



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



SELF-LEARNING HOME TASK (SLHT) # 2

Subject: **Inquiries, Investigation and Immersion**

Grade Level: 12

Quarter: 4 Week: 2

Competency: Describe adequately the research procedure.

Competency Code:

Name _____ Section _____ Date _____

School: Dalaguete National High School District: Dalaguete 1

Readings/Discussions

Data collection refers to the process of gathering information. The data that you will collect should be able to answer the questions you posed in your Statement of the problem.

There are various methods that you can use in collecting data for a research study. Each has its advantages and disadvantages and as a researcher you should be able to identify when it is appropriate to employ each of the data collection procedure. All these techniques are expected to generate numerical calculations. The data are collected, recorded, organized and translated to measurement scales in quantitative research for interpretation.

Data Collection Procedure

Data collection is defined as the procedure of collecting, measuring and analyzing accurate insights for research using standard validated techniques. A researcher can evaluate their hypothesis on the basis of collected data. In most cases, data collection is the primary and most important step for research, irrespective of the field of research. The approach of data collection is different for different fields of study, depending on the required information.

Most Frequently Used Data Collection Techniques

1. Documentary Analysis. This technique is used to analyze primary and secondary sources that are available mostly in churches, schools, public or private offices, hospitals, or in community, municipal, and city halls. At times, data are not available or are difficult to locate in these places and the information gathered tend to be incomplete or not definite and conclusive.

2. Interview. The instrument used in this method is the interview schedule. The skill of the interviewer determines if the interviewee is able to express his/her thoughts clearly. Usually, an interview is conducted with single person, but there are also times when it is conducted with a group of people (around five to ten) whose opinions and experiences are elicited simultaneously. This type is called a focus

group interview. Life histories are also needed in this area. These are narratives or self-disclosures

about an individual's life experiences. The interview must guide the respondents in narrating their accounts.

Data obtained from an interview may be recorded on audiotapes or videotapes. Today, cell phones or smartphones can be used as recording devices. Some researchers believe that writing down responses during the interview affects rapport, reduces spontaneity, and hinders eye contact.

Three Types of Interview

- a. *Unstructured.* This interview can be in the form of normal conversations or a free-wheeling exchange of ideas. The researcher must be skilled in conducting the interview so that he/she can steer the course of conversation. The interviewer must be knowledgeable on the subject or topic of concern.
- b. *Structured.* The conduct of questioning follows a particular sequence and has a well-defined content. The interviewer does not ask questions that are not part of the questionnaire, but he/she can ask the interviewee to clarify his/her answers.
- c. *Semi-structured.* There is a specific set of questions, but there are also additional probes that may be done in an open-ended or close-ended manner. The researcher can gather additional data from a respondent to add depth and significance to the findings.

3. Observation. This process or technique enables the researcher to participate actively in the conduct of the research. The instrument used in an observation is called the observation guide or observation checklist. Observation must be done on a quiet and inconspicuous manner so as to get realistic data. In nursing research, the observation method has broad applicability, particularly for clinical inquiries. Nurses are in an advantageous position to observe the behaviors and activities of the patients and their families as well as the healthcare staff. It can be used to gather information such as the characteristics and conditions of individuals: verbal communication: non-verbal communication; activities and environmental conditions.

The following dimensions should be taken into consideration: the focus of observation; concealment, the condition wherein the subject of observation has no knowledge that he/she is being observed; duration; and the method of recording the observations.

Two Types of Observation

- a. *Structured.* The researcher uses a checklist as a data collection tool. This checklist specifies expected behaviors of interest and the researcher records the frequency of occurrences of these behaviors.
- b. *Unstructured.* The researcher observes things as they happen. The researcher conducts the observation without any preconceived ideas about what will be observed.

4. Physiological Measures. The technique is applied for physiological measures involves the collection of physical data from the subjects. It is considered more accurate and objective than other data-collection methods. However, skills and expertise are needed to enable the researcher to use and manipulate the measurement devices.

