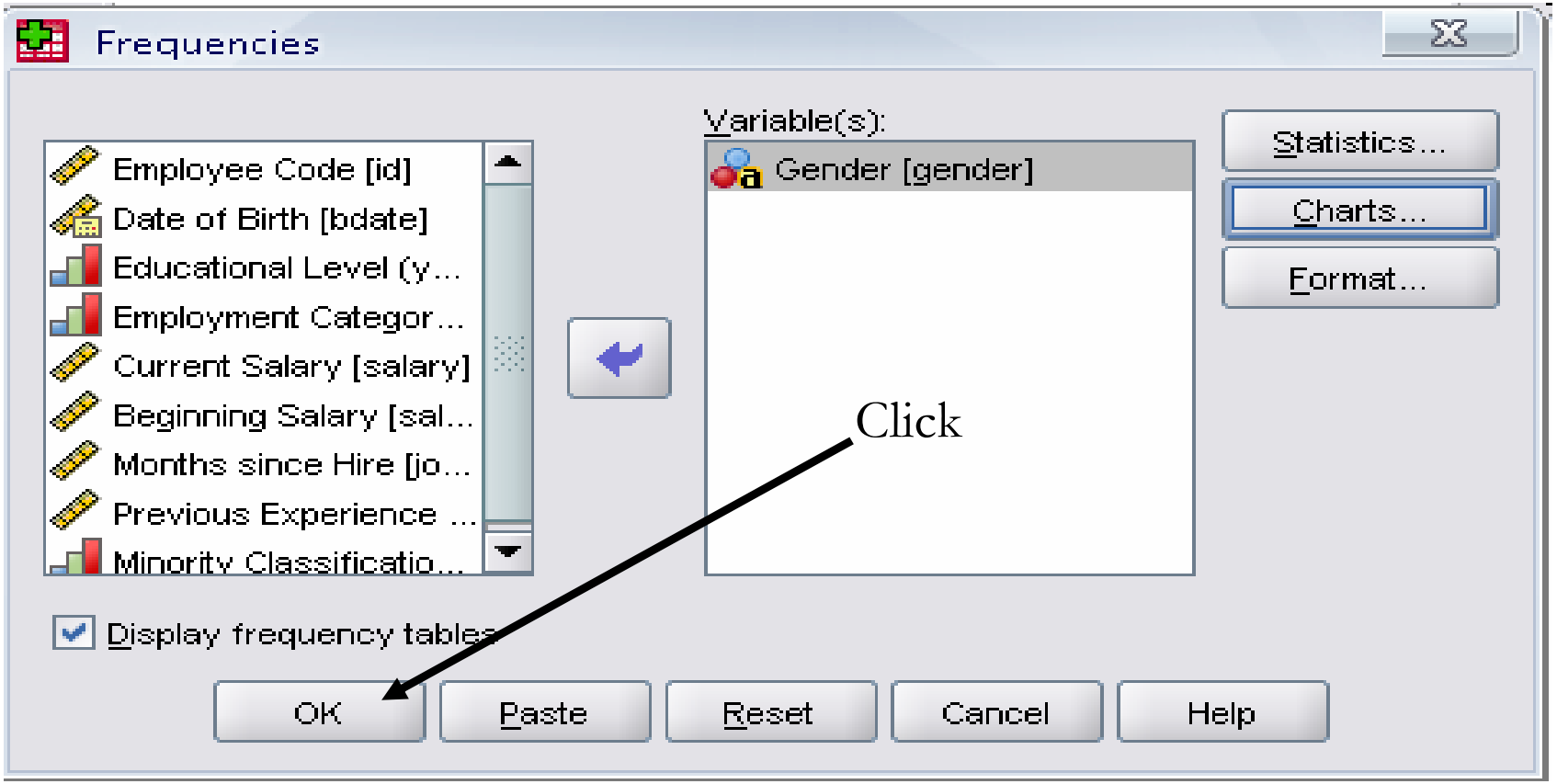
Then click ‘Bar charts’ and click ‘Continue.’





3.1 Frequencies

Finally Click OK in the Frequencies box.



] – SPSS Viewer

Transform Insert Format Analyze Graphs Utilities Add-ons Window Help

Frequencies

[DataSet1] C:\Program Files\SPSSInc\SPSS16\Samples\Employee

Statistics

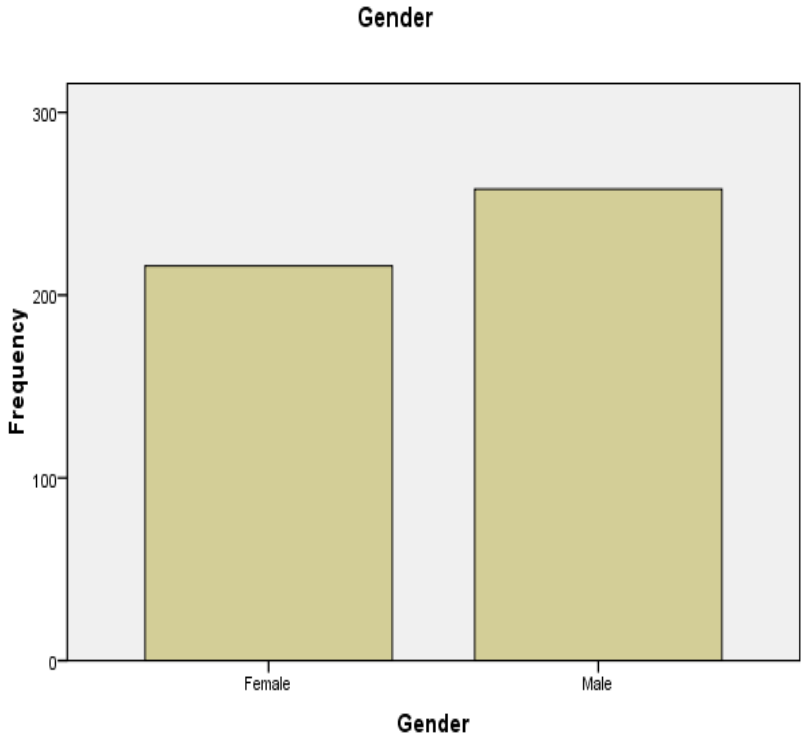
Gender

N	Valid	474
	Missing	0

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	216	45.6	45.6	45.6
	Male	258	54.4	54.4	100.0
	Total	474	100.0	100.0	

SPSS Processor is ready



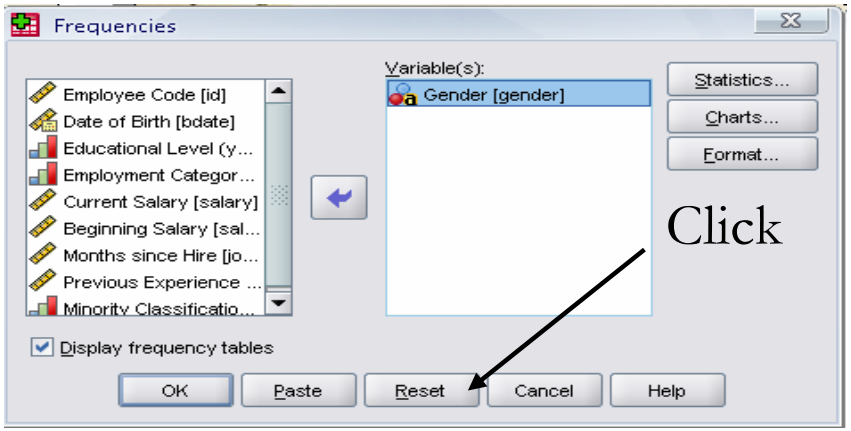
Using the Syntax editor

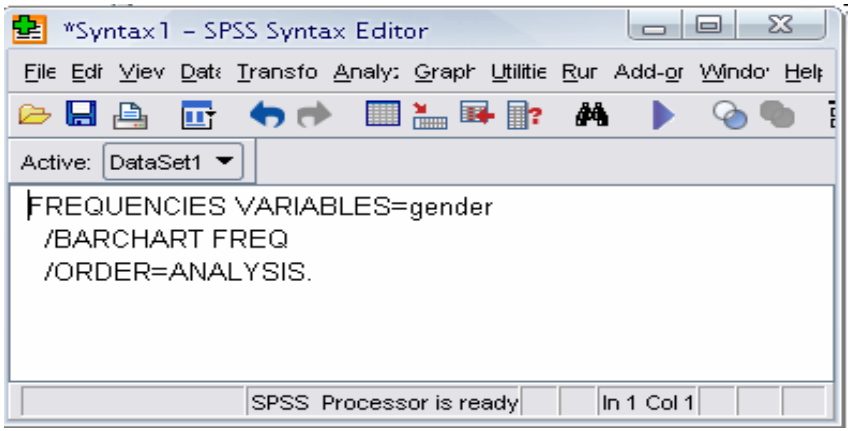
Click ‘Analyze,’ ‘Descriptive statistics,’ then click ‘Frequencies.’

Put ‘Gender’ in the Variable(s) box.

Then click ‘Charts,’ ‘Bar charts,’ and click ‘Continue.’

Click ‘Paste.’

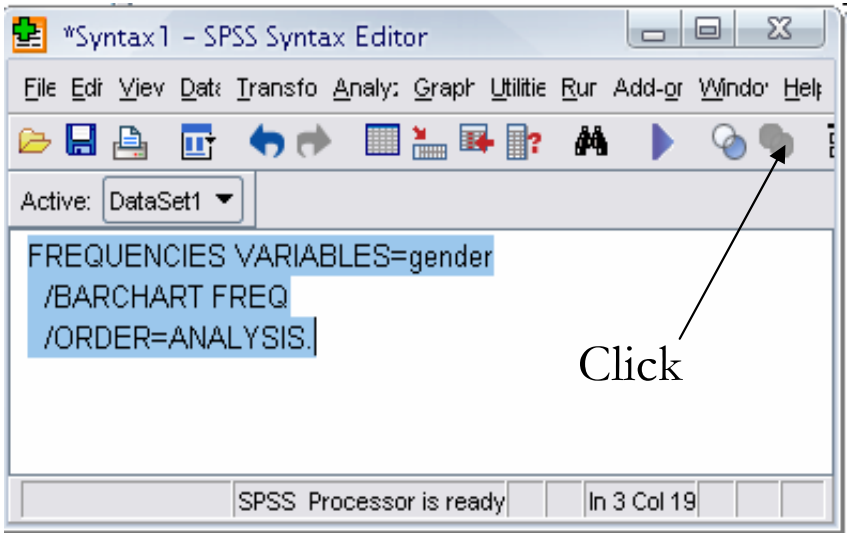


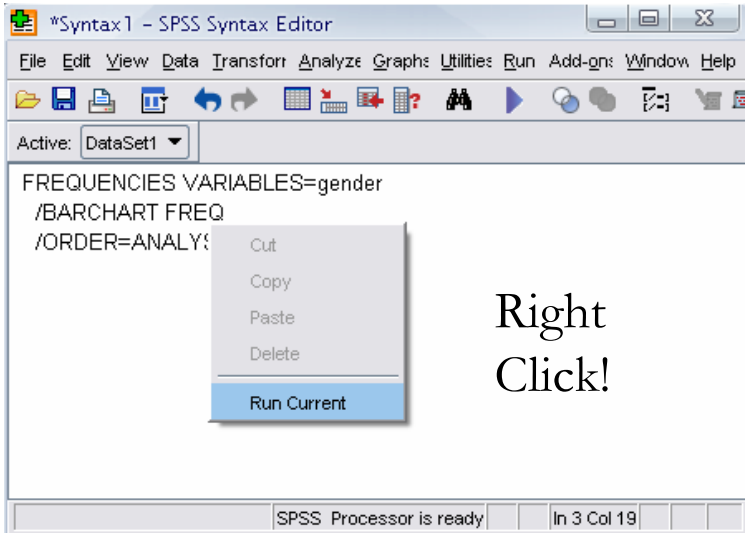


Using the Syntax editor

Highlight the commands in the Syntax editor and then click the run icon.

You can do the same thing by right clicking the highlighted area and then by clicking ‘Run Current’.



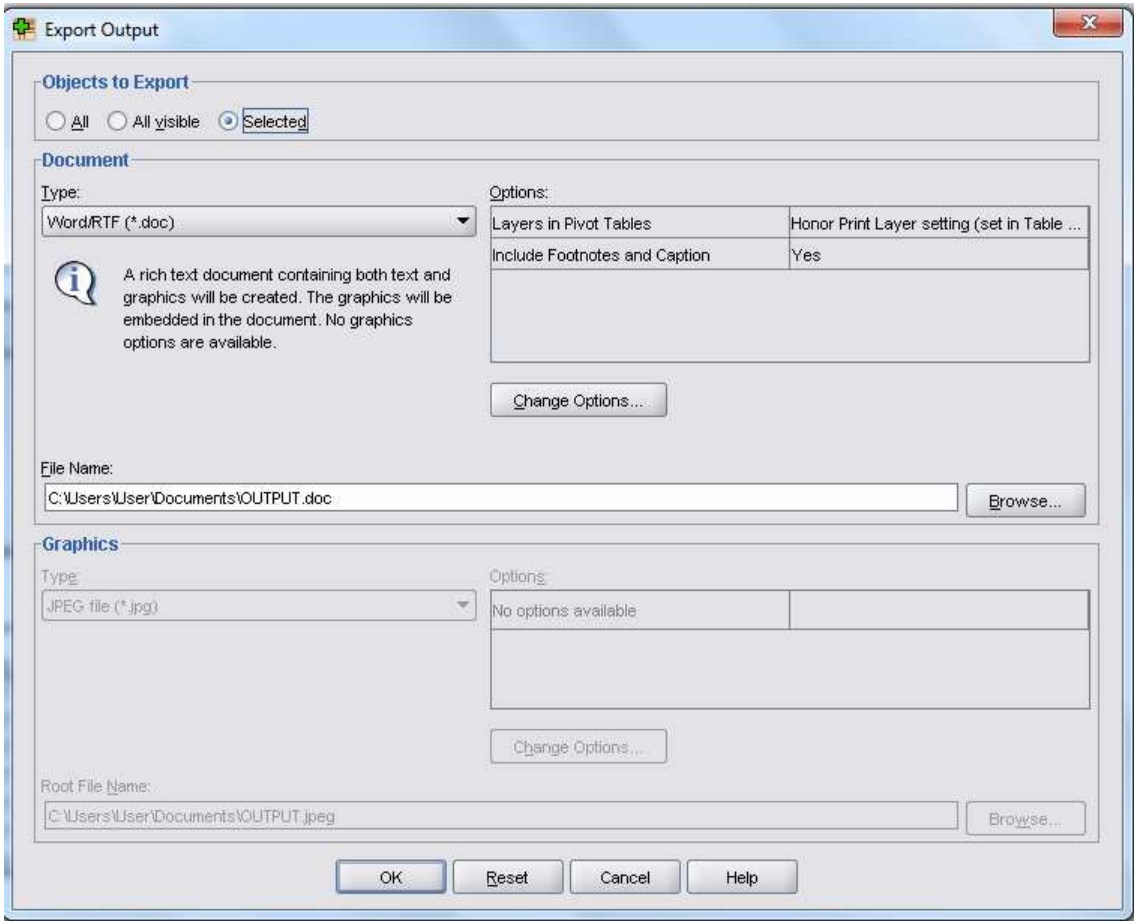


Exporting SPSS Output to a File

SPSS output can be exported to other programs.

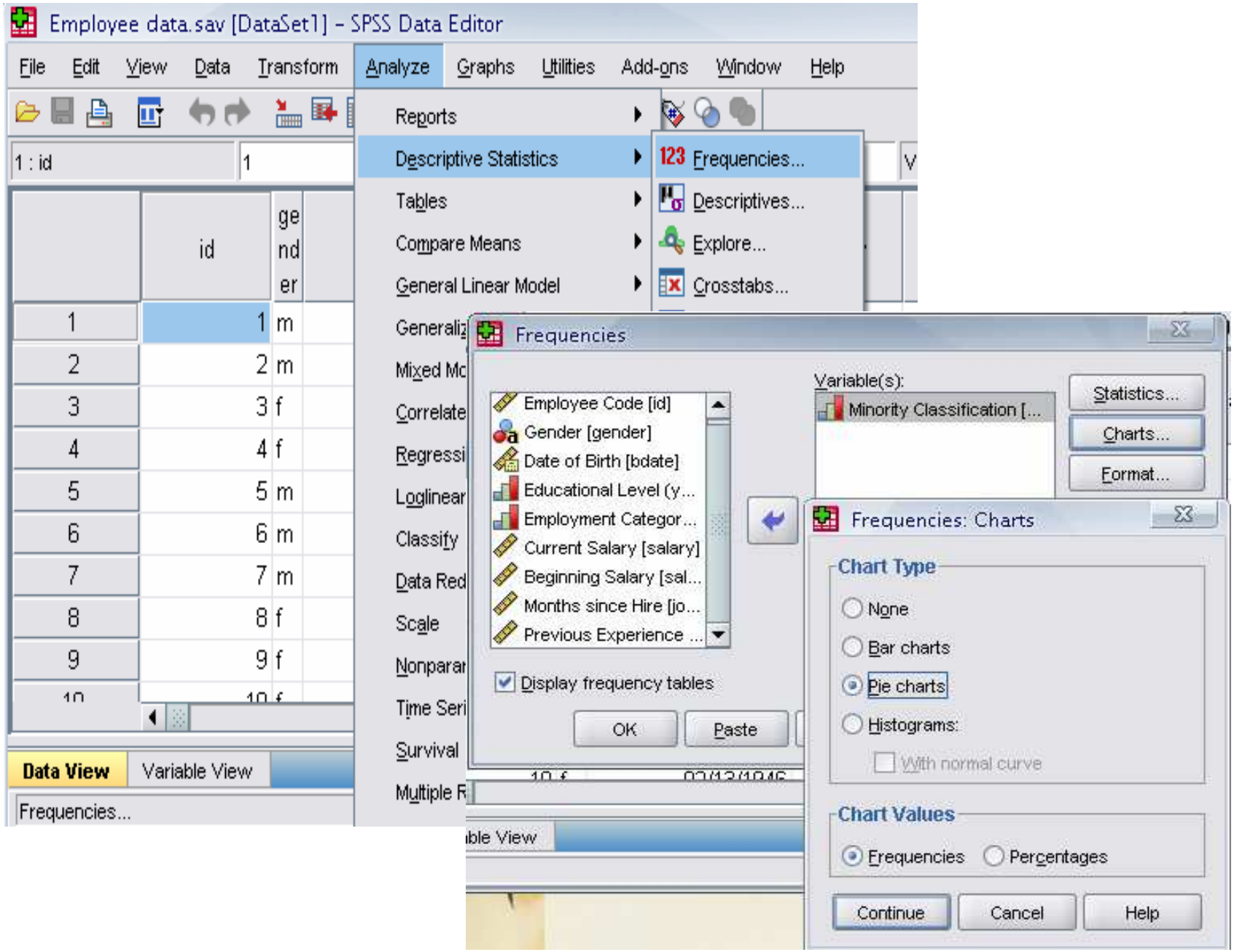
Either entire output file, or selected tables.

Export to Word, HTML, Excel, Text, PDF, or PowerPoint.

