



## **Influence of Design Styles on User Preferences in Hotel Guestrooms**

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### **ABSTRACT**

In this study, the impact of the differences between the hotel guestroom design styles and the participants' gender on the dependent variables including preference, complexity and impressiveness was investigated. In the experiment, 82 Turkish persons rated the nine guestrooms grouped in contemporary, traditional and classical styles on seven-point Semantic Differential Scales for a total of five bipolar adjective pairs. According to the results, linear relationships were found between preference and complexity with preference and impressiveness indicated that preference increases with low complexity (simplicity) in line with high impressiveness. Furthermore, contemporary style guestrooms have had more positive evaluations for all dimensions compared to traditional and classical style guestrooms. In addition, males responded more positively than females. In conclusion, avoiding designs with complex features or those with excessive classical forms and using less ornate, smooth and simple forms or materials may contribute to the more positive perception of guestrooms by guests.

**Keywords:** interior design styles, preference, complexity, impressiveness, guestrooms

### **INTRODUCTION**

Hotels must pay special attention to maintaining high quality standards in hotel service environments, such as the guestroom, guest bathroom and the exterior that have the greatest impact on financial return (Kimes, 1999). In addition to this, guest satisfaction can be improved by their initial visual comfort. Consequently, guests' visual perceptions



of hotel guestrooms are important for pleasantness and satisfaction. With this in mind, this study focused on the perception of hotel guestrooms, which were designed with the same design features, but in different styles.

Guestrooms are considered to be a private space for guests in the hotel service environments. However, guestroom design focuses on these basic functions: a sleeping zone that permits viewing television in bed, a working area, a resting area, a bathroom and a storage space for clothes (Pullman & Robson, 2005). Guestrooms have a deep influence on the guests' relaxing and resting by creating a residential environment to make guests feel at home (Siguaw & Enz, 1999; Rutes, Penner & Adams, 2001; Lin, 2004). Today, the hospitality sector uses design and style as a way of differentiating itself from other hotels and of impressing the socially active hotel guests. In design, hotel services especially take into consideration decoration, ambience and furnishings along with developing all other elements and details to generate a homelike environment for guests (Siguaw & Enz, 1999; Bitner, 1992; Phillips, 2003; Countryman & Jang, 2006; Ryan & Huimin, 2007). Therefore, service providers and designers should pay special attention to the guestroom design from a guest's perspective for using the right interior design style to create a pleasant environment (Pullman & Robson, 2005; Lin, 2004; Bitner, 1992).

Many studies have shown that styles have common components and people are aware of them (Espe, 1981; Groat, 1982; Devlin & Nasar, 1989; Wilson & Canter, 1990). The physical properties of place and the persons' experience have emerged as the variables of why persons may prefer some styles. At the same time, a contradiction of preference may occur in response to a known (experienced) style (Purcell, 1986). Design, with these variables, may be evaluated by these environmental data and consequently, the choice of formal and symbolic meanings. Meanings are diversified by experience and content. Some studies have shown that symbolic meanings comprised the differences (Nasar & Kang, 1989; Nasar, 1989). Other studies have evaluated according to formal meaning (Herzog, Kaplan & Kaplan, 1982). Lastly, Kempen (2008) found that people can infer meanings from the scene of spaces, and spaces can give meaningful information to persons within the psychological process.

Styles in interiors that express the symbolic and formal meanings emerge as a need of a person's physical and psychological requirements. In every culture and every period, interior design styles show differences with their periodical or personal needs. With these differences, the changes made to interiors by users can be considered as a search for individual appearance, i.e. the need for comfort, identity and personalization. Interior



elements, such as furniture, personalize the environment and further give a message about who lives there (Cooper, 1974). Several studies have shown that elements used in interior spaces have broad symbolic significance. Especially, furniture defines personal style and social class (Cooper, 1974; Ritterfeld, 2002; Lihra & Graf, 2007; Yoon, Oh & Cho, 2010).

The preference of styles on architectural or interior environments has been supported by various studies (Nasar & Kang, 1989; Ritterfeld & Cupchik, 1996; Cupchik, Ritterfeld & Levin, 2003). Despite the importance of interior design styles, little is known about how people make preferences and which design styles they like in hotel guestrooms. The current study focuses on the preferences in complexity and impressiveness that might occur in hotel guestrooms when styles are considered.

There are a number of studies on hotel guestroom evaluations, but they support the research that the degree of perceived complexity is an important part of preferences for interiors. However, visual information presented by an environment is referred to by complexity (Berlyne, 1971; Kaplan & Kaplan, 1982; Ham & Guerin, 2004), and interior preferences may be changed by the complexity within the interiors' elements (Scott, 1993). Complexity occurs depending on the relation of the independent elements to each other, great differences in these elements and how they are used together. The perceived number of elements in an interior, particularly the noticeable differences among them, provides a measure of complexity. Perceived complexity correlates to the value at which usable information is made available to the person, or by the value of change in the noticeable differences (Kaplan & Kaplan, 1989; Rapoport, 1990; Akalin, Yildirim, Wilson & Kilicoglu, 2009). Berlyne (1960) identified complexity as a dominant factor influencing a person's level of arousal with the level of organization within elements.