5. Psychological Tests. These include personally inventories and projective techniques. Personality inventories are self-reported measures that assess the differences in personality traits, needs, or values of people. They involve gathering information from a person through questions or statements that require responses or reactions.

Examples of these are the Minnesota Multiphasic Personality Inventory (MMPI) and the Edwards Personal Preference Schedule (EPPS). In projective techniques, the subject is presented with a stimulus designed to be ambiguous or vague in meaning. The person is then asked to describe the stimulus or tell what the stimulus appears to represent. Examples of common projective techniques are the Rorschach Inkblot Test and the Thematic Apperception Test. In the Rorschach Inkblot Test, subjects are presented with cards that contain designs which are actually Inkblots. The Thematic Apperception Test consists of a set of pictures about which the subjects are asked to tell a story or what they think is happening.

6. Questionnaire. It is the most commonly used instrument in research. It is a list of questions about a particular topic, with spaces provided for the response to each question, and intended to be answered by a number of persons (Good, 1984). It is less expensive, yields more honest response, guarantees confidentiality, and minimizes biases based on question-phrasing modes.

The questionnaire can be structured or unstructured. Structured questionnaire provides possible answers and respondents just have to select from them. Unstructured questionnaires do not provide options and the respondents are free to give whatever answer they want.

Planning the Collection of Data

The researcher should clarify whether the type of data to be collected is textual or numerical. The researcher must also have a timeline in collecting the data from the subjects or respondents for practical purposes. When the collection of data is planned properly, it will serve as a motivation to the researcher and will help save money, time, effort and energy.

The following should be considered in the data collection:

1. The people. After identifying the characteristics of the subjects/respondents, secure the approval and endorsement of the proper authorities for the conduct of the study (i.e. allow the distribution of the survey questionnaires or conduct of the interview). This is done by submitting a letter seeking approval which also identifies the person who will collect the data, conduct the interview or observe the person/s under study. There are times that the researcher himself/herself will do all the tasks

related to the research, but there also times when he/she cannot do these tasks alone, needs somebody or a group of enumerators to assist him or her.

2. The finances. All research undertakings have financial requirements. The amount varies depending on the type of study to be conducted. It is important to properly plan the amount for the production of the instrument and the research study, the travel expenses in going to the participants or to the venue where the research is to be conducted, honoraria and other incremental expenses.

3. The schedule. A good projection of when to start, how much time to be consumed in going from one participant to the other, when to retrieve questionnaires or the data, when to do follow-ups and the like are factors to consider in formulation or finalizing the schedule.

4. Miscellaneous. The researcher must consider the following- what to wear during the data collection; what to do to ensure the participants are safe; how to motivate and encourage participants to answer all the items in the instrument; and what to do to build rapport and gain trust and cooperation of the participants.

Here is an example of describing the research data gathering procedure as part of the research methodology.

Data Gathering Procedure

This study employed these steps to complete the collection of data. The researcher started in making a framework of questions based from the problem-statement. Then, the researcher let an expert in the person of the research teacher to validate the questions being formulated. Afterwards, the researcher had secured a transmittal letter signed by the School Head, a letter of consent from parents and an approval letter from the local authorities to ensure safety and follow protocol in doing the research outside the campus. When everything was in place, the researcher conducted a series of interview through an FGD of 10 participants. The responses that took place during the FGD were adopted in making the survey questionnaire. After the questionnaire was validated and pilot-tested, the survey in Sitio Caimito, Brgy. Lorenzo was done. The collected data were analyzed and interpreted through a statistical procedure. Finally, the researcher made conclusions and recommendations.

Data collection is defined as the procedure of collecting, measuring, and analyzing accurate insights for research using standard validated techniques. A researcher can evaluate their hypothesis based on collected data. In most cases, data collection is the primary and most important step for research, irrespective of the field of research. The approach of data collection is different for different fields of study, depending on the required information.