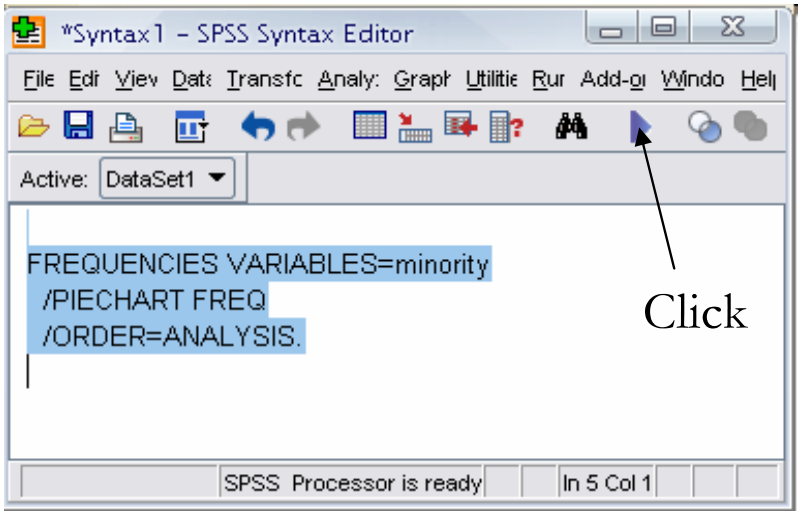


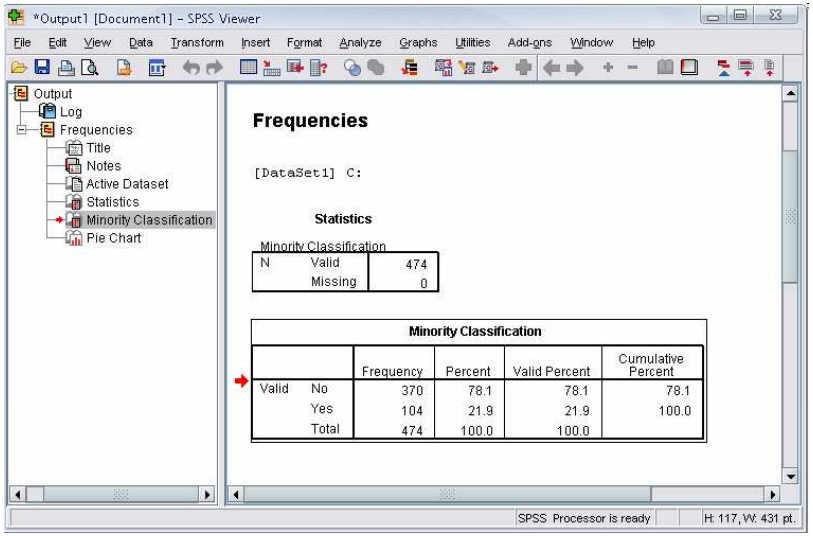
Exercise time

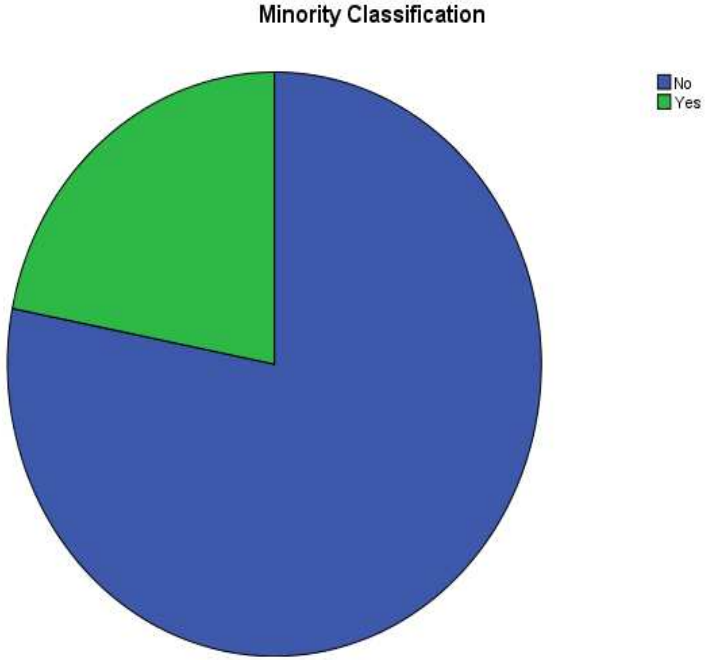
- Do a frequency analysis on the variable “minority”
- Create pie charts for it
- Do the same analysis using the syntax editor


Employee data.sav [DataSet1] – SPSS Data Editor
File Edit View Data Transform Analyze Graphs Utilities Add-ons Window Help
Reports
Descriptive Statistics
Tables
Compare Means
General Linear Model
Frequencies...
Descriptives...
Explore...
Crosstabs...
1 : id
id
gender
Data View
Variable View
Frequencies...
Frequencies
Employee Code [id]
Gender [gender]
Date of Birth [bdate]
Educational Level (y...
Employment Categor...
Current Salary [salary]
Beginning Salary [sal...
Months since Hire [jo...
Previous Experience ...
Variable(s):
Minority Classification [...
Statistics...
Charts...
Format...
Display frequency tables
OK
Paste
Frequencies: Charts
Chart Type
None
Bar charts
Pie charts
Histograms:
With normal curve
Chart Values
Frequencies
Percentages
Continue
Cancel
Help

Answer


*Syntax1 – SPSS Syntax Editor
File Edit View Data Transfc Analy: Graph Utilitie Rur Add-on Windo Help
Active: DataSet1
FREQUENCIES VARIABLES=minority
/PIECHART FREQ
/ORDER=ANALYSIS.
Click
SPSS Processor is ready
In 5 Col 1


*Output1 [Document1] – SPSS Viewer
File Edit View Data Transform Insert Format Analyze Graphs Utilities Add-ons Window Help
Output
Log
Frequencies
Title
Notes
Active Dataset
Statistics
Minority Classification
Pie Chart
Frequencies
[DataSet1] C:
Statistics
Minority Classification
N Valid 474
Missing 0
Minority Classification
Frequency Percent Valid Percent Cumulative Percent
Valid No 370 78.1 78.1 78.1
Yes 104 21.9 21.9 100.0
Total 474 100.0 100.0
SPSS Processor is ready
H: 117, W: 431 pt.

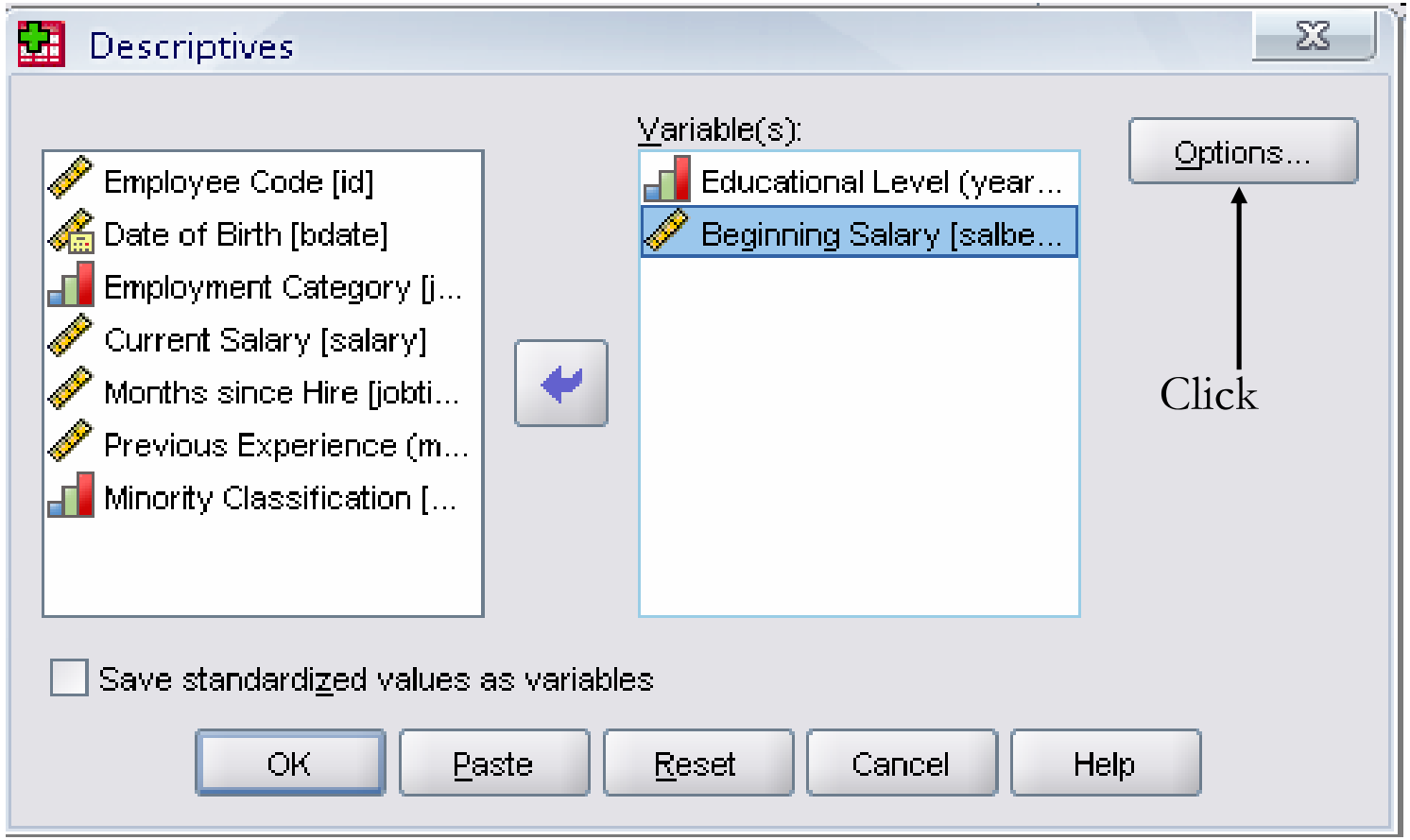

Minority Classification
No
Yes

3.2 Descriptives

Click ‘Analyze,’ ‘Descriptive statistics,’ then click ‘Descriptives…’

Click ‘Educational level’ and ‘Beginning Salary,’ and put it into the variable box.

Click Options

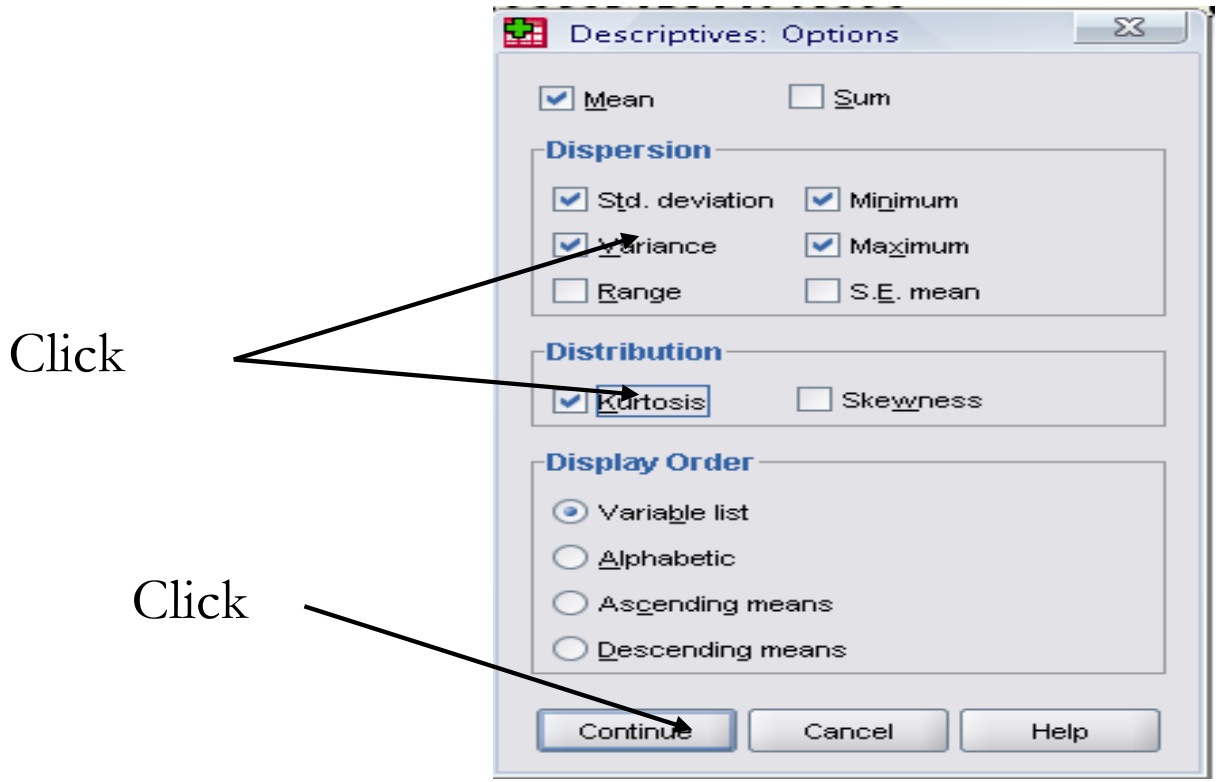


3.2 Descriptives

The options allows you to analyze other descriptive statistics besides the mean and Std.

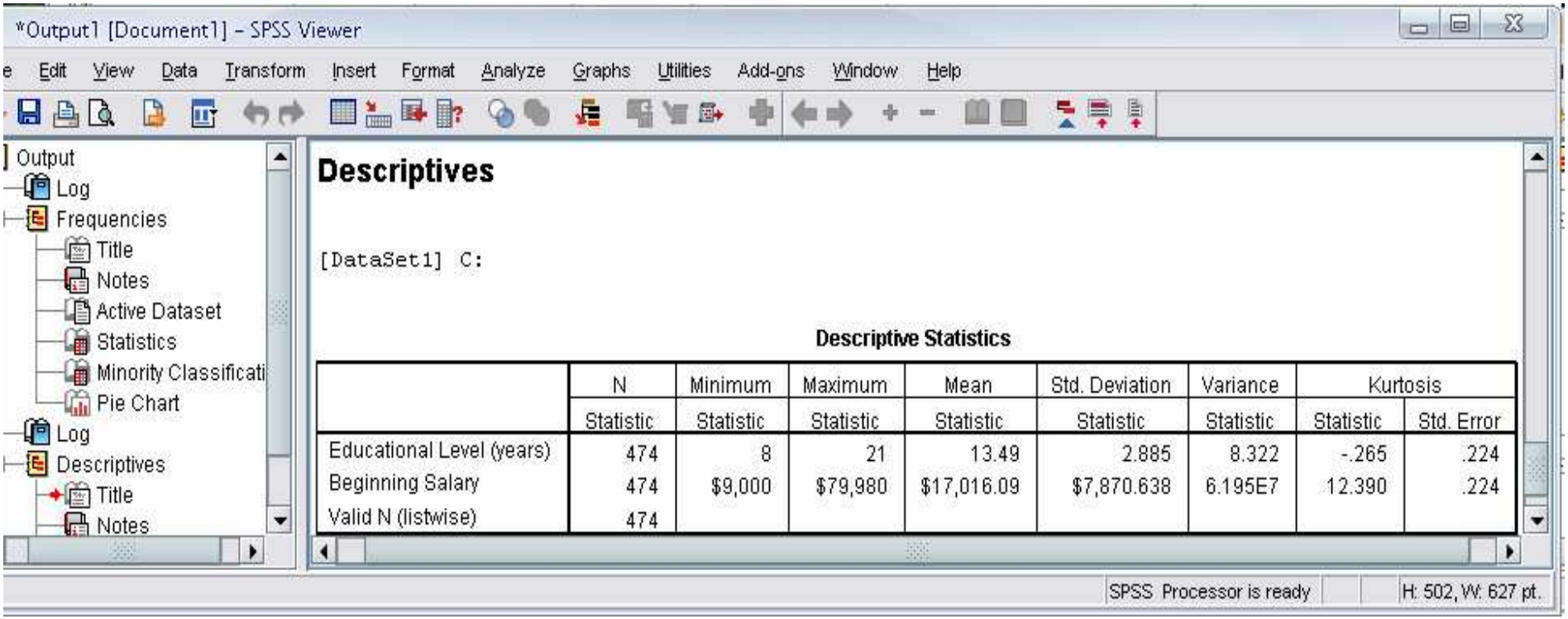
Click ‘variance’ and ‘kurtosis’

Finally click ‘Continue’



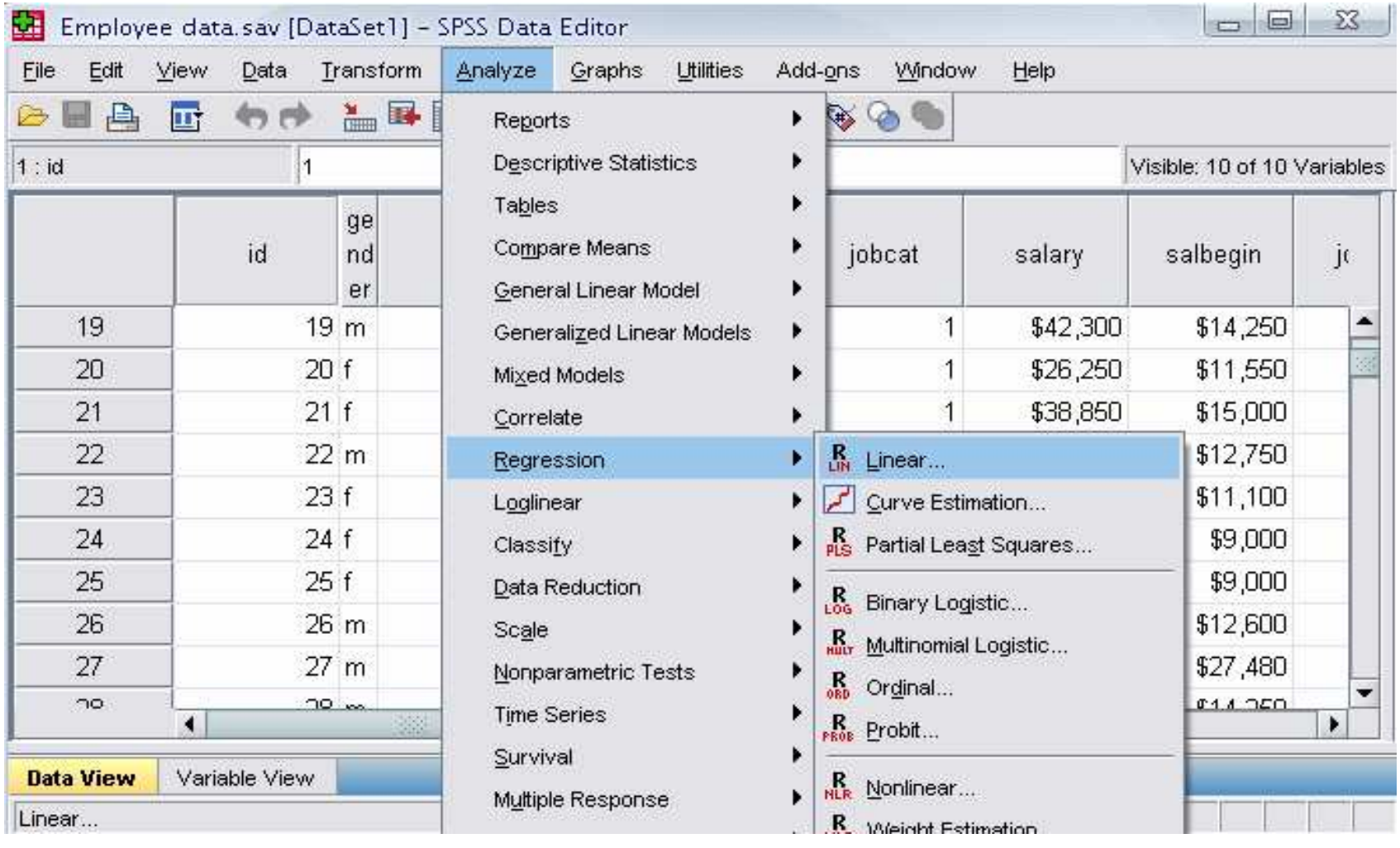
3.2 Descriptives

Finally Click OK in the Descriptives box. You will be able to see the result of the analysis.



3.3 Regression Analysis

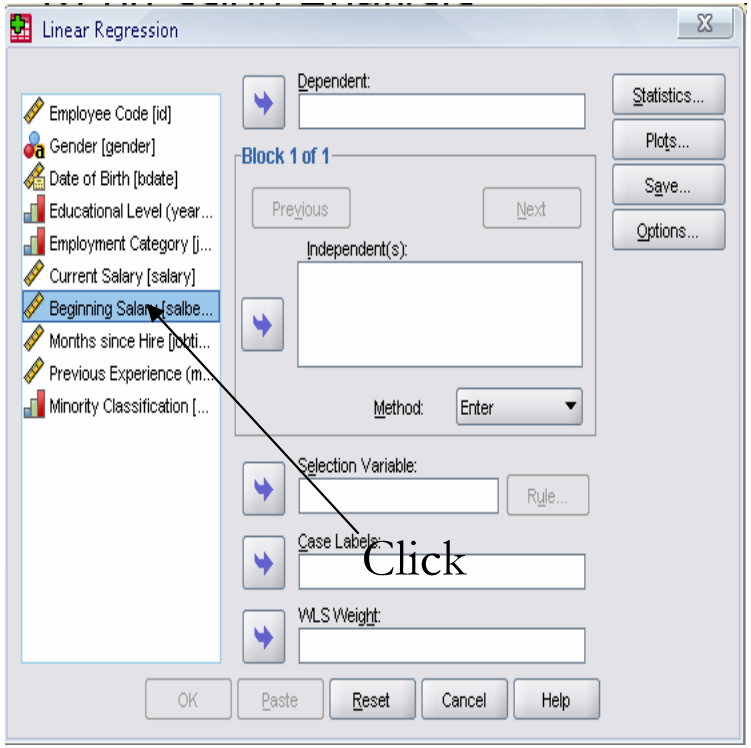
Click ‘Analyze,’ ‘Regression,’ then click ‘Linear’ from the main menu.

