

Final Assessment

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BBA program

Course title: Research Method

Course Code: Res-431

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Answer to the question No: 1

ANOVA: Analysis of Variance (ANOVA) is a statistical formula used to compare variances across the means (or average) of different groups. A range of scenarios use it to determine if there is any difference between the means of different groups.

The basic principle of ANOVA are
discussing below: The basic principle of ANOVA is to test for differences among the means of the populations by examining the amount of variation within each of these samples relative to the amount of variation between the samples.

$f = \frac{\text{Estimate of population variance based on between samples variance.}}{\text{Estimate of population variance based on within samples variance.}}$

This value of F is to be compared to the F-limit for given degrees of freedom. If the F value we work out is equal or exceeds the F-limit value, we may say that there are significant differences between the sample means.

and A student's t-test is used to test the null hypothesis that the difference between the sample means is zero.

Now by comparing the calculated F value with the F-limit value, we can determine whether the null hypothesis is rejected or not. If the calculated F value is greater than the F-limit, then we reject the null hypothesis and conclude that there are significant differences between the sample means. This is because the calculated F value is greater than the F-limit, which means that the variance between the sample means is significantly different from the variance within the samples. This indicates that the null hypothesis is false and we can conclude that there are significant differences between the sample means.

Answer to the question No:2

Hypothesis in research: A hypothesis

(Plural: hypotheses), in a scientific context,

is a testable statement about the

relationship between two or more variables

or a proposed explanation for some observed

phenomenon.

Hypothesis testing: Hypothesis testing is a

formal procedure for investigating our

ideas about the world using statistics. It

is most often predictions, called hypotheses

that arise from theories.

There are 5 main steps in hypothesis

testing:

1. Step 1: State your null and alternate hypothesis.

2. Step 2: Collect data

3. Step 3: Perform a statistical test

4. Step 4: Decide whether to reject or fail to reject your null hypothesis

5. Step 5: present your findings

1) Step 1: State your null and alternate

hypothesis: After developing your initial research hypothesis (the prediction that you want to investigate), it is important to restate it as

a null (H_0) and alternate (H_a) hypothesis

so that you can test it mathematically.

2) Step 2: Collect data: For a statistical test

to be valid, it is important to perform

Sampling and collect data in a way that is designed to test your hypothesis. If your data are not representative, then you cannot make statistical inferences about the population you are interested in.

3) Step 3: perform a statistical test: There are a variety of statistical tests available, but they are all based on the comparison of within-group variance (how spread out the data is within a category) versus between-group variance (how different the categories are from one another).

4) Step 4: Decide whether to reject or fail to reject your null hypothesis: Based on the outcome of your statistical test, you will have to decide whether to reject or fail

to reject your null hypothesis.

5) Step 5: present your findings: The results of hypothesis testing will be presented in the results and discussion sections of your research paper, dissertation or thesis.

Answer to the question No: 3

Interpretation required conducting a research:

The interpretation of data helps researchers to categorize, manipulate, and summarize the information in order to answer critical questions.

The importance of data interpretation is evident and this is why it needs to be done properly.

Major techniques of interpretation: There are 8 types of interpretation:

1) Remote simultaneous interpretation: Remote simultaneous interpretation (RSI) is the mode that is continuously getting more attention due to its remote applications.

2) Simultaneous interpretation: Simultaneous interpreters translate the speech in their

head and deliver it in the preferred language instantly, with a minimum delay, in a matter of milliseconds. It requires immediate comprehension from the audience and speaker as the original speech continues with no interruptions.

3) consecutive interpretation: The consecutive mode relies heavily on taking structured notes. When used at on-site events, consecutive interpretation can only occur if an interpreter stands in close proximity to the presenter.

4) whispered interpretation: Whispered interpretation is also called chuchotage (whispering in French). A whispered interpreter interprets the message in their head and "whispers" it to the client. The interpreter

leans over and communicates the message in a client's preferred language in a quiet voice.

5) Relay interpretation: Relay interpretation is your best mode when there are no interpreters available for a particular language pair. For example, if Finnish to Latvian interpreters are missing, a mediating process could take place.

6) Liaison interpretation: Liaison as a process, is established as a close working relationship between people or organizations. It is the most informal mode of interpretation that can lack some accuracy.

7) Travel interpretation: Travel interpretation

(also known as escort interpretation) is a mode of interpretation that stands out from others from a cultural perspective. Travel interpreter accompanies the client to the previously agreed destination and helps them overcome the language barrier through interpretation.

8) Over-the-phone interpretation: Over-the-phone interpreting (OPI) is one of the remote interpretation services. Such service providers tend to operate in more than 100 languages.

Governmental institutions often use OPI on occasions related to healthcare or public concerns in countries like the United States.

Answer to the question No:4

The concept of research report: Research

reports are recorded data prepared by researchers on statisticians after analyzing the information gathered by conducting organized research, typically in the form of surveys or qualitative methods. A research report is a reliable source to recount details about a conducted research.

Different steps in writing report: Writing a report can be a complex and time-consuming process, but by following a structured approach you can ensure that your report is clear, concise, and effective. Here are the steps involved in writing a report:

1) Define the purpose and scope of the report:

Determine the reason for writing the report and what you want to achieve with it. This will help you to focus your research and determine what information to include in the report.

2) Gather Data and Information:

Collect relevant data and information from various sources, such as books, articles, interviews, and surveys. Ensure that the information you gather is accurate and relevant to the purpose of the report.

3) Analyze the Data:

Organize and analyze the data to identify trends, patterns, and relationships. This will help you to draw meaningful conclusions and make recommendations.

4) Outline the Report Structure:

Create an outline of the report's structure, including the main sections, sub-sections, and headings. This will help you to organize the information and ensure that the report is easy to read and understand.

5) Write the Report:

Start by writing the introduction, which should provide background

information and explain the purpose of

the report. Then, write the main body of

the report, including the results, discussion

and conclusion. Finally write the executive

summary and conclusion, which should

summarize the main findings and

recommendations of the report.

6) Format and present the Report: Format the report to ensure that it is visually appealing and easy to read. Choose appropriate charts, tables and graphs to present the data and make sure they are easy to understand.

7) Review and Edit the Report: Review the report for grammar, spelling and punctuation errors. Ensure that the report is well-structured and that the information is presented in a clear and concise manner. Make revisions as needed to improve the overall quality of the report.

8) Finalize the Report: After you have reviewed and edited the report, it's

time to finalize it. This can include adding a title page, table of contents, references, and appendices, if necessary.