

Interior Design in Restaurants as a Factor Influencing Customer Satisfaction

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This study was conducted to determine the importance of specific interior design factors in restaurants and the effect of those factors on customer behavior. Research was conducted in the Dubrovnik area through face-to-face distribution of questionnaires. Final number of participants involved in this study was 106; half of those people were Dubrovnik residents and the other half were tourists that visited Dubrovnik. There was no significant difference in the importance of attitudes between male and female respondents, but the responses were different between people from Dubrovnik and tourists. Interestingly, participants who were willing to pay more money for one of the interior design factors considered color and furniture design more important than those who were not willing to pay more money.

Introduction

In today's restaurant market an entrepreneur has to be innovative and stand out from what market has to offer, and to be able to do so have to provide not only good products and service, but also a unique dining environment to contribute to the overall customer satisfaction (Liu & Jang, 2009a). Liu & Jang (2009a) researched attributes of key customer satisfaction drivers in restaurant industry like product, service, atmospherics and price. Key preconditions for the customer choice of the restaurant are food safety and cleanliness of the restaurant environment. When preconditions are satisfied, the most influential drivers for the customers are food and service quality (Liu & Jang, 2009a).

Interior design. Physical environment of the restaurant has a great influence on the image of the restaurant and can act positively or negatively for the customer perception of the restaurant image, but the physical environment is not significant in the customer perceived value. Physical surrounding has to be maintained throughout the time and changed or improved according to the customer's wants and the restaurant image to keep up with the trends on the current market (Ryu, Lee, & Kim, 2010).

According to study that is done in restaurant industry, important drivers for customer experience are people or employees that interact with customers, core service, more exactly the food that is served to the customer and physical environment of the restaurant (Walter, Edvardsson, & Öström, 2010). A restaurant, as a place where the product is being bought and consumed is the one of the

most significant features of the total product and has to be able to provide good atmosphere for the customer satisfaction, as Kotler (1973) cited. The term atmospherics was used to describe the conscious designing of space that will eventually create certain effects in buyers and affect their behavior. Interior design in restaurants should then create unique experience or emotion for the customer and make him want to come back, as for the design in store can be oriented to "enhance the purchase probability". Atmosphere of the place is created out of customers four senses, visual, tactile, olfactory and aural and it is determined by the color, temperature, scent, music, light etc. Taste as a fifth sense is excluded from the atmosphere definition because it is directly affected by the meal, or the core restaurant product (Kotler, 1973).

Restaurants today have become one of the best designed facilities because dining today has become fashionable and customers expect to have outstanding environment when they visit restaurants (Sabherwal, 2011). According to the study frequent drivers of customers in physical environment is directed toward interior and both exterior environment of the restaurant. Exterior environment is important because it is the first contact that customers have with restaurant, and also the last contact when they are leaving, but the more frequent driver was interior design both in favorable and unfavorable experiences (Walter & Edvardsson, 2012). A customer has to get a proper compensation for the price that he is willing to pay for the meal and the best way to provide them, besides food and service, is through restaurant design that will seduce them and want to come back (Sabherwal, 2011).

Ambient light. As Walter and Edvardsson (2012) stated in their research, in the physical environment there are present "one-sided unfavorable drivers" meaning that the elements that are missing from the physical environment are perceived as negative experience while present in the environment those elements rarely or never create extreme positive experience, for example bad lighting will be noticed and mentioned as a complaint but a good lighting will rarely be mentioned as a compliment from customers review. According to the Shields there were indications that brighter lights can decrease range of meal duration (2006).

Color. Customer satisfaction is increased when a customer feels that the restaurant design and its color, lighting and music are reflecting the quality of restaurant. Also customers tend to set higher their perceived reasonable prices if the physical environment is reflecting or increasing restaurant quality (Ryu & Han, 2010). Color perception is connected with emotions and can vary from trend, culture or gender, so for example men tend to tolerate neutral colors better than females. Red and yellow are the most popular color choices among fast food restaurants because they apparently attract customer attention and stimulate their appetite (Singh, 2006). Even though blue is shown to have decreasing effect on customer appetite, formal restaurants tend to use it often because it have a calm effect and is shown to be relaxing restaurant customers and bringing them in state of comfort and satisfaction. Color also have influence on waiting time, so with blue color time is seemingly passing quicker, while with red color time seems to be passing slower (Singh, 2006).

