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Examining the effect of perceived service quality on customer loyalty and the mediating role of perceived value: A PLS-SEM approach towards luxury hotels in Algeria.

فحص أثر جودة الخدمة المدركة على ولاء الزبون والدور الوسيط للقيمة المدركة: مقاربة باستخدام النمذجة بالمعادلات الهيكلية بالمربعات الصغرى الجزئية في الفنادق الفاخرة بالجزائر.

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Abstract:

The purpose of this study is to examine the effect of perceived service quality on customer loyalty in the context of hotels. It suggests that perceived service quality positively affects customer loyalty and that perceived value mediates the association between perceived quality and loyalty. Based on empirical data collected via a questionnaire from 100 regular customers of 4 and 5 stars hotels in Algeria, PLS-SEM was used to examine these relationships.

Results confirm the hypotheses and support the extant theory. Finally, the implications for hotel managers are discussed.

Keywords: Algeria; Hotels; Customer loyalty; Perceived quality; Perceived value.

Jel Classification Codes: M31; L83.

ملخص:

هدفت هذه الدراسة لفحص أثر جودة الخدمة المدركة في ولاء الزبون في مجال الفندقة. وقد افترضت أن جودة الخدمة المدركة تؤثر إيجابا في ولاء الزبون وأن القيمة المدركة تتوسط العلاقة بين جودة الخدمة والولاء. بالاعتماد على بيانات تم جمعها باستخدام استبيان موجه لمائة زبون دائم لدى فنادق 4 و 5 نجوم بالجزائر، تم اعتماد النمذجة بالمعادلات البنائية بالمربعات الصغرى الجزئية لاختبار هذه العلاقات.

وقد أكدت النتائج الفرضيات ودعمت الدراسات السابقة. أخيرا، تمت مناقشة آثار نتائج الدراسة على مستوى مسيري الفنادق. كلمات مفتاحية: الجزائر؛ الفنادق؛ ولاء الزبون؛ جودة الخدمة المدركة؛ القيمة المدركة. تصنيف J.83 'M31: IEL.

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1.INTRODUCTION:

Over recent years, the Algerian hotel industry witnessed a fast growth in terms of hospitality structures inauguration. Since 2015, the accommodation capacity increased by (23%) among the different types of Algerian hotel institutions (Ministry of tourism and handicraft and family work, 2020). Thus, the current hospitality competitive business environment is making it more and more difficult for hotel organizations to maintain their customers, especially with the constant evolution and change in their needs and demands. Maintaining customers is more profitable than acquiring new ones (Trianasari, 2018, p. 51). Therefore, many scholars recognized that building customer loyalty is a key component of an organization's endurance (Dedeoğlu et al., 2015, p. 6), and that it leads to the acquisition of a competitive advantage and to an increase in organizations' profitability, as well as their market share and financial performance (Kandampully et al., 2011, p. 26). The core philosophy and goal of relationship marketing is to foster mutual and beneficial long-term relationships, which in turn impacts organizations' sustainability (C. F. Chen & Chen, 2010, p. 31). Relationship marketing identified service quality as an important factor in creating customers loyalty (Hussein et al., 2018, p. 1). Accordingly, retaining customers requires from organizations generally and from hotels specifically to provide high levels of service quality, since it is considered as a prerequisite for any provided service and an important factor in the success and survival in competitive markets (Kandampully et al., 2011, p. 26). Besides service quality, perceived value is another important concept that leads to customer loyalty. Many studies conducted in the hotel industry found that customers tend to be more loyal when they perceive high value (Hussein et al., 2018, p. 2).

Therefore, the main purpose of this study is to examine the interrelationships among service quality, perceived value and customer loyalty. Based on the literature review, a research model is examined in the context of Algerian hotel industry. Two objectives will be addressed in this study: the first is to confirm the impact of perceived quality on customers loyalty and the second objective is to

examine the mediating effect of perceived value on the relationship between perceived quality and customer loyalty.

In the next section the theoretical framework and hypotheses are presented, followed by a description of the adopted method and the results. Finally, in the Section five study implications, limitations and directions for future research are discussed.

2. Theoretical framework and hypothesis development:

The suggested theoretical model is indicated in Figure 1. We propose that customer perceived quality of hotels is an antecedent of both customer perceived value and customer loyalty, and that perceived quality and perceived value have direct positive effect on customer loyalty. Moreover, the effect of perceived quality on customer loyalty is mediated by perceived value. In order to test this model, a literature review is conducted regarding the relationship between these three variables for the purpose of developing hypotheses about these relationships.

