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Could the Artwork in Hotels Attract More Bookings? –A Study Using the Experimental Design Method

The aim of this study is to examine the influence of artwork images on the website of hotels on the purchase intention of guests. Results of the experimental design show that the aesthetics appreciation, achievement and physical views of the respondents have significant positive impact on their booking intentions. The originality of the study is it liaises the aesthetics attributes with the website of hotels for the first time. The findings could provide valuable implications to hotels to improve their performance in the increasingly competitive environment.

Key words: Intention to Book, Artworks, Aesthetics, Hotel, Experiment

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Introduction

As the development of the Information Communication Technology (ICT), the internet has played an increasingly important role in marketing and sales activities, because customers rely on the internet to search, compare and make the purchase decision (Varkaris & Neuhofer, 2017). In the hotel industry, most of the hotels have their own website or social medias which directly liaise themselves to guests. It has been shown that the quality of hotel websites has a significant impact on online booking intentions (Wang et al., 2015). Particularly, the number of photos and images could give more realistic impression and reliable information of the hotel to the guests, and then lead to higher booking rate (Yao et al., 2019).

There are many hotels such as the Luxury Selection Hotel in Greece, Peninsula Hong Kong and the Middle House in Shanghai are decorated by modern or classic artworks in lobbies and rooms. In the mainstream marketing research, Hagtvedt and Patrick (2008) revealed that artwork images can facilitate customers to pay more attention to the product containing the art images, improve customer's assessment to the product and finally increase the purchase intention. However, the impact of artwork images on the booking intention in the hotel industry has been overlooked. To fill in this gap, an experiment is designed to examine the relationship between artwork images and booking intention to hotels and explore the transmission mechanism between them. The findings of this research may provide useful practical implications for hoteliers to improve the attractiveness of the website and raise the booking rate of their hotels.

Literature Review

1.1 The Impact of Website Experience on the Purchase Behavior in Hotel Industry

Constantinides (2004) is a pioneer study to investigate the influence of the “web experience” on the purchase decision. He categorizes the attributes on the website into three groups which are functional, psychological and content factors, respectively. Following Constantinides (2004)’s work, a number of studies focused on the examination of the impact of different functional attributes on the booking intention of hotels based on the perceived importance of the attributes ranked by the guests such as Chung and Law (2003), Law and Hsu (2005), Zafiroopoulos and Vrana (2005) and Rong et al. (2009). Different from the subjective rankings, Ip and Lee (2012) used the fuzzy analytic hierarchy process, which is an objective ranking method, to evaluate the functionality of hotel websites and found out that an accessible reservation information was perceived as the most important element of hotel website function, followed by the hotel description and hotel facility information etc.

Psychological factors are more related to the quality of the website (Li et al., 2017). Wang et al., (2015) proposed a three-dimensional scale to measure the hotel website quality which are usability, functionality and security and privacy. Ali (2016) built a structural equation model to examine the relationships between hotel website quality, perceived flow and purchase intentions, indicating that usability, functionality, and trust influence customer's perceived flow, therefore facilitate their purchase intentions.

Different from the traditional marketing content proposed by Kotler (1985) which includes price, product, promotion, and place, researchers argue that communication should be highlighted in the context of website marketing (Kim et al., 2003; Joines et al., 2003). Kotler (2010) further revealed that the design, aesthetic, atmosphere and interface of the website can affect the impression of customers to the website, which further influences their purchase behavior.

1.2 The Impact of artworks on the purchase intention in Hospitality Industry

According to Kotler (2010), artworks which is a type of aesthetics affects the purchase intention of customers. Based on Hagtvedt et al. (2008), artworks are defined as “works that are perceived as skillful and creative expressions of human experience, in which the manner of creation is not primarily driven by any other function.” In this context, artworks can be referred as the works with aesthetics value belonging to the functional, content and communication factors in Kotler (2010)’s framework. In terms of the effect of artworks on consumers, Levinson (2003) argued that the artwork is different from the normal image, because artworks aim to connect the state of mind, expression, and emotion of the hotel to the guests, instead of only showing the descriptive information of the hotel. Tractinsky & Lowengart (2007) developed a theoretical framework to explain the relationship between the aesthetics and the retailing performance. In general, artworks can lead to a favorable attitude for guests when they evaluate the product. However, it can only contribute partially to the total decision-making process of purchase (Hagtvedt & Patrick, 2008). For instance, customers may prefer a unique art on the website of a hotel; however, as discussed before, other factors such as the room rate may also be one of their concerns.

Although the impact of artworks on websites on the purchase intention of customers have been investigated in mainstream marketing studies, little light has been shed on its impact in the hotel industry. Compared with other industries, the product of the hotel industry is intangible which cannot be stored. As argued by Kotler (2010), more information on the website could facilitates the purchase intention of customers. Given the specific characteristic of the hotel industry, the impact of artworks on the website deserves further investigation.

