GENDER-CHOICE BEHAVIOR LINKAGES: AN INVESTIGATION IN THE HOSPITALITY INDUSTRY

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Abstract
Purpose – The purpose of this study is to investigate whether males and females differ on the emphases they place on core service and relational service in choosing a hotel.
Design/Methodology – Data were gathered from the residents of a metro area in the United States. Three hundred and forty-one residents participated in the study. The Del statistic, an undertapped technique, was used.
Findings – The results reveal that male and female guests are essentially the same in the importance they place on core and relational services in choosing a hotel.
Originality of the research – Empirical research about the hotel choice behavior of female guests is scarce. Therefore, this study addresses this underresearched issue.
Keywords core service, the Del statistic, gender, hotel industry, relational service

INTRODUCTION

In today’s trying service environment, a basic imperative for hotels to stay afloat, survive and thrive is an understanding of their guests. This above all necessitates an understanding of how guests choose a particular hotel (Kim and Perdue 2013; McCleary et al. 1994). Choice criteria are central to this process and the study reported in this article expands on earlier research and examines the similarities and differences in the hotel selection criteria used by female and male guests. A study addressing this topic is useful and relevant.

While much is known about the hotel choice behavior of male guests, research on the behavior of females is sparse. This is surprising since female travelers play active roles in travel decision-making in their households where 80 percent of all travel decisions are made by women (Bond 2015). According to recent estimates, 32 million single American women traveled at least once last year and about 30 percent of them took five or more trips (Bond 2015). More remarkably as women move up the career ladder in all businesses, there is a growth in the ranks of female business travelers (Mulrine 2001). Today, 47 percent of women who travel travel for business (Garcia 2014). In 1970 a mere 1 percent of the business travelers were women (Matte 2000). Three decades later, a survey of business travelers conducted by the Travel Industry Association determined that women, on the average, took four business trips a year with 6 percent of all female business travelers making 10 or more trips annually.
These days, indeed, women are no longer ‘stay-at-home’ moms waiting anxiously for their business-traveling husbands to return to the nest. In 2010, nearly half of all business travelers were women up from approximately 25 percent in 1991 (Brownell 2011; Gargiulo 2012).

With so many women traveling on pleasure and business trips, it is important for hotels which have traditionally courted male customers to better understand and cater to the needs of this fast growing segment of the guest market (Yetzer 2000). It should be remembered that gender meets several of the requirements for a successful targeted marketing strategy. It is easy to identify and measure, easy to access, durable, and large enough to be profitable.

A related objective of our study is to introduce the Del statistic, an undertapped technique, that overcomes certain problems associated with the use of inappropriate techniques in the analysis of categorical data.

BACKGROUND

A scrutiny of prior research on hotel choice criteria (e.g. Ananth et al. 1992; Barsky and Labagh 1992; Kim and Perdue 2013; LeBlanc and Nguyen 1996; Lockyer and Roberts 2009; Yao-Hsu et al. 2015) suggests that the services provided by hotels to guests can be decomposed into two components: core service and relational service (Iacobucci and Ostrom 1993). The core component of a service refers to the nucleus of the service offering. The relational component, on the other hand, describes the interpersonal process by which the service is delivered to customers (cf. Dimitriadis and Koritos 2014; Sun and Qu 2011). The core and relational service quality dichotomy neatly corresponds to the technical quality (what is delivered) and functional quality (how service is delivered) taxonomy advocated in a now-classic work by Gronroos (1984). While technical quality encompasses such characteristics as reliability and security, temporal characteristics (e.g. courtesy, helpfulness and pleasantness of the service) are associated with the functional and relational aspects of the service.