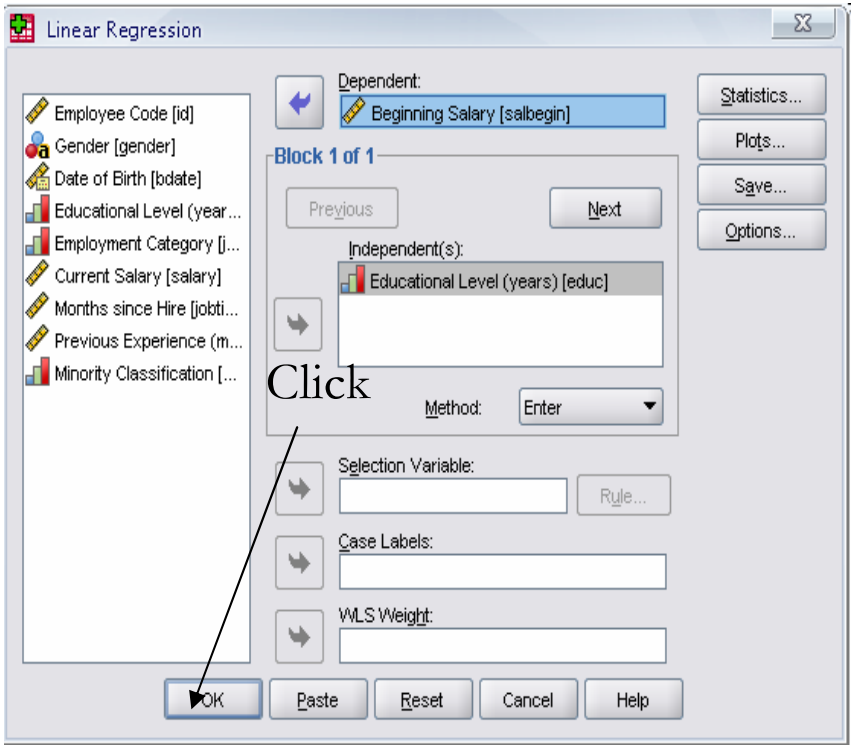


3.3 Regression Analysis

- For example let's analyze the model
- Put 'Beginning Salary' as Dependent and 'Educational Level' as Independent.

$$\text{salbegin} = \beta_0 + \beta_1 \text{edu} + \varepsilon$$





3.3 Regression Analysis

Clicking OK gives the result

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.633[a]	.401	.400	$6,098.259

a. Predictors: (Constant), Educational Level (years)

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.175E10	1	1.175E10	315.897	.000[a]
	Residual	1.755E10	472	3.719E7		
	Total	2.930E10	473			

a. Predictors: (Constant), Educational Level (years)

b. Dependent Variable: Beginning Salary

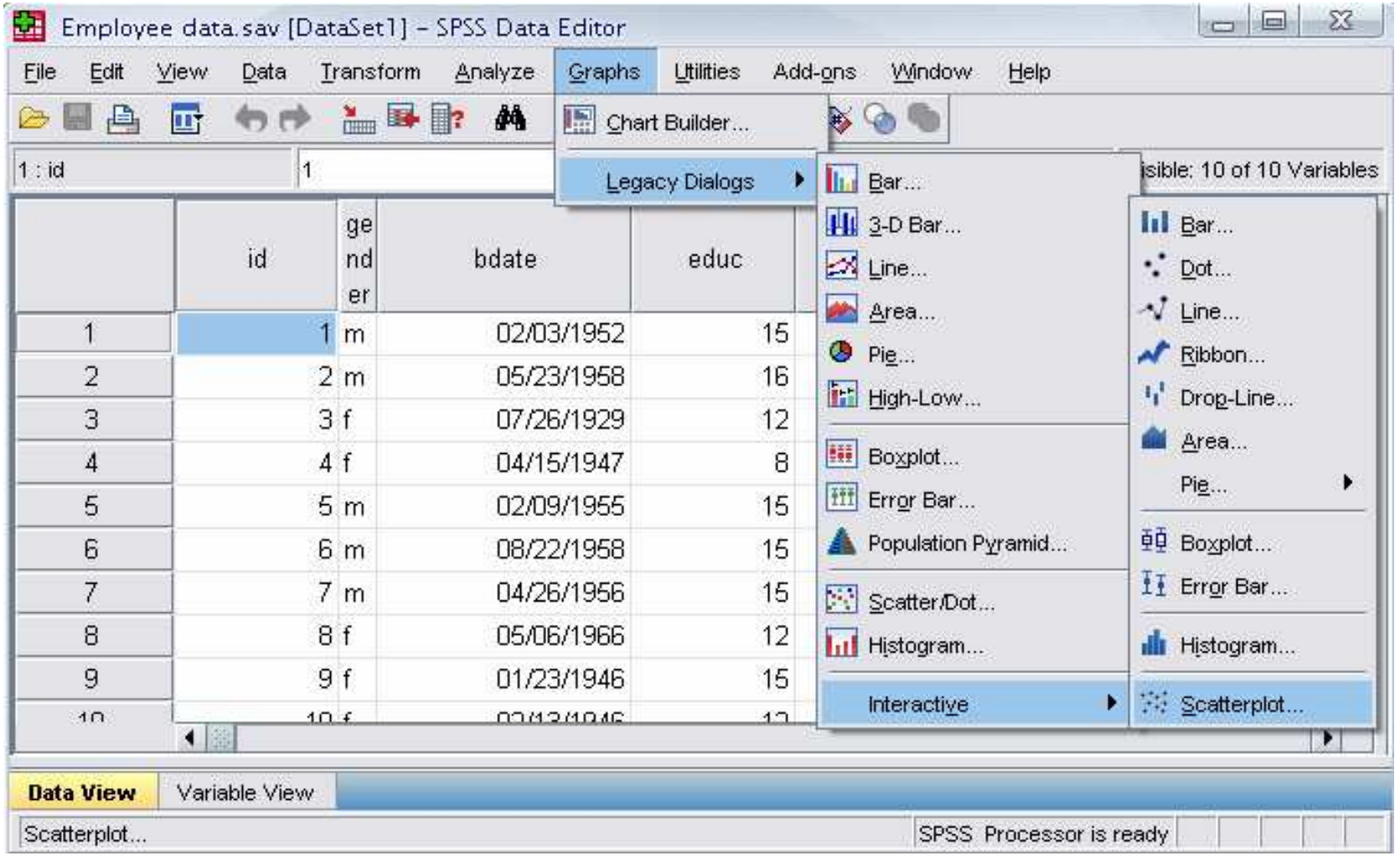
Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-6290.967	1340.920		-4.692	.000
	Educational Level (years)	1727.528	97.197	.633	17.773	.000

a. Dependent Variable: Beginning Salary

Plotting the regression line

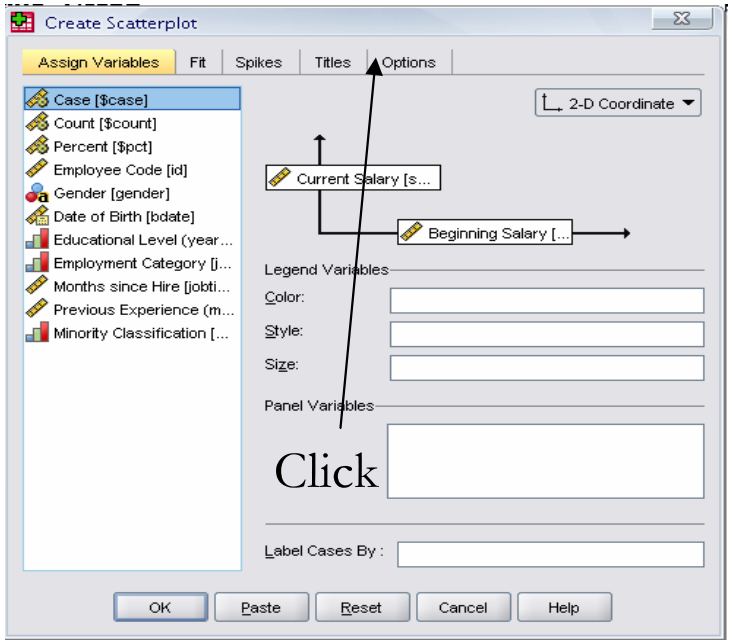
Click ‘Graphs,’ ‘Legacy Dialogs,’ ‘Interactive,’ and ‘Scatterplot’ from the main menu.

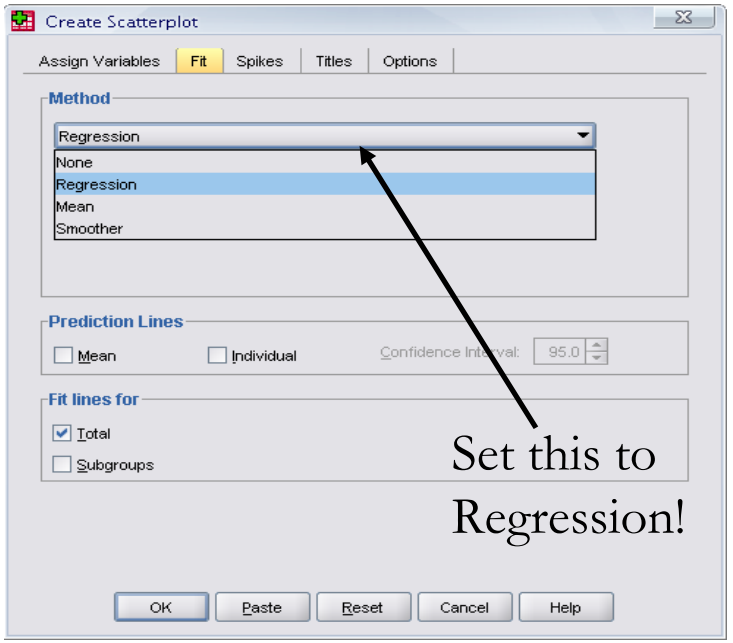


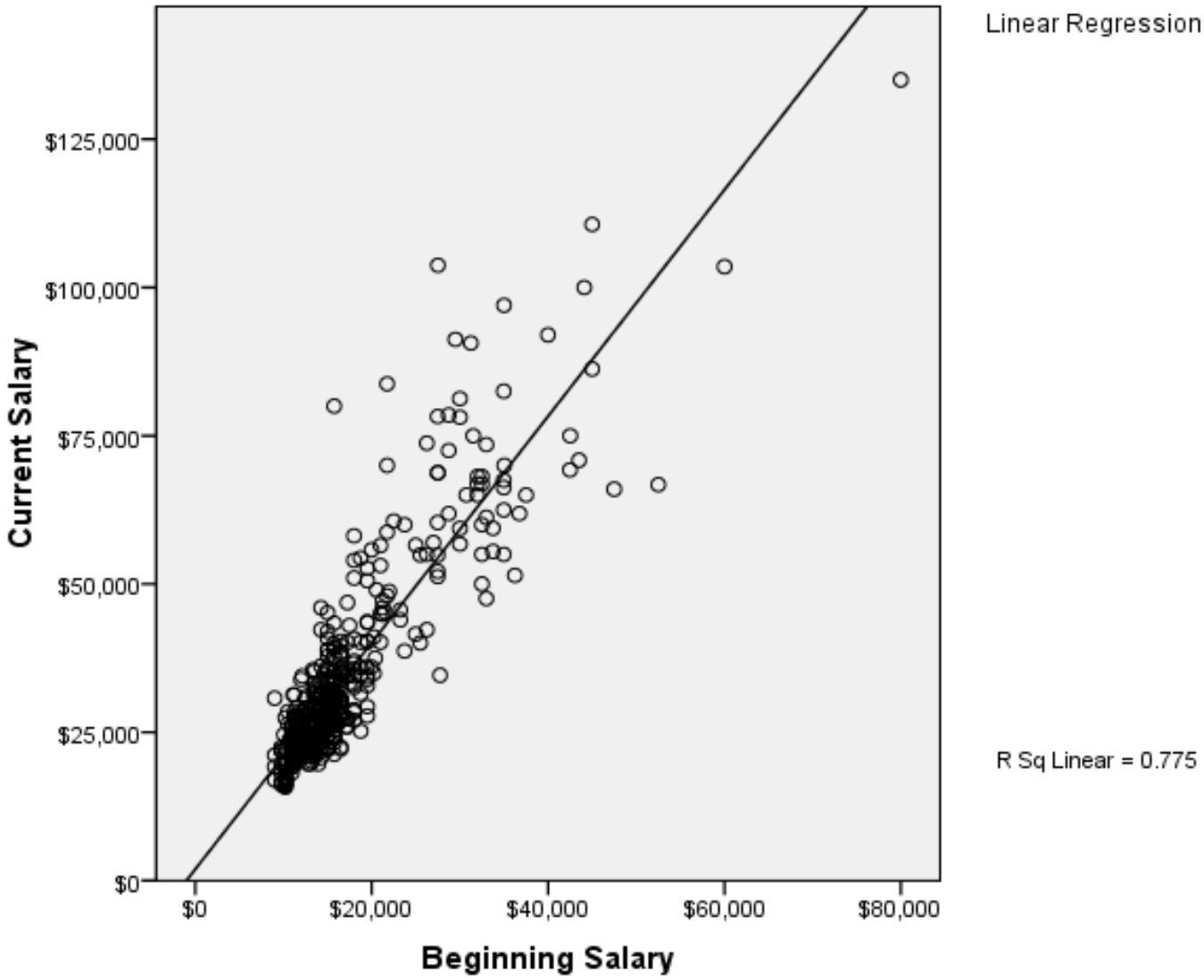
Plotting the regression line

Drag ‘Current Salary’ into the vertical axis box and ‘Beginning Salary’ in the horizontal axis box.

Click ‘Fit’ bar. Make sure the Method is regression in the Fit box. Then click ‘OK’.






Linear Regression
$125,000
$100,000
$75,000
$50,000
$25,000
$0
Current Salary
$0
$20,000
$40,000
$60,000
$80,000
Beginning Salary
R Sq Linear = 0.775

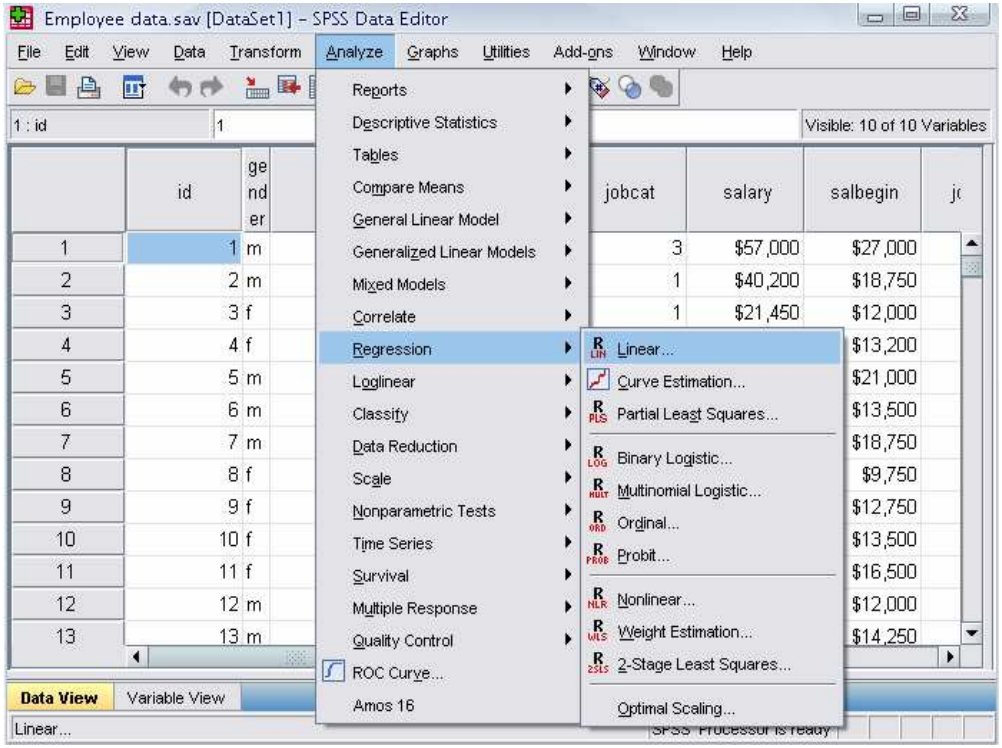
Exercise time

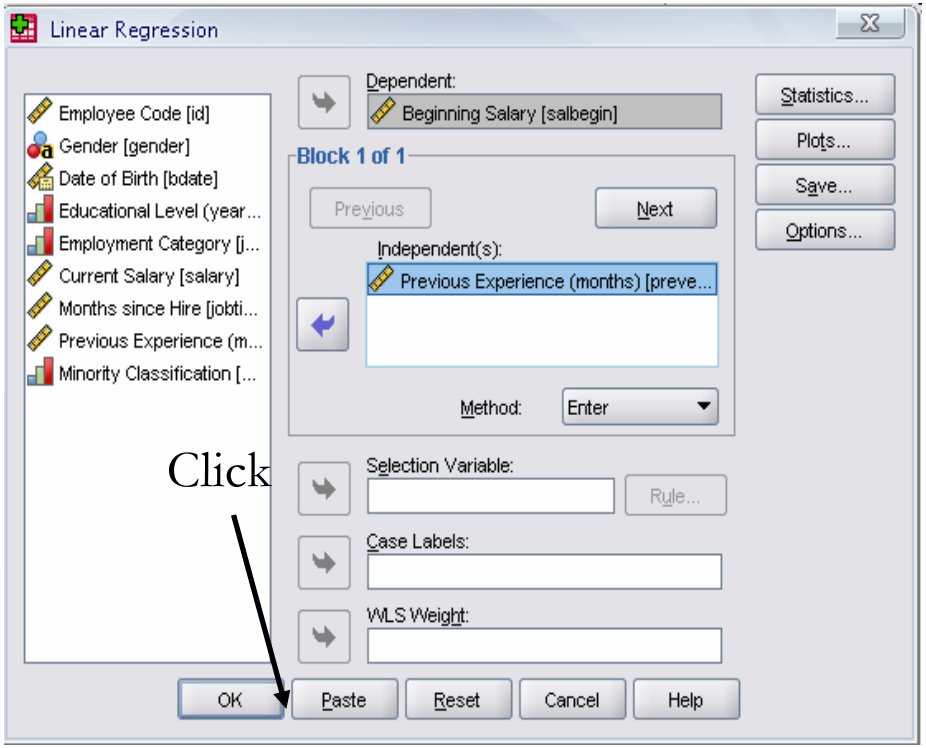
Find out whether or not the previous experience of workers has any affect on their beginning salary?

- Take the variable “salbegin,” and “prevexp” as dependent and independent variables respectively.

Plot the regression line for the above analysis using the “scatter plot” menu.

Answer


Employee data.sav [DataSet1] - SPSS Data Editor
File Edit View Data Transform Analyze Graphs Utilities Add-ons Window Help
Reports
Descriptive Statistics
Tables
Compare Means
General Linear Model
Generalized Linear Models
Mixed Models
Correlate
Regression
Loglinear
Classify
Data Reduction
Scale
Nonparametric Tests
Time Series
Survival
Multiple Response
Quality Control
ROC Curve...
Amos 16
Linear...
Curve Estimation...
Partial Least Squares...
Binary Logistic...
Multinomial Logistic...
Ordinal...
Probit...
Nonlinear...
Weight Estimation...
2-Stage Least Squares...
Optimal Scaling...
Visible: 10 of 10 Variables
Data View
Variable View
Linear...


Linear Regression
Employee Code [id]
Gender [gender]
Date of Birth [bdate]
Educational Level (year...
Employment Category [j...
Current Salary [salary]
Months since Hire [jobti...
Previous Experience (m...
Minority Classification [...
Dependent:
Beginning Salary [salbegin]
Block 1 of 1
Previous
Next
Independent(s):
Previous Experience (months) [preve...
Method:
Enter
Selection Variable:
Rule...
Case Labels:
WLS Weight:
Statistics...
Plots...
Save...
Options...
OK
Paste
Reset
Cancel
Help
Click

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.045[a]	.002	.000	$7,870.942

a. Predictors: (Constant), Previous Experience (months)

b. Dependent Variable: Beginning Salary

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.969E7	1	5.969E7	.964	.327[a]
	Residual	2.924E10	472	6.195E7		
	Total	2.930E10	473			

a. Predictors: (Constant), Previous Experience (months)

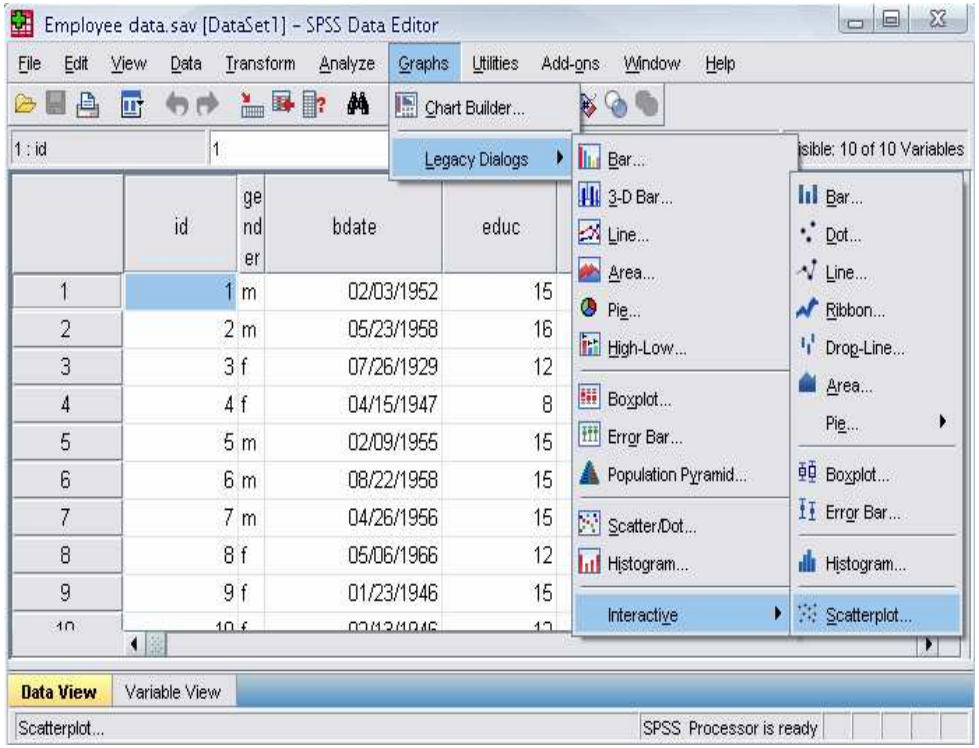
b. Dependent Variable: Beginning Salary

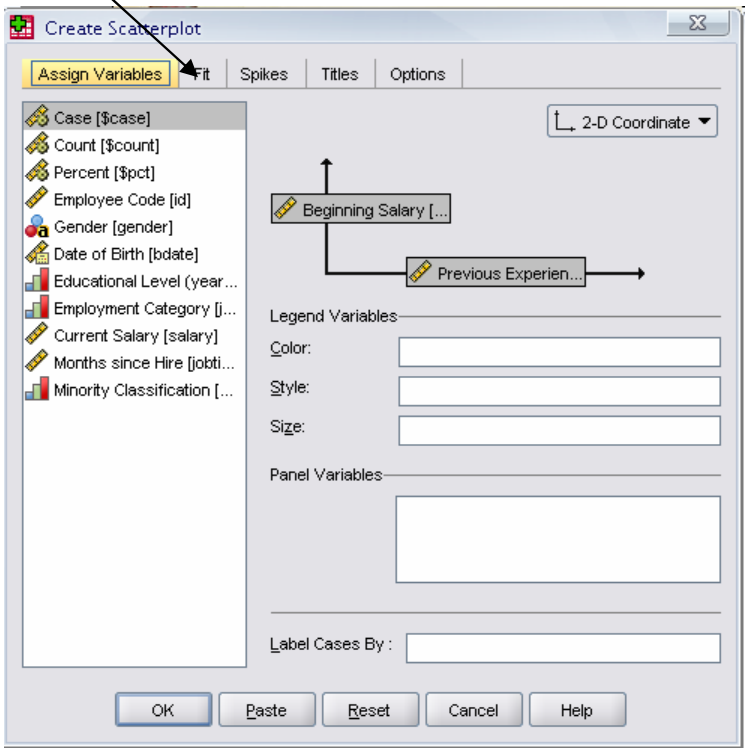
Coefficients[a]