2.1. Perceived quality:

Many studies focused on the concept of service quality in the hospitality industry; service quality is defined as the gap between customers' expectations and perceptions (Kuo et al., 2013, p. 258). Parasuraman, Zeithaml and Berry (1985) developed SERVQUAL model to measure service quality; the final suggested scale (1988) included five dimensions: tangibles, reliability, responsiveness, assurance and empathy. Although SERVQUAL has been widely used by scholars and practitioners it was subject to many criticism, Cronin and Taylor (1994) suggested that "the measurement of service quality could be accomplished by using only the perception of customer experience rather than measuring the gap between expectation and actual experience of the service by customers", thus they promoted the use of SERVPERF model which assesses the perceived performance. Other studies in the hospitality industry suggested scales to measure service quality in hotels arguing that hotels might have different dimensions of service quality. Among these studies: LODGSERV developed by Stevens, Knutson and Patton (1995); HOLSERV developed by Wong Ooi Mei, Dean and White (1999); Lodging Quality Index (LQI) proposed by Guetty and Guetty (2003); Al-Sabbahy, Ekinci and Riley (2004) suggested the Q-sort technique; and Govender (2016) developed HOTSPERF instrument (Govender, 2016, pp. 1, 2, 3).

2.2. perceived value:

Perceived value is another concept that was widely studied in the hotel industry. It was defined by Zeithaml (1988) as "customer overall evaluations based on the perception of what is given and what is received" (Hussein et al., 2018, p. 5). Scholars indicated that perceived value is a multidimensional concept and suggested many dimensions for its measurement. In the hospitality industry, more precisely in catering (Ryu et al., 2012) measured perceived value through hedonic and utilitarian value; whereas (Yang & Mattila, 2016) suggested functional, hedonic, symbolic (expressive) and financial value; In hotels, (Gallarza et al., 2016) proposed entertainment, aesthetics, ethics and spirituality (relaxation); while (El-adly, 2018) suggested self-gratification, aesthetics, price, prestige, transaction, hedonic and quality.

2.3. Customer loyalty:

Customer loyalty is defined as the commitment toward preferred products or services (Liat et al., 2014, p. 318). In the literature, customer loyalty is explained and analyzed in terms of two different measures: attitudinal and behavioral (Dedeoğlu et al., 2015, p. 6). The attitudinal measure deals with the desire to continue a relationship with a service provider whereas the behavioral measure is related to repeat patronage (C. F. Chen & Chen, 2010, p. 31) .The concept of loyalty received a large interest in the hotel industry, guest loyalty is related to guests' favorable attitudes toward a product besides their intention to repurchase the service frequently (Jani & Han, 2014, p. 13). Many studies proved that retaining existing customers usually costs less than acquiring new ones (Yin & Shen, 2017, p. 86) and that loyal customers tend to recommend products and services to other potential customers (C. F. Chen & Chen, 2010, p. 31), in addition to repurchasing and paying premium prices (Ongsakul et al., 2020, p. 5), which in turn impacts the profitability of the organization (Liat et al., 2014, p. 318). Therefore, focusing on building their loyalty is considered as a strategic goal for the sustainability and the success of organizations.

2.4. Hypothesis development:

The literature indicated that perceived service quality and perceived value affect consumer purchase intention, and thus affect consumer loyalty. (Roger-Monzó et al., 2015, p. 2).

Service quality was proved to be one of the main drivers of loyalty-related behaviors in the hospitality industry (Kandampully et al., 2011, p. 30). Various studies examined the significant impact of service quality on customer loyalty. For instance, it was confirmed in Korean casual dining restaurants by (Kim, 2011). This linkage was also examined and confirmed in bed and breakfast hotels in Taiwan by (C. M. Chen et al., 2013) and in luxury hotels in Bangkok by (Suwanamas et al., 2015). (Su et al., 2016) also found a significant effect of service quality on word of mouth intentions among Chinese leisure hotel guests. Therefore, on the basis of the above, the following hypothesis is proposed:

H1: Perceived quality affects positively customer loyalty.

As aforementioned, an increasing number of scholars considered the role of perceived value in developing customer loyalty. This linkage was confirmed by (C. F. Chen & Chen, 2010) who conducted their study among heritage tourists in Taiwan, and by (Zhou & Wu, 2012) in the Chinese hotel industry. Perceived value significant positive effect on customer loyalty was also confirmed by (Hussein et al., 2018) in Indonesia boutique hotel industry and by (El-adly, 2018) within UAE residents regarding their experience of the last hotel they had stayed in inside or outside the UAE. Thus, in order to explore if these results are consistent with the Algerian hotel context, the following hypothesis is examined:

H2: Perceived value affects positively customer loyalty.