Music. Shields stated in 2006 that the music and interior layout have great influence on revenue in the small business restaurants. According to his research increase in music tempo and volume can affect business by increasing the number of table turns and decreasing meal duration. By adjusting the interior layout and music according to the restaurant image, the revenues of the restaurant

can be increased but the management has to adopt the perspective of the customer and employees, and also test attributes of the atmospherics (Shields, 2006). It is stated that customers want to have appealing design in restaurants, but also comfortable seats, pleasant music, appropriate lighting and other ambiance settings that restaurant owners or managers should be able to provide and adapt for the specific customer preferences on specific market (Ryu & Han, 2010). Slow music on the other hand has positive affect and can increase customer's willingness to buy and spend money (Musinguzi, 2010).

Background noises. Noises affect customer's willingness to spend money in the restaurant, so customers in quiet restaurants are less likely to leave food on their plates and also tend to spend significantly more money than the customers in noisy restaurants that usually leave food on their plates and spent less money. The problem that customers have with noisy restaurants is mainly caused because of the importance for the customer to socialize (Musinguzi, 2010). If the restaurant is more crowded it is associated with higher quality food and good restaurant image, on the other hand if the restaurant is quiet a customer can attribute it as a low quality food, bad restaurant image or even high cost food.

Space & layout. Bitner (1992) argued that servicescape as one of the key factors that affect customer satisfaction factors include ambient conditions which were mentioned as atmosphere or sensors in the Kotler (1973) study, spatial layout of the restaurant and its functionality, and signs or decor that creates a desired image of the restaurant. He also argued that the servicescape have a greater importance for the restaurant and other industries whose customers spend extend time in the establishment, while other services where customers leave facility in relatively short time have a lower importance of the servicescape (Bitner, 1992).

Dining atmosphere has shown to have a big influence on customer's positive and negative experiences and perceived value, that later on affected customer if it will become repeat customer or look for other restaurant options (Liu & Jang, 2009b).

Aesthetics. If the restaurant owner wants to redesign the facility it should first communicate with the customer and research on its wants and recommendations on aesthetics (the wall decor, paintings/pictures, furniture, flooring/carpeting, etc.) of the restaurant because the customers are eventually the ones that are directly influenced with those decisions (Ryu & Han, 2011). Also it is stated that the results of the assessing the customer opinion on the aesthetics of the restaurant can differentiate depending on the new or repeat customer or time period of the previous design that was implemented in the restaurant. Overall satisfaction affects the customer loyalty and repeat customers. Also aesthetics does not only

increase loyalty in the existing customers but also can be a positive experience that will attract new customers and increase revenues (Ryu & Han, 2011). More frequent driver was interior design both in favorable and unfavorable experiences, than the exterior (Walter & Edvardsson, 2012).

Research done in middle and upscale full service restaurants show that the attractive atmosphere can be a tool for the managers to use in a marketing strategy for the restaurant. The study had shown that the tangible parts of the atmospherics, more exactly the aesthetics of the restaurant and employees that were part of the dining experience are more significant to the customers than the intangible factors, like lighting, colors or music, for which the customers are not willing to pay more money (Heung & Gu, 2012).

Tableware. Design of plates can have an impact on customer food experience, meaning that there was a difference in flavor intensity between same meals presented on the different color of plates, but the shape of plate did not have effect on flavor intensity, according to the research done in 2012 by Piqueras- Fiszman, Alcaide, Roura, & Spence. It is shown that the shape of plate did not have effect on customer consumption of food, but rather the portion size (Rolls, Roe, Halverson, & Meengs, 2007).

Methods

While previous studies tested on overall factors that affect customers in restaurant industry, this research was done to focus and test only specific factors of the interior design in restaurants. Purpose of this descriptive research was to analyze which interior design factors in restaurants affect customers' satisfaction and their purchase behavior.

Participants. There were 106 participants in total recruited through face to face distribution of questionnaires. There were 54 people tested from Dubrovnik region and 52 were tourists from Croatia and worldwide. Out of 54 people with Dubrovnik residence there were 25 male and 29 female participants. Tourists were divided in two groups, those with living residence inside Croatia and other who were tourists from worldwide. Out of total 52 tourists tested, there were 27 males (14 from Croatia and 13 from worldwide) and 25 females (12 from Croatia and 13 from worldwide). As gender and place of origin were taken as control variables, the sample was created to the effect of having approximately equal groups of residents and tourists, and approximately equal number of participants of both genders. Although controlled for, due to time constraints, age was not taken in consideration in the selection of participants. Only one person in the sample was less than 18 years old, and five participants reported being more than 60 years old. Most of participants (43 %) belonged to '18-29 years' group; there was the same number of participants (21 people) in '29-30 years' group and in the '30-39 years' group, i.e. 20% of participants per each group,

and 11 % of participants were in the '50-59 years' group.