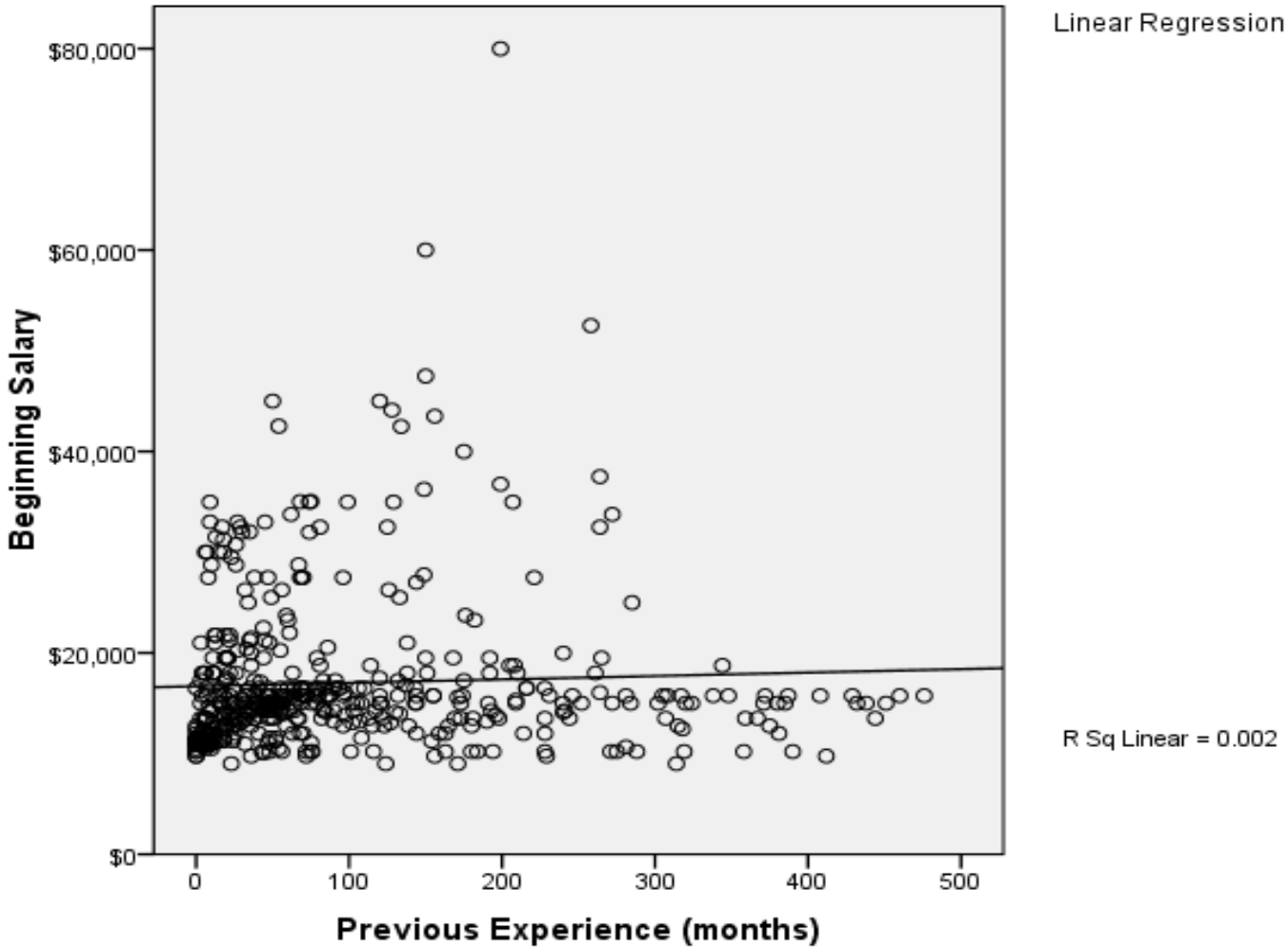
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	16690.478	490.646		34.017	.000
	Previous Experience (months)	3.397	3.460	.045	.982	.327

a. Dependent Variable: Beginning Salary

Click on the “fit” tab to make sure the method is regression





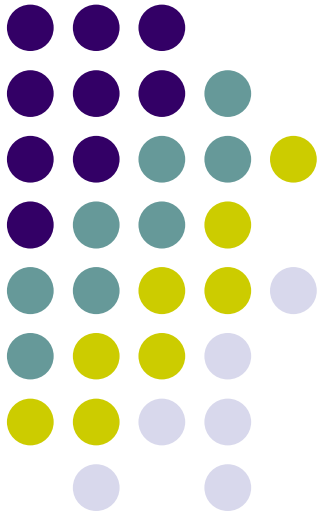

Linear Regression
$80,000
$60,000
$40,000
$20,000
$0
Beginning Salary
0
100
200
300
400
500
Previous Experience (months)
R Sq Linear = 0.002

Thank you!

20. Using Existing Statistics

Presentation Objectives

- *To raise students/trainees' awareness of the analysis of existing statistics as a relevant, valid, and potentially fruitful research method*
- *To consolidate students/trainees' capacity to think critically about the data produced by others and not accept them at face value*
- *To develop students/trainees' understanding of the need to rely on various sources in their use and analysis of existing data and statistics*



Using existing statistics

- In social research it is often the case that researchers have to use official or quasi-official statistics.
- In this case, these **official or quasi-official statistics** are called **secondary data**.
- This means that the data have been collected by someone or an institution other than the researcher who uses them for her/his own research.
- Secondary data contrast with primary data, which are data collected *and* used by the same person.

Using existing statistics in Myanmar

- In Myanmar, most of these statistics are provided by the government.
- Using statistics from the Myanmar government will raise various issues for the researchers using this data: that of **validity and reliability** of these statistics.
- It is crucial that the researcher using secondary data addresses the issue of the accuracy.
- The researcher has to explain why s/he thinks that these secondary data are accurate and why s/he can therefore use them for his/her research.

Accuracy of secondary data

- Accuracy of secondary data will build on the reliability and validity of these data. These two notions were explained in the second presentation (‘Critical thinking and research’).

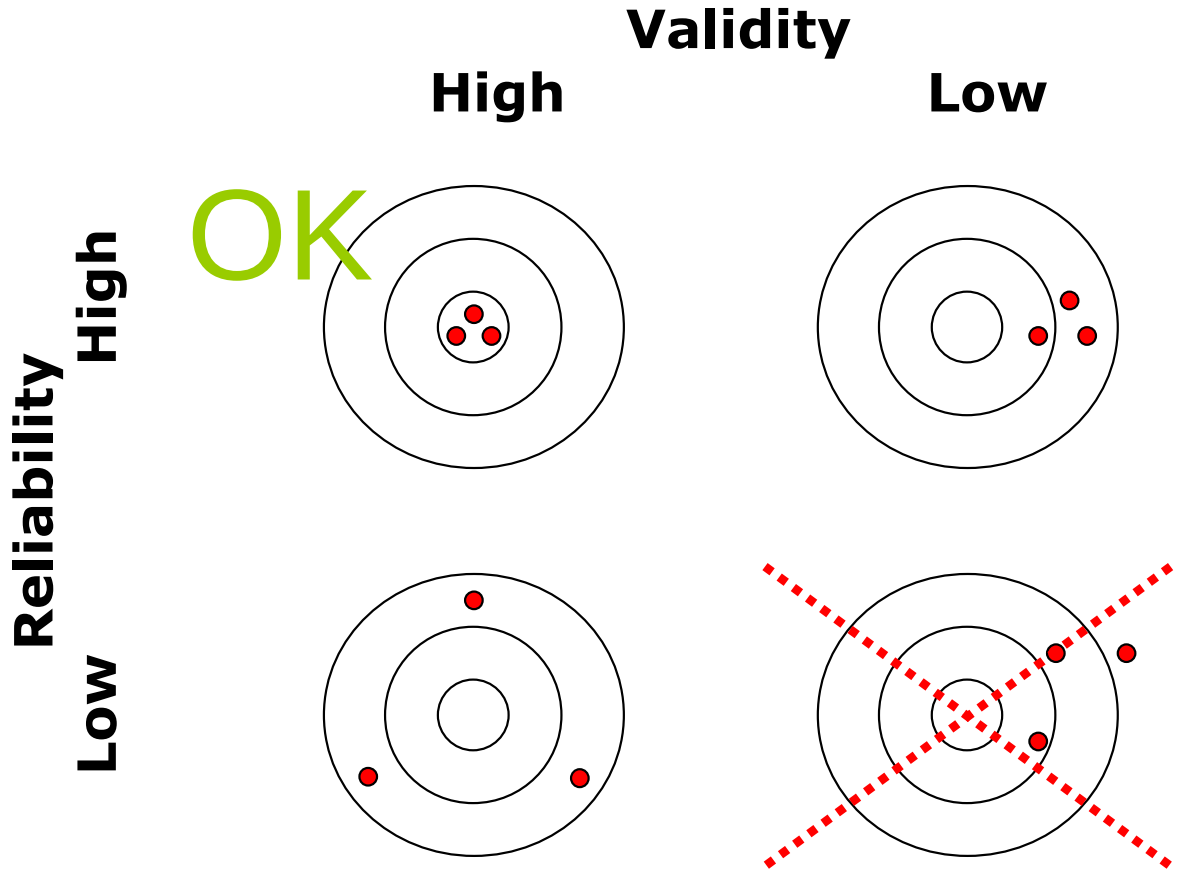
- It is worth recalling what they mean again:

- **Reliability** (precision, reproducibility):
  - The degree of stability displayed when a measurement is repeated under identical condition.

- **Validity** (consistency, relevance):
  - The degree to which a measurement or study reaches a correct conclusion.
    - Internal validity - the extent to which the results of an investigation accurately reflect the true situation of the study population.

    - External validity (generalisability) - the extent to which the results of a study are applicable to other population.

Accuracy of secondary data



Secondary data that the researcher thinks have low validity and low reliability (i.e. target shown bottom right) should be discarded completely.

Secondary data that the researcher thinks have high validity and high reliability (i.e. target shown in upper left) should be prioritized.

How to ensure accuracy of data?

One way to partly solve the problem of accuracy is to look for other sources providing similar data and compare these sets of data.

Some data that are available on Myanmar can be compared with those provided by the government.

In this case, the researcher explains which one of the sets of data seems to be more valid and reliable and why.

What is important to remember here is the need to compare the same data between different providers, and not to just rely on one provider.

When accuracy of data is lacking

When comparison is not possible and when accuracy of data is lacking, the researcher has to start the report by writing:

> "The following data available from __ *(name of the organization which provided the data)*_____ have to be examined with great caution. The production of this data is subject for debate because …."

The researcher then has to explain why the data production is subject for debate.

The problem of accuracy may be a problem of (1) biased research hypothesis, (2) research method, (3) sampling, (4) data collection, etc ….

The researcher will explain which one of these possibilities seems to be the most likely.

Advantages of secondary data

1/2

In most cases, however, using secondary data has lots of advantages, such as the following:

Development of research plan

Secondary information provides some background which the research will build upon. The researcher can develop an argument:

-**against** this secondary information,
-**in support of** this information;
-**in support of** this information **but with some reservations**;

Cost and time

Potential for good quality data comes at a fraction of the cost of primary research, especially when data like from major UK surveys are readily available online (http://www.data-archive.ac.uk/).

Advantages of secondary data

2/2

Quality of data

Many data sources such as official UK, US, Japanese, or European surveys offer excellent quality data.

Longitudinal Data Analysis

Using secondary data offers a great potential for analysis over time e.g. the General Household Survey, Census, Labour Force Survey etc.

Detailed analysis

Large national sample surveys enable analysis of small or very distinct groups of people.

New analysis

Reanalysing existing data can offer new interpretations of data.

Limitations of secondary data

No control

Using secondary data offers the researcher no control over the quality of data or the variables included.

Complexity of data

Many of the large national data sets are complex in their structure and require a period of familiarisation on the part of the researcher.

Other Issues

Research practices related to existing statistics are also regulated in some countries.

It is also likely this will be the case in Myanmar in the near future.

- **Confidentiality**

All data collected by the national statistical office must protect the privacy of individual respondents, whether persons or businesses (Office for National Statistics).

- **Code of Practice**

Office for National Statistics *Code of Practice* http://www.ons.gov.uk/about-statistics/ns-standard/cop/index.html

Sources of Secondary Data

Sources of secondary research data can come from many sources.

Here are some websites that could be of relevance and use for future research:

- United Nations: http://unstats.un.org/unsd/demographic/ww2000/
- International Labour Organization: www.ilo.org
- CIA World Factbook: www.cia.gov/cia/publications/factbook/
- World Bank: www.worldbank.org

- Official data or statistics come from:
  - National government
  - International bodies, especially the EU (Eurostat) and the United Nations
  - Bodies set up by government: e.g. Health Authorities, Police, Development Agencies
  - Local Authorities

Distinction between statistics & social research

Principle	Statistics	Social Research
1) National Representation	MUST be nationally representative (covering 1 or more of national/ geographic territories it may reasonably be expected to.	MAY be nationally representative (goal is to be representative of the target group of interest)

Distinction between statistics & social research

Principle	Statistics	Social Research
3) Data Collection & Evidence & Analysis Base is Robust	Application of sound statistical principles consistent with international practice & quality assured by professional statisticians	Evidence & analysis is rigorous & robust, based on scientific methods. A range of professional standards may apply depending on research methods used

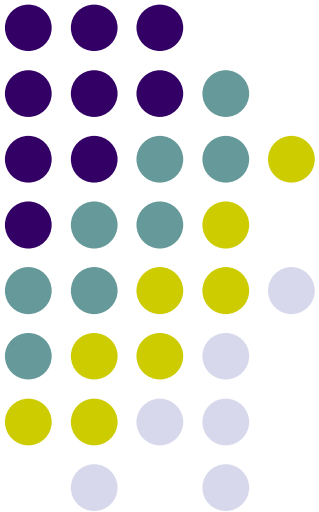
Source: UK Statistics Authority, 2009.

Thank you!

21. Reading of References

Presentation Objectives

- *To raise students/trainees' awareness of the importance to think critically about the references they use for research purposes and not to accept their contents at face value*
- *To develop students/trainees' capacity to cautiously use research findings collected from other research others*



Reading for thinking

Reading is tool for thinking and learning; reading comprehension is good but not enough.

Reading for thinking should be encouraged too.

Before reading an article or a book, it is important to get a sense of its organization: the abstract, the table of contents, and its different sections.

It is also important to have the following points in mind and try to consider them once you start reading the book::

1/5-research topic;
2/5-research design and measurement;
3/5-research method(s);
4/5-data analysis;
5/5-reporting

Research topic & research design

When reading an research paper, a research report, here are the following questions that a researcher should address:

1/5. About the research topic:

- What is the research question/hypothesis?
- Is there a theoretical background to the study? If yes, what is it?
- Is there any comparable research projects which have addressed a similar topic?

2/5. About the research design and measurement:

- What was the unit of analysis? Was it appropriate for the purpose of the study?
- How was the concept study clarified and implemented?
- How was the measurement of the concept defined?

Research method(s)

When reading the text, the researcher should also ask himself/herself:

3/5. About the research method:

- Was there only one research methods used? If not, how many were used and what were there?
- Was the choice of these research methods relevant in relation to the research topic addressed?
- Could another research method have been used for the same purpose? If yes, which one?

Data analysis and reporting

Finally, here are the two sets of questions about data analysis and reporting that the research should try to answer:

4/5. About data analysis:

- Has the researcher undertaken all relevant data analyses?
- Have all appropriate variables been identified and examined?
- What are the weaknesses in the analysis and interpretation of data?
- Are there any contradictions?

5/5. About the reporting:

- Has the researcher placed this particular project in the context of previous research on the topic? Does this research add to, modify, replicate, or contradict previous studies?
- Has the researcher reported any flaws or shortcomings in the study design or execution?

Exercise time

Read the following text and answer the question below:

- “In 1992, I began a long-term study of women’s work and family choices. Several factors led me to undertake this research project. First and foremost, my personal experience as a woman committed to both career and motherhood gave me an understanding of what such a commitment entails. Second, my concern about the unequal status of women in the labor force led me to focus on the costs of the conflicting demands of employment and family for women. Third, the scarcity of […] research about women’s adult development presented a challenge to me as a feminist researcher.”

  Michele Hoffnung, excerpted from Adler & Clark, *An Invitation to Social Research: How it’s Done*, International Edition, Cengage Wadsworth Pub., 2011, p.75

- a/ What does the topic of Hoffnung’s research address?

- See answer in the next slide.

Exercise time

- “In 1992, I began a long-term study of women’s work and family choices. Several factors led me to undertake this research project. First and foremost, my personal experience as a woman committed to both career and motherhood gave me an understanding of what such a commitment entails. Second, my concern about the unequal status of women in the labor force led me to focus on the costs of the conflicting demands of employment and family for women. Third, the scarcity of […] research about women’s adult development presented a challenge to me as a feminist researcher.”

  Michele Hoffnung, excerpted from Adler & Clark, *An Invitation to Social Research: How it’s Done*, International Edition, Cengage Wadsworth Pub., 2011, p.75

- a/ What does the topic of Hoffnung’s research address?

  Hoffnung’s research addresses the question of **women’s work and family choices**.

Exercise time

Read the same text and answer the question below:

- “In 1992, I began a long-term study of women’s work and family choices. Several factors led me to undertake this research project. First and foremost, my personal experience as a woman committed to both career and motherhood gave me an understanding of what such a commitment entails. Second, my concern about the unequal status of women in the labor force led me to focus on the costs of the conflicting demands of employment and family for women. Third, the scarcity of […] research about women’s adult development presented a challenge to me as a feminist researcher.”

  Michele Hoffnung, excerpted from Adler & Clark, *An Invitation to Social Research: How it’s Done*, International Edition, Cengage Wadsworth Pub., 2011, p.75

- b/ Does Michele Hoffnung want to make a choice between career and motherhood?

- See answer in the next slide.

Exercise time

- “In 1992, I began a long-term study of women’s work and family choices. Several factors led me to undertake this research project. First and foremost, my personal experience as a woman committed to both career and motherhood gave me an understanding of what such a commitment entails. Second, my concern about the unequal status of women in the labor force led me to focus on the costs of the conflicting demands of employment and family for women. Third, the scarcity of […] research about women’s adult development presented a challenge to me as a feminist researcher.”

  Michele Hoffnung, excerpted from Adler & Clark, *An Invitation to Social Research: How it’s Done*, International Edition, Cengage Wadsworth Pub., 2011, p.75

- b/ Does Michele Hoffnung want to make a choice between career and motherhood?

  No, she does not want to make a choice: she is **a woman committed to both career and motherhood**.

Exercise time

Read the same text and answer the question below:

- “In 1992, I began a long-term study of women’s work and family choices. Several factors led me to undertake this research project. First and foremost, my personal experience as a woman committed to both career and motherhood gave me an understanding of what such a commitment entails. Second, my concern about the unequal status of women in the labor force led me to focus on the costs of the conflicting demands of employment and family for women. Third, the scarcity of […] research about women’s adult development presented a challenge to me as a feminist researcher.”

  Michele Hoffnung, excerpted from Adler & Clark, *An Invitation to Social Research: How it’s Done*, International Edition, Cengage Wadsworth Pub., 2011, p.75

- c/ How does she consider the position of women in the labour market? How does she try to study the issue (i.e. the position of women in the labour market)?

- See answer in the next slide.

Exercise time

- “In 1992, I began a long-term study of women’s work and family choices. Several factors led me to undertake this research project. First and foremost, my personal experience as a woman committed to both career and motherhood gave me an understanding of what such a commitment entails. Second, my concern about the unequal status of women in the labor force led me to focus on the costs of the conflicting demands of employment and family for women. Third, the scarcity of […] research about women’s adult development presented a challenge to me as a feminist researcher.”

  Michele Hoffnung, excerpted from Adler & Clark, *An Invitation to Social Research: How it’s Done*, International Edition, Cengage Wadsworth Pub., 2011, p.75

- c/ How does she consider the position of women in the labour market? How does she try to study the issue (i.e. the position of women in the labour market)?

- Her concern is about the **unequal status of women in the labor force**. She studies the issue by focusing on the **costs of the conflicting demands of employment and family for women**.

Exercise time

Read the same text and answer the question below:

- “In 1992, I began a long-term study of women’s work and family choices. Several factors led me to undertake this research project. First and foremost, my personal experience as a woman committed to both career and motherhood gave me an understanding of what such a commitment entails. Second, my concern about the unequal status of women in the labor force led me to focus on the costs of the conflicting demands of employment and family for women. Third, the scarcity of […] research about women’s adult development presented a challenge to me as a feminist researcher.”