Many studies indicated that perceived quality positively affects perceived value in the context of hospitality (Park et al., 2019), (Milfelner & Pisnik Korda, 2011), (Hu et al., 2009). The three previous studies dealt with the relationship between service quality and perceived value within a group of other relationships in their models, they were applied in various types of hospitality institutions such as resorts, luxury and economic hotels, they also were conducted in different regions of the world: Slovenia, Taiwan, Morris Islands. Accordingly this study examines whether their results are consistent within luxury hotels in Algeria. Therefore, the following hypothesis is developed:

H3: *Perceived quality affects positively perceived value.*

Researches who examined the relationship between perceived quality, perceived value and loyalty (such as the quality-value-loyalty chain suggested by (Parasuraman & Grewal, 2000)), started by identifying the key drivers to customer loyalty and found that service quality and perceived value are prerequisites for customer loyalty (Zhou & Wu, 2012, p. 465). According to (Dedeoğlu et al., 2015, p. 6) perceived value is not only one of the most successful competition elements but it is also important since it affects customers' feelings and buying intentions. In tourism services, many studies suggested that perceived quality is a main antecedent of perceived value, and since the latter is an important antecedent to satisfaction and behavioral intentions (C. F. Chen & Chen, 2010, pp. 31, 32), then it can be suggested that it mediates the relationship between perceived quality and customer loyalty. Thus the below hypothesis is examined:

H4: Perceived value mediates the effect of perceived quality on customer loyalty

Perceived value H3Perceived quality $H4: PQ \rightarrow PV \rightarrow CL$ Loyalty

Fig. 1. Theoretical model

PQ: Perceived quality; PV: Perceived value; CL: Customer loyalty

Source: Elaborated by the author based on the literature review

3. Research method:

3.1. Data collection and sample:

The targeted respondents of this study were regular customers of classified hotels established in Algeria. Prior to data collection, the questionnaire was

examined by four academicians, modifications were carried out according to their remarks. The diffusion of the online questionnaire was performed using Google forms on social media platforms (mainly Facebook and Instagram) and via email between march and May 2020. The sampling method consisted on convenience sampling since the targeted respondents were selected among pages and groups dealing with hospitality content and by picking out their comments about their different experiences with classified hotels. The respondents who were contacted through email were first asked to answer the question "if they deal with a specific hotel in Algeria". Those who answered by "yes" were asked to continue responding the questions. A total of 175 questionnaires were collected of which 105 were 4 and 5 stars hotels' customers. Only 100 were selected for the analysis using SmartPls software which requires a maximum sample number of 100 in its student (free) version.

3.2. Measures:

A self-administrated online questionnaire was developed and adapted with reference to the extant literature in hospitality. The questionnaire was divided into two parts, the first included the constructs items, the second involved sociodemographic questions. Service quality construct was measured using SERVQUAL instrument adapted from (He et al., 2010; Minh et al., 2015), The measures of perceived value were developed from (Campón-cerro et al., 2016; Eladly, 2018; Yin & Shen, 2017). According to (Liat et al., 2017, p. 319) the recommended approach to measure customer loyalty in hotels is based on the context of repeat purchase intention, price sensitivity and recommendations, thus the measures of loyalty were adapted from (Campón-cerro et al., 2016; Jani & Han, 2014). Five-point Likert scale was employed ranging from strongly disagree (1) to strongly agree (5).

4. Data analysis and results:

To test the hypotheses, partial least squares structural equation modeling (PLS-SEM) using SmartPLS (Ringle et al., 2015) software was employed, the reason for using this method is because the data are non-normally distributed, and the main objective of the study is to predict endogenous variables (Hair et al., 2017). Also, the number of published articles using PLS-SEM increased significantly in recent years in many social science disciplines including marketing and

hospitality management (Hair et al., 2019, p. 3). Two steps are required to examine the PLS model: assessment of the measurement model, then the structural model (Hair et al., 2017). Before performing the PLS-SEM analysis, common-method variance bias test was conducted using Herman's single-factor test (Podsakoff et al., 2003, p. 889), all items were entered into a principal component analysis. The results showed that no single factor accounted for the majority of the variance (the first factor accounted for 18.63% of the 75.5% explained variance). Thus, this study does not have any problem of common-method variance bias.

4.1. Sample characteristics:

A total of 100 regular respondents from luxury hotels based in Algeria were analyzed. The largest proportion was male (61%). The main age category was 26-35 years old with (44%), followed by (29%) who were 36-45 years old, then, 18-25 years old with (13%), then (11%) were 46-60 years old and (3%) of the respondents were over 61 years. Regarding the level of education, respondents with high school level or less represented (4%), those with a bachelor's degree accounted for (37%) percent, and those with higher education (magister or doctorate degree) represented the largest proportion with (59%). Regarding their income, (20%) earn less than 32.000 dzd, (29%) earn between 32.001 and 65.000, (34%) gain between 65.001 and 150.000 and (17%) earn more than 150.001 dzd.