Gender differences

Prior studies on gender differences in sociology, psychology as well as in marketing management relying on biological make-up (brain lateralization) and socialization perspectives (Putrevu 2001) suggest that males and females may differ in their choice behaviors in general and the emphasis they place on choice attributes, in particular. According to the brain lateralization perspective, females’ hemispheres may be more symmetrically organized while men’s hemispheres are more specialized (Saucier and Elias 2001). Women process information in a more integrated and detail-oriented fashion while men focus on few details. They attempt to simplify the decision process (Phillip and Suri 2004) and utilize a heuristic-based approach (Sun and Qu 2011).
The socialization perspective maintains that societal norms create traditional sex roles (Eagly 1987) where males are primarily guided by norms that require control, mastery and self-efficacy to pursue self-centered goals. Females, on the other hand, are guided by concerns for self and others. Also men are more agentic (task- or goal-oriented) whereas women are more communal (relationship-oriented) (Hupfer 2002; Iacobucci and Ostrom 1993). This agentic versus communal distinction between the two sexes impacts how each gender (the more emotional females and the more rational males) observes, evaluates and relates to the environment (Rudmin 1990).

Research based on the widely-studied Myers-Briggs Type Indicators (MBTI) adds that females are emotion-dominated “Feeling” types while males are logic-dominated “Thinking” types (Rideout and Richardson 1989). This stream of research suggests that “Thinking” type people evaluate experiences on the basis of rational factors whereas "Feeling” types tend to rely on affective processes (Carey et al. 1989). Research also shows that women have a greater concern for social context and relationships and place more importance on interpersonal relationships relative to men (Belenky et al. 1986). In addition, in the American society women are seen as warm and emotionally expressive while men are typically perceived as technically competent and instrumental (Deaux 1984).

Overall, women are more expressive and receptive to emotional communication (e.g. Sprecher and Sedikides 1993). In the formation of relationships, emotional considerations are more important to women whereas men tend to stress rational factors. Empirical evidence specifically in the context of services also shows that females and males differ in their approaches to forming relationships with service providers (Shemwell and Cronin 1995) and in evaluating service encounters (Iacobucci and Ostrom 1993; Yavas et al. 1999).

Translating such difference into choosing a hotel, one would expect men to place more emphasis on the rational and cognitive aspects of hotel choice whereas women would be more likely to make their decisions on the basis of affect-intensive factors. Similarly, because women are socialized to maximize the interpersonal aspects of their relationships, they would be expected to emphasize the relational component of service delivery and be more influenced by relational cues. Men, on the other hand, would be expected to focus more on the core service.

Based on the preceding discussion, we advance the following hypotheses:

**Hypothesis 1:** Males place higher importance on core service when choosing a hotel.
**Hypothesis 2:** Females place higher importance on relational service when choosing a hotel.
METHOD

Sample

Data to achieve the purposes of the study were collected through self-administered questionnaires from the residents of a metro area in the United States. Five hundred questionnaires were hand distributed to potential respondents satisfying the following condition; the respondent had to have stayed in a hotel for business or pleasure purposes at least twice within the past 12 months. If a respondent did not meet this condition during the initial screening, then members of the field force sought an alternative respondent in the same neighborhood. After a two-week period, of the 500 questionnaires thus distributed, 341 usable ones (68 percent response rate) were retrieved. Of those respondents 182 were females and 159 males.

A comparison of the characteristics of the two groups revealed that 56 percent of male respondents had college or better education compared with 36 percent of females. Both groups came from households with comparable incomes. Thirty-five percent of male and 30 percent of female respondents earned more than $45,000. Fifty-four percent of male and 49 percent of female respondents were married. Compared with 57 percent of male respondents, 53 percent of female respondents were between the ages of 25 and 44. About one fifth (19 percent) of female and 34 percent of male respondents indicated that the primary purpose of their hotel stay was business. On the average, males spent 2.31 nights in a hotel per stay compared with 2.49 nights per stay for females.

Measurement

The list of attributes that people use in selecting a hotel was canvassed from the literature (cf. Ananth et al. 1992; Barsky and Labagh 1992; Hwang 2007; Kim and Perdue 2013; LeBlanc and Nguyen 1996; Yao-Hsu et al. 2015) and guest satisfaction surveys distributed by various hotel chains. The process resulted in a pool of 28 attributes. After evaluating each item for its content, the researchers then reduced the list to 10 attributes five of which related to core service and the remaining five to relational service. The items generating a consensus were: core service (room amenities in good working condition, attractiveness of exterior design/appearance, attractiveness of interior design/lobby, cleanliness of rooms, cleanliness of bathrooms) and relational service (convenience of check in/check out, courtesy of personnel, ease of making reservations, security/safety, promptness of service).