Many studies have investigated whether or not there was a correlation between complexity and preference (pleasantness) (Berlyne, 1974; Wohlwill, 1976; Oostendorp & Berlyne, 1978; Rapoport, 1990; Imamoglu, 2000; Herzog & Shier, 2000; Akalin, Yildirim, Wilson & Kilicoglu, 2009). There seems to be, however, a disagreement on the relationship between complexity and preference. While in some studies, preference increased or decreased in relation to complexity (Kaplan, Kaplan & Wendt, 1972; Wohlwill, 1976; Nasar, 1983; Devlin & Nasar, 1989; Capanoglu, 2014), in others, maximum preference for intermediate degrees of complexity have found, decreasing to unpleasantness at the high and low complexity (Wohlwill, 1968; Berlyne, 1974; Wohlwill, 1975; Imamoglu, 2000; Akalin, Yildirim, Wilson & Kilicoglu, 2009). Apart from these



studies, there have been few interior service environment evaluations (Lin & Worthley, 2012; Orth & Wirtz, 2014), but perceived complexity may change the interior design style preferences of hotel guestrooms.

The current study aims to contribute to the above-mentioned literature by exploring the effect of the level of complexity on guestroom design styles for judgments of preference and complexity. It was expected that preference would be reduced due to an increase in complexity level as the guestroom design style changes (*H1*).

Impressiveness has an identical meaning with individuality of details as defined by Berlyne (1974). However, perceived impressiveness and perceived complexity have a linear relationship one increases and the other decreases as the interior scene changes (Devlin & Nasar, 1989; Capanoglu, 2014). In this study, it was expected in line with the previous studies that impressiveness would be reduced due to an increase in complexity level as the guestroom design style changes (*H2*).

An additional objective of the present study was to examine the role of gender as an important independent variable affecting preference. The concept of gender-role identification has been generally considered to be a major factor in the development of behavioral differences (Putrevu, 2001). According to some studies (Ritterfeld & Cupchik, 1996; Stamps & Nasar, 1997; Imamoglu, 2000; Putrevu, 2001; Yildirim, 2005; Yildirim, Akalin-Baskaya & Hidayetoglu, 2007), males and females perceived the environment differently and male users were usually more positive than female users. It is believed that males and females perceive the hotel guestrooms differently, i.e., male users are usually more positive in evaluating guestrooms than female users (*H3*).

## **METHOD**

### **Participants**

For this study, two different groups were formed, consisting of experts and laypersons. In the first stage of the study, 10 professors participated from the Hacettepe, Selçuk and Gazi Universities, who are experts on the subject of architecture and furniture history. In the second stage of the study, 82 laypersons between 35-45 years of age participated, of which 43 were females (52.4%) and 39 were males (47.6%). Of these 82 participants, 29 (35.3%) had attended high school and 53 (64.7%) had attended university. Laypersons were randomly selected from among the public group.



## **Environmental Setting**

A total of nine different guestrooms were used at the Bilkent Hotel, which has been serving its guests with a five-star hotel comfort since 1991 in Ankara, Turkey. When grouping the guestrooms into the styles, experts paid attention to physical properties (i.e. form, material, details, function, layout, design idea, accessories, measurements, furniture density, decoration, flat surfaces, sharp corners and bow lines), for every guestroom. In this direction, the experts grouped nine guestrooms according to the most determinant and differential features of their styles as contemporary, traditional and classical. Experts grouped the rooms in a similar manner, with nine guestrooms numbered 1, 2 and 3 as contemporary, refers to as low complexity (combinations of contemporary design features, i.e. using plain and smooth forms, solid wood and plain fabric furniture); with the guestrooms numbered 4, 5, and 6 as traditional, refers to as intermediate complexity (adaptations of eighteenth century design features, i.e. using curved forms, solid wood furniture) and with the guestrooms numbered 7, 8, and 9 as classical, refers to as high complexity (adaptations of antique and classic features, i.e. flamboyant forms, using brass furniture). When grouping the guestrooms the expert group approved the other features i.e. nightstand, lighting, curtain, floor, layout, density as identical when grouping into the styles with complexity levels.

In order to not affect the participants' color preferences, the pictures were shown in black and white. The examples of images of the guestrooms have been shown in Figure 1 and were taken from a similar view angle – from the left front corner of the room.