As for the hotel characteristics, those with four stars accreditation represented (62%), and those with five stars (38%). Urban hotels represent (67%), and resorts account for (33%). Local hotels represent (43%), local chains (18%) and international chains (39%).

4.2. Measurement model:

The measurement model was examined based on internal consistency (cronbach's alpha, composite reliability), convergent validity (indicator reliability, average variance extracted) and discriminant validity (Hair et al., 2017, p. 121). Items loading ranged from 0.60 to 0.91 which suggests high item reliability (table 1). Cronbach's alpha coefficients for all constructs were higher than threshold value of 0.7. To establish appropriate results of average variance extracted (AVE) and composite reliability, items with a loading less than 0.6 were deleted (i.e.

Qual1_Tang: The hotel's location is convenient; Val31_prix: The hotel offers other good services (e.g., laundry, car rental, room service, spa, ...etc) that are worth their price; Val32_prix: In general, the hotel price is acceptable; Fid6_sensib: You are likely to pay a little bit more for using the hotel's services; Fid7_ sensib: Price is not an important factor in your decision to remain with the hotel; Fid8_sensib: If the hotel were to raise the price by 10%, you would likely remain). Thus, composite reliability was well established since its values were higher than 0.7. All AVE values were higher than 0.5 as recommended by (Hair et al., 2019).

Table 1. Measurement model results.

Factor and Indicator (Loading)	or CD AVE
Factor and Indicator (Loading)	$\frac{\alpha - CR - AVE}{2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 +$
Perceived quality	0.943- 0.951- 0.601
Equipment, fixtures and fittings are modern looking.	
(0.613)	
The staff have a neat appearance. (0.798)	
The hotel offers a variety of food and beverages that meet	
your needs. (0.654)	
The staff perform the requested service right from the	
beginning. (0.831)	
The staff provides you with the services you need at the	
convenient time. (0.805)	
You receive a prompt service with a minimal waiting	
time. (0.836)	
The Staff is always available to answer your questions.	
(0.825)	
You feel safe during your stay at this hotel. (0.660)	
The staff employees are friendly and courteous. (0.829)	
The staff employees have the necessary knowledge to	
answer your questions. (0.867)	
The staff employees give you individual attention. (0.792)	
The staff employees understand your specific needs.	
(0.794)	
The Staff employees understand your circumstances and	
sympathize with you. (0.725)	
Loyalty	0.922- 0.941- 0.762
You will say positive things about this hotel to other	
people. (0.913)	
You will encourage friends and relatives to stay in this	
hotel. (0.903)	
/	

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You would recommend it to people who ask your advice. (0.901)

You are willing to revisit this hotel in the future. (0.813)

This hotel will be your first choice whenever it comes to choosing a hotel in this area. (0.830)

Perceived value

0.947- 0.952- 0.558

The experience of your stay at this hotel truly felt as an escape from life pressure. (0.783)

During your stay at this hotel, you were able to forget your problems. (0.783)

The experience of your stay at this hotel helped you to release stress and to relax. (0.751)

For you, staying at this hotel was a way to do something different from your daily routine. (0.776)

For you, the ambience (atmosphere) of the hotel gave a sense of joy to your stay. (0.768)

It was fun to be at this hotel. (0.760)

You were happy during your stay at this hotel because of its ambience (atmosphere). (0.787)

The time spent at this hotel was truly enjoyable. (0.831)

The hotel provides good accommodation that is worth its price. (0.764)

The food and beverages served at the hotel are worth their price. (0.606)

You enjoy the thrill of finding that one expensive room or service at the hotel was really on special rate. (0.634)

You consider your staying experience at the hotel as fortunate when you find some bargains (e.g., special rates, offers, discounts, etc.). (0.720)

Staying at that hotel is considered prestigious. (0.774)

You consider staying at this hotel a status symbol . (0.743)

Your stay at this hotel matches your social status. (0.657)

You feel proud when staying at this hotel. (0.772)

 α : alpha cronbach; CR: Composite Reliability; AVE: Average Variance Extracted; all item loadings are significant at p < 0.05.

Source: Elaborated by the author using Smart PLS 3. results

Finally, discriminant validity was verified according to Fornell-Lacker (table 2) and heterotrait-monotrait (HTMT) ratio of correlations (table 3) criteria. Fornell-Larcker criterion was examined, it suggests that the square root of the AVE should be greater than the correlation coefficients between the constructs (Hair et al., 2019). As reported in the table 2. The diagonal values (square root of the AVE) are higher than the other values of the matrix.