During the course of the study respondents were asked to indicate the level of importance they attached to these attributes on seven-point scales (7 = very important, 6 = important, 5 = slightly important, 4 = not sure, 3 = slightly unimportant, 2 = unimportant and 1 = not important at all). Composite scores were formed for each component (core service and relational service) by linearly combining the scores of attributes belonging to that component. The internal consistency reliabilities of the two measures were: core service (0.681) and relational service (0.702).
ANALYSIS

During the analysis stage, by using median scores of the composite measures as split-points, respondents were divided into high and low importance core service (relational service) categories. To analyze categorical data of this nature, researchers typically use the familiar Chi-square test. However, the Chi-square test measures the extent to which variables exhibit a non-random relationship, but it does not permit inferences of the type “the more of X, the more (or less) of Y.”

Drazin and Kazanjian (1993) cautioning that use of inappropriate methods to analyze data raises legitimate concerns about the validity of any inferences drawn from them, assert that in typical cross-classification studies, even where theory and predictions are precise, relationships between variables are inadequately tested. They add that majority of cross-classification studies reduce the level of precision in their theories to match the methods available and do not go beyond being exploratory.

Given precise directional hypotheses in our study concerning relationships between core (relational) service and gender, we use the Del statistic (Drazin and Kazanjian 1993), which overcomes such problems. The Del statistic measures the strength of categorically specified hypotheses as a proportionate reduction of error (PRE) in cross-classification analysis of nominal and ordinal data. Del goes beyond rejecting the null and specifies predictive hypotheses about categorical variables and measures the extent to which the hypotheses explain the observed data. Del is interpreted as the proportionate reduction in error of knowing the specific prediction rule over not knowing that rule. In the absence of such a rule, expected cell frequencies are determined by the marginal probabilities of the rows and columns which define them. While Chi-square measures a goodness of fit for the null hypothesis of no relationship, Del measures a goodness of fit for a directional relationship hypothesis.

The calculation of Del involves specifying the cells in which frequencies are expected to occur. To calculate the proportionate reduction in error, a comparison is made between the expected frequencies in the presence and absence of a prediction rule. Prediction errors are measured by assigning a weight (typically 1) to the cells in which frequencies are not expected to occur to penalize them when they do, and a weight of zero (0) to those cells in which they are expected to fall under. The expected frequencies of cells are then multiplied by the weights assigned to them and all products are summed. The observed frequencies of each cell are also multiplied by their corresponding weights and summed. Del which is the measure of prediction success is the expected errors minus the observed errors divided by the expected errors. In the absence of observed errors, the goodness of fit is perfect and Del =1.

The significance of a given value of Del is determined by calculating its corresponding z-score as follows:

\[ Z = \frac{\text{del}}{(V)^{1/2}} \]

where V (the variance of Del) is:

\[ V = \frac{\sum_{i} \sum_{j} (w_{ij} P_{ij}) - (\sum_{i} \sum_{j} w_{ij} P_{ij})^2}{n[\sum_{i} \sum_{j} (w_{ij} P_{ij})]^2} \]
In this formula:

\[ w_{ij} = 1 \text{ or less for specified error cells and } 0 \text{ for predicted cells,} \]
\[ P_{ij} = \text{cell probabilities, and} \]
\[ P_i P_j = \text{marginal probabilities for the } i\text{th row and the } j\text{th column, respectively.} \]

RESULTS

Table 1 displays the results of Chi-square tests, which we conducted prior to performing Del to serve as a reference point. The null hypotheses in the case of Chi-square test are that there are no relationships between gender and the importance attached to core (relational) service in choosing a hotel. A significant Chi-square result leading to the rejection of the null hypothesis would mean that the variables are related. The Chi-square results in Table 1 suggest that the relationship between gender and importance attached to core service is marginally significant and the gender-relational service relationship is not significant. Thus, at least on the face of it, the Chi-square results seem to provide some support regarding the validity of one of the hypotheses we advanced.

