

Republic of the Philippines Department of Education REGION VII, CENTRAL VISAYAS Division of Cebu Province



SELF-LEARNING HOME TASK (SLHT) # 6

Readings/Discussions

LESSON 1: RESEARCH DESIGN

Understanding data starts with collecting them. There are various ways of collecting and understanding data. **Research Design** enables the researcher to organize the components of her or his research in an orderly and coherent topic or problem. The research design is also a template for the collection, measurement, and analysis of data. The research problem determines the research design that will be used in the study.

Choosing the Appropriate Research Design

To start writing a research paper, you have to plan the research design of your study. The research design is your overall concept or strategy to put together the components of your study in a logical manner. Additionally, the design ensures that the research problem is appropriately addressed. The research problem and questions shall determine the type of research design you should be.

Methods of Research

1. Qualitative Research Method

It is a method that collects data using conversational methods. Participants are asked openended questions. The responses collected are essentially non-numerical. This method not only helps a researcher understand what participants think but also why they think in a particular way.

2. Quantitative Research Method

It deals with numbers and measurable forms. It uses a systematic way of investigating events or data. It is used to answer questions in terms of justifying relationships with measurable variables to either explain, predict, or control a phenomenon.

Characteristics of Qualitative and Quantitative Research Methods

QUANTITATIVE	QUALITATIVE
1. Hypotheses are defined at the beginning of the research activity	1. Hypotheses emerge as the research progress
2. Definitions are clearly defined prior to the research	2. Definitions are captured the research activity
3. Data are transformed to numerical scores	3. Narrative descriptions are preferred.
4. The reliability and validity of research instrument are represented by equivalent statistical coefficients.	 Reliability of inference is assumed to be adequate.
5. Randomized of samples	5. Purposive samples (Expert informants)
6. Well defined procedures	6. Narrative literacy descriptions of procedure
7. Control of extraneous variables	7. Relies on logical analysis in controlling extraneous variables
8. Statistical Summary of results	8. Narrative Summary of results
 Breaks down complex phenomena into specified parts 	9. Holistic description of complex phenomena

Common Designs of Qualitative Research Method

1. Phenomenological Design

This design focuses on obtaining descriptions of the subjects' or respondents' lived experiences either in writing or through interviews. The goal of this study is to analyze the meaning behind these experiences for each subject, rather than generating to a greater population. (Donalek, 2004)

2. Historical Design

This design focuses on the identification, location, evaluation and synthesis of data or evidence from the past to confirm or reject a hypothesis. Data for historical research may be found in printed documents, such as official record, reports, archives and even diaries; or in non-textual artifacts, such as relics, maps, pictures, and audiovisual material. (Cristobal & Cristobal, 2017))

3. Case Study Design

A case study design is a comprehensive, in-depth examination of a specific individual, or institution. It may be used to gain insights into an obscure or specific problem; provide background data for broader studies; or explain socio-psychological and socio-cultural processes. Some of the disadvantages of case studies are problems of general application. Since the study focuses only on specific subjects; the difficulty determining the adequacy of data; the possibility of biases; and the expense entailed by the design.

A case study may be considered quantitative or qualitative research, depending on the purpose of the study and the approach chosen by the researcher. This is also true to other types of quantitative studies, for a case study to be considered qualitative, the researcher must be interested in abstract ideas and concepts, such as the meaning of an experience to a subject, rather than in generalizing results to other groups of people. Case studies are not used to test hypotheses, but hypotheses may be generated from case studies (Younger, 1985).

4. Grounded Theory Design

Grounded theory is a systematic research approach developed by two sociologists, Barney Glaser and Anselm Stauss, in which rigorous procedure (such as **open coding**identifying, naming, categorizing and describing phenomena encountered in the study, as well as their characteristics) are used to collect data, analyze that data, and formulate theory on the matter at hand. This theory can then be used to explain, provide a perspective on, or even predict behavior in and of the context of the study's subject. (Cristobal & Cristobal, 2017)

5. Action Plan Design

Action research is a design which involves a cycle of identifying a problem regarding a situation or process, developing a strategy for invention (the "action") with the purpose of improving the said situation or process, implementing said intervention, and observing and analyzing the results until a sufficient level of understanding of (or valid solution to) the problem is achieved. Generalizing the findings is not a goal of this study, as in the case of quantitative research studies. In action research, the implementation of solutions occurs as an actual part of the research process. (Cristobal & Cristobal, 2017)

6.Meta-Analysis Design

This design is a systematic evaluation of multiple individual studies on a topic to not only summarize the results, but also develop a new understanding of the research problem.