In the hotel service environments, the plan of the typical guestroom has determined the guestroom functions – sleeping, relaxing, working, entertaining, the bathroom and areas for dressing and clothes storage (see Figure 2). The sleeping area was at the center of the guestroom space, the seating and work areas were located near the window and the areas for dressing and clothes storage were grouped next to the entrance. Furnishings included a double bed, two nightstands, a dresser, a TV stand, a seating group, a minibar, a coffee table and accessories.

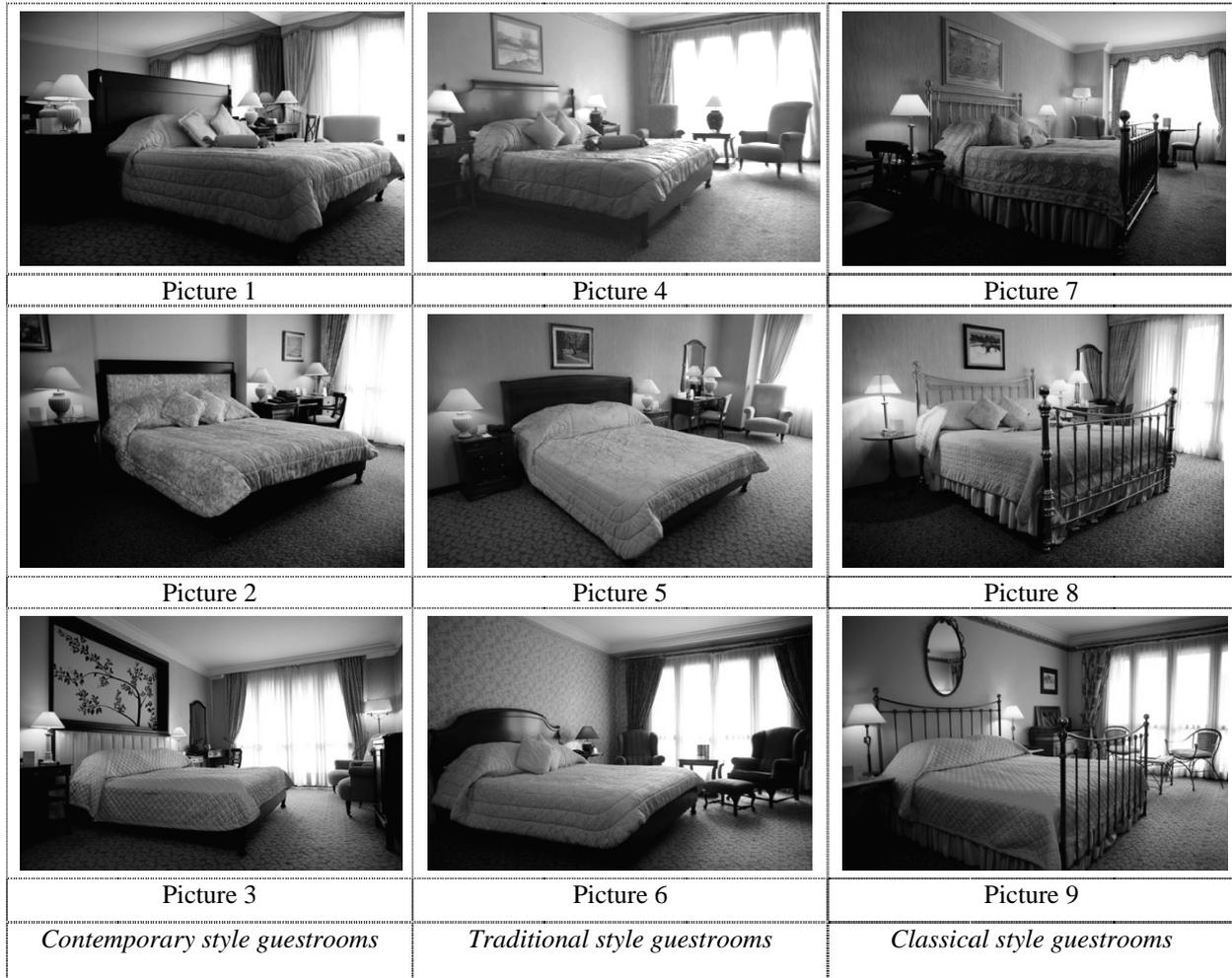


Figure 1: Executive guestrooms at the five-star Bilkent Hotel in Ankara, Turkey

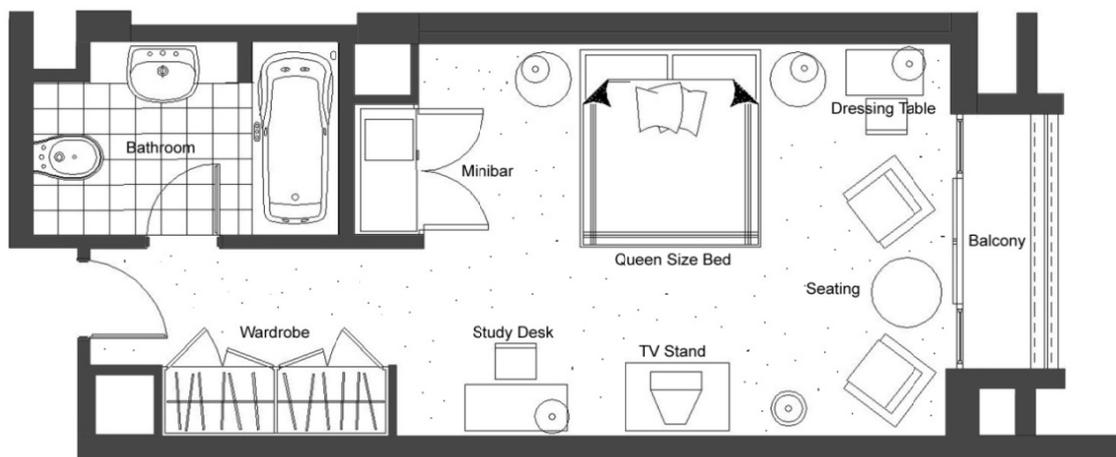


Figure 2: A standard plan drawing of the five-star Bilkent Hotel executive guestrooms



## Questionnaire Design and Procedure

In this study, two different questionnaires were used in the form of an expert questionnaire for the expert group, and a layperson questionnaire for the public group.

The expert questionnaire was prepared by utilizing the data used in previous studies (Akalin, Yildirim, Wilson & Kilicoglu, 2009; Akalin, Yildirim, Wilson & Saylan, 2010; Erdogan, Akalin, Yildirim & Erdogan, 2010). The expert questionnaire form consisted of two parts: the first part asked for general information about the participants' age and gender; the second part consisted of the physical features for their classification of the guestrooms' design styles. The expert group questionnaire form was based on grouping judgments of 10 experts as styles of the panoramic virtual images of the nine executive guestrooms and commensally from the black and white photographs of the A4-sized printouts.

The layperson questionnaire form consisted of two parts: the first part asked for general information about the participants (e.g., education, gender); the second part consisted of seven-point semantic differential scales about their perception of the guestroom design styles. The participants had to evaluate the importance of each of the bipolar adjective pairs on a 1-7 semantic differential scale where 1 = beautiful and 7 = ugly. The participants evaluated a total of five bipolar adjective pairs after familiarizing themselves with the items, three of which dealt with preference and the other two with complexity and