Table 2 presents the results of analysis using Del statistic. Given the hypothesized relationship between the variables, one would expect cell frequencies to load more heavily in the female-high and male-low cells in the case of relational service and in the reverse direction in the case of core service. As such, for instance, according to our directional hypothesis, the frequencies in the male-high and female-low cells in the case of relational service are “errors” (see Table 3).

Table 1: Chi-square test results

<table>
<thead>
<tr>
<th>Gender</th>
<th>Core</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>117 (109)</td>
<td>116 (124)</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>42 (50)</td>
<td>65 (57)</td>
</tr>
<tr>
<td></td>
<td>Chi-Square:</td>
<td>3.54</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Degrees of Freedom:</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Probability:</td>
<td>0.06</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Core</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>93 (86)</td>
<td>92 (99)</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>64 (71)</td>
<td>87 (80)</td>
</tr>
<tr>
<td></td>
<td>Chi-Square:</td>
<td>2.08</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Degrees of Freedom:</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Probability:</td>
<td>0.16</td>
<td></td>
</tr>
</tbody>
</table>

\(^a\) Numbers in parentheses are expected frequencies.
As can be seen from Table 2, with respect to core service dimension, 64 percent of the females attach low importance to this dimension as compared with 74 percent of males. Likewise while 36 percent of females attach high importance to core service dimension, little over one-quarter (26 percent) of males view this dimension of being high importance. Thus, in relative terms, females tend to view core service experience attributes more important than males. Overall \((117+65)/340=54\) percent of the respondents (male and female) are classified in the error cells. In the case of relational service, 49 percent of females vs. 41 percent of males view this dimension importantly.

Table 2: Del test results

<table>
<thead>
<tr>
<th>Service</th>
<th>Hypothesis</th>
<th>Del: 0.09</th>
<th>Z: 1.63</th>
<th>P: 0.10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Service</td>
<td>Hypothesis: There is no relationship between gender and emphasis placed on core service in choosing a hotel.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hypothesis: Males place higher importance on core service when choosing a hotel.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relational Service</td>
<td>Hypothesis: There is no relationship between gender and emphasis placed on relational service in choosing a hotel.</td>
<td>Del: 0.07</td>
<td>Z: 1.55</td>
<td>P: 0.12</td>
</tr>
<tr>
<td></td>
<td>Hypothesis: Females place higher importance on relational service when choosing a hotel.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For the hypotheses advanced in the study, the Del statistic is 0.09 for core and 0.07 for relational service dimensions with corresponding \(z\)-scores of 1.63 and 1.55. Both results are insignificant and refute the advanced hypotheses. Thus, by going beyond a mere test of no relationship as in the case of Chi-square, Del provides more concrete support and prevents derivation of an erroneous conclusion in the case of core service.
Table 3: Calculation of DEL: Relational service

<table>
<thead>
<tr>
<th>Relational Service</th>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Predicted</td>
<td>Error</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>Error</td>
<td>Predicted</td>
</tr>
</tbody>
</table>

\[
\text{DEL} = 1 - \frac{\text{observed errors}}{\text{expected errors}} = 1 - \frac{(64+92)}{(71+99)} = 1 - \frac{158}{170} = 1 - 0.93 = 0.07
\]

DISCUSSION

Summary of findings

Building upon the earlier research streams into gender differences and hotel choice criteria, this study investigated whether males and females differ on the emphases they place on core service and relational service in choosing a hotel. A sample of residents of a metro area in the United States served as the study setting in testing two research hypotheses. The results suggested that males and females were essentially the same in terms of the emphases they placed on core service and relational service in choosing a hotel. These results are counterintuitive and run against the existing received views (Iacobucci and Ostrom 1993). However, the results receive some support from a related study conducted among travelers who had stayed at a hotel within the past three months (Sun and Qu 2011). That study indicated that the effects of core and relational service quality on male and female travelers’ behavior did not differ. One plausible explanation for the male-female similarity found in our study is that women are joining the workforce in increasing numbers and with their increased involvement in the business world, a “blurring” of traditional gender-role distinctions is taking place.