  Michele Hoffnung, excerpted from Adler & Clark, *An Invitation to Social Research: How it’s Done*, International Edition, Cengage Wadsworth Pub., 2011, p.75

- d/ Did the scarcity of research about women, work, and family’s choices represented an additional reason for her to conduct the research she developed?

- See answer in the next slide.

Exercise time

- “In 1992, I began a long-term study of women’s work and family choices. Several factors led me to undertake this research project. First and foremost, my personal experience as a woman committed to both career and motherhood gave me an understanding of what such a commitment entails. Second, my concern about the unequal status of women in the labor force led me to focus on the costs of the conflicting demands of employment and family for women. Third, the scarcity of […] research about women’s adult development presented a challenge to me as a feminist researcher.”

  Michele Hoffnung, excerpted from Adler & Clark, *An Invitation to Social Research: How it’s Done*, International Edition, Cengage Wadsworth Pub., 2011, p.75

- d/ Did the scarcity of research about women, work, and family’s choices represented an additional reason for her to conduct the research she developed?

- Yes

Exercise time: read the four abstracts below

1-Child-Centred Education and the Promise of Democratic Learning: Pedagogic Messages in Rural Indian Primary Schools

Global and national agendas to achieve universal primary education and improve the "quality" of school provision in developing countries have identified the need to reform classroom pedagogy. Since the 1990s, child-centred ideas in particular have been utilised in teacher-training programmes and school reforms across many parts of Africa and Asia with the intention of creating more child-friendly, democratic learning environments. Analysing episodes from classroom observations conducted in a rural Indian primary school, this paper reveals the tensions experienced by one teacher in handing over greater classroom control to pupils. It provides insight into the complex processes of pedagogic interaction, and sheds light on some of the possibilities and conditions for achieving child-centred pedagogic change in such development contexts.

2-Pedagogical Renewal in Sub-Saharan Africa: The Case of Uganda

There has been an unprecedented interest in reforming pedagogical practices in sub-Saharan Africa in the past two decades. The reform efforts are often characterised by a move away from teacher-centred instruction to child-centred pedagogy (CCP). Uganda has been no exception to this trend as the new curriculum adopted the principles of CCP and efforts were made to popularise and institutionalise the reformed pedagogies in primary schools. Based on a fieldwork study in selected schools in Kampala, this article seeks to explore teachers' views on CCP, their classroom practices, and the perceived challenges in implementing CCP. The article suggests that the implementation of CCP in Ugandan classrooms has not occurred in the ways intended by policy-makers and offers some explanations for the discrepancy between policy and practice. It also raises questions with regard to the appropriateness of CCP as the most suitable pedagogy in African classrooms.

3-Problems on Primary School-Based In-Service Training in Vietnam: A Case Study of Bac Giang Province

In Vietnam, despite the introduction of a new curriculum based on a child-centred education approach, there exist many problems and challenges in the educational process. To overcome these problems, the Vietnamese and Japanese governments have been conducting an in-service teacher-training programme, including school-based observation and reflection of lessons as a major activity. This study investigates the problems encountered in these schools. The results reveal that (1) the lesson is extremely fast-paced, (2) teachers tend to evaluate their colleagues and students, (3) teachers need to learn about how to learn and (4) promoting dialogue among teachers is considerably challenging.

4-Girls' Drop-Out from Primary Schooling in the Middle East and North Africa: Challenges and Alternatives.

The present situation in the Middle East and North Africa Region (MENA) regarding primary school drop-out and repetition, with special reference to the situation of the girl child, is examined in this study. The in-school as well as out-of-school causes of primary school drop-out are examined, and solutions that help reduce or eliminate the problem in the region are introduced. Part I presents a brief description of the purpose, the methodology, the organization, and the limitations of the study. Part II seeks to stress the importance of studying the drop-out problem in primary education in general, followed by an assessment of its characteristics and extent in MENA countries. In Part III, underlying causes of the drop-out problem in primary school are discussed, with special references to the factors leading to girls' drop out. In the final section, culture-sensitive action recommendations are provided to help meet the drop-out challenge.

- **1-Child-Centred Education and the Promise of Democratic Learning: Pedagogic Messages in Rural Indian Primary Schools**

- Global and national agendas to achieve universal primary education and improve the "quality" of school provision in developing countries have identified the need to reform classroom pedagogy. Since the 1990s, child-centred ideas in particular have been utilised in teacher-training programmes and school reforms across many parts of Africa and Asia with the intention of creating more child-friendly, democratic learning environments. Analysing episodes from classroom observations conducted in a rural Indian primary school, this paper reveals the tensions experienced by one teacher in handing over greater classroom control to pupils. It provides insight into the complex processes of pedagogic interaction, and sheds light on some of the possibilities and conditions for achieving child-centred pedagogic change in such development contexts.

After reading the abstract, fill in the boxes for each abstract in the table below

	Purpose of the research	Methods used	Major findings	Recommendations
1. abstract				

- **2-Pedagogical Renewal in Sub-Saharan Africa: The Case of Uganda**

- There has been an unprecedented interest in reforming pedagogical practices in sub-Saharan Africa in the past two decades. The reform efforts are often characterised by a move away from teacher-centred instruction to child-centred pedagogy (CCP). Uganda has been no exception to this trend as the new curriculum adopted the principles of CCP and efforts were made to popularise and institutionalise the reformed pedagogies in primary schools. Based on a fieldwork study in selected schools in Kampala, this article seeks to explore teachers' views on CCP, their classroom practices, and the perceived challenges in implementing CCP. The article suggests that the implementation of CCP in Ugandan classrooms has not occurred in the ways intended by policy-makers and offers some explanations for the discrepancy between policy and practice. It also raises questions with regard to the appropriateness of CCP as the most suitable pedagogy in African classrooms.

After reading the abstract, fill in the boxes for each abstract in the table below

	Purpose of the research	Methods used	Major findings	Recommendations
2. abstract				

- **3-Problems on Primary School-Based In-Service Training in Vietnam: A Case Study of Bac Giang Province**

- In Vietnam, despite the introduction of a new curriculum based on a child-centred education approach, there exist many problems and challenges in the educational process. To overcome these problems, the Vietnamese and Japanese governments have been conducting an in-service teacher-training programme, including school-based observation and reflection of lessons as a major activity. This study investigates the problems encountered in these schools. The results reveal that (1) the lesson is extremely fast-paced, (2) teachers tend to evaluate their colleagues and students, (3) teachers need to learn about how to learn and (4) promoting dialogue among teachers is considerably challenging.

After reading the abstract, fill in the boxes for each abstract in the table below

	Purpose of the research	Methods used	Major findings	Recommendations
3. abstract				

- **4-Girls' Drop-Out from Primary Schooling in the Middle East and North Africa: Challenges and Alternatives.**

- The present situation in the Middle East and North Africa Region (MENA) regarding primary school drop-out and repetition, with special reference to the situation of the girl child, is examined in this study. The in-school as well as out-of-school causes of primary school drop-out are examined, and solutions that help reduce or eliminate the problem in the region are introduced. Part I presents a brief description of the purpose, the methodology, the organization, and the limitations of the study. Part II seeks to stress the importance of studying the drop-out problem in primary education in general, followed by an assessment of its characteristics and extent in MENA countries. In Part III, underlying causes of the drop-out problem in primary school are discussed, with special references to the factors leading to girls' drop out. In the final section, culture-sensitive action recommendations are provided to help meet the drop-out challenge.

After reading the abstract, fill in the boxes for each abstract in the table below

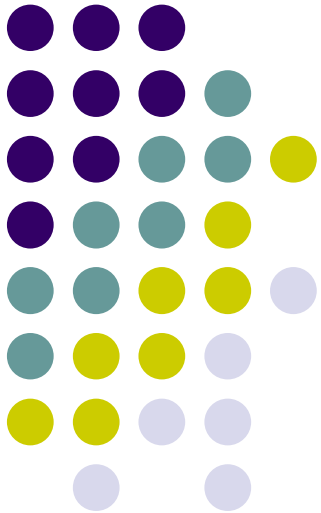
	Purpose of the research	Methods used	Major findings	Recommendations
4. abstract				

Thank you!

22. Ethics and Politics of Social Research

Presentation Objectives

- *To raise students/trainees' awareness of the importance to think critically about the context in which the research project is to be conducted (the larger context as well as the narrower)*
- *To develop students/trainees' understanding of the ethics that research projects has to observe*



Ethics and Politics

Developing a research project means that the production of data and the resulting findings should be done by respecting a code of conduct and practice.

A researcher should abide by this code of conduct and practice. By doing so, the researcher will be recognized by the civil society for respecting specific moral standards and criteria.

- **Ethics** :
  - What are ethical issues in social research?
  - What are ethical issues for the scientist?

- **Politics:**
  - What are politics in social research?
  - How do ethics & politics interact in social research?

What are ethical issues in social research?

Suppose a research is conducted on a PLHIV (People Living with HIV) community.

Here follow three conducts and practices that do ***not*** respect ethical issues in social research.
Any researcher should abstain to follow these types of conducts and practices.

1st Conduct: – a researcher pretends to be a PLHIV so as to integrate a (Self-Help Group) SHG.
By doing so, his/her intrusion into people's lives under this pretence does not respect the moral conduct a researcher should observe.

2nd Conduct: – a researcher reports the list of interviews to the local authorities.
By doing so, people can be identified: this does not respect the right to anonymity any research has to respect.

3rd Conduct: – a researcher pretends to be a doctor to interview PLHIV.
By doing so, the researcher does not use any informed consent and the people that interviewed are deceived.

Any of the three conducts is to be proscribed

1st Conduct: – a researcher pretends to be a PLHIV so as to integrate a (Self-Help Group) SHG.
By doing so, his/her intrusion into people's lives under this pretence does not respect the moral conduct a researcher should observe.

2nd Conduct: – a researcher reports the list of interviews to the local authorities.
By doing so, people can be identified: this does not respect the right to anonymity any research has respect.

3rd Conduct: – a researcher pretends to be a doctor to interview PLHIV.
By doing so, the researcher don't use any informed consent and the people that interviewed are deceived.

What are ethical issues in social research?

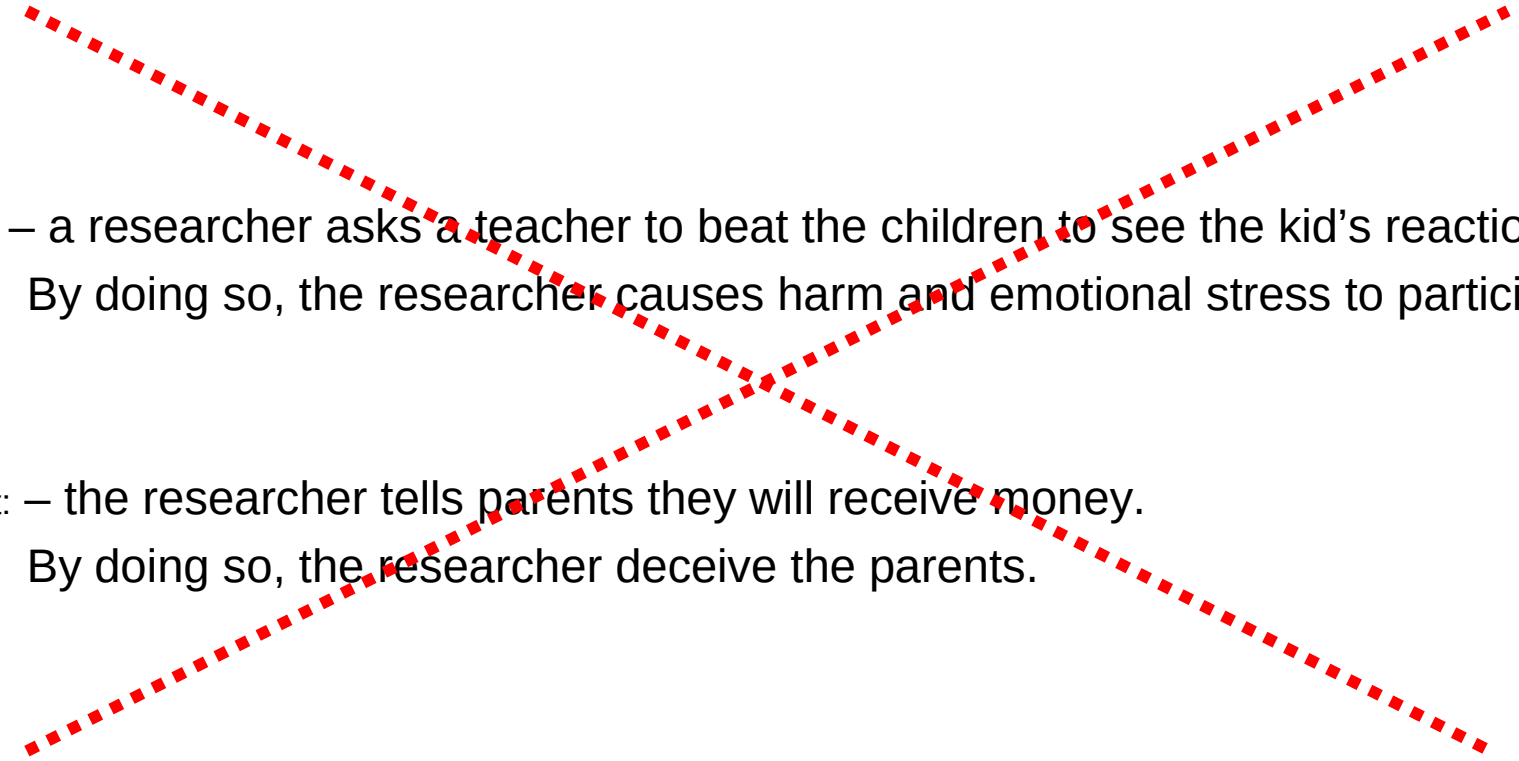
Suppose a research is conducted on primary education.

Here follow two conducts and practices that do ***not*** respect ethical issues in social research.
Any researcher should abstain to follow these types of conducts and practices.

1st conduct: – a researcher asks a teacher to beat the children to see the kid's reactions.
By doing so, the researcher causes harm and emotional stress to participants.

2nd Conduct: – the researcher tells parents they will receive money.
By doing so, the researcher deceive the parents.

Any of the two conducts is to be proscribed



1st conduct: – a researcher asks a teacher to beat the children to see the kid's reactions.
By doing so, the researcher causes harm and emotional stress to participants.

2nd Conduct: – the researcher tells parents they will receive money.
By doing so, the researcher deceive the parents.

Ethical issues in social research

When conducting research, the five following rules should be observed by the researcher:

1. **Voluntary Participation**
2. **No Harm to Subjects**
3. **Anonymity**
4. **Confidentiality**
5. **No Deception**

1. Voluntary Participation

Observing the rule of ‘Voluntary Participation’ entails the following:

- Subjects must agree to reveal information about themselves.

- Subjects must be able to provide informed consent (when requested).

2. No Harm to Subjects

Observing the rule of ‘No Harm to Subjects’ entails the following:

- Subjects must be free from reasonably anticipated physical or emotional harm.
- Subjects must be informed of the manifest content of the information they will be asked to reveal about themselves.
- It is permissible to deceive subjects, as long as the deception cannot be anticipated to create physical or emotional harm.

3. Anonymity

Observing the rule of ‘Anonymity’ entails the following:

- Both the researcher and the public cannot identify the subject.
- Anonymity often is not required during data collection, but sometimes is preferred.
- Typically, identifiers must be removed from the data after collection is complete.
- The exception would be for longitudinal data collection (ex. UNDP HH survey).

4. Confidentiality

Observing the rule of ‘Confidentiality’ entails the following:

- The public cannot identify the subject.
- Confidentiality nearly always is required.

Notice the difference between ‘Anonymity’ and ‘Confidentiality’:

Anonymity	⇔	**Confidentiality**
Can’t be identified		*Only researchers can identify*

5. No Deception

Observing the rule of ‘No Deception’ means that the researcher has to make known to the research participants the true purpose of the research at one point before the research is finalized.

- In most cases, the rule of ‘No Deception’ will be observed before collecting data: before interviewing, before conducting a survey, a case study, a PAR, the researcher will inform the participants of the true purpose of the research.

- In very rare cases, the rule of ‘No Deception will be observed after collecting data and before doing the reporting: at this stage, the researcher will inform the participants of the full research purpose.

What are ethical issues for the scientist?

Researchers must be honest about their findings and their research.

This means the three following rules:

-*reporting of all the findings*: the research will refrain from concealing some findings;

-*credit for findings*: when findings are not the researcher's own, the credit should be given to the person to whom the findings are attributed.

-*no plagiarism*: a researcher can not use someone else's words or thoughts as though they were his/her own. This constitutes intellectual theft. When a researcher uses the words or thoughts that are not his/her own, he has to be clear about who expressed these words or thoughts.

Who takes care of ethics in research?

- In foreign countries, most of institutions as well as international agencies have an Ethical Review Committee (ERC), principally on health related issues: WHO, PSI,…

- Some website useful on ethical and independent review services: www.eandireview.com

- In Myanmar: Department of Health's ERC … and probably more … soon as illustrated by a headline from *New Light of Myanmar*, 23th July 2012: "Myanmar health leaders take Johns Hopkins bioethics lessons home".

Can a 100% ethical research exist?

In very rare cases, applying the five rules previously mentioned can not be done 100%.

For certain research topics, it can be important for researchers to conceal their identity to subjects.

Example: a research project addresses the question of ‘Human trafficking’.

The strict observance of the ‘No Deception’ rule means that the researcher must all times identify him/herself as a researcher.

However, because of the sensitivity of the research topic, the researcher will have benefit in concealing his/her real identity while collecting information.

Conducting this research under one’s real identity might cause risks to the researcher and the persons who participate in the research.

What are politics in social research?

Besides ethical questions, the researcher has to deal with politics:

It was mentioned at the very beginning of the training module that researchers have to be aware of their biases and prejudices. Among them are political biases and prejudices which could undermine the integrity of the research if these views are strongly reflected in the research contents.

The researcher's priority should always be 'Objectivity of the science' as opposed to 'Ideology of politics':

Objectivity of science ⇔ Ideology of politics

Yet, can science be completely objective?

How politics and ethics interact?

Conducting research and producing research findings will, in many cases, involve addressing questions about ethics and politics.

- The **ethics of social research** deal mostly with the **methods employed**.
- **Political issues** tend to center on the **substance and use of research**.
- There are **no formal codes of acceptable political conduct**.
- But there are **formal codes of conduct for social research (ethics)**. The five ethical rules (1.‘Voluntary participation’, 2.‘No harm to subjects’, 3.‘Anomymity’, 4.‘Confidentiality’, 5.‘No deception’) should be respected as much as possible.

In conclusion

Researchers should not let their own values interfere with the quality and honesty of research.

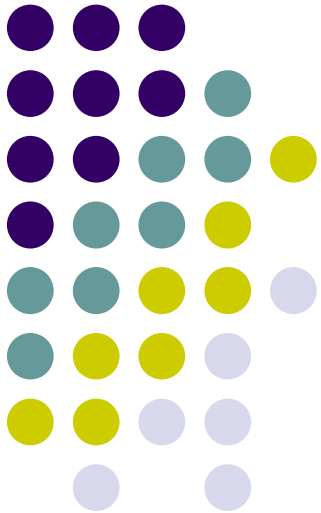
Thank you!

23. Unity and Coherence

Presentation Objectives

- *To raise students/trainees' awareness of the importance to write with unity and coherence in mind when writing research reports whether in the Myanmar or the English language.*

- *To develop students/trainees' capacity to use key terms that will reinforce the sense of unity and coherence of research reports*



Unity

- What is ‘unity’?
- What is the ‘unity of paragraph’?

- ‘Unity of paragraph’ means that a paragraph discusses **one and only one main idea** from beginning to end of the paragraph.

- This is a rule that should apply whenever a text is written either in the Myanmar or the English language.

Coherence

- What is coherence?
- What is the ‘coherence of a paragraph’?

- The coherence of the paragraph means that the **sequence** of sentences is **logical**.

- This is also a rule that should apply whenever a text is written either in the Myanmar or the English language.

Coherence

- While the rule of ‘unity’ is easy to respect as long as only one idea is featured in a paragraph, the rule of ‘coherence’ will be respected by following three basic principles.

- Coherence within a paragraph is achieved through:

  - **1. Use of key pronouns;**
  - **2. Use of transition terms;**
  - **3. Logical order of sentences.**

1. Use of key pronouns

- The use of key pronouns in a paragraph should be consistent throughout the paragraph.
- If the first sentence of the paragraph refers to specific features (plural/singular, male/female) for the key pronoun, these specific features for the key pronoun should remain the same throughout the paragraph.
- These specific features (plural/singular, male/female) should also apply to all key noun substitutes and attributes to key pronouns.

1. Use of key pronouns: exercise time

- A child in Bagan who sells all sorts of goods and knows a few English and Japanese words has an advantage over a child who does not. They can often start talking to tourists. If, for example, you know how greet them, you have a better chance to sell your goods to them.

- The use of the key pronoun in this paragraph is inconsistent.

- Re-write the paragraph so as to give it coherence.

1. Use of key pronouns: exercise time

- **Lack of coherence of the paragraph as shown below:**
- A child in Bagan who sells all sorts of goods and knows a few English and Japanese words has an advantage over a child who does not. **They** can often start talking to tourists. If, for example, **you** know how greet them, **you** have a better chance to sell **your** goods to them.

- **Possible correction for the paragraph with the use of the plural 'children':**
- **Children** in Bagan who sell all sorts of goods and know a few English and Japanese words have an advantage over children who do not. **They** can often start talking to tourists. If, for example, **children** know how to greet them, **they** have a better chance to sell **their** goods to tourists.