Table 2. Discriminant validity for the measurement model according to Fornell-Larcker criterion.

Construct	Perceived quality	Loyalty	Perceived value
Perceived quality	0.775		
Loyalty	0.707	0.873	
Perceived value	0.648	0.736	0.747

Correlation is significant at the 0.001 level.

Source: Elaborated by the author using Smart PLS 3. results

Discriminant validity of the constructs is also assessed using HTMT ratio which should not exceed the value of 0.85 according to (Henseler et al., 2015), this was verified in the results mentioned in table 3. Thus, adequate discriminant validity for the variables in this study was established.

Table 3. Discriminant validity of constructs according to Hetrotrait-Monotrait ratio of correlations (HTMT).

Construct	Perceived quality	Loyalty	Perceived value
Perceived quality	•	-	
Loyalty	0.747		
Perceived value	0.668	0.766	

Source: Elaborated by the author using Smart PLS 3. results

Based on the abovementioned results, the measurement model was considered satisfactory from the evidence of internal consistency, convergent validity and discriminant validity.

4.2. Structural model:

The next step after confirming the validity and reliability of the measurement model is the evaluation of the structural model. According to (Hair et al., 2019),

standard assessment criteria which should be considered in evaluating the structural model include the statistical significance and relevance of the path coefficients, the coefficient of determination (R²) and the predictive relevance Q². Bootstrap resampling procedure with 5000 iterations was performed to test the path coefficient significance, findings of structural model assessment are mentioned in table 4 and fig.2.

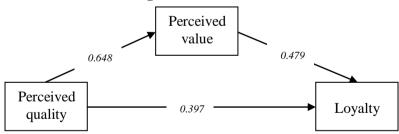
Table 4. Results of the structural model

Hypothesis	Beta	T value	P value	Decision
H1: Perceived quality → Customer	0.397	4.274	0.000	supported
loyalty				
H2: Perceived quality → Perceived	0.648	8.426	0.000	supported
value				
H3: Perceived value → Customer	0.479	5.334	0.000	supported
loyalty				11

Source: Elaborated by the author using Smart PLS 3. results

The results of the path analysis indicate that all three paths were significant, table 4 indicates that both perceived quality (H1: β = 0.397, t = 4.274, p< 0.001) and perceived value (H3: β = 0.479, t = 5.334, p< 0.001) have positive effects on customer loyalty, this provides support for H1 and H3. In addition perceived quality (H2: β = 0.648, t = 8.426, p< 0.001) significantly affects perceived value, thus H2 is supported.

Fig. 2. Structural model



Source: Elaborated by the author using Smart PLS 3. results

R² values of 0.75, 0.50 and 0.25 can be considered substantial, moderate and weak according to (Hair et al., 2019, p. 11). The R² values of perceived value and loyalty were 0.42 and 0.63 respectively which may be considered as weak to moderate. Therefore, in this model perceived quality explains 42% of the variance in customer loyalty and perceived value explains 63% of the variance in customer

loyalty.

Stone-Geisser predictive relevance (Q^2) was used to assess the predictive relevance of the model, the endogenous constructs (perceived value and customer loyalty) must have Q^2 greater than 0. As a rule of thumb, Q^2 values higher than 0, 0.25 and 0.50 depict small, medium and large predictive relevance of the PLS-path model (Hair et al., 2019, p. 12). Based on the blindfolding-based cross-validated redundancy measure procedure Q^2 was calculated, Q^2 for perceived value was 0.20 and Q^2 for customer loyalty was 0.44 indicating acceptable predictive relevance.

4.3. Analysis of mediating effect:

To analyze the mediation effect, the procedure suggested by (Hair et al., 2017) was employed. Bootstrapping with 5000 iterations was performed to test the significance of the indirect effect between perceived quality and customer loyalty through perceived value.

Table 5. Results of mediating effect

	Indirect effect			Confidence interval	
Hypothesis			2.5%	97.5%	
	Beta	T value	P value	Lower	Upper
H4: Perceived quality →	-	-		-	
Perceived value → Customer	0.301	4.488	0.000	0.187	0.453
loyalty					

Source: Elaborated by the author using Smart PLS 3. results

According to the results reported in table 5, significant indirect effect of perceived quality on customer loyalty through perceived value was found (t=4.488, p< 0.001) since the confidence intervals do not include zero (0.187, 0.453). And Because the direct effect of perceived quality on customer loyalty was significant (t = 4.274, p< 0.001), we conclude that perceived value partially mediates the effect of perceived quality on customer loyalty (Hair et al., 2017), thus, H4 was supported.

