# STA630 final term subjective

## Solved by

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**Question No: 65 ( Marks: 3 )**
**How would you differentiate between History Effect and Mechanical Loss in Experimental research?**

**History Effect:**
**A specific event in the external environment occurring between the first and second measurement that is beyond the control of the experimenter and that affects the validity of an experiment. Advertisement of a particular product (mineral water) and its sale is affected by an event in the society (contamination of drinking water). The researcher does not have control on such happenings which have an impact on the X and Y relationship**

**Mechanical Loss:**
**A problem may be experienced due to equipment failure. For example, in an experiment if the subjects are told that their behavior is being video taped, and during the experiment the video equipment failed to work for some subjects, then the validity of the results could become doubtful.**

**Question No: 66 ( Marks: 5 )**
**Write a note on any three varieties of non reactive observations.**

**Physical Traces:**
- **Erosion: Wear and tear suggests a greater use.**
- **Accretion: Accumulation of physical evidence suggests behavior.**

**Archives:**
- **Running Records: Regularly produced public records may reveal lot of information.**
- **Other Records: Irregular or private records can reveal a lot.**

**Observations:**
**• External Appearance: How people appear may indicate social factors.**
**• Count Behaviors: Counting how many people do something can be informative.**
**• Time Duration: How long people take to do things may indicate their intention**

Question No: 41 ( Marks: 5 )
Defend the use of the term inductive to describe qualitative data analysis and interpretation.

**In inductive term answers should address methodological characteristics such as data collection and coding, developing categories and patterns, and interpreting relationships across patterns.**

Question No: 42 ( Marks: 5 )
Briefly discuss the Solomon s Four Group Design in experimental research with the help of example?

**Solomon's Four Group Design: to gain more confidence in internal validity in experimental designs, it is advisable to set up two experimental groups and two control groups. One experimental group and one control group can be given the both pretest and the posttest. The other two groups will be given only the posttest. Here the effects of treatment can be calculated in several different ways as shown**

| **Group** | **Pretest** | **Treatment** | **Posttest** |
|---|---|---|---|
| **Experimental** | **O1** | **X** | **O2** |
| **Control** | **O3** | **-** | **O4** |
| **Experimental** | **-** | **X** | **O5** |
| **Control** | **-** | **-** | **O6** |

**1) Involvement with deviants is the Ethical dilemma of field Research how would explain (Marks 3) Page 140**

**Ethical Dilemmas of Field research**

**The direct personal involvement of a field researcher in the social lives of other people raises many ethical dilemmas. The dilemmas arise when the researcher is alone in the field and has little time to make a moral decision. Although he or she may be aware of general ethical issues before entering**

the field, they arise unexpectedly in the course of observing and interacting in the field.

2) How Researchers locate evidence in historical comparative research (Marks 3) Ch.No. 41

Data and Evidence in Historical context

Historical-comparative researchers draw on four types historical evidence or data:

1. Primary sources;

2. Secondary sources;

3. Running records; and

4. Recollections.

Traditional historians rely heavily on primary sources. H-C researchers often use secondary sources or the different data types in combination.

3) Does historical comparative Research follow scientific approach or not Discuss (Marks 5) Ch.No. 41

Historical-Comparative research follows scientific approach because of the following reasons:

• Can be a survey of events in history - could be through the study of documents. Organizations generally document themselves, so if one is studying the development of some organization he/she should examine its official documents: charters, policy statements, speeches by the leaders, and so on. Often, official government documents provide the data needed for analysis.

• Historical-Comparative researchers mostly do a longitudinal analysis i.e. look into the developmental processes of the issues under reference.

• Historical –Comparative researchers make cross-cultural comparisons of the social forms or economic form as well as the developmental processes of those forms, aiming at making generalizations.

