Chapter 12 Case Clues

Case 12.1 The Hobbit’s Choice Restaurant Survey Descriptive and Inference Analysis

Case Objective

You are to use the SPSS data set pertaining to the Hobbit’s Choice Restaurant case, determine the scaling assumptions underlying each question, run the proper descriptive or inferential analysis, and interpret the findings.

Clues to Case Questions

1. Determine what variables are categorical (either nominal or ordinal scales), perform the appropriate descriptive analysis, and interpret it.

   Clue: The chapter indicates that categorical variables are nominal variables that require the use of SPSS Frequencies to determine their percentage distributions.

2. Determine what variables are scale variables (either interval or ratio scales), perform the appropriate descriptive analysis, and interpret it.

   Clue: The “scale” variables identified in the SPSS data set are largely interval scales.

3. What are the population estimates for each of the following?

   For a, b, and c, one must use SPSS to determine the percentage and then calculate the confidence interval for the percentage using the formula provided in the textbook. With d and e, the variables are ratio, so a one-sample t test should be used with the Test Value set to 0. For the age, one must calculate the age by subtracting the year born from present year (e.g., age=2010-yrborn).

   a. Preference for “easy listening” radio programming
   b. Viewing of 10 p.m. local news on TV
   c. Subscribe to City Magazine
   d. Average age of heads of households
   e. Average price paid for an evening meal entrée

   Clue: Remember that SPSS will calculate confidence intervals for means, but you must use the Frequencies procedure and calculate percent confidence intervals yourself.

4. Because Jeff Dean’s restaurant will be upscale, it will appeal to high income consumers. Jeff hopes that 25% of the households have an income level of $100,000 or higher. Test this hypothesis.
Clue: 25% is a percentage, not a mean.

5. With respect to those who are “very likely” to patronize the Hobbit’s Choice Restaurant, Jeff believes that they will either “very strongly” or “somewhat” prefer each of the following: (a) waitstaff with tuxedos, (b) unusual desserts, (c) large variety of entrees, (d) unusual entrees, (e) elegant décor, and (f) jazz combo music. Does the survey support or refute Jeff’s hypotheses? Interpret your findings.

Clue: “Very likely” corresponds to a “5.”

Case 12.2 Integrated Case: Global Motors Descriptive and Inference Analysis

Case Objective

In this case, you will use the SPSS data set pertaining to integrated case, Global Motors, determine the scaling assumptions underlying each question, run the proper descriptive or inferential analysis, and interpret the findings.

Clues to Case Questions

The proper SPSS output follows each question.

1. **What is the demographic composition of the sample?**

   Clue: The chapter indicates that categorical variables are nominal variables that require the use of Frequencies to determine their percentage distributions. It is also appropriate to use Frequencies to analyze ordinal variables.

2. **How do respondents feel about (1) global warming and (2) the use of gasoline?**

   Clue: Feelings are typically measured on a metric continuum: scale variable.

3. **What type of automobile model is the most desirable to people in the sample? What type is the least desirable?**

   Clue: Opinions are measured on a metric continuum: scale variable.

4. **Describe the “traditional” media usage of respondents in the sample.**

   Clue: “Traditional” media refers to TV, radio, magazine, and newspaper. These are “check only one” measures.

5. **Describe the social media usage of the respondents in the sample.**
Clue: Social media are the last 5 variables in the dataset. People use these up to several times a day.

6. The Global Motors principals believe that the desirability on the part of the American public for each of the automobile models under consideration is the following.

<table>
<thead>
<tr>
<th>Vehicle Model Type</th>
<th>Desirability*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-seat all-electric</td>
<td>3</td>
</tr>
<tr>
<td>4-seat all-electric</td>
<td>4</td>
</tr>
<tr>
<td>4-seat gasoline hybrid</td>
<td>4</td>
</tr>
<tr>
<td>5-seat diesel hybrid</td>
<td>3</td>
</tr>
<tr>
<td>5-seat standard size gasoline</td>
<td>2</td>
</tr>
</tbody>
</table>

*Measured on 1-7 scale.

Test these hypotheses with the findings from the survey.

Clue: The principals have a belief about the desirability of each model across all of the American public. Test each of these 5 beliefs.