5. Discussion and implications:

Two main research objectives were addressed in this study. The first was to investigate the effect of perceived quality on customer loyalty in the Algerian luxury hotels, and the second research objective was to examine the mediating effect of perceived value in the relationship between perceived quality and customer loyalty. Next, the findings of the study, its implications and limitations will be discussed.

5.1. General discussion

Results indicate that perceived quality influences customer loyalty and perceived value. This finding strengthens the previous studies showing the positive significant effect of perceived quality on customer loyalty (C. M. Chen et al., 2013; Kandampully et al., 2011; Kim, 2011; Su et al., 2016; Suwanamas et al., 2015), which means that the better the service is provided to customers by the hotel staff, the higher their loyalty will be. This implies that service quality dimensions (tangibles, reliability, responsiveness, assurance and empathy) play a significant role in creating positive behavioral intentions towards the hotel. Moreover, high levels of service quality positively influence customers' perception of value, in fact positive perceptions of self gratification, hedonic value, price, transaction and prestige are affected by high levels of provided service quality. The study also found that customer loyalty is affected by perceived value, this aligns with previous studies findings (C. F. Chen & Chen, 2010; El-adly, 2018; Hussein et al., 2018; Zhou & Wu, 2012). Furthermore, recent research studies suggest that perceived value could be a far better predictor of repurchase intentions than either satisfaction or quality (C. F. Chen & Chen, 2010, p. 30), this was confirmed in this study where the effect of perceived value on customer loyalty (β = 0.479) was greater than the effect of perceived quality on customer loyalty (β = 0.397). Finally, in addition to the previous results, the mediating role of perceived value between perceived quality and customer loyalty was confirmed and consistent with the findings of (C. F. Chen & Chen, 2010; Zhou & Wu, 2012).

The findings of this study contribute to the current body of knowledge in the context of Algerian luxury hotel services. To the best of the researchers' knowledge, this study is the first to examine the mediating role of perceived value between perceived quality and customer loyalty in the context of Algerian luxury hotels. Moreover, it provides strong evidence of the importance of

perceived value as a mediator of the relationship between perceived quality and customer loyalty.

5.2. Managerial implications:

These findings can help managers and practitioners better understand a part of the driving forces of customer loyalty within the hotel industry. Findings indicate that perceived quality has a direct and an indirect positive effect on customer loyalty through the mediation of perceived value, and that the relationship between perceived quality and loyalty is better explained when adding perceived value as a mediator. Consequently, hotel managers should concentrate on providing high levels of service quality in order to generate higher perceptions of value and thus gaining their customers loyalty. Hotel managers should invest in providing appealing equipment and fixtures as well as focusing on the neat appearance of the staff. They also should insure constant and regular training for the staff in order to master their tasks, and improve their interacting skills when dealing with the specific needs of the different customers.

5.3. Limitations and directions for future research:

Many limitations need to be highlighted in this study, SERVQUAL instrument was employed to measure perceived quality, future research can examine this construct using other instruments developed for the hotel context such as LODGSERV (Stevens et al., 1995), HOLSERV (Wong Ooi Mei et al., 1999); LQI (Guetty & Guetty, 2003); Q-sort technique (Al-Sabbahy, et al., 2004) and HOTSPERF (Govender, 2016). To measure perceived value, The study mainly adopted (El-adly, 2018) measure since it was dedicated for the hotel context, however dimensions of aestetics and quality were removed to avoid redundancy with perceived quality construct. Future studies may adopt other measures for perceived value. This study adopted two determinants of customer loyalty, other constructs as trust, commitment and satisfaction could be considered by future studies, also other mediators could be considered besides perceived value, such as switching costs and perceived risk. Future studies can also explore the moderator effect of length of stay and relationship duration with the hotel between perceived quality and customer loyalty. This study employed convenience sampling method due to limited direct access to the hotels whose activities were suspended during the diffusion period of the questionnaire, this was mainly caused by the spread of covid-19 virus. This limitation can be overcome by future studies as soon as hotels activities resume. In addition, the studied sample size was small, first because of the difficulty of access to hotels customers electronically, and to the data processing in the free version of smartpls3 which limits the maximum sample size to one hundred. This study was applied in 4 and 5 stars hotels, future studies can extend the scope to other star ratings and types of hotels.