Interior design characteristic	Mean	Std. Dev.
Size importance	3,29	1,57
Color importance	4,38	1,76
Layout importance	4,80	1,54
Furniture design	4,43	1,45
Furniture comfort	6,04	1,24
Lighting	5,29	1,29
Preferred lighting	4,24	1,02
Art importance	4,21	1,40
Wall design	4,18	1,50
Music style	5,59	1,22
Music volume	5,22	1,23
Preferred music	3,53	0,99
Communication	4,77	1,75
Background	2,83	1,18
Condition of	5,55	1,55
Design of glasses	4,51	1,59
Condition of	5,41	1,59
Design of plates	4,51	1,63

Table 1
Descriptive statistics for variables regarding importance of specific interior design characteristics.

Materials. Questionnaires were made in two versions, one for the locals in Croatian language and the other one for the tourists in English language. Both versions of questionnaire were with same type and set of questions, the only difference being the language. There were 35 questions in total, formed to research importance of the interior design factors for the customers and their preferences on those mentioned factors. Factor importance was measured using Likert-type scale where participants had to mark the level of importance from 1 being the least important to 7 being the most important. Customer preferences on specific interior design factors were tested using nominal set of questions where they had to choose one of the preferred style or type of a factor. Interior design factors like color, layout, music and lighting were tested in this research through designed set of questions. Furniture as a research variable was tested in term of a

furniture comfort and furniture design with its affect on customer's behavior.

Results

Preference of design characteristics. The majority of participants (54 %) reported preference of medium sized restaurants, i.e. restaurants with 20 to 50 tables. For the layout of the restaurant majority of participants (63 %) reported preference of medium spacing between tables. With regard to preferred color used in interior design, majority of participants (42 %) reported preferring warm colors. No specific color was reported as the preferred color in interior design, as majority of participants (49 %) reported preferring a combination of colors to be used. As for the furniture type, majority (59 %) would prefer soft and higher from ground furniture. Preferred material for hard furniture in restaurants, as reported by 76 % of the sample, is wood; and for soft furniture majority of participants (46%) reported preferring cotton, and 32 % of participants reported preference of leather as the material of choice. Preferred art type in restaurants reported by majority of participants (46 %) are paintings, and preferred music style lounge music (34 % of participants), or classical music (24 % of participants). With regard to design of plates majority of participants (59 %) reported preference of modern design. When it comes to overall atmosphere in the restaurant, majority of participants (66 %) reported preferring casual atmosphere. There was a marginally significant difference between participants of different gender, $\chi^2(4, N = 106) = 8.38, p=.07$. While majority of male participants reported preferring casual atmosphere (75 %), there were female participants in addition to those preferring casual atmosphere (54 %), who reported preference for intimate atmosphere (28 %). With regard to the variables listed no other difference between participants of different gender, participants of different age, between participants of different customer type was detected.

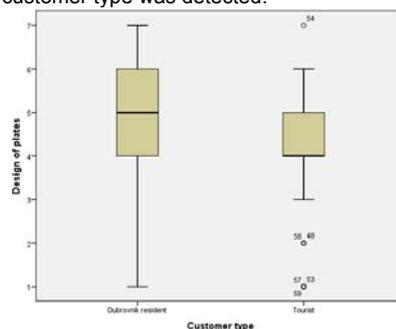


Figure 1 Box-and-whisker plot of importance of plate design for different customer types.

Importance of design characteristics. As shown in Table 1, average scores for the variables regarding importance of specific interior design characteristics for the whole sample indicate that furniture comfort was perceived as the very important characteristic ($M=6.04, SD=1.57$), followed by music style

($M=5.59, SD=1.22$), condition of glasses ($M=5.55, SD=1.55$), condition of plates ($M=5.41, SD=1.59$), lighting importance ($M=5.29, SD=1.29$) and music volume ($M=5.22, SD=1.23$). Results indicate that background noises are perceived as unimportant characteristic ($M=2.83, SD=1.18$), followed by size of the restaurant ($M=3.29, SD=1.56$), and preferred music volume ($M=3.53, SD=0.99$).

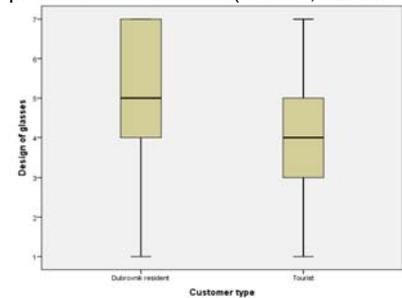


Figure 2 Box-and-whisker plot of importance of design of glasses for different customer types.

