

Dissertation Workshop Group Activity

Topic

The Relationship Between Customer Satisfaction and Brand Loyalty Among iPhone Users

Group format

Work in groups of up to three students.

Purpose

This activity will help you practise analysing quantitative data and writing the Methodology, Findings, Discussion and Conclusion chapters of a dissertation.

You will be provided with:

- The research title, aim, objectives and questions
- The questionnaire
- A CSV dataset containing survey responses

You do not need to collect any data.

Research objectives

1. To assess the level of customer satisfaction among iPhone users.
2. To assess the level of brand loyalty among iPhone users.
3. To examine the relationship between customer satisfaction and brand loyalty among iPhone users.

Research questions

1. What is the level of customer satisfaction among iPhone users?
2. What is the level of brand loyalty among iPhone users?
3. What is the relationship between customer satisfaction and brand loyalty among iPhone users?

Activity tasks

Task 1: Prepare the data

Open the CSV dataset using Excel, SPSS or another suitable statistical tool.

Create the following two variables:

- **Customer Satisfaction Score:** calculate the mean of Q6, Q7, Q8 and Q9 for each respondent.
- **Brand Loyalty Score:** calculate the mean of Q10, Q11, Q12 and Q13 for each respondent.

These scores will range from 1 to 5. A higher score indicates greater customer satisfaction or brand loyalty.

Task 2: Conduct descriptive analysis

For both the **Customer Satisfaction Score** and **Brand Loyalty Score**, calculate:

- Mean
- Median
- Mode
- Standard deviation
- Skewness
- Minimum and maximum

Create:

- A histogram of the Customer Satisfaction Score
- A histogram of the Brand Loyalty Score
- A summary table comparing the descriptive statistics for the two variables

Use the results to identify:

- The overall level of customer satisfaction
- The overall level of brand loyalty
- The amount of variation in the responses
- Whether the scores are approximately symmetrical or skewed

Task 3: Conduct correlation analysis

Use **Pearson's correlation** to examine the relationship between Customer Satisfaction and Brand Loyalty.

Report:

- Correlation coefficient (**r**)
- Significance value (**p**)
- Sample size (**n**)
- Direction of the relationship
- Strength of the relationship
- Whether the relationship is statistically significant

Create a **scatterplot** showing Customer Satisfaction on the horizontal axis and Brand Loyalty on the vertical axis.

Use the following hypotheses:

- **H₀**: There is no statistically significant relationship between customer satisfaction and brand loyalty among iPhone users.
- **H₁**: There is a statistically significant relationship between customer satisfaction and brand loyalty among iPhone users.

Use a significance level of **p < .05** when making your decision.

Task 4: Write the Methodology (150–200 words)

Briefly explain:

- The use of a quantitative research approach
- The survey strategy and questionnaire
- The use of the provided survey dataset
- The target respondents: current iPhone users
- The use of descriptive statistics and Pearson's correlation
- The software used to analyse the data

Task 5: Write the Data Analysis and Findings (300–400 words)

Present:

- The descriptive statistics for Customer Satisfaction
- The descriptive statistics for Brand Loyalty

- The histograms and summary statistics table
- The Pearson correlation result
- The scatterplot
- The decision to accept or reject the null hypothesis

Report the results clearly without providing a detailed explanation of why they occurred.

Task 6: Write the Discussion (250–350 words)

Explain:

- What the satisfaction results mean
- What the loyalty results mean
- What the correlation result means
- How the findings answer the research questions
- Whether the relationship is positive or negative, weak or strong, and statistically significant
- Possible reasons for the findings
- One limitation of the study

Do not claim that customer satisfaction **causes** brand loyalty. Correlation shows an association, not causation.

Task 7: Write the Conclusion (100–150 words)

The conclusion should:

- Summarise the main findings
- Answer all three research questions
- State the overall outcome of the study
- Avoid introducing new evidence or arguments

Expected group submission

Each group should submit:

- Methodology: 150–200 words
- Data Analysis and Findings: 300–400 words
- Discussion: 250–350 words
- Conclusion: 100–150 words

- One descriptive-statistics table
- Two histograms
- One scatterplot
- Pearson correlation output

Base all analysis and writing on the provided dataset and keep the Findings, Discussion and Conclusion sections separate.