Meta-analysis design is method for systematically combining pertinent qualitative and quantitative study data from several selected studies to develop a single conclusion that has greater statistical power. This conclusion is statistically stronger than the analysis of any single study, due to increased numbers of subjects, greater diversity among subjects, or accumulated effects and results.

Meta-analysis would be used for the following purposes:

- 1. To establish statistical significance with studies that have conflicting results
- 2. To develop a more correct estimate of effect magnitude
- 3. To provide a more complex analysis of harms, safety data, and benefits
- 4. To examine subgroups with individual numbers that are not statistically significant

Common designs of Quantitative Research Method

There **four basic research designs** generally taught in research books. These are descriptive research design, correlational, causal-comparative, experimental design and quasi-experimental design (Borg & Gall, 1992; Kerlinger, F., 1986).

1. Descriptive Research

It is used to gather information on current situations and conditions. It helps provide answers to the questions of who, what, when, where and the how of a particular research study. Descriptive research studies provide accurate data after subjecting them to a rigorous procedure and using large amounts of data from large number of samples. This design leads to logical conclusions and pertinent recommendations. However, the descriptive research design is dependent to a high degree on data collection instrumentation for the measurement of data and analysis.

Research writers commonly resort to descriptive design because of the ease in gathering data. Once the instruments are formulated, data can be gathered by any of the following means: questionnaire, interview, or documentary analysis. An example of a research using descriptive design is shown on a study on demographic and personal characteristics i.e., age. Sex. Socio-economic status of the family, marriage status of parents, manner of discipline at home, ambition in life, expectations of the family on the child. etc.

2. Causal-Comparative Research

Causal -Comparative Research attempts to determine the causes or difference that already exist between or among groups or individuals (Fraenkel and Wallen, 1993). The design compares two or more groups in terms of a difference variable that cannot be manipulated, i.e., and high performing group versus low performing group (Performance in the difference variable). The research may observe that the two groups differ in some variables to determine the reasons of their difference. The statistical treatment employed to compare the two groups may positively identify significant variables such as socio-economic status, educational attainment of parents, expectation at home, social pressure, peer influence, or teacher's motivation may be explored. All hypotheses concerning the differences between or among groups are so stated after the statement of the problem.

3. Correlational Design

Correlational design explores the relationship between or among variables. The variables are studied without any attempt to control or manipulate them. Correlational research is also referred to as a form of descriptive research because it describes relationship between variables. Correlation coefficients may describe positive or negative relationship depending upon the outcome of the study. Positive correlation describes direct relationship; x increases as y increases or as variable one goes up; variable two goes up or vice versa. Negative correlation is inverse relationship; x increases as y decreases, i.e. performance diminishes when one goes old. Correlational design cannot be used to establish cause and effect.

4. Experimental Design

Of all the research designs, experimental research is the design that can be establish cause-and-effect relationship between the dependent and independent variables. By experiment, variables are manipulated and their effects upon other variables are observed. The variables being manipulated are called experimental variables. Conditions that may possibly isolate cause-and -effect relationship are controlled to come up with valid research outcomes.

The experimental designs are the following:

The **Posttest only control group design** is composed of two groups. The subjects are randomly selected and assigned to the two groups prior to the experiment. The experimental group is given the treatment (x) while the control group receives the traditional treatment. After the experimental period, the two groups are compared on the treatment variable by the results of the posttest. Replication of the experimental groups may be used to have more than two groups.