impressiveness. Related bipolar adjective pairs were designated for each category; for preference: beautiful – ugly, pleasant – unpleasant, attractive – unattractive; for complexity: simple – complex, and for impressiveness: impressive – unimpressive. The technique of altering the sets of items from positive to negative, as previously done by Akalin et al. (2009), Berlyne (1974), Imamoglu (2000), Capanoglu (2014), Yildirim (2005), Yildirim et al. (2007), Akalin et al. (2010), Imamoglu (1979), Mattila and Wirtz (2001), Brennan et al. (2002), Kaya and Weber (2003), Leather et al. (2003), Lee and Brand (2005), Baskaya et al. (2006), Akalin-Baskaya and Yildirim (2007), and Yildirim et al. (2007) was adopted to reduce the probability of participants simply marking the scale on either of the extremes.

A participant evaluation was carried out for determining the preference for complexity and impressiveness for each guestroom. After collecting general information about the participants, the 360° black and white panoramic views of the nine guestrooms were presented one-by-one in a mixed order to the participants on a notebook computer from the hotel website and they were asked to rate each with the five bipolar adjective pairs as grouped in three groups of scale items (preference, complexity and impressiveness).



The study was conducted at different times of the day. It took subjects approximately twenty minutes to complete each of the questionnaires. The data obtained from this part were referred to as the rating data.

### Data Analysis

As a result of this study, the categorical means of the data have been defined with their standard deviations and the reliability of the semantic differential items was tested using the Cronbach's alpha test. To examine the effect of differences, the appropriate techniques of the one-way analysis of variance (ANOVA) and multivariate analysis of variance (MANOVA) were used. Tukey's honestly significant difference (HSD) test has been used for the differences among the dependent variables belonging to the variance sources, which were found to be significant in the analysis. In addition, the Pearson's correlation test was used to determine the relationship between the dependent variables. The data were given in graphs to compare the significant means of the variance in the analysis.