OK

1. Use of key pronouns: exercise time

- Olympic Athletes must be strong both physically and mentally. First of all, if you hope to compete in an Olympic sport, you must be physically strong. Furthermore, athletes must train rigorously for many years. For the most demanding sports, they train several hours a day, five or six days a week. This means that you have to be totally dedicated to your sport, often giving up a normal school, family, and social life. Being mentally strong also means that he or she must be able to accept the intense pressure of international competition with its media coverage. Finally, not everyone can win a medal, so Olympians must possess the inner strength to live with defeat.

  Excerpted from *Writing Academic English* (4th edition), Oshima & Hogue, Longman Pub., 2006

- The use of the key pronoun in this paragraph is inconsistent.

- Re-write the paragraph so as to give it coherence.

1. Use of key pronouns: exercise time

- **Lack of coherence of the paragraph as shown below:**
- Olympic Athletes must be strong both physically and mentally. First of all, if **you** hope to compete in an Olympic sport, **you** must be physically strong. Furthermore, athletes must train rigorously for many years. For the most demanding sports, they train several hours a day, five or six days a week. This means that **you** have to be totally dedicated to **your** sport, often giving up a normal school, family, and social life. Being mentally strong also means that **he** or **she** must be able to accept the intense pressure of international competition with its media coverage. Finally, not **everyone** can win a medal, so Olympians must possess the inner strength to live with defeat.

- **Possible correction for the paragraph:**
- Olympic Athletes must be strong both physically and mentally. First of all, if **they** hope to compete in an Olympic sport, **they** must be physically strong. Furthermore, athletes must train rigorously for many years. For the most demanding sports, they train several hours a day, five or six days a week. This means that **athletes** have to be totally dedicated to **their** sport, often giving up a normal school, family, and social life. Being mentally strong also means that **they** must be able to accept the intense pressure of international competition with its media coverage. Finally, not **all athletes** can win a medal, so Olympians must possess the inner strength to live with defeat.

OK

2. Use of transition words

- The coherence of a paragraph is also built on the use of transition words from one sentence to the next in the paragraph.

- These transition words help to articulate the sequence of sentences by introducing:

    - an additional view;
    - an opposite view or contrast;
    - a choice of alternative;
    - a restatement or explanation;
    - an example;
    - a conclusion or a summary;
    - a result.

Meaning/Function	Transition Phrases	Conjunctive Adverbs	Coordinating Conjunctions	Subordinating Conjunctions	Others
To introduce an **additional idea**	in addition	furthermore moreover besides also too	and		another (+noun) an additional (+noun)
To introduce an **opposite idea** or **contrast**	on the other hand in contrast	however nevertheless instead still nonetheless	but yet	although though even though whereas while	in spite of (+noun) despite (+noun)
To introduce a **choice** or **alternative**		otherwise	or	if unless	
To introduce a **restatement** of **explanation**	in fact indeed	that is			
To list in **order**	first, second, next, last				the first, second, the next, last, final
To introduce an **example**	for example for instance				an example of (+noun) such as (+noun)
To introduce a **conclusion** or **summary**	clearly in brief in conclusion indeed in short in summary				
To introduce a **result**	accordingly as a result as a consequence	therefore consequently hence thus	so		

2. Use of transition words

Excerpted from *Writing Academic English* (4th edition), Oshima & Hogue, Longman Pub., 2006

3. Logical order of ideas

The most common types of logical order in the English language are the following
:

-chronological order

-logical division of ideas

-comparison/contrast paragraph

Exercise time

Put the following sentences into a logical order:

a. Another important change was that people had the freedom to live and work wherever they wanted.

b. The earliest significant change was for farming families, who were no longer isolated.

c. The final major change brought by the automobile was the building of superhighways, suburbs, huge shopping centers.

d. The automobile revolutionized the way of life in the United States.

e. The automobile enabled them to drive to towns and cities comfortably and conveniently.

f. In fact, people could work in a busy metropolitan city and live home to the quiet suburbs.

Exercise time

Put the following sentences into a logical order

a This means that they have to be totally dedicated to your sport, often giving up a normal school, family, and social life.

b. Furthermore, aspiring Olympians must train rigorously for many years.

c. For the most demanding sports, they train several hours a day, five or six days a week, for ten or more years.

d. In addition to being physically strong, athletes must also be mentally tough.

e. Finally, not all athletes can win a medal, so Olympians must possess the inner strength to live with defeat.

f. Olympic athletes must be strong both physically and mentally.

g. Being mentally strong also means that they must be able to withstand the intense pressure of international competition with its accompanying media coverage.

h. First of all, if athletes hope to compete in an Olympic sport, they must be physically strong.

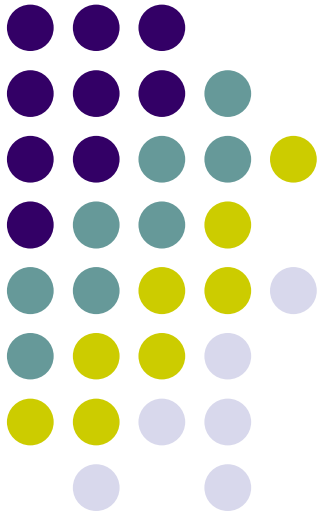
Thank you!

24. Paragraph Structure

Presentation Objectives

- *To raise students/trainees' awareness of the importance to write structured paragraphs in research reports whatever language the report is written in.*

- *To develop students/trainees' capacity to analyse the structure of a paragraph and to use practical tools for structuring their own writing.*



Paragraph

What is a paragraph?

A paragraph is a group of sentences that support and develop a single idea or one aspect of a large and more complex topic.

The paragraph has three functions:

- it introduces a new topic (or aspect of a topic) and develops it;
- visually and logically, it distinguishes the present (new) topic from the previous one and from the following one;
- as a result, it shows a logical relation between the sentences within the paragraph.

Example

Once, he spotted a ragged doll sticking out of a dump, which he pulled out to give to his daughter.

Paragraph 1

In addition, people live frugally in order to make efficient use of their space and labor. It is not uncommon for three generations of one family to be living under the same roof, where they share the chores, responsibilities, and income. Grandparents usually take care of the grandchildren while the parents go off to work. A *mokehinka* seller told me that she sets aside half the fish she buys from the market as ingredients for rice noodle soup, which she sells to customers, and uses the remainder for her family. She remarked: "At least my family members are able to have fish every day." She also bought fish bones from the market daily to make *ngapi* (a salty fish paste usually eaten with rice). She continued wryly, "We just have to think about ways of getting through each day."

Paragraph 2

Other people attempt to find additional income by providing services of various kinds that operate in a gray zone economically. Such services are aimed at local residents and are usually offered at affordable prices. Many stay-at-home moms set up home-based seamstress or hair salon operations. At one home salon in Insein I visited, a living room was used as a waiting area for customers during the day and was transformed into a sleeping space for the family at night. A table used for displaying hair-care products during the day became a study desk for the children every evening. Some women carry jewelry samples in their bags to sell on consignment while on visits to friends.

At any busy intersection in Yangon city, one can find artisans of all kinds, each specializing in repairing such items as umbrellas and shoes, or binding books. Cheap "mobile" mechanics can be found in many sections of the city, but most visitors would not recognize them as they appear to be merely idle residents lounging in chairs next to a pile of tools on the street—an expedient adopted to avoid arrest by the police or municipal authorities because they do not have business

In this excerpt of an article, there are two paragraphs that are fully visible.

Excerpted from Ardeth Maung Thawnhmung, "The Politics of Everyday Life in Twenty-First century Myanmar", Journal of Asian Studies, 2011, p.8

Paragraph structure

When a researcher writes a paragraph, it is crucial that what is written in this paragraph will well understood by the future readers.

To make sure that what is written in the paragraph will be well-understood by others, giving the paragraph a structure is a first toward this goal.

The structure of a paragraph should be as follows:

1. **Statement**
2. **Supporting details**
3. **Concluding sentence**

Example

Below is an example of the different components of a paragraph:

1. Statement

"Working conditions have worsened for workers at textile factories"

2. Supporting evidence

"Number of workers at textile factories has increased by 5% from last year".

"Textile workers are 80% female".

"Demonstrations by workers from textile factories turned violent last week with two casualties".

"Numbers of incidents between workers and supervising staff have increased by 10% compared with last year".

3. Concluding sentence (examples)

"Demonstrations from factories' workers will increase in the future."

"The worsening of working conditions for workers at textile factories will have to be addressed in the round of talks between the unions and the government."

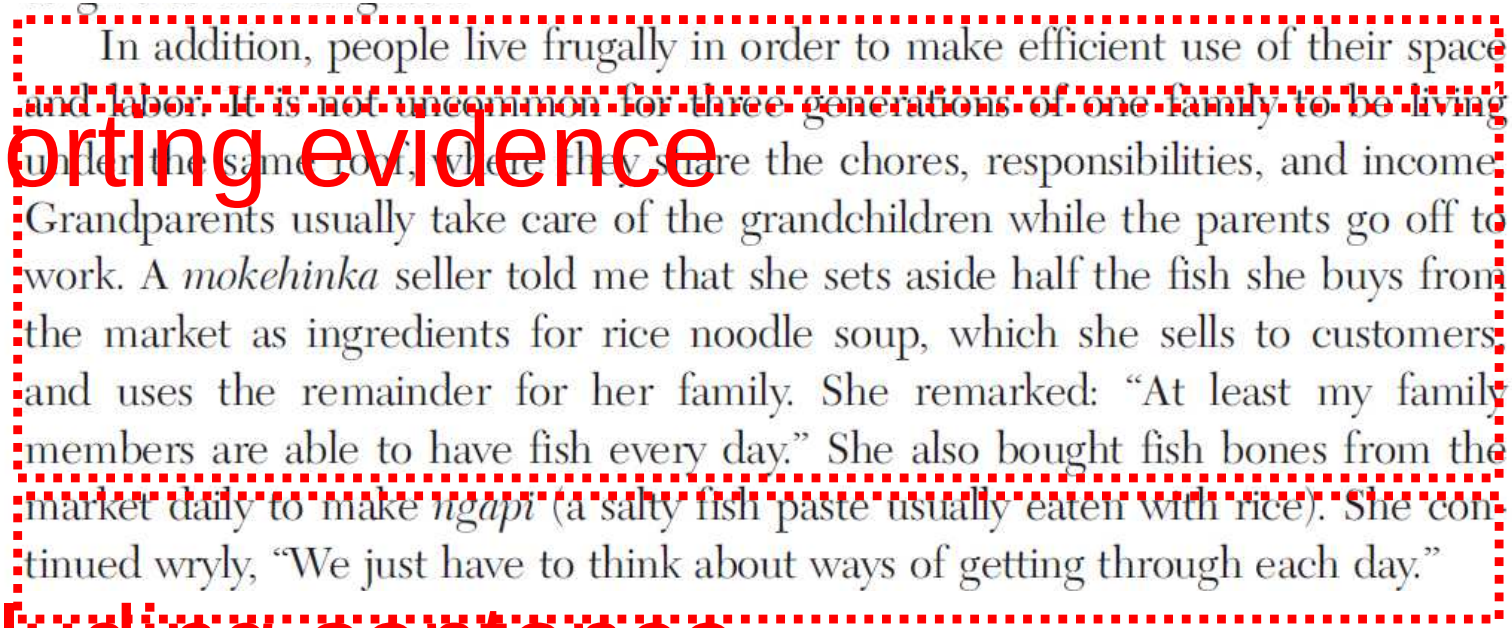
Example

From the excerpt given previously, paragraph 1 has the following structure:

statement

supporting evidence

concluding sentence



In addition, people live frugally in order to make efficient use of their space and labor. It is not uncommon for three generations of one family to be living under the same roof, where they share the chores, responsibilities, and income. Grandparents usually take care of the grandchildren while the parents go off to work. A *mokehinka* seller told me that she sets aside half the fish she buys from the market as ingredients for rice noodle soup, which she sells to customers, and uses the remainder for her family. She remarked: "At least my family members are able to have fish every day." She also bought fish bones from the market daily to make *ngapi* (a salty fish paste usually eaten with rice). She continued wryly, "We just have to think about ways of getting through each day."

Exercise time

- “Gold, a precious metal, is prized for two important characteristics. First of all, gold has lustrous beauty that is resistant to corrosion. Therefore it is suitable for jewelry, coins, and ornamental purposes. […] Another important characteristic of gold is its usefulness to industry and science. For many years, it has been used in hundreds of industrial applications, such as photography and dentistry. In conclusion, gold is treasured not only for its beauty but also for its utility.”

Excerpted from *Writing Academic English* (4th edition), Oshima & Hogue, Longman Pub., 2006

- What is the statement?
- What are the two main points made about the topic in the paragraph?
- What examples are used to support each of the two points?

Exercise time

The statement is in red

The two main points are in blue

The examples used to support each of the two points are in green

- "Gold, a precious metal, is prized for two important characteristics. First of all, gold has lustrous beauty that is resistant to corrosion. Therefore it is suitable for jewelry, coins, and ornamental purposes. […] Another important characteristic of gold is its usefulness to industry and science. For many years, it has been used in hundreds of industrial applications, such as photography and dentistry. In conclusion, gold is treasured not only for its beauty but also for its utility."

Excerpted from *Writing Academic English* (4th edition), Oshima & Hogue, Longman Pub., 2006

1. Statement

- The **statement** is the **most important sentence** in the paragraph.

- It briefly indicates what the paragraph is going to discuss.
- It does **NOT** give any details as to what the paragraph will be about.

- Therefore, the statement introducing a paragraph **should not be TOO** general.
- Similarly, it **should not be TOO** specific.

Exercise time

Read the following sentences and answer the questions below:

“It is hard to know which foods are safe to eat nowadays”

“In some large ocean fish, there are high levels of mercury”

“Undercooked chicken and hamburger may carry various bacteria”

“Not to mention mad cow disease”

“Food safety is an important issue”

- Which sentence is TOO general?
- Which sentence is TOO specific?
- Which sentence is incomplete?
- Which sentence can be used as a statement?

Exercise time

“It is hard to know which foods are safe to eat nowadays” **can be used as a statement**.

“In some large ocean fish, there are high levels of mercury” **is TOO specific**.

“Undercooked chicken and hamburger may carry various bacteria” **is TOO specific**.

“Not to mention mad cow disease” **is incomplete**.

“Food safety is an important issue**” is TOO general**.

Exercise time

Read the following sentences and decide which one is the statement and which are supporting evidence? Re-order the sentences to make a coherent paragraph.

1. Another important change was that people had the freedom to live and work wherever they wanted.

2. The earliest significant change was for farming families, who were no longer isolated.

3. The final major change brought by the car was the building of expressways, suburbs, shopping centers.

4. The use of cars caused major changes in the way of life in the developed countries.

5.The car enabled them to drive to towns comfortably and conveniently.

6. In fact, people could work in a busy downtown and drive home to the quiet suburbs.

Exercise time

4. The use of cars caused major changes in the way of life in the developed countries.

2. The earliest significant change was for farming families, who were no longer isolated.

5.The car enabled them to drive to towns comfortably and conveniently.

1. Another important change was that people had the freedom to live and work wherever they wanted.

6. In fact, people could work in a busy downtown and drive home to the quiet suburbs.

3. The final major change brought by the car was the building of expressways, suburbs, shopping centers.

2. Supporting evidence

After writing the statement , the paragraph should list the evidence that support this statement.

Supporting evidence include the following data:

- **Examples**
- **Statistics**
- **Quotes**

This supporting evidence will have to come directly from the data collected from the research:

-statistics obtained from survey research or collected from existing statistics;

-examples obtained from case studies, interviews or field observation;

-quotes obtained from interviews.

Exercise time

Red-Light Running

Although some people think that red-light running is a minor traffic violation that is no worse than jaywalking,[1] it can, in fact, become a deadly crime. Red-light runners cause accidents all the time. Sometimes people are seriously injured and even killed. It is especially a problem in rush hour traffic. Everyone is in a hurry to get home, so drivers run red lights everywhere. The police do not do much about it because they are too busy. The only time they pay attention is when there is an accident, and then it is too late. In conclusion, running a red light is a serious offense.

Which of the two texts have supporting evidence?

Red-Light Running

[1]Although some people think red-light running is a minor traffic violation that is no worse than jaywalking, it can, in fact, become a deadly crime. [2]Red-light runners cause hundreds of accidents, including deaths and injuries as well as millions of dollars in damages. [3]Each year more than 900 people die, and nearly 200,000 are injured in crashes that involve red-light running. [4]Motorists run red lights all the time. [5]For example, in Fairfax, Virginia, a five-month-long survey at five busy intersections revealed that a motorist ran a red light every 20 minutes. [6]Red-light runners are seldom caught. [7]According to the Insurance Institute for Highway Safety, "Communities don't have the resources to allow police to patrol intersections as often as would be needed to ticket all motorists who run red lights" ("Q&A").[2]

Excerpted from *Writing Academic English* (4th edition), Oshima & Hogue, Longman Pub., 2006

Exercise time

Red-Light Running

Although some people think that red-light running is a minor traffic violation that is no worse than jaywalking,[1] it can, in fact, become a deadly crime. Red-light runners cause accidents all the time. Sometimes people are seriously injured and even killed. It is especially a problem in rush hour traffic. Everyone is in a hurry to get home, so drivers run red lights everywhere. The police do not do much about it because they are too busy. The only time they pay attention is when there is an accident, and then it is too late. In conclusion, running a red light is a serious offense.

This paragraph has supporting evidence.

Red-Light Running

[1]Although some people think red-light running is a minor traffic violation that is no worse than jaywalking, it can, in fact, become a deadly crime. [2]Red-light runners cause hundreds of accidents, including deaths and injuries as well as millions of dollars in damages. [3]Each year more than 900 people die, and nearly 200,000 are injured in crashes that involve red-light running. [4]Motorists run red lights all the time. [5]For example, in Fairfax, Virginia, a five-month-long survey at five busy intersections revealed that a motorist ran a red light every 20 minutes. [6]Red-light runners are seldom caught. [7]According to the Insurance Institute for Highway Safety, "Communities don't have the resources to allow police to patrol intersections as often as would be needed to ticket all motorists who run red lights" ("Q&A").[2]

Excerpted from *Writing Academic English* (4th edition), Oshima & Hogue, Longman Pub., 2006

3. Concluding sentence or How to end a paragraph?

- A paragraph is best ended with a concluding sentence, using the following terms:

Finally,
In brief,
In conclusion,
Indeed,
In short,

Lastly,
Therefore,
Thus,
To sum up,

3. Concluding sentence or How to end a paragraph?

- A paragraph can also be ended by using the following expressions:

  The evidence mentioned here suggests that …

  These examples show that …

  We can see that …

Thank you!

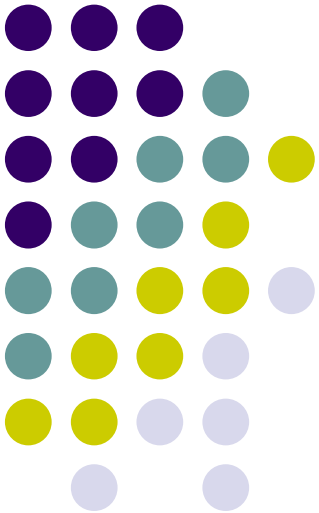
25. Sentence Structure

Presentation Objectives

- *To raise students/trainees' awareness of the importance to write structured sentences in research reports.*

- *To develop students/trainees' capacity to analyse the structure of a sentence and to use practical tools for structuring their own writing.*

Note that this presentation is valid for sentence structure in the English language.
The presentation is not available in the Myanmar language.



Significance of the sentence

- Sentences are the main mode of expressing ideas. It is crucial for researchers to structure correctly their sentences. If sentences are structured correctly, ideas can be understood by any reader.

- In making sentences, you will have to combine clauses.

- What is a clause?
- A clause is a group of words that contains (at least) a subject and a verb.

- For example:

Ecology is a science: subject: ecology
verb: is

<u>"Ecology is a science" is a clause</u>

To protect the environment subject: ??
verb: protect

<u>"To protect the environment" is not a clause</u>

Independent Clause

- Just like variables, there are **in**dependent and dependent clauses.

- An **in**dependent clause contains a subject and a verb and express a complete thought.

- It can stand alone as a sentence by itself:

	Subject	Verb	Complement (optional)
Ex.1:	The sun	rose.	
Ex. 2:	The monsoon	caused	many floods.

Combining two independent clauses

- When writing two independent clauses after one another, the researcher will have to clarify how the two clauses are linked, that is, how the idea expressed in one sentence is related to the idea expressed in the other sentence.

- Combining two independent clauses will be done by using:

for, and, nor, but, or, yet, so

When to use
for, and nor, but, or yet, so?

When using:	**for**	between to clauses means to add	**a reason**
.....	**and**	**……**	**a similar idea**
…….	**nor**	**…….....**	**a negative equal idea**
…….	**but**	**……..**	**an opposite idea**
…….	**or**	**……..**	**an alternative possibility**
…….	**yet**	**……..**	**an unexpected or surprising continuation**
…….	**so**	**……..**	**an expected result**

Exercise time

Read the following independent clauses and combined them in pairs using: for, and, nor, but, or, yet, so

- 1. Nuclear accidents can happen. Nuclear power plants must have strict safety controls.
- 2. The accident at the nuclear power plant at Chernobyl in the former Soviet Union created fears about the safety of this energy source. The disaster at Fukushima in Japan confirmed them.
- 3. Solar heating systems are economical to operate, yet the cost of installation is very high.
- 4. Environmentalists know that burning fossil fuels causes holes in the ozone layer. People continue to do it.
- 5. Developing nations especially will continue this harmful practice. They do not have the money to develop “clean” energy sources.
- 6. All nations of the world must take actions. Our children and grandchildren will suffer the consequences.