The **Pretest/Posttest control groups design.** This design is also composed of two groups. Prior to the start of the experiment, the subjects are selected at random and assigned to the experimental and control groups. The Pretest is introduced in this design. The purpose of such is to compare the two groups in terms of the entry behavior or characteristics of the two groups. Another use of the pretest is to help in the determination of the gain scores, the difference between the pretest and posttest scores. The posttest scores may also be compared to differentiate the effect of the treatment (x) from the control condition.

The **Solomon-four group design.** This design is a combination of the first two designs on one. There are two experimental groups and two control groups. Only two groups are pretested but all the groups receive the posttest. Groups 1 and 3 receive the treatment (x) while group 2 and 3 are considered as control groups. This design is considered the best experimental design because it is able to check most of the threats to internal validity. One experimental group (G3) and one control group have no pretest. This checks the possible sensitization effect to the pretest to the posttest. The presence of the pretest in one experimental and control groups in terms of entry characteristics. The comparison of all the posttest results shall provide data on the effect of the treatment variable and the responsibility of sensitization effect by the pretest.

The **Quasi-experimental design.** A design in which either there is no control group or the subjects are not randomly assigned to groups. The most common types are pretest-posttest non-equivalent groups design and time series design. Pretest-Posttest Non- Equivalent Groups Design looks like the pretest-posttest control group design except that this design does not involve random assignment of subjects into groups. In this design, two existing groups are pretested, administered a treatment and posttested. Another, Time Series Design is an elaboration of the one-group pretest-posttest design. One group is repeatedly pretested, exposed to a treatment and then repeatedly posttested. (Tomakin,2010)

How to plan and write well your research design successfully:

1.Decide on whether your study will follow the quantitative, qualitative, or mixedmethod route.

- a. If you wish to use quantitative research, here are some research design that you may wish to consider: descriptive research, correlation, causalcomparative research, experimental design, quasi-experimental design, factor analysis, meta-analysis and structural equation modeling.
- b. If you want to consider qualitative research, the following are some of the most commonly used design: ethnography, case study, phenomenology, grounded theory, narrative inquiry, and action research.
- c. If you wish to mix the two, you will use the hybrid design called mixedmethods design. It uses both quantitative and qualitative methods of collecting and analyzing data.
- 2. Make sure your research problem, objective and research questions determine your design.
- 3. Read extensively about your selected research design.
- 4. Demonstrate in your Chapter 3 that you are knowledgeable about your design.
- 5. Be consistent with your design throughout your study.

Essential Components in Writing the Research Design

- 1. Introduction
- 2. Statement of the Problem
- 3. Objectives
- 4. Definition of Concept
- 5. Reference to the previous study (additional))

For example:

Research Method

This study used the survey approach of conducting research. Specifically, it utilized the descriptive survey and correlation procedures. The principal purpose of the researcher was to discover how the groups of respondents assessed the intrapersonal and interpersonal competencies of school managers and to find out the relationship of these competencies to the school's effectiveness. The descriptive method was supplemented with documentary analysis of the school's, teacher's and student's performance as reflected in the Performance Appraisal for Secondary School Teachers (PAST), and the documentary available in the Division office for the performance indicators as well as local documents available in the school for the awards received and data on the school participation in the community.

Gay (1976) defines descriptive research as involving the current status of the subject of the study. This method of research is designed to gather information on the condition existing at particular period. Similarly, Travers (1978) added that the descriptive method of research is used to describe

Definition

Statement of the Problem

Introduction

the nature of a situation as it exists at the time of study and to explore the causes of particular phenomena.

A correlation approach was used to relate the competencies of the school managers to school performance. A correlation survey is defined by Calmorin (1998) as the study that aims to determine the relationship of variables. It also indicates the extent to which different variables are related to each other and variables are related to each other in the target population. It also ascertains how much variation is caused by another variable. Measure to correlation determines the magnitude and direction of relationship. (samples taken from Cristobal and Cristobal, 2017)

Research Design enables the researcher to organize the components of her or his research in an orderly and coherent topic or problem. The research design is also a template for the collection, measurement, and analysis of data. The research problem determines the research design that will be used in the study. Common qualitative research designs are phenomenology, historical, case study, grounded theory, action plan and meta-analysis. On the other hand, common qualitative research designs are descriptive research design, correlational, causal-comparative, experimental design and quasi-experimental design. Bothe researchers are different in many ways.