The most frequently used data collection techniques are documentary analysis, interview, observation, physiological measures, psychological tests, and questionnaire.

In planning the collection of data, these should be considered like the people, the finances, the schedule and miscellaneous.

Exercise:

Directions: Read carefully and identify the following items. Write the correct answer in a separate sheet of paper.

1. It is applied for physiological measures involves the collection of physical data from the subjects.
2. It is a list of questions about a particular topic, with spaces provided for the response to each question and intended to be answered by a number of persons.
3. The conduct of questioning follows a particular sequence and has a well-defined content.
4. This technique is used to analyze primary and secondary sources that are available mostly in churches, schools, public or private offices.
5. It is defined as the procedure of collecting, measuring and analyzing accurate insights for research
6. It is conducted with single person, but there are also times when it is conducted with a group of people.
7. The researcher can gather additional data from a respondent to add depth and significance to the findings.
8. This process or technique enables the researcher to participate actively in the conduct of the research.
9. An example of these is the Minnesota Multiphasic Personality Inventory (MMPI).
10. This interview can be in the form of normal conversations or a free-wheeling exchange of ideas.

Assessment/Application/Outputs

Directions: Read the situations carefully. Write the letter of the correct answer in a separate sheet of paper.

1. Choosing ladies at random at the department store and asking them what brand of cosmetics they prefer to use. What data gathering procedure is applied?
A. Documentary analysis B. Interview C. Observation D. Survey
2. Estimate the number of students in your school who play video games more than 10 hours per week. What data gathering procedure is applied?
A. Documentary analysis B. Interview C. Observation D. Survey
3. Determine if punishment among children increases violence in children's behavior. What data gathering procedure is applied?
A. Documentary analysis B. Interview C. Observation D. Test
4. Decide if computer-based instructions are more effective than lecture method. What data gathering procedure is applied?
A. Experiment B. Observation C. Textual analysis D. Survey
5. Asking students if school uniform should be abolished. What data gathering procedure is applied?
A. Experiment B. Observation C. Textual analysis D. Survey
6. A random selection of people to determine if computer games are too violent. What data gathering procedure is applied?
A. Experiment B. Interview C. Observation D. Textual analysis
7. Giving one's point of view about the feminism issues in the paly entitled "The Virgin" by Kerima Polotan Tuvera. What data gathering procedure is applied?
A. Experiment B. Interview C. Observation d. Textual analysis
8. Determining the average IQ of all the Senior High School students. What data gathering procedure is applied?

- A. Documentary analysis B. Interview C. Observation D. Test
9. Asking the experiences of ex-convicts in the community. What data gathering procedure is applied?
- A. Documentary analysis B. Interview C. Observation D. Test
10. Asking male basketball players of their preferred shampoo. What data gathering procedure is applied.
- A. Documentary analysis B. Survey C. Observation D. Test
11. What is the most commonly used instrument in research?
- A. Checklist B. Likert Scale C. Questionnaire D. Standardized Tools
12. The interviewer does not ask questions that are not part of the questionnaire, but he/she can ask the interviewee to clarify his/her answers. What type of interview is used?
- A. Free flow B. Semi-structured C. Structured D. Unstructured
13. What are the common data collection procedures of Qualitative Research?
- A. Books and journal C. Questionnaires and survey
 B. Interview and observation D. Secondary sources
14. Consider this question: Why should divorce be legalized in the Philippines? What type of question is this?
- A. Close-ended B. Dependent C. Independent D. Open-ended
15. What data collection strategy makes use of books, archives, literature in order to collect common themes for analysis?
- A. Documentary Analysis C. Interview
 B. Focus Group Discussion D. Observation

Suggested Enrichment/Reinforcement Activity/ies (Performance Output)

Directions: Since you already collected all the needed data, this time, describe the data gathering procedure you had undertaken following the sample as shown in the discussion part.

Data Gathering Procedure

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NOTE: Contents adapted from the module of DepEd Cebu City Division, Region VII