6. Bibliography list:

- Campón-cerro, A. M., Hernández-mogollón, J. M., & Alves, H. (2016). Sustainable improvement of competitiveness in rural tourism destinations: The quest for tourist loyalty in Spain. *Journal of Destination Marketing & Management*, 1–15. https://doi.org/10.1016/j.jdmm.2016.04.005
- Chen, C. F., & Chen, F. S. (2010). Experience quality, perceived value, satisfaction and behavioral intentions for heritage tourists. *Tourism Management*, 31(1), 29–35. https://doi.org/10.1016/j.tourman.2009.02.008
- Chen, C. M., Chen, S. H., & Lee, H. T. (2013). Interrelationships between Physical Environment Quality, Personal Interaction Quality, Satisfaction and Behavioural Intentions in Relation to Customer Loyalty: The Case of Kinmen's Bed and Breakfast Industry. *Asia Pacific Journal of Tourism Research*, 18(3), 262–287. https://doi.org/10.1080/10941665.2011.647041
- Dedeoğlu, B. B., Küçükergin, K. G., & Balıkçıoğlu, S. (2015). Understanding the Relationships of Servicescape, Value, Image, Pleasure, and Behavioral Intentions Among Hotel Customers. *Journal of Travel and Tourism Marketing*, 1–21. https://doi.org/10.1080/10548408.2014.982268
- El-adly, M. I. (2018). Modelling the relationship between hotel perceived value, customer satisfaction, and customer loyalty. *Journal of Retailing and Consumer Services*, 1–11. https://doi.org/10.1016/j.jretconser.2018.07.007
- Gallarza, M., Giacomo, F. A., Chiappa, D. C., & Gil-saura, I. (2016). Intrinsic value dimensions and the value-satisfaction-loyalty chain: a causal model for services. *Journal of Services Marketing*, 30(2), 1–33. https://doi.org/10.1108/JSM-07-2014-0241
- Govender, K. (2016). From SERVQUAL to HOTSPERF: Towards the Development and Validation of an alternate Hotel Service Quality Measurement Instrument. *African Journal of Hospitality, Tourism and Leisure*, *5*(4), 1–17.

- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM) (2nd Ed). Sage Publications.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, *31*(1), 2–24. https://doi.org/10.1108/EBR-11-2018-0203
- He, P., Murrmann, S. K., & Perdue, R. R. (2010). An Investigation of the Relationships among Employee Empowerment, Employee Perceived Service Quality, and Employee Job Satisfaction in a U. S. Hospitality Organization. *Journal of Foodservice Business Research*, 13(1), 36–50. https://doi.org/10.1080/15378021003595947
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43, 115–135. https://doi.org/10.1007/s11747-014-0403-8
- Hu, H. S., Kandampully, J., & Devi, T. (2009). Relationships and impacts of service quality, perceived value, customer satisfaction, and image: an empirical study. *The Service Industries Journal*, 29(2), 111–125. https://doi.org/10.1080/02642060802292932
- Hussein, A. S., Hapsari, R. D. V., & Yulianti, I. (2018). Experience quality and hotel boutique customer loyalty: Mediating role of hotel image and perceived value. *Journal of Quality Assurance in Hospitality and Tourism*, 19(4), 442–459. https://doi.org/10.1080/1528008X.2018.1429981
- Jani, D., & Han, H. (2014). Personality, satisfaction, image, ambience, and loyalty: Testing their relationships in the hotel industry. *International Journal of Hospitality Management*, 37, 11–20. https://doi.org/10.1016/j.ijhm.2013.10.007
- Kandampully, J., Juwaheer, T. D., & Hu, H. H. (2011). The influence of a hotel firm's quality of service and image and its effect on tourism customer loyalty. *International Journal of Hospitality and Tourism Administration*, 12(1), 21–42. https://doi.org/10.1080/15256480.2011.540976
- Kim, H. J. (2011). Service orientation, service quality, customer satisfaction, and customer loyalty: Testing a structural model. *Journal of Hospitality Marketing and Management*, 20(6), 619–637. https://doi.org/10.1080/19368623.2011.577698