### RESULTS

The reliability of the semantic differential items, including the participants' perceptual evaluation of the guestroom design styles, was tested using the Cronbach's alpha test and has been given in Table 1. The Cronbach's alpha coefficient estimates of internal consistency for the scale, including the average scores for the five bipolar adjective pairs grouped together in Table 1, were 0.90. The coefficient of the scale was above 0.70, which is a threshold for good reliability according to some researchers (Bagozzi & Yi, 1988; Bosma et al., 1997; Grewal, Krishnan, Baker & Borin, 1998). The scale may therefore be considered reliable.

Table 1: Results of the reliability analysis for the dependent variables

| Dependent Variables | Scale Items               | Items' Reliability | Scale Reliability |
|---------------------|---------------------------|--------------------|-------------------|
| Preference          | beautiful – ugly          | 0.87               | 0.90              |
|                     | pleasant – unpleasant     | 0.88               |                   |
|                     | attractive – unattractive | 0.86               |                   |
| Complexity          | simple – complex          | 0.90               |                   |
| Impressiveness      | impressive– unimpressive  | 0.88               |                   |

Note: The scales' reliability is given for each dependent variable.

In this part, the statistical differences among the participants' evaluations of the guestroom design styles (*contemporary, traditional and classical*) for the dependent variables were analyzed. The results have been given in Table 2 as the mean, standard deviation and homogeneous group for the three groups of scale items (*preference,*



*complexity and impressiveness*). Tukey's HSD test was used for comparing the average values belonging to the differences among the guestroom design styles and for the differences among the dependent variables belonging to the variance sources. Therefore, Table 2 has indicated that perceptions of the guestroom design styles for the preference and impressiveness variables were statistically significant and the ordering of the design styles from the most positive to the most negative value have been given as follows: Contemporary > Traditional > Classical. Likewise, the evaluations of the participants including their perceptions of complexity for the design styles of the guestrooms were listed from simple to complex as follows: Contemporary (*low complexity*) > Traditional (*intermediate complexity*) > Classical (*high complexity*).

Table 2: Means, SD and HG of the dependent variables for the guestroom design styles

| Dependent Variables | Guestroom Design Styles |      |    |             |      |    |           |      |    |
|---------------------|-------------------------|------|----|-------------|------|----|-----------|------|----|
|                     | Contemporary            |      |    | Traditional |      |    | Classical |      |    |
|                     | M                       | SD   | HG | M           | SD   | HG | M         | SD   | HG |
| Preference          | 3.22 <sup>a</sup>       | 1.50 | A  | 3.60        | 1.37 | B  | 3.88      | 1.49 | B  |
| Complexity          | 3.06                    | 1.59 | A  | 3.17        | 1.58 | AB | 3.47      | 1.78 | B  |
| Impressiveness      | 3.73                    | 1.63 | A  | 4.27        | 1.50 | B  | 4.39      | 1.65 | B  |

Notes: M: Mean, SD: standard deviation, HG: homogeneous group

<sup>a</sup> Variable means ranged from 1 to 7, with higher numbers representing more negative responses.

The differences among the dependent variables for the guestroom design styles (*contemporary, traditional and classical*) were tested with the ANOVA (see Table 3). According to these results, the differences among the dependent variables including preference, complexity and impressiveness were found to be statistically significant (*at a level of  $p < 0.01$* ) for the guestroom design styles.

Table 3: ANOVA results of the dependent variables for the guestroom design styles

| Dependent Variables |                | Sum of Squares | df  | Mean Squares | F      | Sig.    |
|---------------------|----------------|----------------|-----|--------------|--------|---------|
| Preference          | Between groups | 54.031         | 2   | 27.016       | 12.669 | 0.000*  |
|                     | Within groups  | 1567.296       | 735 | 2.132        |        |         |
|                     | Total          | 1621.327       | 737 |              |        |         |
| Complexity          | Between groups | 21.759         | 2   | 10.879       | 3.963  | 0.019** |
|                     | Within groups  | 2017.744       | 735 | 2.745        |        |         |
|                     | Total          | 2039.503       | 737 |              |        |         |
| Impressiveness      | Between groups | 60.913         | 2   | 30.445       | 11.974 | 0.000*  |
|                     | Within groups  | 1869.537       | 735 | 2.544        |        |         |
|                     | Total          | 1930.450       | 737 |              |        |         |

Note: \*  $\alpha$ : 0.001 and \*\* $\alpha$ : 0.01 are the levels of significance.

According to the data of this study, the relationship between preference, complexity and impressiveness depending on design styles of the guestrooms (contemporary, traditional and classical) were tested using Pearson's correlations. The correlations between the



dependent variables have been given in Table 4. According to the results of Pearson's correlations in Table 4, it has been found that there were statistically significant relationships among the variables (at the level of  $p < 0.01$ ). Consequently, it can be stated that there are positive and highly reliable relationships among the variables.