Exercise 1:

Instructions: Complete the box by filling in the missing characteristics of qualitative or quantitative research from the choices provided below. Write the answer directly in a separate sheet of paper.

Choices:

- Used to understand individual differences
- Involves processes, feeling and motives
- With or without a theory nor hypothesis
- Uses more structured processes

- -Uses structured instruments
- Has high validity
- -Uses small size of samples
- *Methods include field research, case study and secondary analysis*

Quantitative	Qualitative	
1.	Usually concerned with generating	
	hypothesis from data rather than testing a hypothesis	
Has high output replicability	2.	
Methods include census, survey,	3.	
experiment and secondary analysis		
4.	Uses more flexible processes	
Uses large sample sizes that are representatives of the populations	5.	
6.	Uses either unstructured or semi-	
	structured instruments	
Aims to characterize trends and	7.	
patterns		
Used to gain greater understanding of group similarities	8.	

LESSON 2: POPULATION AND SAMPLING METHOD

The element of the research Methodology discusses how the subjects or respondents of the study are selected and how an appropriate sampling method is chosen. In this part of the research, the subjects/respondents are introduced to the readers through their basic profiles. Subjects can be individuals or groups that interventions or process are applied. In some studies, the subjects are the respondents themselves but in other research, the subjects are not necessarily the respondents. The participants or respondents are individuals or groups of people that serve as the sources of information during data collection.

What is a population?

The **population** is composed of persons or objects that possess some common characteristics that are of interest to the researcher. There are two groups of population: the *target population* and the *accessible population*. The target population consists of the entire group of people or objects to which the findings of the study generally apply. Meanwhile, the accessible population is the specific study population.

For example, in a study about the common difficulties encountered by senior high school students in the technical-vocational track in their on the job-training in Region VII, all senior high school students enrolled in the Technical Vocational Track in Region VII are the target population while the senior high school students who are enrolled within the school or district and even those who are within the division are the accessible population.

A parameter is a numeric characteristic of a population especially if it is very large; in this case, a sample is derived. A sample is a subset of the entire population or a group of individuals that represents the population and serves as the respondents of the study. A statistic is a numeric characteristic of a sample. A single member of the sample is called an element.

In the example concerning senior high school students on the technical-vocational track in region VII, if there is a total of 13,000 students enrolled, 13,000 is called the parameter; Out of the 13,000 only 3,000 senior high school students are enrolled in the division of Cebu. After computing statistically with the use of Slovin's formula or other appropriate formula, the sample derived is 500 senior high school students. This number, 500, is called the sample size.

Ways to Determine the Sample Size

An important task of the researcher is to determine the acceptable sample size. The larger the sample, the more reliable the result of the study. Hence, it is advisable to have a large enough sample for it will yield more reliable results.

Factors to Consider in Determining the Sample Size

1. Homogeneity of the population. The higher the degree of variation within the population, the smaller the sample size can be utilized.

- **2. Degree of precision desired by the researcher.** A larger sample size will result in greater precision or accuracy of results.
- 3. Types of sampling procedure. Probability sampling and non-probability sampling.
- 4. The use of formulas.

Formulas:

A. Slovin's Formula. It is used to compute for sample size (Sevilla , 2003). This formula is used when you have limited information about the characteristics of the population and are using a non-probability sampling procedure (Ellen, 2016).

$$n = \frac{N}{1 + Ne^2}$$

Where:

n= a sample size N= population size e= desired margin of error

Example: The parameter of the population is 1000 at 5% of margin of error or 95% accuracy.

$$n = \frac{N}{1 + Ne^2}$$

$$n = \frac{1000}{1 + 1000(.05)^2}$$

$$n = \frac{1000}{1 + 1000(.0025)}$$

$$n = \frac{1000}{1 + 2.5}$$

n= 1000/3.5 n = 285.71 or 286 respondents

Suppose n= 286 derived from Slovin's formula, N= 1000 respondents are distributed to these strata:

Subgroups/Strata	Accessible Population
Grade 7	350
Garde 8	150
Grade 9	200
Grade 10	300
	N= 1000

How should the n=286 samples be allocated to the four groups of respondents? To do this, we take the percentage contribution of each group of respondents and use this to compute the sample allocation for each group.