2.3 Research Framework

According to Watchravesringkan (2008) and Bloch et al (2013), the appreciation of aesthetics and the vanity could stimulate the purchase intention of the produce. The vanity refers to “a fixation on physical appearance and achievement of personal goals” of consumers (Watchravesringkan, 2008). The physical view focuses on the perceived image of the consumer by others whereas the achievement view is the perceived image by the consumer her/himself. Thus, based on Kotler (2010)’s theory, the framework of this study is proposed as follows

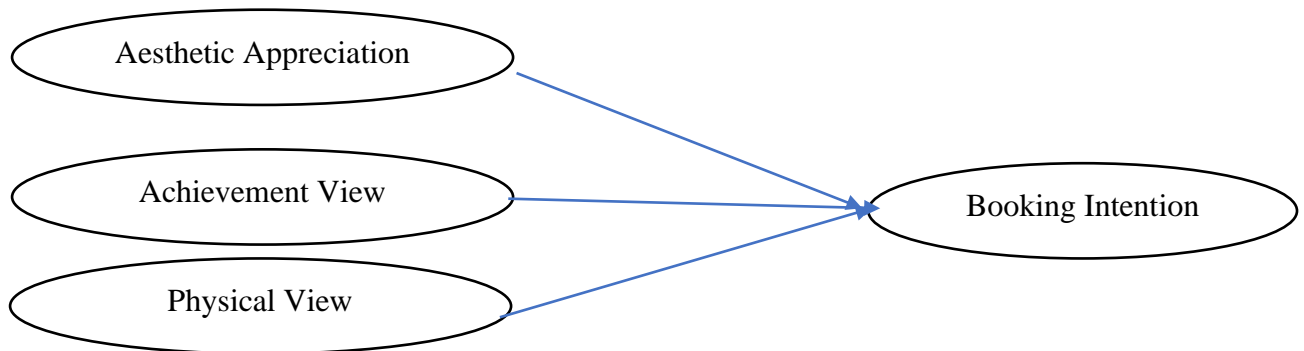


Figure 1 The Framework of the Study

The hypotheses of this study are proposed as follows

- 1) There is a significant positive impact of the aesthetic appreciation on the booking intention;
- 2) There is a significant positive impact of the achievement view on the booking intention;
- 3) There is a significant positive impact of the physical view on the booking intention.

Methodology

The experimental design focuses on the impact of the artworks on the website of a hotel on guest’s purchase intention. Nine common artwork pictures including the modern sculpture, drawings, vases, chinaware, bookshelves and classical artworks are selected as the artworks

listing on the website (<https://www.wjx.cn/jq/44446565.aspx>). Two virtual websites were designed for the manipulate check. The two websites are the same except that only one of them uploaded artworks hanging in the lobby or rooms of the hotel. Thus, other influencing factors of the purchase intention could be effectively controlled.

The two websites are used for the manipulate check to the items of the dependent variable, the intention to book the hotel. In the main experiment, respondents are asked to answer the questions after they visit the website with artworks on it. Regarding the measurements used in this study, items used by Yoo and Donath (2001) measure the purchase intention, whereas the measurement of the aesthetic and the vanity are from Watchravesringkan (2008) and Bloch et al (2013), respectively. All items are investigated by the five-points Likert scale. Due to the strong purchase power and the sustained growth of the outbound tourism, Chinese visitors are selected as the sample of this study.

Samples are randomly selected by the largest online survey company in China, Wenjunxing, in its sample pool. Ten respondents were interviewed for the main survey as the pilot test to check the reliability of the questions. After that, another 100 respondents are selected to implement the manipulate check, followed by 221 respondents for the main survey. T-test and regression are used to investigate the impact of artworks on the website on the booking intention of hotels.

Findings

Results of Descriptive Statistics

There were 120 males (54.3%) and 101 females (45.7%) in the 221 respondents. In terms of the age of the participants, 64 respondents (29%) aged between 18 and 25 years old and 99 respondents (44.8%) between 26 and 35, while the rest of 58 respondents (26.3%) were over

36 years old. Furthermore, 174 participants held a bachelor's degree or above, accounting for 78.8% of the sample, and 32 (14.5%) were in the college level with the last 15 respondents (6.8%) holding a high school degree or below. In addition, 21 participants (9.5%) travel in every month, followed by 97 respondents (43.9%) travel twice or three times a year and 61 respondents (27.6%) for four to five times a year. The number of participants that travel once a year, or less is 30 and 12, respectively, accounting for 13.6% and 5.4% of the sample. Finally, 192 participants (86.9%) travelled for leisure purpose and the rest of 29 people (13.1%) for business.

Results of the Manipulate Check

In the manipulate check, respondents were asked to answer the questions included in Yoo and Donath (2001) after they were randomly selected to visit the two versions of the website. Independent t-test is used to examine the difference of the intention to book of the hotel between the groups which visit the website with artworks and which not. The results of the t-test are shown in Table 1. It indicates that the purchase intention of the hotel with artworks is significantly higher than the one without artworks, measured by all the items in Yoo and Donath (2001) at 1% significance level. Thus, the presentation of the artwork on the website could be a determinant of the booking intention of hotels.