Table 4: Pearson's correlations between the dependent variables

| Dependent Variables | Preference | Complexity | Impressiveness |
|---------------------|------------|------------|----------------|
| Preference          | 1          | 0.662**    | 0.785**        |
| Complexity          | 0.662**    | 1          | 0.472**        |
| Impressiveness      | 0.785**    | 0.472**    | 1              |

Note: \*\* Correlation is significant at the level of  $p < 0.01$  (2-tailed).

Representation of the above results has been given in a graph in Figure 3. From the evaluation of the means and homogeneous groups by the variables, the participants seemed to have had more positive evaluations about the style of the guestrooms with a low complexity (*contemporary style*) variable compared to the intermediate complexity (*traditional style*) and high complexity (*classical style*). According to this result, when the relationship between complexity and preferability was considered, it was determined that as the complexity decreases, the preferability increases. In conclusion, it was observed that the contemporary design style, which was perceived to be slightly complex, was preferred the most. This finding supports the first hypothesis ( $H1$ ). On the other hand, when the relationship between level of impressiveness and complexity was considered, it was determined that an increase in complexity, impressiveness also decreased. Figure 3 shows this linear correlation. This finding supports the second hypothesis ( $H2$ ).

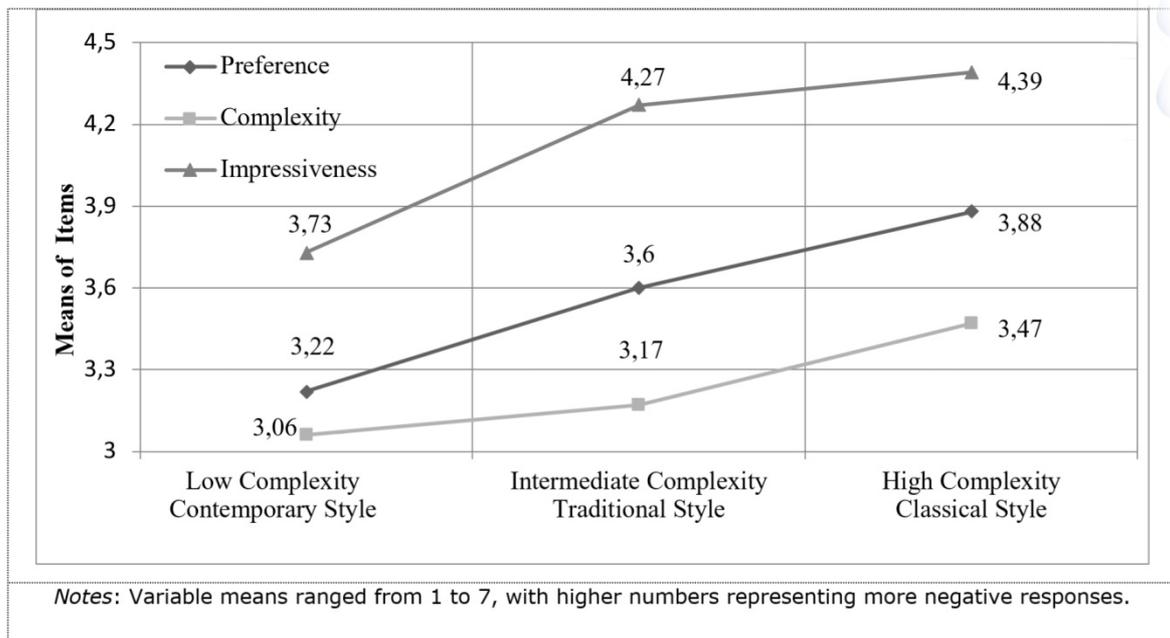


Figure 3: The effect of guestroom design styles on the dependent variables

In conclusion, it was observed that the contemporary design style guestrooms were impressed even more and were preferred even more designed with clean lines, modern interpretations and unadorned forms.

In this part of the analysis, the means and standard deviations for the relationships between participants' gender with their perceptions of environmental conditions (dependent variables) were determined. The results of the questionnaire have been given in Table 5 as the mean and standard deviation for each of the bipolar adjective pairs (dependent variables) for environmental conditions. From the evaluation of the means and SD values given in Table 5, male participants seemed to have more positive perceptions than female participants for most of the attributes about the evaluations of guestroom design styles.

Table 5: Means and SD of the dependent variables for gender

| Dependent Variables | Gender            |      |      |      |
|---------------------|-------------------|------|------|------|
|                     | Female            |      | Male |      |
|                     | M                 | SD   | M    | SD   |
| Preference          | 3.73 <sup>a</sup> | 1.44 | 3.39 | 1.50 |
| Complexity          | 3.21              | 1.64 | 3.26 | 1.68 |
| Impressiveness      | 4.36              | 1.61 | 3.87 | 1.58 |

Notes: M: mean, SD: standard deviation

<sup>a</sup> Variable means ranged from 1 to 7, with higher numbers representing more negative responses.

