

*Tikrit University*

*College of Nursing*

*Basic Nursing Sciences*



**3<sup>rd</sup> stage - 2023-2024**

**Research Methods**

**( Research Design)**

*by:*

*MSc. Mahmood Hasan Mahmood*



## **Research methods**

### **Research Design**

**Research design:** - is the logical plan used by the researcher to address the problem statement in the research study. The research design, which follows an organized progression, takes the researcher from the research idea to the final step of the study. Specific strategies for obtaining subjects, collection data, analysing data, and interpreting results are determined by research design. Most research designs are categorized as either quantitative or qualitative.

**Quantitative research:** - which is based on reductionism, uses variables that analysed as numbers.

**Qualitative research:** - which is based on holism, uses ideas that are analysed as words to identify the relationship among variables.

### **Tabulation & analysis of data.**

#### **Tabulation**

Identifying appropriate categories of the information .It is important to present data in a manner that can be easily understood by the reader. There are a variety of ways that data can be presented visually so that it is better understood. Computer graphics have greatly increased the options that researchers have for presenting their data. The most common methods of presenting data visually are tables and figures. Tables usually present quantitative data.

## **Specific Guidelines for Construction of Useful Tables Every table should**

1. Be identified by a number as: Table I.
2. Have an explanatory, but brief, title
3. Have headings for each column.
4. Explain all abbreviation and special symbols.
5. Be explained in the accompanying text of the article or book.

## **Figure**

Any illustration other than a table is called a figure. A figure may be a chart, graph, photograph, or drawing. A good figure is a simple and clear.

## **Specific Guidelines for Construction of Useful Tables Every figure should:**

1. Supplement rather than duplicate the text.
2. Convey only essential facts.
3. Omit (ignore) visually distracting materials.
4. Be easily understood.
5. The purposes should be clearly presented.
6. Be clearly and appropriately labelled.

## **DISCUSSION THE FINDINGS OF THE STUDY EXAMINE RESULT**

The first step in interpretation is to consider all the factors that support or contradict the validity or results related to the research Sub problems. The following lists states the factors (listed first and underlined) and the questions that should be asked to determine whether the factors support or contradict the results.

**1. The research Plan:** Do the problem statement ,framework, Sub problems, variables, design, methods of observation, method of measurement and types of analyses all link together so that the results of the data analysis can be said to be a true answer to the research Sub problems?.

**2. Measurement of study variables:** Did the data collection methods really measure the variables?

**3. Data collection Process:** Did any activities occur during the data collection process that could affect the meaning of the results?

**4. Data analysis process:** Were the data accurate and complete? Were the statistical tests used appropriate to the data.

**5. Data analysis results:** if the results are what the researcher expected, are there any other reasons that these results occurred? If the results are not what the researcher expected (negative results), are they a true reflection of reality or due to inappropriate Methodology, a deviant sample, a small sample, use of weak statistical measure of faulty analysis.

**6. Result of Previous Studies:** are the results of the research consistent with other researcher that has been done on this problem?

## **FINDING**

Results in a study are interpreted and then they become findings. Findings are a consequence of evaluation evidence. Although much of the process of developing findings from results occurs in the mind of the researcher, evidence of the thinking can be found in the published research report.

## **Conclusions**

Conclusions are derived from the findings and are a synthesis of findings. Forming these conclusions requires a combination of logical reasoning and creative formation of a meaningful whole from pieces of information obtained through data analysis.

## **Implications**

Implications are the meanings of conclusions for the body of knowledge, for theory and for practice. Implications are based on the conclusions and are more specific than conclusions. They provide specific suggestions for implementing the findings.

## **Recommendations for Further Research**

The completion of a study and the examination of implications should culminate in the consideration on future studies that logically emerge from the present study and from previous studies in the same area of interest.

Suggested studies or recommendations for further study may include replications or repeating the design with a different or large sample. In every study, the researcher gains knowledge and experience that can be used to design a "better study next time".