Table 1 Results of t-test for the Manipulate Check

Item	t-statistics
I will definitely book accommodation from this website in the near future	4.27***
I intend to book accommodation through this website in the near future.	3.63***
It is likely that I will book accommodation through this website in the near future.	2.59***
I expect to book accommodation through this website in the near future.	3.89***
The likelihood that I would actively book a tourism product is very high.	4.54***
The probability that I will spend more than 50% of my spectator tourism budget on this website is very high.	3.49***

Note: *** indicates significant at 1% significance level.

Impact of Artworks on the Booking Intention

To further investigate why the presentation of artworks could lead to higher booking intentions, the measurement of aesthetes (Watchravesringkan, 2008) and the vanity (Bloch et

al, 2013) are introduced for the regression analysis. Exploratory factor analysis (EFA) is implemented to estimate factor scores of all the constructs as the input to regressions. Particularly, EFA suggests that the vanity could be further split into achievement and physical views, respectively. All the Cronbach alphas and Kaiser-Meyer-Olkin Measures are above 0.7 and Bartlett's tests are all significant at 1% significance level, indicating good reliability and validity of the constructs which were developed.

Table 2 presents the regression results with factor scores obtained from EFA. R^2 and adjusted R^2 equal to 0.214 and 0.204, respectively, which means that more than 20% of the variation in booking intention can be explained by the variations of aesthetic appreciation and consumer's vanity, which is an acceptable result in the social science research (Shieh, 2008). F -statistic is 19.751 and significant at 1% significant level, meaning that the overall regression result is significant. Diagnostic tests including Durbin-Watson value (1.95), variance of inflation factor (1.02) and P-P plot and the distribution of residuals (Figure 2) show that the estimation results are valid and reliable.

Regression results show that all the investigated independent variables have significant impact on the booking intention of the hotel. This means all the hypotheses cannot be rejected at 1% significant level. One unit increase of aesthetics appreciation could stimulate the booking intention by 0.339 unit, followed by the achievement view (0.184) and physical view (0.157), respectively. In particular, the impact of aesthetics appreciation is significantly larger than the achievement view ($Z=1.77$) and physical view ($Z=2.09$) at 10% significant level. No evidence has been found that impacts between the two vanity factors are significantly different.

Table 3 Estimation Result of the Impact of Artworks on the Website on the Booking Intention

Variables	Coefficient	t-statistic	VIF
Constant	-3.771E-17	.000	-
Aesthetics Appreciation	.339	5.453***	1.069
Achievement View	.184	2.986***	1.053
Physical View	.157	2.585***	1.016
R ²	0.214	Adj-R ²	0.204
F-statistic	19.751***	D.W.	1.95

Note: *** indicates significant at 1% significance level.

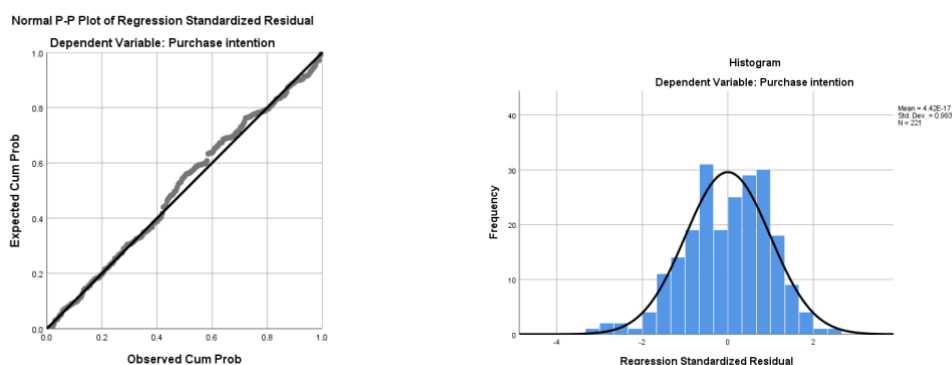


Figure 2: Standardized Residual of the Regression

Conclusion

This research investigates the impact of the artwork images on the hotel website on guests' booking intentions. The manipulate check shows that there is a significant difference of the booking intention between the two groups with and without artworks on the website. This indicates if hotels are willing to invest in artworks, they should present them on the homepage, which could significantly increase the booking intentions of guests.

The experimental design used nine common artwork pictures including the modern sculpture, drawings, vases, chinaware, bookshelves and classical artworks to investigate the booking intention of guests and the corresponding influencing factors. The regression results reveal that aesthetics appreciation, achievement view and physical view all have significant positive impact on the booking intention of guests. Thus, in addition to presenting the artworks on the

website, hotels could also promote the artworks to guests who appreciate art and who are keen to share travel experience with others in order to improve the occupancy rate.

In addition to the limitation of the sample size which is relatively small for the moderating analysis based on different segments, eye-tracking and other bioinformatics monitoring equipments could be used to measure the interest of guests to the artwork more objectively and accurately in future studies.

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