Thus,

Grade
$$7 = \frac{350}{1000} = 0.35 = 35\% \times 286 = 100.1 \approx 100$$
 samples
Grade $8 = \frac{150}{1000} = 0.15 = 15\% \times 286 = 42.9 \approx 43$ samples
Garde $9 = \frac{200}{1000} = 0.20 = 20\% \times 286 = 57.2 \approx 57$ samples
Grade $10 = \frac{300}{1000} = 0.30 = 30\% \times 286 = 85.8 \approx 86$ samples
(examples taken from Tomakin,2010)

As a result, 100 samples are to be taken from Grade 7, 43 samples from Grade 8, 57 samples from Grade 9, and 86 samples from Grade 10 to get the total sample size of 286 respondents.

5. Other considerations:

- a. Sample sizes as small as 30 are generally adequate to ensure that the sampling distribution of the mean will approximate the normal curve (Shott, 1990)
- b. When the total population is equal to or less than 100, this same number may serve as the sample size. This is called universal sampling.
- c. The following are the acceptable sizes for different type of research (Gay, 1976)
 - Descriptive research 10%- 20% may be required Correlational research - 30 subjects or respondents Comparative research - 15 subjects /group Experimental design- 15-30 subjects per group

In determining the sample size for qualitative research:

It is important to remember that there are no hard and fast rules. It varies depending on the type of qualitative research approach and date collection method to be used:

Research Design	Usual Practice
Biography/ Case Study	Select one case or one person
Phenomenology	Assess 10 people. If you reach saturation prior to assessing ten people you may use fewer.
Grounded Theory/ Ethnography/ Action Research	Assess 20-30 people, which typically is enough to reach saturation.
Data Collection Method	Rules
Interviewing key informants	Interview approximately five people.

In-depth interviews	Interview approximately five people.
Focus groups	Create groups that average 5-10 people each. In addition, consider the number of focus groups you need based on "groupings" represented in the research question. That is, when studying males and females of three different age groupings, plan for six focus groups, giving you one for each gender and three age groups for each gender.
Ethnographic surveys	Select a large and representative sample (purposeful or random based on purpose) with numbers like those in a quantitative study.

Sampling Method

- **1.Probability Sampling**. This is a type of sampling in which all members of the population are given chance of being selected. This also called scientific sampling.
 - a. **Simple random sampling**. This is a method of choosing samples in which all the members of the population are given an equal chance to be selected as respondents. It is unbiased way of selection as samples are drawn by chance. There are various ways of getting the samples through simple random sampling. These include the roulette wheel, fishbowl technique and the use of the table of random numbers.
 - b. **Stratified random sampling.** The population is first divided into different strata then the sampling follows. Age gender and educational qualifications are just some of the criteria used in dividing the population. Example: The researcher will study the common causes and effects of smoking among senior high school students. Equal representations of respondents are selected from various samples from public and private schools (first stratum). Then, in the selected public and private schools, samples are chosen from each grade level (second stratum).
 - c. **Cluster sampling.** This used in large-scale studies in which the population is geographically spread out. In these cases, sampling procedures may be difficult and time-consuming. Example: A researcher wants to interview 100 senior high school honor students to have enough representatives of the different public schools within the division. If there are 10 public schools in the division, each cluster or school must have 10 samples to complete the total statistics of 100.
 - d. **Systematic sampling.** It is a method of selecting every *nth* element of the population (e.g. every fifth, eight, ninth, eleventh element).