Exercise time

- 1. Nuclear accidents can happen **so** nuclear power plants must have strict safety controls.
- 2. The accident at the nuclear power plant at Chernobyl in the former Soviet Union created fears about the safety of this energy source **and** the disaster at Fukushima in Japan confirmed them.
- 3. Solar heating systems are economical to operate, **yet** the cost of installation is very high.
- 4. Environmentalists know that burning fossil fuels causes holes in the ozone layer **but** people continue to do it.
- 5. Developing nations especially will continue this harmful practice **for** they do not have the money to develop “clean” energy sources.
- 6. All nations of the world must take actions **or** our children and grandchildren will suffer the consequences.

Dependent Clause

- A dependent clause begins with a word like *when, while, if, that, who.*

- A dependent clause does not express a complete thought, so it is not a sentence by itself. It is not a complete sentence.

- Words that starts a dependent clause are the following ones:

when	after	before	that
which	although	though	whenever
because	while	whom	where
if	until	since	so that

- A dependent clause contains a word like the above ones listed + a subject and a verb:

when the sun rose + independent clause

because the monsoon caused many floods+ independent clause

Exercise time

- Identify which following sentences are **in**dependent or dependent clauses:

1. Globalization means more travel for businessmen and women,

2. As business executives fly around the world to sell their companies' products.

3. Jet lag affects most long-distance travelers.

4. Which is simply the urge to sleep at inappropriate times,

5. During long journeys, the body's pace is disrupted.

6. For some reasons, travel from west to east causes greater jet lag than travel fro east to west.

7. Changes in work schedules can cause jet lag.

8. When hospital nurses change from a day shift to a night shift,

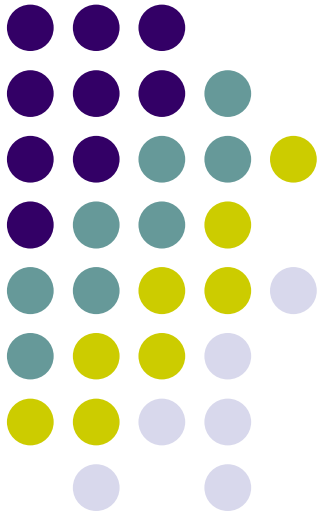
Thank you!

26. Supporting Details

Presentation Objectives

- *To raise students/trainees' awareness of the importance to use supporting details for building the case developed in a research report.*

- *To develop students/trainees' capacity to use the different types of supporting details needed in the analysis of a research topic.*



Supporting Details

- Last time, it was explained that paragraphs consist of the following three elements:
    - Statement sentence
    - Supporting evidence
    - Concluding sentence (optional)
- Supporting evidence fall into three categories:
    - 1. Examples
    - 2. Quotes
    - 3. Statistics

Supporting details

- Before detailing each of these three types of supporting details, some clarification about what supporting details are and what they are not is needed.
- In bringing supporting details to the analysis, it is crucial to distinguish between facts and opinions.
- Opinions are subjective statements based on someone’s beliefs or attitudes.
  - Men are better drivers than women
  - Smoking is a bad habit
  - English is an easy language to learn

Supporting details

- **Instead of opinion, facts and data are needed to support a statement:**
  - Women live longer than men
  - Cigarettes are addictive
  - Young people have less difficulty in learning foreign languages that elder people

- **So here is what it is important to remember:**

Opinions

-Men are better drivers than women

-Smoking is a bad habit

-English is an easy language to learn

Facts and data

-Women live longer than men

-Cigarettes are addictive

-Young people have less difficulty in learning foreign languages than elder people

OK

1. Examples

- The first type of supporting details is an example.

- Examples should be taken directly from the data the researcher will collect from the field, the survey, and the interviews conducted for the research project.

- For example, suppose a research project is about ‘socio-economic discriminations of PLHIV’.

- Because discrimination is quite vague in its meaning, it will be important to give concrete examples of discriminations faced by PLHIV.

2. Quotations

- Quotations are the words and statements expressed orally by someone who took part in the research project.
- Quotations can be also taken from an expert who wrote on the topic under study. His/her words have to re-typed by the researcher just exactly as they were expressed.
- It is often the case that quotations will be made from the words expressed by key informants when the researcher interviewed them during the data collection phase of the research project.
- Quotations from someone’s words about key topics of the issue under study should be placed adequately in the sections specifically dealing with these key topics.

2. Quotations

- Quoting someone's verbal statements means to do either a **direct** quotation or an **indirect** quotation.

- **Direct** quote is made as follows:
  - The president said, "the situation will improve".

  Note that the words of the person quoted have to be exactly the same as what s/he said and be enclosed with quotation marks "…….".

- **Indirect** quote is made as follows:
  - The president said that the situation will improve.

  Note here that there are no quotation marks. Only the term 'that' is added as a link between the two clauses.

- For indirect quotations the following verbs are usually needed:

assert	indicate	suggest
insist	agree	claim
report	state	write
declare	mention	say

2. Quotations

- Here are examples with both direct quotation and reported speech:

  The president **says**, “For the situation to improve, everyone has to agree”.

  “For the situation to improve, everyone has to agree”, **says** the president.

  “For the situation to improve”, **says** the president, “everyone has to agree”.

  According to the president, everyone has to agree for the situation to improve.

  For the situation to improve, everyone has to agree, **according to** the president.

- Note the place of the verb ‘says’ and the place of the quotation marks “…….” for the examples in direct speech.

3. Statistics

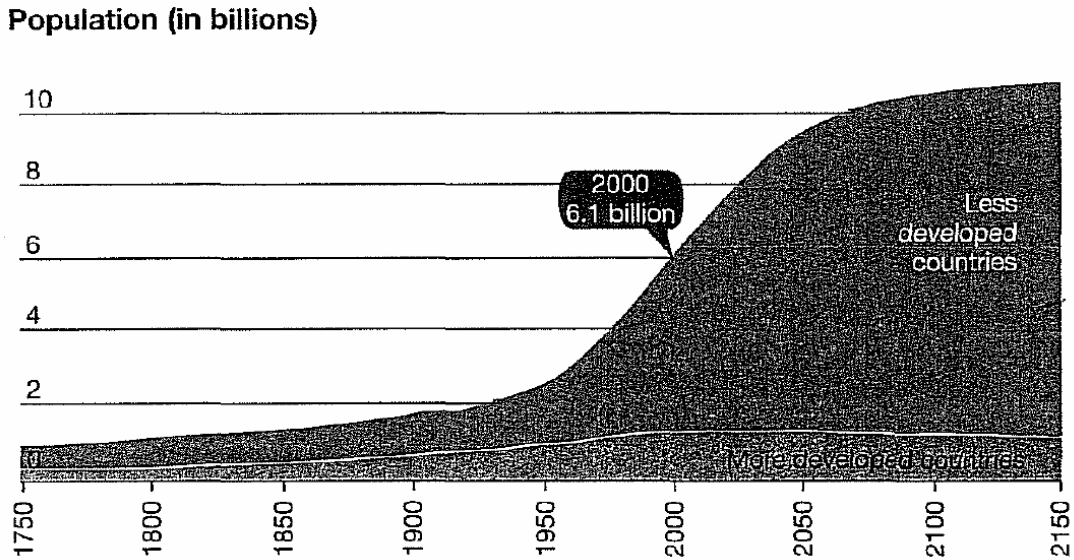
- The data collected from a survey will be turned into statistics by the researcher.
- The researcher can also use existing statistics taken from governments, international agencies' reports, etc….
- In all cases, the statistics will be placed adequately in sections of the research report.
- Just like for quotations, the researcher will make clear as to the source where the statistics are taken from.
- For instance, if the statistics are based on data collected from the survey, the researcher will start the sentence with the following:

  According to the data collected from the survey, there are XX% of persons who ……

- If statistics are taken from official reports, the researcher will start the sentence with the following:

  According to the report produced by XXXXXX (name of the organization/institution),
  there are xx% of persons who …..

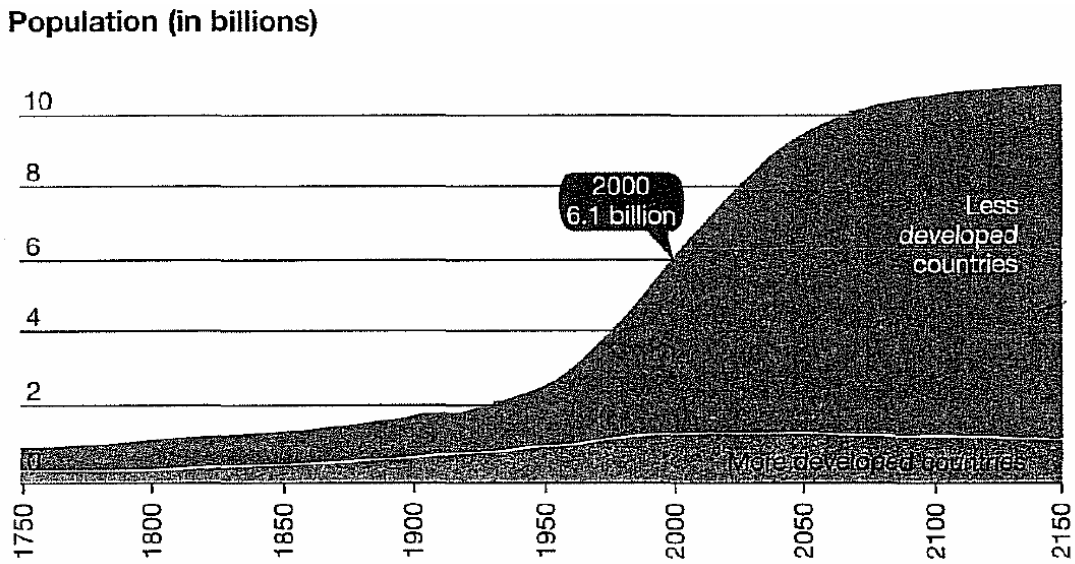
Exercise time



Source: United Nations, *World Population Prospects, The 1998 Revision*, and estimates by the Population Reference Bureau.

World Population Growth

According to statistics from the Population Reference Bureau, the world's population is increasing at a geometric rate. World population first reached 1 billion back in 1804. It took 123 years for it to reach 2 billion in 1927. By 1960, a period of just 32 years, it had added another billion. Just 15 years later, we were at 4 billion, 12 years later at 5 billion, and 11 years after that at 6 billion. The United Nations has projected an increase to 9 billion by the year 2050. Most of the increase will be in the world's less developed countries.



Source: United Nations, *World Population Prospects, The 1998 Revision*, and estimates by the Population Reference Bureau.

World Population Growth

According to statistics from the Population Reference Bureau, the world's population is increasing at a geometric rate. World population first reached 1 billion back in 1804. It took 123 years for it to reach 2 billion in 1927. By 1960, a period of just 32 years, it had added another billion. Just 15 years later, we were at 4 billion, 12 years later at 5 billion, and 11 years after that at 6 billion. The United Nations has projected an increase to 9 billion by the year 2050. Most of the increase will be in the world's less developed countries.

What is the statement sentence of the paragraph?

Where do the statistics come from? What is the source of the statistics that are used to support this idea?

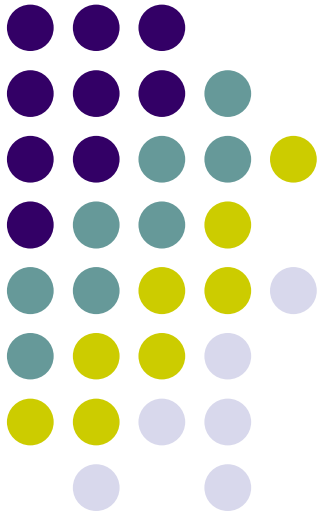
What reporting expression is used to identify this source?

Thank you!

27. Writing a Report

Presentation Objectives

- *To advance students/trainees' understanding of the various key terms that help to structure the writing of a report.*
- *To develop students/trainees' capacity to write a final report in an orderly manner.*



Approach to report-writing

- The typical research report follows the same **chronological order** as your research:

Problem and objectives	→	First, you discuss the issues that you want to study,
Methodology	→	then you discuss the data collection methodology,
Data	→	then you discuss the data itself,
Conclusions	→	and finally the conclusions based upon that data.

Outline of a report

On the left, is a typical outline of a report.

Each section of this outline will be now detailed.

1. Research title

2. Purpose of the research and Research Hypothesis

3.Background of the research or Overview of the Problem

4.Literature review

5. Research methods used

6. Limitations to the research

7. Obstacles encountered when conducting research (if relevant)

8. Analysis

9. Conclusion

10. Recommendations

11. References

12. Appendices

Context of the research project

The report has to start with a general explanation of how the research project got started and an assessment of the knowledge of the issue under study at the time of conducting research.

Typically, below is how the report has to start:

1. Research title: the title has to give a concise idea of what will be discussed in the report.

2. Purpose of the research and Research Hypothesis: why the research project was developed, with what objectives, and what underlying assumption is behind the project are questions to be addressed in this section.

3. Background of the research or Overview of the Problem: a brief description of the general context in which the issue under study developed.

4. Literature review: a description of the sources available and the state of the knowledge of the issue under study.

Conduct of the research

After describing the general context of how the project was started, the report has explained how it was conducted.

5. Research methods used:

-explain the relevance of the research methods used in relation to its purpose (why you choose the research methods and not others);

-identify the variable under study (with detail about the independent/dependent variables, if relevant);

-provide details about the categories created for studying the variable(s) (if relevant);

-provide details about the sample, sampling techniques (if relevant), number of persons involved, age group, gender balance (if relevant), social status (if relevant).

Conduct of the research

Once explanation of the research methods used is given, the researcher has to clarify what the limitations and obstacles to the research were.

6. Limitations to the research:

-time constraints;

-budget constraints;

-explanations as to whether these constraints forced you to select specific research methods);

-discussion about issues of validity and reliability with regards to the research topics.

7. Obstacles encountered when conducting research (if relevant):

-reluctance of respondents to speak;

-lack of cooperation from any authorities involved in the research process;

-others.

Result of the research

It is important to spend time on the analysis. A research project is not simply about collecting data, it is also about to put this data into perspective, that is, what can be learned from this data for future action.

8. Analysis which will include the following elements:

-relevant information about attitude, knowledge, and practices that break from what was initially thought about the issue under study: how does the data collected during your research differ from what was known about the topic before you conduct the research; how does it confirm it?
AND/OR
-statements with supporting evidence arranged in order of importance (main problems raised by your informants);
OR
-interpretations of data and evidence related to the research hypothesis and arranged in thematic order.

Result of the research

9. Conclusion: summary of major findings

10. Recommendations: with emphasis on recommendations which could be possibly promoted by your organization as part of their advocacy activities

11. References: if you quoted any papers, reports, books in your analysis, give full references to these items in this section: Author, *Title* (in italics), Publisher (if any), year, page number.

12. Appendices: any significant item that you used for your research (questionnaire sample, survey questionnaire, etc…); interview schedules. Only templates have to be included in appendices, **not** an actual questionnaire with someone's answers.

Here, again, the typical outline of a report.

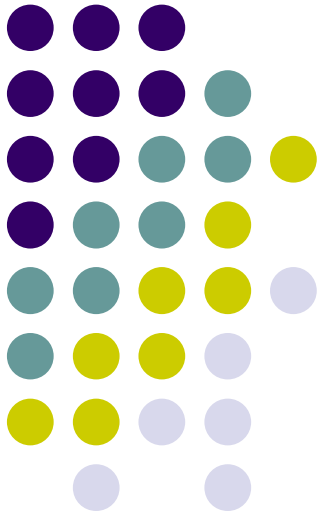
- **1. Research title**
- **2. Purpose of the research and Research Hypothesis**
- **3. Background of the research or Overview of the Problem**
- **4. Literature review**
- **5.Research methods used**
- **6. Limitations to the research**
- **7. Obstacles encountered when conducting research (if relevant)**
- **8. Analysis which will include the following elements**
- **9. Conclusion**
- **10. Recommendations**
- **11. References**
- **12. Appendices**

Thank you!

28. Policy and Advocacy Brief

Presentation Objectives

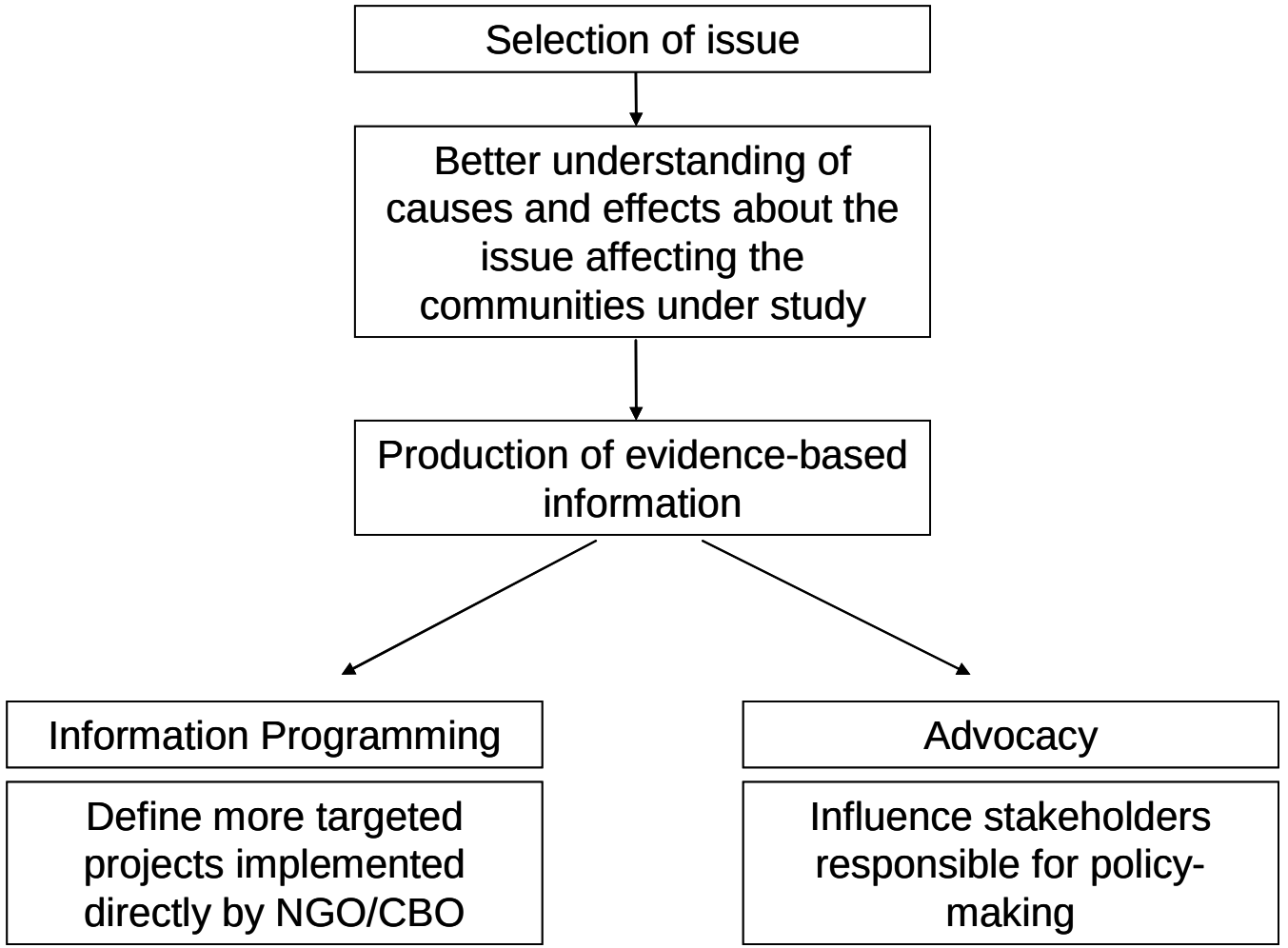
- *To advance students/trainees' understanding of the various key terms that help to structure the writing of a policy and advocacy brief.*
- *To develop students/trainees' capacity to write a policy and advocacy brief in an orderly manner.*



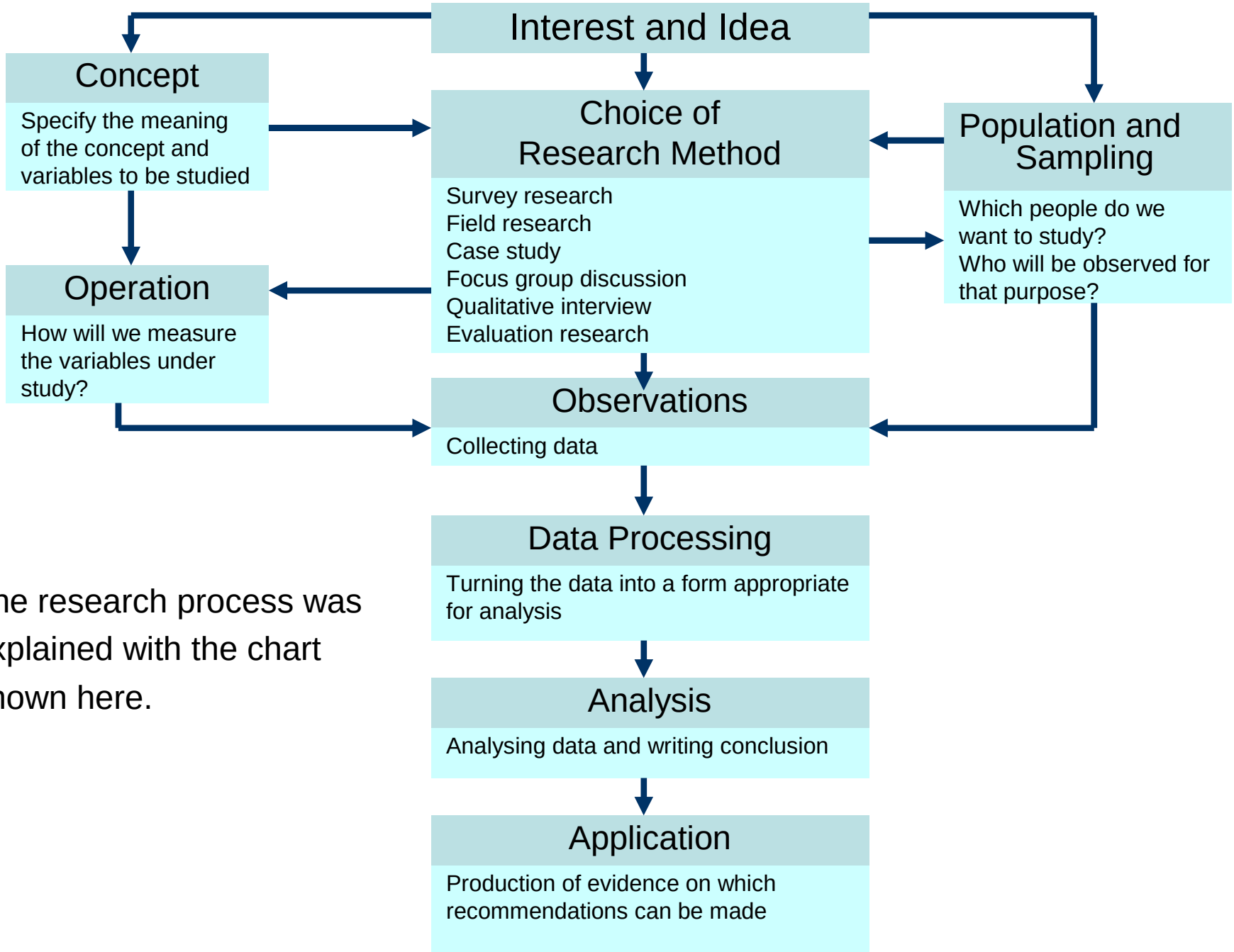
Social Action Research

At the beginning of this training, presentation of this chart about ‘social action research’ was made.

