Institute of Management - Nirma University

Service Marketing - Assignment 2025

**Statistical Test Description & Analysis**

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**Analysis & Test Description**

1. Descriptive Statistics –

* Mean, median, mode, Variance and standard deviation for Reliability, Responsiveness, Assurance, Empathy, Tangibles, and Overall Satisfaction.
* Percentage distribution for Gender, Age Group, Education, Occupation, Overall Satisfaction and Ticket Booking Method.
* Travel class preference trends over years using frequency distribution.

1. Frequency Analysis –

* How frequently GSRTC services are used vs. Preferred travel class
* Ticket booking method vs. Age Group
* Years of service usage vs. Satisfaction level
* Occupation and Income vs. GSRTC Usage Frequency

1. Chi-Square (𝛘²) Test –

* Gender vs. Preferred Travel Class - Do males and females have different travel class preferences?
* Age Group vs. Booking Method - Is there any relation between age and how people book tickets?
* Income vs. GSRTC Usage Frequency - Does income level affect how often people use GSRTC?
* Education vs. Satisfaction Level - Does education level influence satisfaction with GSRTC services?

1. Independent Sample t-Test –

* Gender vs. Satisfaction - Do males and females rate satisfaction differently?

1. One-Way ANOVA –

* Age Group vs. Satisfaction Level - Do different age groups have varying satisfaction levels?
* Personal Income vs. Satisfaction Level - Do different income groups use GSRTC differently?
* Education Level vs. Booking Method - Does education affect how people book tickets?

1. Regression Analysis –

* Multiple Regression:
  + Satisfaction as the dependent variable and Reliability, Responsiveness, Assurance, Empathy, and Tangibles as independent variables .
  + Usage Frequency as the dependent variable and Income, Occupation, and Age as independent variables .