2. Non-probability Sampling. This is a process of selecting respondents in which the members of the entire population do not have an equal chance of being selected as samples. There are cases which a sample is given priority instead of other members. This is also called as non-scientific sampling.

a. **Convenience sampling**. It is also called accidental or incidental sampling. For example, after you have already determined the size of the sample from your population of elementary pupils, the elementary pupils who are now present during the research visit will be chosen as respondents.

b. **Quota sampling**. It is somewhat similar to stratified sampling in which the population is divided homogeneous strata and then sample elements are selected from each stratum. For example, the researcher desires to have 50 male students. The first 50 male students who are approached by the researcher as respondents will be asked to participate in the survey in this case.

c. **Purposive sampling.** It involves the handpicking of subjects. This is also called judgmental sampling. For example, in a study involving diabetic patients, the researcher uses a list of diabetic patients and chooses the necessary number of patients.

Describing the Research Respondents

In formulating the description of respondents of the study, the following elements must be adequately described:

- a. the total population and its parameters.
- b. the sample and its statistics.
- c. the sampling method, with references to support it;
- d. an explanation and discussion of the sampling method
- e. an explanation of how the sampling is done;
- f. an enumeration of the qualifying criteria; and
- g. the profile of the respondents.

Example:

Title: CORRELATES OF THE LEARNING MODALITY PREFERENCE AND ACADEMIC PERFORMANCE OF GRADE 12 SENIOR HIGH SCHOOL STUDENTS IN DALAGUETE NATIONAL HIGH SCHOOL, DALAGUETE, CEBU

Research Respondents

The respondents of this study are the Grade Senior High School Students of Dalaguete National High School, Dalaguete, Cebu. The population of Senior high School students in ABM has 39, HUMSS has 193, STEM has 78, and TVL has 159 with a total of 469 students.

Out of the total number, 216 are taken as samples of the study. The Senior High School students are selected randomly from each strand through stratified sampling using the Slovin's Formula. The sample is presented in Table 1.

Name of District	Population	Sample
ABM	39	17
HUMSS	193	89
STEM	78	37
TVL	159	73
Total	469	216

Table 1. Frequency Distribution of Respondents According to Strands

Another Example:

Research Respondents

The respondents of this study are the Grade 10 students of Dalaguete National High School. This is useful to the researchers because they are in this year's level; they will have little trouble gathering data and will save time, resources, money, and effort.

The Grade 10 class had a total of 400 students. Since it is so large, the sampling method is used to collect an appropriate number of samples. With a desired margin of error of.05., the researchers use Slovin's formula (N/1 +Ne). They come up with a sample size of 200 people. To pick the final 200 samples, simple random sampling is used to ensure that all elements are included in the sample.

During the sampling, all students in each section are given an equal chance because their names are placed in a fishbowl. The respondents are made up of the 200 students who were selected, as shown in table 1.

Sections	Frequency	Percentage
Benedicto	40	.20
Scholastica	40	.20
Peter	38	.19
John	44	.22
Samuel	38	.19
TOTAL	200	100%

Table 1 Distribution of Respondents According to Section

The **population** is composed of persons or objects that possess some common characteristics that are of interest to the researcher. There are two groups of population: the *target population* and the *accessible population*. The target population consists of the entire group of people or objects to which the findings of the study generally apply. Meanwhile, the accessible population is the specific study population. There are factors to consider in determining the sample size: Homogeneity of the population, Degree of precision desired by the researcher and the use of formula. However, there also other considerations to apply especially in determining sample sizes.

In determining the sample size for qualitative research, it is important to remember that there are no hard and fast rules. It varies depending on the type of qualitative research approach and date collection method to be used.

Finally, there are sampling method than can be applied: **Probability Sampling** and **Probability Sampling**. Probability sampling is a type of sampling in which all members of the population are given chance of being selected while non-probability sampling is a process of selecting respondents in which the members of the entire population do not have an equal chance of being selected as samples.

Exercise 2.

Directions: Identify the methods of sampling being described in each item. Choose the correct answer in the box and write it a separate sheet of paper.