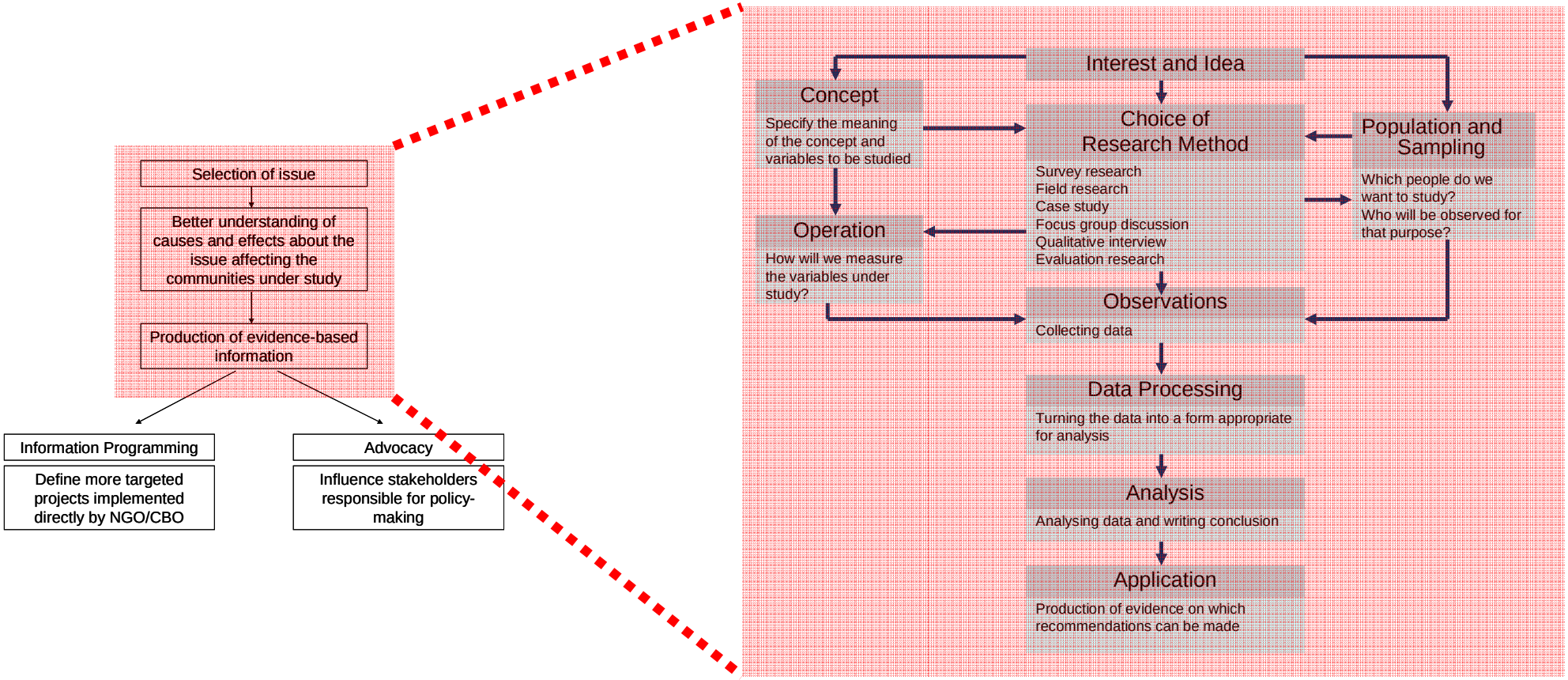
It was explained that one of the purposes of social action research was to prepare advocacy plans (seen here at the bottom right of the chart).



Research Process



The research process was explained with the chart shown here.



The link between advocacy and research process was shown here where the chart on the right is the enlargement of the small red square on the left.

Policy or Advocacy Brief

- A policy brief is (1) a summary of a particular issue, (2) the policy options to deal with it, and (3) some recommendations on the best option.

- It is aimed at government policymakers and others who are interested in formulating or influencing policy.

- A typical format is a single A4 sheet (210 x 297 mm), containing perhaps 700 words.

Objectives of the Policy or Advocacy Brief

What should a policy or advocacy brief do?

A policy or advocacy brief should:

-Give enough **background** for the reader to understand the problem.

-Convince the reader that the problem must be addressed **urgently**.

-Give **evidence** to support one alternative.

-Stimulate the reader to make a **decision**.

What makes a brief a good one?

A good policy brief / advocacy brief has the following qualities:

-the brief is **short** and **to the point**;

-the brief is based on **firm evidence**;

-the brief focuses **on meaning**, not on methods: readers of the brief will be interested in what you found and what you recommend, not in the ways you found what you found;

-the brief **links** the problem **with the 'big picture'**: it is context-specific and gives recommendations that can be applicable at a larger scale.

Structure of a Brief

A policy brief / advocacy brief should be structured this way:

- **1. Title**
- **2. Introduction**
- **3. Body of the Brief**
- **4. Recommendations or Policy Implications**

1. Title

The title of the brief should be:

- **Short**: less than 12 words;
- **Catchy**: a question as a title can be a good option;
- **To the point**: title relevant to the topic.

2. Introduction

The introduction is the statement of the issue under consideration:

The introduction does three things:

- It **develops the issue** mentioned in the title;
- It says **why it is important to consider the issue** which is the topic of the brief;
- It explains **why something should be done** about the issue.

3. Body of the Brief

The body of the brief can have different formats depending of the issue addressed.

Below are four possible formats for the body of the Policy or Advocacy Brief.

Format 1

- **Issue**
- **Background**
- **Rationale**

Format 2

- **Problem**
- **Effects**
- **Causes**

Format 3

- **Theme 1**
- **Theme 2**
- **Theme 3**

Format 4

- **Problem**
- **Intervention**
- **Result**

4. Recommendations or Policy Implications

After the body of the brief has been written, the final part of the brief has to be considered: the recommendations or policy implications.

There are three options for writing recommendations or policy implications:

Option 1:

-Suggest revisions in the existing policy;

-List the changes/effects expected from these revisions;

-Explain the costs implications and the possible side-effects of the suggested revisions.

4. Recommendations or Policy Implications

Option 1:

-Suggest revisions in the existing policy;
-List the changes/effects expected from these revisions;
-Explain the costs implications and the possible side-effects of the suggested revisions.

Option 2:

-Suggest recommendations at various levels: micro, macro, sectoral, institutional.

4. Recommendations or Policy Implications

Option 1:

-Suggest revisions in the existing policy;

-List the changes/effects expected from these revisions;

-Explain the costs implications and the possible side-effects of the suggested revisions.

Option 2:

-Suggest recommendations at various levels: micro, macro, sectoral, institutional.

Option 3:

-List several interventions than can contribute to resolve the problem under consideration;

-Assess the benefits and disadvantages of each intervention.

4. Recommendations or Policy Implications

Option 1:

-Suggest revisions in the existing policy;

-List the changes/effects expected from these revisions;

-Explain the costs implications and the possible side-effects of the suggested revisions.

Option 2:

-Suggest recommendations at various levels: micro, macro, sectoral, institutional.

Option 3:

-List several interventions than can contribute to resolve the problem under consideration;

-Assess the benefits and disadvantages of each intervention.

Whatever the options selected:

- **Keep the recommendations very short;**
- **Make realistic recommendations;**
- **Make them visible in the brief (can be put in bold font)**

Presenting recommendations

When recommendations are made in a brief, they have to be presented in a bullet point format like shown below in the right section.

Notice the difference in format between the left and right sections.

Original report	Policy brief
"The project distinguished between agronomic, vegetative, structural and management measures."	There are four ways to conserve soil and water: • **By changing cropping practices:** For example, by planting crops along the contour. • **By planting trees and grass:** For example, by planting grass strips to slow down runoff. • **By building earth or stone barriers** such as terraces or drains to divert water. • **By improved management** – such as ploughing at different times of year.

Excerpted from *Food Security Communications Toolkit, p.* 166, available at www.eldis.ac.uk

Sample

A Poverty Reduction Strategy for the Budget 2009

Introduction

A comprehensive federal anti-poverty strategy would make a significant difference in the lives of millions of poor Canadians. This poverty reduction strategy should include a vision with measurable targets and timelines, an action plan and a budget, mechanisms of accountability and poverty indicators to monitor progress.

Issue

- One in ten Canadians lives in poverty, and Canada's poverty rates haven't changed substantially in the past 25 years.
- Persistent poverty impacts the dignity of many Canadians and represents a serious cost to individuals, to our society, and to our economy.
- Poverty undermines the right of every person to live with dignity, to participate in society, and to meet basic needs.

Background

- In 1989, the House of Commons passed a unanimous resolution calling for child poverty to be eliminated in Canada by the year 2000. Yet child poverty persists, and poverty rates in general have not improved.

Rationale

- Successful anti-poverty strategies in Ireland and the United Kingdom are evidence that a federal comprehensive strategy, if implemented correctly, can significantly reduce poverty.
- The National Council of Welfare released a report in 2007 stating that there are four components to an effective poverty reduction strategy. They include: measurable targets and timelines, an action plan and a budget, mechanisms of accountability and poverty indicators to monitor progress.

Recommendation

- Parliament should announce a federal poverty reduction strategy in the Budget 2009 that includes measurable targets and timelines, an action plan and a budget, mechanisms of accountability and poverty indicators to monitor progress.

Source: downloaded from the internet

In conclusion

Here is what should be remembered from today's presentation:

- Title

- Introduction
  - short
  - catchy
  - to the point

- Body of the Brief (select on the four suggested formats below):

Issue	Problem	Theme 1	Problem
Background	Effects	Theme 2	Intervention
Rationale	Causes	Theme 3	Results

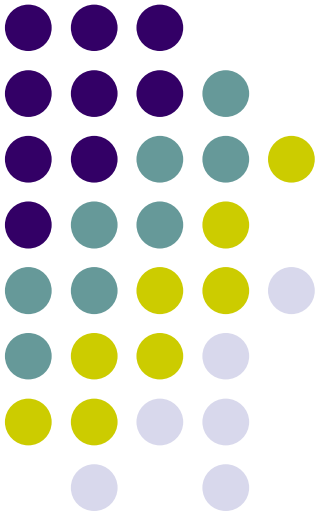
- Recommendations or Policy Implications

Thank you!

29. English Syntax Part 1

Presentation Objectives

- *To advance students/trainees' understanding of some important points of the English language syntax.*
- *To develop students/trainees' capacity to write structured and consistent sentences.*
- *This presentation is not available in the Myanmar language.*



Consistent sentences

- In the ‘sentence structure’ presentation, the emphasis was on how important it is to structure a sentence in the right way.

- Today, the emphasis will be on how to phrase consistent sentences when comparisons are made in this sentence.

- This means that when a list of items is made in a sentence, the same pattern should be used to describe these different items.

- For example:
  - if the first item of the list is a noun, all remaining items of the list should be nouns.
  - If the first item of the list is a dependent clause, all remaining items should be dependent clauses.

Consistent sentences

My English conversation class is made up of Chinese, Spaniards, and some are from Bosnia.

The students who do well attend class, they do their homework, and practice speaking in English.

The teacher wanted to know which country we came from and our future goals.

The language skills of the students in the evening classes are the same as the day classes.

Above are sentences whose syntax is not consistent. This means, some sentences have two subjects, some have one dependent clause and a complement listed together, etc… Identify the mistakes and correct them.

Consistent sentences

My English conversation class is made up of Chinese, Spaniards, and some are from Bosnia.

noun

noun

clause

My English conversation class is made up of **Chinese, Spaniards**, and **Bosnians**.

(*The items are all nouns.*)

2 subjects

The students who do well attend class, they do their homework, and practice speaking in English.

The students who do well **attend class, do their homework**, and **practice speaking in English**.

(*The items are all verbs + complements.*)

The teacher wanted to know which country we came from and our future goals.

clause

complement

The teacher wanted to know **which country we came from** and **what our future goals were**.

(*The items are both noun clauses.*)

The language skills of the students in the evening classes are the same as the day classes.

‘same’ refers to language skills not to students

The language skills of the students in the evening classes are the same as **the language skills of the students in the day classes**.

(*The items are both noun phrases.*)

Consistent sentences

The list of two items shown in the sentence below are not parallel and consistent: one item is a verb with a *–ing* ending (overspend***ing***) and the second item is an independent clause.

“The disadvantages of buying a car are overspending and you pay high maintenance fees.”

A correct and consistent sentence is the one below which has two verbs with *–ing* ending.

*The disadvantages of buying a car are overspendi**ng** and pay**ing** high maintenance fees.*

Exercise time

- Read the following sentences, identify elements that are not consistent and correct them.

- 1. Credit cards are accepted by department stores, airlines, and they can be used in some gas stations.
- 2. You do not need to risk carrying cash or to risk to miss a sale.
- 3.You can charge both at restaurants and when you stay at hotels.
- 4. Many people carry not only credit cards but they also carry cash.

Exercise time

Below are the sentences corrected.

- 1. Credit cards are accepted by department stores, airlines, and can be used in some gas stations.
- 2. You do not need to risk carrying cash or missing a sale.
- 3.You can charge both at restaurants and at hotels.
- 4. Many people carry not only credit cards but also cash.

Fragment Sentences

Decide which sentences shown below are correct and which ones are not.

1. The desire of all humankind to live in peace and freedom, for example.

2. The best movie I saw last year.

3. *Titanic* was the most financially successful movie ever made.

4. Although people want to believe all men are created equal

5. Many of my friends who did not have the opportunity to go to college.

6. Because I do not feel that grades in college have any value.

Fragment Sentences

1. The desire of all humankind to live in peace and freedom, for example.

Fragment sentence: **incorrect**

2. The best movie I saw last year.

Fragment sentence: **incorrect**

3. *Titanic* was the most financially successful movie ever made. **correct**

4. Although people want to believe all men are created equal

Fragment sentence: **incorrect**

5. Many of my friends who did not have the opportunity to go to college. **correct**

6. Because I do not feel that grades in college have any value.

Fragment sentence: **incorrect**

Summarizing Practice

Read the short text below and summarize it into three sentences. The sentences you phrase should be entirely different from the text below but convey the same meaning.

- Language is the main means of communication between peoples. But so many different languages have developed that language has often been a barrier rather than an aid to understanding among peoples. For many years, people have dreamed of setting up an international universal language which all people could speak and understand. The arguments in favor of a universal language are simple and obvious. If all peoples spoke the same tongue, cultural and economic ties might be much closer, and good will might increase between countries.

Excerpted from *Writing Academic English*, by A. Oshima, and A. Hogue, Addison-Wesley Pub. (4th edition).

Summarizing practice

- Language is the main means of communication between peoples. But so many different languages have developed that language has often been a barrier rather than an aid to understanding among peoples. For many years, people have dreamed of setting up an international universal language which all people could speak and understand. The arguments in favor of a universal language are simple and obvious. If all peoples spoke the same tongue, cultural and economic ties might be much closer, and good will might increase between countries.

- Summary (one possibility among others)

  People communicate through language; however, having different languages create communication barriers. A universal language could bring countries together culturally and economically as well as increase good feeling among them.

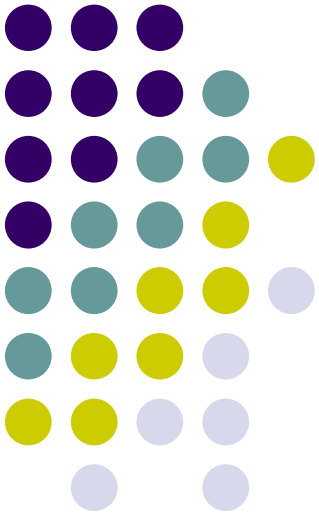
Excerpted from *Writing Academic English*, by A. Oshima, and A. Hogue, Addison-Wesley Pub. (4th edition).

Thank you!

30. English Syntax Part 2

Presentation Objectives

- *To advance students/trainees' understanding of some important points of the English language syntax.*
- *To develop students/trainees' capacity to write structured and consistent sentences.*
- *This presentation is not available in the Myanmar language.*



Exercise time

Read the three following sentences and follow step 1, step 2, and step 3 of the exercise.

(a) Gas became expensive.
(b) Car companies began to produce smaller cars.
(c) Smaller cars use less gas.

Step 1:

-Decide what the relationship between the sentences is.

-Do sentences express equal ideas?

Excerpted from *Writing Academic English*, by A. Oshima, and A. Hogue, Addison-Wesley Pub. (4th edition).

Answer

Step 1: The three sentences do not express equal ideas. Sentence (b) is the most important.

(a) Gas became expensive. **Fact**

(b) Car companies began to produce smaller cars. **Result of (a) and (c): the most important sentence**

(c) Smaller cars use less gas. **Fact**

Because sentence (b) is the most important, it will become the independent clause of the sentence combining sentences (a), (b), and (c).

Exercise time

Step 2: Decide what the relationship of other sentences to the main idea is.

(a) Gas became expensive.

(b) Car companies began to produce smaller cars.

(c) Smaller cars use less gas.

Answer

Step 2: Relationships of sentence (a) and (c) to the main idea or sentence (b).

(a) Gas became expensive.

(b) Car companies began to produce smaller cars.

(c) Smaller cars use less gas.

Sentence (a) could be a development in time or a reason.

Sentence (c) could be the reason to (c) or some descriptive information.

Exercise time

Step 3: Write a sentence using sentences (a), (b), and (c) where sentence (b) is the independent clause. The three sentences will be linked with one of the following:

similar or equal idea	**and**
negative equal idea	**nor**
opposite idea	**but**
alternate possibility	**or**
surprising continuation	**yet**
expected result	**so**
reason	**for**

time	**when, after, as soon as, …**
reason	**because, since, as**
contrast	**although, whereas, …**
descriptive information	**who, which, that, …**

Answer

Step 3: Write a sentence using sentences (a), (b), and (c) where sentence (b) is the independent clause.

There are two options:

-Because small cars use less gas, car companies began to produce smaller cars when gas became expensive.

-Because gas became expensive, car companies began to produce smaller cars which use less gas.

Editing Practice

- Read the text below and correct any mistakes related to the English syntax.

- “All the teachers are accept beaten or scolding well. Because of our traditional culture of method of teaching for long ago this was called TCA. “Teachers center approach”. Because they consider it appropriate to children’s education. […] Even though, nowadays we have apply CCA “child center approach” system which prevent and not to beat or hit the students, were used all over the school and all kind of school. Most of the teachers like that system because they want to punishment by beaten. They believed that is more effective method, suitable and reform their behavior change for their students.”

Answer

- “All the teachers interviewed ~~are~~ accept the practice of beating or scolding ~~well~~. Because of **Myanmar** traditional culture ~~of~~ and method of teaching ~~for long ago~~ this practice was called the “Teacher**-**center**ed** approach”. B~~ecause they T~~eachers consider it appropriate to children’s education. […] Even though, nowadays ~~we~~ teachers have **to** apply the “child**-**center**ed** approach” system which ~~prevent and~~ recommends teachers not to beat or hit the students, ~~were~~ **some still beat and scold** ~~used all over the school and all kind of school~~ at some schools. Most of the teachers like that system because they ~~want to punishment by beaten~~ think punishment is a necessary practice. They ~~believed~~ **believe** that is **a** more effective method, suitable and **that it can** ~~reform their behavior~~ change ~~for their~~ **the behavior of** students.”

- All the teachers interviewed accept the practice of beating or scolding. Because of Myanmar traditional culture and method of teaching this practice was called the “Teacher-centered approach”. Teachers consider it appropriate to children’s education. […] Even though, nowadays teachers have to apply the “child-centered approach” system which recommends teachers not to beat or hit the students, some still beat and scold at some schools. Most of the teachers like that system because they think punishment is a necessary practice. They believe that is a more effective method, suitable and that it can change the behavior of students.”

Thank you!