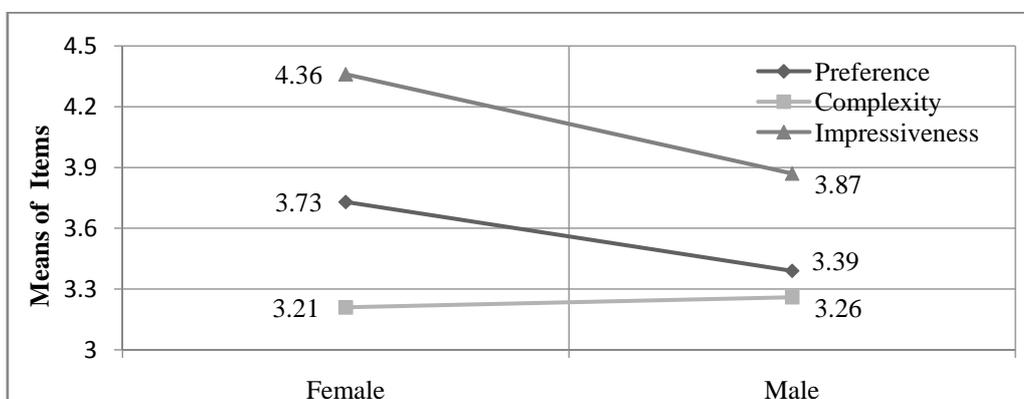
The differences between the perceptions of guestroom design styles for gender were also tested using the ANOVA (see Table 6). According to the results given in Table 6, the differences between the dependent variables, including the perceptions of the guestroom design styles for gender, were found to be statistically significant (at a level of  $p < 0.001$ ) for the dependent variables (preference and impressiveness). Consequently, it can be stated that the differences between the participants' gender have a significant influence on perceptual evaluations, since male participants evaluated guestroom design styles more positively than females. This finding supports the third hypothesis ( $H3$ ).

The differences among the participants' perceptions of guestroom design styles for the dependent variables (preference, complexity and impressiveness) depending on their gender have been illustrated in Figure 4. As can be seen, female participants demonstrated the highest values (a negative reaction), while male participants had the lowest values (a more positive reaction) for preference and impressiveness of the dependent variables (at a level of  $p < 0.01$ ). According to this result, it can be stated that gender most definitely affects positive/negative perceptions of guestroom design styles as measured on the semantic differential scales.

Table 6: ANOVA results of the dependent variables for gender

| Dependent Variables |                | Sum of Squares | df  | Mean Squares | F      | Sig.               |
|---------------------|----------------|----------------|-----|--------------|--------|--------------------|
| Preference          | Between groups | 21.159         | 1   | 21.159       | 9.732  | 0.002*             |
|                     | Within groups  | 1600.168       | 736 | 2.174        |        |                    |
|                     | Total          | 1621.327       | 737 |              |        |                    |
| Complexity          | Between groups | 0.418          | 1   | 0.418        | 0.151  | 0.698 <sup>i</sup> |
|                     | Within groups  | 2039.085       | 736 | 2.770        |        |                    |
|                     | Total          | 2039.503       | 737 |              |        |                    |
| Impressiveness      | Between groups | 44.557         | 1   | 44.557       | 17.389 | 0.000*             |
|                     | Within groups  | 1885.892       | 736 | 2.562        |        |                    |
|                     | Total          | 1930.450       | 737 |              |        |                    |

Notes: \*  $\alpha$ : 0.01 is the level of significance, i: insignificant



Notes: Variable means ranged from 1 to 7, with higher numbers representing more negative responses.

Figure 4: The effect of participants' gender on the dependent variables



The effects of interactions among the independent variables (guestroom design styles, participants' gender) depending on the participants' perceptions of environmental conditions for the dependent variables (preference, complexity and impressiveness) were tested using the MANOVA. According to the results given in Table 7, the main effects (guestroom design styles and participants' gender) were found to be significant (at a level of  $p < 0.05$ ). On the other hand, the two-way interaction for guestroom design styles x gender was found to be insignificant at a level of  $p < 0.05$ .

Table 7: MANOVA results of the independent variables

| Independent Variables            | Value | F     | df | Sig.  | Result        |
|----------------------------------|-------|-------|----|-------|---------------|
| Guestroom Design Styles          | 0.046 | 5.688 | 6  | 0.000 | $p < 0.001^*$ |
| Gender                           | 0.036 | 9.200 | 3  | 0.000 | $p < 0.001^*$ |
| Guestroom Design Styles * Gender | 0.011 | 1.303 | 6  | 0.252 | <i>i</i>      |

Notes: *i*: insignificant, \* $\alpha$ : 0.001 level of significance

In conclusion, it can be stated that differences between the guestroom design styles and the participants' gender were both effective on the perception of guestrooms. However, for the other two-way interactions, the differences were not that strong.