Purposive Sampling Stratified Sampling Non- probability Sampling Quota Sampling	Convenience Sampling Cluster Sampling Simple Random Sampling	Systematic Sampling Probability Sampling Non-probability Sampling	
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- 1. This is a process of selecting respondents in which the members of the entire population do not have an equal chance of being selected as samples.
- 2. It is somewhat similar to stratified sampling in which the population is divided homogeneous strata and then sample elements are selected from each stratum.
- 3. This is a method of choosing samples in which all the members of the population are given an equal chance to be selected as respondents.
- 4. This is a type of sampling in which all members of the population are given chance of being selected.
- 5. The population is first divided into different strata then the sampling follows.
- 6. This is also called judgmental sampling.
- 7. It is also called accidental or incidental sampling.
- 8. It is a method of selecting every *nth* element of the population.

9. This used in large-scale studies in which the population is geographically spread out.

10. This is also called as non-scientific sampling.

Exercise 3.

Try to obtain the sample size allocation at e= 3% of the given the population utilizing the Slovin's formula. Write your answers in a separate sheet of paper.

Respondents	Population Size	Sample size
Grade 7	1250	
Grade 8	1000	
Grade 9	750	
Grade 10	1500	
Senior High	500	
	N- 5000	

N= 5000

Assessment/Application/Outputs

- A. Directions: Read each item. Determine whether the given studies employ quantitative research, qualitative research or both. Write the letter of the correct answer in your answer sheet
- 1. Testing the relationship between the scores on an intelligence test and gender A. Qualitative research B. Quantitative research C. Both
- Observing the social interactions of children ages 3-4 in a playgroup
 A. Qualitative research B. Quantitative research C. Both
- 3. Participants of 8 are grouped into a discussion to study the experience of bullying in the school.
 - A. Qualitative research B. Quantitative research C. Both
- 4. Analyzing and interpreting violence through artworks of students A. Qualitative research B. Quantitative research C. Both
- 5. Observing the effects of using a a reward to teach a child good communication skills
 - A. Qualitative research B. Quantitative research C. Both
- 6. Surveying typhoon victims who may be experiencing post-trauma A. Qualitative research B. Quantitative research C. Both
- 7. Conducting an experiment to investigate whether having regular rest breaks during a prolonged study session improves performance on a test
 - A. Qualitative research B. Quantitative researchC. Both
- Counting the number of drivers who disobey a stop sign at an intersection

 A. Qualitative research
 B. Quantitative research
 C. Both
- 9. Studying the behavior of newborn infants by observing and recording their second-by-second movements during their first 72 hours of life following birth

 A. Qualitative research
 B. Quantitative research
 C. Both
- 10. Investigating ways of which females are portrayed in the print media by analyzing newspaper and magazines advertisements

A. Qualitative research B. Quantitative research C. Both

B. Direction: Distinguish the kind of sampling techniques employed in the following:

11. Peter is interested in what kinds of movies are enjoyed most by the students in his

class. He makes a list of all his students in his class, alphabetizes the list and asks every 10th student what type of movies they enjoyed watching the most. What method of sampling is applied?

A. Purposive sampling

C. stratified sampling D. Systematic sampling

B. simple random sampling

12. Mr. Rene samples his class by selecting 8 girls and 9 boys. This type of sampling is called?

A. Cluster B. Simple C. Stratified D. Systematic 13. The school librarian wants to determine how many students use the library on a regular basis. What type of sampling method would she use if she chose to select every 3rd student who enters the library on Tuesday.

- A. Convenience Sample C. Stratified Random Sample
- B. Simple Random Sample D. Systematic Sample
- 14. Mrs. Torres samples her class by picking 10 numbers from lottery box and each number is assigned to a student. This is ______ random sampling.A. Cluster B. Simple C. Stratified D. Systematic
- 15. Farmer Joe separates his farm into 10 regions. He then randomly selected 5 trees from each region to estimate the number of apples produced on his apple tree farm. This is ______ sampling.
 - A. Cluster B. Simple C. Stratified D. Systematic

Suggested Enrichment/Reinforcement Activity/ies (Performance Output)

At this time, write the Research Design or Research Method of your Own study. Describe also the Research Respondents. See the example given in the discussion above as your guide.

Chapter III RESEARCH METHODOLOGY

Research Method

Research Respondents

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