- Kuo, N.-T., Chang, K.-C., Cheng, Y.-S., & Lai, C.-H. (2013). Investigating the Effect of Service Quality on Customer Loyalty in the Hotel Industry: The Mediating Role of Customer Satisfaction and the Moderating Roles of Service Recovery and Perceived Value. *Journal of China Tourism Research*, 9(3), 257–276. https://doi.org/10.1080/19388160.2013.812896
- Liat, C. B., Mansori, S., Chuan, G. C., & Imrie, B. C. (2017). Hotel Service Recovery and Service Quality: Influences of Corporate Image and Generational Differences in the Relationship between Customer Satisfaction and Loyalty. *Journal of Global Marketing*, 30(1), 42–51. https://doi.org/10.1080/08911762.2016.1262932
- Liat, C. B., Mansori, S., & Huei, C. T. (2014). The Associations Between Service Quality, Corporate Image, Customer Satisfaction, and Loyalty: Evidence From the Malaysian Hotel Industry. *Journal of Hospitality Marketing and Management*, 23(3), 314–326. https://doi.org/10.1080/19368623.2013.796867
- Milfelner, B., & Pisnik Korda, A. (2011). Hotel image and guests satisfaction as a source of sustainable competitive advantage. *International Journal of Sustainable Economy*, 3(1), 92–106. https://doi.org/https://doi.org/10.1504/IJSE.2011.037722
- Minh, N. H., Ha, N. T., Anh, P. C., & Matsui, Y. (2015). Service Quality and Customer Satisfaction: A Case Study of Hotel Industry in Vietnam. *Asian Social Science*, 11(10), 73–85. https://doi.org/10.5539/ass.v11n10p73
- Ministry of tourism and handicraft and family work. (2020). *Status of national hotels*. https://www.mtatf.gov.dz/المقومات-الاساسية-السياحة/el-83d7bfe4
- Ongsakul, V., Ali, F., Wu, C., Duan, Y., Cobanoglu, C., & Ryu, K. (2020). Hotel website quality, performance, telepresence and behavioral intentions. *Tourism Review*. https://doi.org/10.1108/TR-02-2019-0039
- Parasuraman, A., & Grewal, D. (2000). The impact of technology on the quality-value-loyalty chain: A research agenda. *Journal of the Academy of Marketing Science*, 28(1), 168–174. https://doi.org/10.1177/0092070300281015
- Park, S. H., Hsieh, C., & Miller, J. C. (2019). Perceived quality and value in resort hotel customers: examining the length of stay as a moderator. *International Journal of Tourism Sciences*, 19(2), 65–79. https://doi.org/10.1080/15980634.2019.1621515

- Podsakoff, P. M., Mackenzie, S. B., Lee, J., & Podsakoff, N. P. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology*, 88(5), 879–903. https://doi.org/10.1037/0021-9010.88.5.879
- Ringle, C., Wende, S., & Becker, J.-M. (2015). *SmartPLS 3* (3.2.6). Boenningstedt: SmartPLS Gmbh. www.smartpls.com
- Roger-Monzó, V., Martí-Sánchez, M., & Guijarro-García, M. (2015). Using online consumer loyalty to gain competitive advantage in travel agencies. *Journal of Business Research*, 68(7), 1638–1640. https://doi.org/10.1016/j.jbusres.2015.02.009
- Ryu, K., Lee, H.-R., & Kim, W. G. (2012). The influence of the quality of the physical environment, food, and service on restaurant image, customer perceived value, customer satisfaction, and behavioral intensions. *International Journal of Contemporary Hospitality Management*, 24(2), 200–223. https://doi.org/10.1108/09596111211206141
- Su, L., Swanson, S. R., & Chen, X. (2016). The Impact of Perceived Service Fairness and Quality on the Behavioral Intentions of Chinese Hotel Guests: the Mediating Role of Consumption Emotions. *Journal of Travel and Tourism Marketing*, 33(May), 88–102. https://doi.org/10.1080/10548408.2015.1008668
- Suwanamas, C., Trimetsoontorn, J., & Fongsuwan, W. (2015). The effect of perceived service quality on customer emotions, customer satisfaction and customer loyalty: a PLS-SEM approach towards a luxury hotel in Bangkok, Thailand. *Journal of Global Business Advancement*, 8(4), 374–398. https://doi.org/10.1504/JGBA.2015.074018
- Trianasari, N. (2018). Hotel's responses toward on line complaints. *International Conference on E-Business and Applications ICEBA 2018.*, 51–54. https://doi.org/10.1145/3194188.3194198
- Yang, W., & Mattila, A. (2016). Why do we buy luxury experiences? Measuring value perceptions of luxury hospitality services. *International Journal of Contemporary Hospitality Management*, 28(9), 1–43. https://doi.org/10.1108/IJCHM-11-2014-0579
- Yin, C. K., & Shen, H. (2017). Assessing the Effects of Switching Costs on Perceived Values and Brand Loyalty: The Impact of Customers' Perceived Authenticity in Hotel Sector. *International Journal of Business and*

Management, 12(1), 84–94. https://doi.org/10.5539/ijbm.v12n1p84

Zhou, Y., & Wu, Y. (2012). Research on the relationship between group-purchasing service quality and customer loyalty in hotel industry. 2012 9th International Conference on Service Systems and Service Management - Proceedings of ICSSSM'12, 464–468. https://doi.org/10.1109/ICSSSM.2012.6252279