## DISCUSSION and CONCLUSION

In this study, the impact of guestroom design styles (contemporary, traditional and classical) on the dependent variables, including preference, impressiveness, and complexity and the differences between the participants' gender were investigated.

Berlyne (1971) stated that the positive relationship between preference (pleasure) and impressiveness (interestingness). In other study, Avital and Cupchik (1998) indicated that pleasantness and interestingness significantly correlated with complexity. In accordance, the findings of this study definitely demonstrated that in the hotel service environments, the guestrooms with different design style preference and impressiveness rates have similar relationships with complexity.

The evaluations of the participants including their perceptions of complexity for the design styles of the guestrooms were listed from simple to complex as follows: Contemporary > Traditional > Classical. From this result, the participants seemed to have had the most positive evaluations about the contemporary style of the guestrooms for the lowest complexity (simplest) variable compared to the traditional and classical style of the guestrooms. According to this result, when the relationship between complexity and preferability was considered, it was determined that as the perceived level of complexity decreases, the preferability increases. In conclusion, it was observed



that the contemporary design style that was perceived to be slightly complex was preferred the most. This result supports some previous studies of Frith and Nias (1974) and partly Pandir's (2006) findings that high scores of preference correlated with low levels of complexity. However, in respect to preference of style, this result in congruence with Imamoglu's (2000) some findings that traditional style was generally perceived as more complex than the modern (contemporary) style ones.

In line with the Scott's (1993) definition, the geometrically plain furniture typically had horizontal tendency and provided single directions of visual emphasis were made available to perceive guestrooms as simple. In contrast, those with curved or linear forms were often vertically oriented and included furniture that directed the eye in multiple directions, and, perceived as more complex. With this in mind, the contemporary style seems to be the most pleasing and perceived design style compared to the traditional or classical styles.

Finally, a linear relationship was found between preference and complexity in this study. In contrast to Berlyne's U-shaped theory, it was observed that simplicity (low complexity) was also most preferred when the stimuli was interior design with different styles. However, it must be stated that the present findings partly do support Berlyne's findings concerning the least preferred guestrooms were the ones with the high complexity.

Another result was that in the evaluations of the participants being impressed by the design styles of the guestrooms, it was listed from being very impressed to slightly impressed as follows: Contemporary > Traditional > Classical. According to this result, when the relationship between impressiveness and complexity was considered, it was determined that in a linear relationship with an increase in the level of complexity, the impressiveness also decreased. In addition to this, Berlyne indicated that people lose interest in highly complex stimuli, which correlate with the results since the least interesting (impressive) guestroom styles were highly complex ones. However, this result supports and extends the Orth and Wirtz's (2014) findings about attractiveness in service environments. In conclusion, it was observed that the contemporary design style, which impressed the most, was preferred the most in guestrooms. It is clear from these results that interior design style has a strong effect on guestroom preference in parallel with the impressiveness variable.

As can be observed, female participants had the highest values (a negative reaction), while male participants had the lowest values (a more positive reaction) for preference and impressiveness of the dependent variables (at a level of  $p < 0.01$ ). In contrast, male participants had the highest values (a negative reaction), while female participants had



the lowest values (a more positive reaction) for perceived complexity. According to these results, it can be stated that gender most definitely affected positive/negative perceptions of guestroom design styles as measured by semantic differential scales. This result supports the previous findings put forward by Nasar (1989), Yildirim (2005), and Yildirim et al. (2007).

In conclusion, complexity in guestroom design styles played a vital role in enhancing preference. Orth and Wirtz's (2014) study in regard to service environments indicated that positive influence and pleasure were related to visually less complex and more fluent interiors. In addition to this, unadorned designed guestrooms were more impressive and preferable. It was understood that, simplicity is an important factor for designing more preferable and impressive hotel guestrooms. Additionally, avoiding designs of complex features or those with excessive classical forms and using less ornate and plain forms or materials may contribute to the more positive perception of guestrooms by guests. Interior designers, architects, and hotel firms need to take care for ensuring adequate levels of legibility and coherence in their hotel interior designs. In fact, people prefer environments that make sense to them and which provide rich enough information to encourage their interest. When hotel guestrooms are similar for functionality and price, guests may tend to choose the one more aesthetically pleasing. With this purpose in mind, this study can provide guidance to interior designers, architects, and hotel firms by determining the reactions of potential guests for design styles in hotel interiors.

Lastly, this study has been limited to one hotel, which has differently designed guestrooms. However, the results of this study open many necessary avenues for additional interior design research studies. For future research, i.e., cross-hotel comparisons for perceptions of service environments or specific interior environment comparisons may also provide useful results within the context of interior design styles.

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