4) Briefly explain the important of measurement and coding in non Research with the help of example (Marks 5) Pag.99 Ch.29

Measurement and Coding

**Careful measurement is crucial in content analysis because a researcher takes different and murky symbolic communication and turns it into precise, objective, quantitative data. He or she carefully designs and documents the procedures for coding to make replication possible.**

**Example**

**Negative stereotypes about women**

***Coding system is*** **a set of instructions or rules on how to systematically observe and record content from text. Look at the construct of "leadership role;" for measuring this construct written rules should be provided telling how to classify people. Same is about the concept of "social class." In case the researcher has three categories of upper, middle, and lower class then the researcher must tell what are the characteristics that are associated with upper class, middle class, and the lower class so that the coders could easily classify people in the three proposed categories.**

5) **What are the advantages of cluster sampling (Marks 5) Pag.94 Ch.28**

**Cluster Sampling Advantages**

- ***Feasibility*: cluster sampling is such a method of probabilistic sampling that takes into account large populations. Since these groups are so large, deploying any other sampling technique would be very difficult task. Cluster sampling is very feasible when you are dealing with large population.**
- ***Economy*: The two major concerns of expenditure when it comes to sampling are traveling and listing. They are greatly reduced when it comes to cluster sampling.**
- ***Reduced Variability*: When you are considering the estimates by any other method of probabilistic sampling, reduced variability in results are observed. This may not be an ideal situation every time. Increased variability in results is observed in cluster sampling.**

6) **Do u explain inferences from non-reactive data by using secondary survey data 3**

**Inferences from Non-Reactive Data:**

**A researcher's ability to infer causality or to test a theory on the basis of non-reactive data is limited. It is difficult to use unobtrusive measures to establish temporal order and eliminate alternative explanations.**

7) **Research process, once u collect the data how u would perform the scoring index activity 3 marks**

- **Remember the measurement of job satisfaction. (dimensions and elements).**
- **Number of statements on each element.**
- **Likert scale (5) response categories: Strongly agree, agree, neutral, disagree, s. disagree.**
- **There are positive and negative statements.**
- **For positive statements, score S. agree = 5, agree = 4, neutral = 3, disagree = 2, s. disagree = 1.**
- **For negative statements reverse the scoring.**

**8) 51) Would u explain spontaneity and confession by using secondary data? Give example each 5 marks**

***Spontaneity:*** The spontaneous actions or feelings can be recorded when they occurred rather than at a time specified by the researcher. If the respondent was keeping a diary, he or she may have been recording spontaneous feelings about a subject whenever he or she was inspired to do so. The contents of such personal recording could be analyzed later on.

***Confessions:*** A person may be more likely to confess in a document, particularly one to be read only after his or her death, than in an interview or mailed questionnaire study. Thus a study of documents such as diaries, posthumously published autobiographies, and suicide notes may be the only way to obtain such information.

9) **Do u know about number and duration in FDG discussion 5 marks**

**Number and duration of sessions:** The number of **focus group sessions** to be conducted depends upon project needs, resources, and whether new information is still coming from the sessions (that is, whether contrasting views from various groups in the community are still emerging). One should plan to conduct at least two different focus group discussions for each subgroup (for example two for males and two for females).
For **duration**, a focus group session typically lasts up to an hour and a half. Generally the first session with a particular type of group is longer than the following ones because all of the information is new. Thereafter, if it becomes clear that all the groups have the same opinion on particular topics, the facilitator may be able to move the discussion along more quickly to other topics that still elicit new points of view.

10) **Suggest the appropriate data collection tool that can be used by the research organization. Give the solid rationale for your answer.**

**Secondary data are usually historical, already assembled, and do not require access to respondents or subjects. Many types of information about the social and behavioral world have been collected and are available to the researcher. Some information is in the form of statistical documents (books, reports) that contain numerical information. Other information is in the form of published compilations available in a library or on computerized records.**

**Secondary data may be collected by large bureaucratic organization like the Bureau of Statistics or other government or private agencies. These data may have been collected for policy decisions or as part of public service.**

11) **What is bracketing with regard to Historical comparative research? Ch.40 & 41**

**H-C researchers attempt to read primary sources with the eyes and assumptions of a contemporary who lived in the past. This means "bracketing," or holding back knowledge of subsequent events and modern values. "If you do not read the primary sources with an open mind and an intention to get inside the minds of the writings and look at things the way *they* saw them, you are wasting time."**

12) **How would you differentiate accretion and count behaviors in Non Reactive Research? Pag.**