There was no recorded effect of factor of gender on any of the attitudes regarding importance of design characteristics. There was no significant effect of age on reported level of importance of design characteristics. When it comes to differences between the residents of Dubrovnik and tourists, residents reported finding design of plates more important ($M=4.81, SD=1.78$), than the tourists ($M=4.19, SD=1.41$), $t(103)=2.26, p=.03$ (Figure 1). Also, residents of Dubrovnik reported finding design of glasses more important ($M=4.94, SD=1.68$), than the tourists ($M=4.13, SD=1.32$), $t(103)=2.73, p=.01$ (Figure 2). There was no other recorded effect of customer type on any of the attitudes regarding importance of design characteristics.

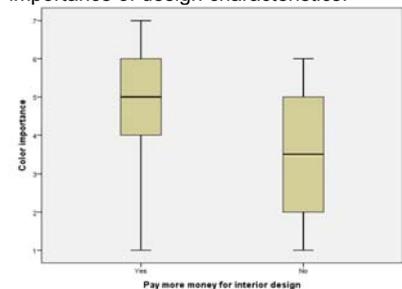


Figure 3 Box-and-whisker plot of importance of color in interior design for participants categorized with regard to willingness to pay more for design characteristics.

Participants who reported willingness to pay more money on account of interior design characteristic find color more important ($M=4.98, SD=1.57$), than those not willing to pay more ($M=3.62, SD=1.69$), $t(103)=4.25, p=.00$ (Figure 3). There was no other recorded effect of willingness to pay more on any of the attitudes regarding importance of design characteristics.

Discussion

This study was designed to answer how important specific elements of the physical environment, the 'second most important contributor to restaurant image' (Ryu, Lee, & Kim, 2010) are, and to investigate the preferences of customers, in this case both locals, permanent residents of Dubrovnik area, and tourists who were visiting Dubrovnik at the time of research. Specific interest of this study was to determine how the interior design in restaurants influence customers overall satisfaction and willingness to pay more money.

Furniture was confirmed as an important part of interior design, but in general the study showed that design is less important factor than comfort. As furniture comfort was reported to be the most important factor in interior design of restaurants, it would seem that both interior designers and restaurant owners would do well in opting for a design that would yield more comfort. According to this study with regard to the furniture type, majority of customers in Dubrovnik region would prefer soft and higher from ground furniture. Preferred material for hard furniture in restaurants is wood; and for soft furniture cotton and leather. Although the difference in opinions of people of different gender, in this study, did not prove to be statistically significant, women did report considering furniture design slightly more important factor than men. Female participants preferred restaurant furniture made of wood and cotton, while males preferred combination of furniture design made of wood and leather. That being said, if one would choose to focus on comfort in design through use of the preferred type of furniture and materials, for creation of the overall experience the restaurant's interior design still would need to be in relation with the service provided (Sabherwal, 2011).

Interestingly, the second most important factor of the restaurant experience in this study was shown to be music style, with lounge (34%), classical music (24%) and blues (13%) as most preferred music styles. Also most people, preferred more silent atmosphere, meaning that the participants did not prefer loud music nor loud background noises. More preferred was the relaxed type of music where Dubrovnik customers could relax and enjoy the meal for longer period of time. This is in line with Shields' (2006) claims that increase in tempo and volume was able to increase table turnover and decrease meal duration. Although according to the restaurant customers in Dubrovnik, background noises are least important factor in the restaurant, as noted, they still reported preference of less noisy restaurants where they can relax, eat without being in a hurry and spent more time, which increases the possibility to spent more money in the facility and eat more food from their plates, according to Musinguzi (2010).

Condition of tableware in a restaurant was third factor of importance in restaurant experience

located in this study. In this, Dubrovnik residents considered that design of plates as more important for the restaurant than the participants that were only visiting Dubrovnik area. According to the Piqueras-Fizman study (2012) intensity of food can be influenced with the design of plates, which could be the case with Dubrovnik participants but the further research needs to be done on this issue. Condition of plates and glasses was also considered to be important factor for the restaurant, meaning that tableware should be replaced and changed when it gets old or out of trend.