On the bases of our study results, the answers to such intriguing questions as “Does gender matter in hotel choice?”, “Should hotels design their properties to pander to females?” “Should hotels dedicate even special floors and rooms for females only?” (cf. Pizam 2014) appears to be no. While separate facilities for females and males might be dictated by customs and religious norms in traditional societies, a gender-targeted approach would be an affront to women in western societies (Pizam 2014) such as the United States where the current study was undertaken. In any event our results do not warrant gender-based strategies. Instead, they point to a holistic
approach. In other words, actions targeted to one gender, say females, should pay dividends in the case of the other gender.

**Implications for practice**

Regardless of gender, delivery of core service in a competent manner is important. This means that the hotel management must organize training programs to equip their frontline employees with the requisite knowledge and tools to provide core services right the first time they are delivered. Frontline employees should also be provided with the necessary problem solving skills to identify and fix customer problems in real time when failures occur in delivery of core services. Hotel management should not ignore interpersonal skills training in their training programs. Interpersonal skills so critical for relational service should be used as a criterion not only in the employee selection process but also as a key component of customer-contact training. A two-pronged approach, thus, would ensure that employees are not only experts about the services they deliver but that they can also deliver them in a courteous, pleasant manner and meet their guests’ needs.

Given the importance of core and relational service, hotels can employ ads featuring favorable testimonials from real guests. This strategy can be especially effective with new guests who have not yet developed an established image of a hotel. Additionally, in their advertisements, hotels can concentrate on image executions that are hard for consumers to refute. For example, the relational service attributes identified in this study primarily deal with hotel personnel qualities. Accordingly, images of helpful and attentive employees can be portrayed in the ads in order to promote the match between the hotel and guests’ expectations (cf. Ladhari 2009).

**CONCLUDING REMARKS**

On a concluding note, we have to reiterate that our study contributes to the body of knowledge by furthering our understanding of the role of gender in choice behavior. In addition, our study draws attention to the Del statistic which is an undertapped technique in analyzing categorical data. As shown here, the Del Statistic has mathematical rigor and is relatively simple and easy to apply. It requires a minimum amount of data and is not sensitive to sample size. Furthermore, the requisite calculations can be easily programmed. In this paper, an Excel program was used in performing the calculations.

Despite the contributions of the study, certain issues may have confounded our results and may delimit generalizations. For instance, the purpose of the trip may affect the importance placed on core versus relational service. Business travelers who use a hotel for business meetings may have different expectations than “road warriors.” Similarly, leisure travelers who travel with children may have different expectations from a hotel than those who travel as couples or singles. Likewise, the size of a hotel and its rating (e.g. economy, luxury, boutique) may have confounded the results. Hence, investigation of the impact of such possible confounding factors in future research would be worthwhile.
Furthermore, this study’s setting was a single region, single industry and a single point in time. This may have led to sampling artifacts and ignored the potential temporal dynamics of the relationships. Therefore, generalizations beyond the specific context of this research must be guarded. Replications in other regions in the United States and elsewhere among respondents in hotel sector as well as other service settings are in order for conclusive generalizations. Finally, our measures can encompass a broader domain and be defined as higher-order constructs. Therefore, future refinements in study measures by collecting data not only through quantitative surveys but also through qualitative studies are in order to improve measures and their psychometric properties (e.g. reliability).

Thus, we culminate with a call for additional research on these issues and hope that our study will inspire other researchers to pursue these and other relevant issues in the future. Such research, on one hand, can further contribute to the generalizability of findings and theory building, and, on the other hand, can facilitate managerial decisions.

REFERENCES