***Accretion:*** **Accumulation of physical evidence suggests behavior. A researcher examines the soft drink cans or bottles in the garbage collection. That might indicate the brands and types of soft drinks that are very popular.**

***Count Behaviors:*** **Counting how many people do something can be informative. For example a researcher may count the number of men and women who come to a full stop and those who come to a rolling stop at a traffic stop sign. This suggests gender difference in driving behavior.**

13) **Treatment of Independent variable?**

**Independent Variable:**

**An independent variable is the variable you have control over, what you can choose and manipulate. It is usually what you think will affect the dependent variable. In some cases, you may not be able to manipulate the independent variable. It may be something that is already there and is fixed, something you would like to evaluate with respect to how it affects something else, the dependent variable like color, kind, time.**

**Example: You are interested in how stress affects heart rate in humans. Your independent variable would be the stress and the dependent variable would be the heart rate. You can directly manipulate stress levels in your human subjects and measure how those stress levels change heart rate.**

14) **Pretest and posttest experimental and control group design?**

***Pretest and Posttest Experimental and Control Group Design:*** Two groups, one control group and the other experimental group, are formed randomly. Both the groups are exposed to pretest and posttest.

The experimental group is exposed to treatment while the control group is not. Measuring the difference between the differences in the post- and pretests of the two groups would give the net effects of the treatment.

**Experimental Group: Pretest (O1) X Posttest (O2)**

Control Group: Pretest (O3) - Posttest (O4)

Randomization used for setting up the group.

[(O2 – O1) – (O4 – O3)] = Treatment effect (could be anywhere between 0 to -1 or +1).

**18) How would you differentiate between Frequency Distribution Table and Bivariate Table?**

**For example we have data of 400 students. We can summarize the data on the gender of the students at a glance with raw count or a *frequency distribution***

**Table 1: Frequency distribution of students**

**Gender Frequency Percent**

**Male 300 75**

**Female 100 25**

**Total 400 100**

**We can present the same information in a graphic form. Some common types of graphic presentations are the *histograms*, *bar chart*, *and pie chart*.**

**For example, a bivariate table shows that young people show more favorable attitude towards women empowerment. But the relationship**

**between age and attitude towards women empowerment may be spurious because men and women may have different attitudes. A bivariate table has 12 cells, the partials have 3 X 12 = 36 cells. An average of five cases per cell is recommended, so the researcher will need 5 X 36 = 180 cases at minimum.**

19) **Being a researcher, how would you criticize the use of Secondary Data in research?**

***Bias:*** Many documents used in research were not originally intended for research purposes. The various goals and purposes for which documents are written can bias them in various ways.

***Selective survival:*** Since documents are usually written on paper, they do not withstand the elements well unless care is taken to preserve them.

***Incompleteness:*** Many documents provide incomplete account to the researcher who has had no prior experience with or knowledge of the events or behavior discussed.

***Lack of availability of documents:*** In addition to thee bias, incompleteness, and selective survival of documents, there are many areas of study for which no documents are available. In many cases information simply was never recorded.

***Limited to verbal behavior:*** By definition, documents provide information only about respondent's verbal behavior, and provide no direct information on the respondent's nonverbal behavior, either that of the document's author or other characters in the document.

***Sampling bias:*** One of the problems of bias occurs because persons of lower educational or income levels are less likely to be represented in the sampling frames

***Lack of standardized format:*** many other documents, particularly personal documents have no standard format.

***Data must be adjusted for comparability over time:*** the change in measuring distance, temperature, currency, and even literacy in Pakistan.

**What are different measures of central tendency are used define each.**

**Three measures of central tendency, or measures of the center of the frequency distribution: mean, median and mode, which are often called averages (a less precise and less clear way to say the same thing). The *mode* is simply the most common or frequently occurring number. The *median* is**

the middle point. The *mean* also called the arithmetic average, is the most widely used measure of central tendency.

What are the functions of recorders?