Ambient light was perceived as important factor for the restaurant atmosphere, confirming the findings that bad lighting in the restaurant can be perceived as negative experience from the customer's perspective (Walter & Edvardsson, 2012), but even though all of the participants considered lighting factor at some level important in restaurants only 2% of people stated lights and sounds as factors worth paying more money for. Lighting more depends on atmosphere of the restaurant, meaning that people who prefer very intimate ambience prefer darker lighting, but further research should be done to investigate whether a brighter light would actually decrease meal duration.

The results of this study further indicate that the layout of the restaurant is more important factor for customers than the very size of a restaurant. In this male participants reported considering space layout to be slightly more important than reported by female participants, although the difference in opinions was not statistically significant. Most participants preferred medium (63%) spacing between tables, or large (35%) spacing between tables in both genders meaning that both prefer intimate or casual atmosphere where they do not feel overcrowded.

Interesting finding of this study was that, although choice of color was not perceived as one of the more important factors in interior design of a restaurant, color was found to be more important by those participants who reported willingness to pay more money for one of the interior design factors. Most people preferred group of warm colors (42%), like red and yellow which could be because those colors stimulate appetite, as reported in a study conducted by Singh (2006). This goes well with slower tempo of music that was reported as preferred as red color can make time seems to be passing slower (Singh, 2006). Still, when participants were asked to chose one color of preference they still reported preference of combination of colors, meaning that people do not like to be surrounded by only one color. Thus, a combination of specific colors should be carefully displayed throughout the space, so that people do not feel saturated with only one color and to create a positive and enjoyable dining area for the customer.

Expectedly, participants that preferred all types of art (photos, paintings and sculptures) consider art factor more important than the

others that prefer only one type of art. Most preferred style of art was stated to be paintings (46%), but photographs (38%) were also frequently chosen meaning that the Dubrovnik customers prefer some style that can be added to the restaurant value using art.

According to the results, most of the participants (55%) were not willing to pay more money for one of the interior design factors, but 57% of the participants were willing to pay more money for the restaurant that is designed according to their preferences. Those results are interesting as these show that most of the participants consider interior design important part of the restaurant but part of them do not consider individual factors of interior design important enough to pay more money for it. Perceived value of restaurant is increased if the interior design as a whole atmosphere and a restaurant theme is according to the customers' preferences, but individual factors of interior design are not noticed enough to increase their perceived value.

According to the additional comments where participants were able to write their additional thoughts about the research, 18 participants only participated approximately 20% of total participants. Almost all of those 18 participants added that despite of their attitudes toward specific interior design factors they consider that food and service are the most important drivers for their satisfaction in the restaurants. The conclusion was that food and service are the most important factors in the restaurant industry, meaning that interior design would not be able to alone sustain customer satisfaction, but it has to provide quality food and service that goes along with it. Interior design is more of a support for the already established food and service quality in the restaurant, support that will help to create image and differentiate restaurant from the competition to increase customer satisfaction and make them come back and eventually increase revenue.

For the future entrepreneurs opening a restaurant in Dubrovnik it would be useful to put more effort in finding out their customer preferences and expectations when it comes to designing the interior. According to the results, they should consider implementing warm colors, especially red color in their facility to create an environment that will stimulate customer's appetite and create a relaxing and comfortable space. Blue color could be used as alternative color to use in a restaurant, since it was second most preferred among Dubrovnik people. There should be some combination of colors so that customers do not get overwhelmed with one color. Music should be contributing to the relaxed and casual atmosphere, as preferred music style was lounge and classic music, not too loud but still loud enough so that background noises are not that noticeable as most of the participants preferred. Space layout should provide enough privacy to the guests, meaning that the tables and chairs should be carefully placed to create medium to large spacing between tables. Wooden furniture lifted higher

from the ground should be used the most with the combination of cotton and leather to create an environment preferred both by males and females. Paintings and photographs are both desirable to have in the restaurants to create comfortable and interesting place that will increase customer attention and give them the visual effect while dining. Some emphasis should be placed on tableware, where some effort should be placed in finding the right design of plates that would satisfy the Dubrovnik residents.

Short amount of time available for conducting this research was the main limitation of this study. If there would be more available time, the research could be done more extensively to determine the attitudes more in detail. Another, and connected, possible limitation is reliance on self-reported attitudes, due to a possibility that the participants were not completely truthful in their responses because of the hurry to finish faster with the task or they were not fully engaged to participate in the research. One of

the future possibilities for the research is to determine through observation combined with self-reported measurements the effect of interior design on the amount of time customer spend in a restaurant. It would also be interesting to determine the impact of the interior design factors on the first time customers, and to investigate if the effect on a customer decreases after a number of visits. Such further research would determine if and how often should the interior design factors be changed through time to increase competitiveness on the market.

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