

## Assignment 1: Santa Fe Grill Analysis Questions

For each of the questions below, clearly answer the following questions: (a) what test did you use? (b) in no more than two or three sentences, explain why you chose this test, and (c) answer the managerial questions posed. Make sure you attach copies of your SPSS printouts.

1. Describe the central tendency and dispersion of the data for the question on satisfaction (X22) and frequency of patronage (X25). Use a histogram to tell you how closely the data approximates a normal distribution. What does this analysis tell you?
2. Let's say the owners of the Santa Fe grill feel that if they score a mean of 4 on X16, it would reveal that consumers generally see their meal prices as reasonable. How would you check the data to see if this is true (i.e., prices are not different from 4)?
3. The owners would like to know if they are meeting the needs of all their customers. They have heard some grumblings about unequal treatment. Can you find out if there are any gender differences in satisfaction with the restaurant (X22)?
4. The owners were a little surprised to see that food *taste* was rated higher than food *temperature* (since they expected these to be closely related). Someone suggested that the difference was small and may not really be significant. Is there a significant difference between customers' ratings of food taste and temperature?
5. Is there a relationship between the distance customers travel to reach the restaurant and their gender on their satisfaction with the restaurant?
6. The owners then began to wonder if there is a relationship between distance traveled to the restaurant and gender. Are males more likely to drive from further away compared to females?
7. While this seems obvious, the owners of the grill would like you to confirm that there is a significant and positive relationship between satisfaction with the restaurant and the likelihood of recommending the restaurant to others. What percentage of the variation in respondents' likelihood of recommending the restaurant can be explained by their satisfaction?
8. Is there a correlation between the rankings respondents gave to "food quality" compared to "service"? What are the modal and median rankings given to the four restaurant selection factors?
9. Assuming that there is a linear relationship between perceptions of prices and satisfaction, the owners want details on that relationship. For every unit increase in perceptions of how reasonable prices are, how much of an increase in overall satisfaction can the owners expect?
10. To what extent are the various perceptions of food at the restaurant (freshness, taste, temperature) related to satisfaction? Anything in your analysis that doesn't make sense? How would you managerially respond to these results? What other analysis would you be interested in running, from a managerial perspective to see the effect on satisfaction?

### OPTIONAL QUESTIONS (TOTAL of 1 point extra credit)

11. Assess the extent to which multicollinearity is likely to be a problem when examining the impact of food perceptions on satisfaction (you want tolerance  $>.10$  and VIF  $<5$ ). Also, make sure correlations between the independent variables are not exceedingly high ( $>.70$ ).
12. Can the various restaurant perceptions (X12-X21) be reduced into some meaningful factors? Are these variables linked together in some meaningful manner? How do these factors influence satisfaction with the restaurant?

COMPLETED ASSIGNMENT DUE IN CLASS ON APRIL 11, 2008