Functions of the Recorder

- **Date, time, and place:**
- **Names and characteristics of participants:**
- **General description of the group dynamics (level of participation, presence of a dominant participant, level of interest):**
- **Opinions of participants, recorded as much as possible in their own words, especially for key statements: and**
- **Vocabulary used, particularly in focus group discussions that are intended to assist in developing questionnaire or other material as stipulated under the topic.**

Historical Comparative Research depends upon some factors. list down those?-

**Historical-Comparative research focuses on:**

- **Tracing the development of social forms (patterns) overtime as well as its broad its broad historical processes, and**

- **Comparing those forms and its developmental processes across cultures (countries/nations).**

Using APA style, describe quotations, i-e what is their format in writting a literature view?- Ch#45

**American Psychological Association style of writing was developed by social and behavioral scientists to standardize the writing of scientific** apa **style papers in the scientific profession of psychology. The writing of an** apa **style paper requires the writer to pay attention to pay attention to mechanical details in the writing such as margins, typeface, margins, page headers and line spacing.**

**Writing** literature **article reviews is not an easy task for any level student. This is because the student is required to read the** literature **material, which are usually wide and provide their deeper meaning in the article reviews.** literature **article reviews also require wide research in order to understand the concepts being discussed in the** literature **materials**.

Parts of executive summary 5marks

The summary contains four elements:

1. The objectives of the report are stated, including the most important background and specific purposes of the project.

**2. The major results are presented. The key results regarding each purpose should be included.**

**3. The conclusions that are based on the results. There should be logical interpretation of the results which could lead to the stated conclusions.**

**4. The recommendations or suggestions for action, which are based on the conclusions. The recommendations must logically emerge from the results.**

## Parts of research report 3marks

**The Makeup of the Report - the Report Parts**

• **Prefatory parts**

**1.** Title fly page

**2.** Title page

**3.** Letter of transmittal

**4.** Letter of authorization

**5.** Table of contents

**6.** Executive summary

• **Main body**

**1.** Introduction

**2.** Methodology

**3.** Results

**4.** Conclusions and recommendations

**5.** References

• **Appended parts**

**1.** Data collection forms (questionnaires, checklist, interview guide, other forms)

**2.** Detailed calculations

**3.** General tables

**4.** Other support material

**5.** Bibliography, if needed

**Components of bivariate tables 3 marks**

**Bivariate Tables**

**The bivariate contingency table is widely used. The table is based on cross-tabulation (crossclassification); that is the cases are organized in the table on the basis of two variables at the same time. A contingency table is formed by cross-tabulating the two or more variables. It is contingent because the cases in each category of a variable get distributed into each category of a second variable. The table distributes cases into categories of multiple variables at the same time and shows how the cases, by the category of one variable, are "contingent upon" the categories of the other variables.**

**How we can use seconadry analysis?**

**Secondary analysis is increasingly used by researchers. It is relatively inexpensive; it permits comparisons across groups, nations, or time; it facilitates replication; and permits asking about issues not thought by the original researchers. Large-scale data collection is expensive and difficult. The cost and time required for major national surveys that uses rigorous techniques are prohibitive for most researchers. Fortunately, the organization, preservation, and dissemination of major survey data sets have improved.**

**53)** Reference Formate **5 marks.**

**Reference Formate**

**Author: Abraham Maslow**

**Name of Journal: International journal of psychology**

**Title: Need hierarchy theory**

**Page number: 20-23**

**Year of publish: 1946**

What is bibliography and reference. 3 Lecture No 45

- A bibliography is the listing of the works that are relevant to the topic of research interest arranged in alphabetical order of the last names of authors.
- A reference list is a subset of the bibliography, which includes details of all the citations used in the literature survey and elsewhere in the report, arranged again, in the alphabetical order of the last names of authors.

## What do we write in executive summary of a research report?

**Executive Summary of Research Report:**

**It is very important part of the report. And it is observed that mostly managers read summary report normally and rest members read whole report.**

**The summary contains four elements:**

**1. The objectives of the report are stated, including the most important background and specific purposes of the project.**

**2. The major results are presented. The key results regarding each purpose should be included.**

**3. The conclusions that are based on the results. There should be logical interpretation of the results which could lead to the stated conclusions.**

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## Components of bivarients 3marks

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