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# Keep Them In: How to Drive Dental Consumers' Loyalty in the Modern Era?

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In recent years, consumers' loyalty has become an important issue in health-case in general and in dentistry in particular. Following the increasing activity in dental services, consumer loyalty. This study investigates the factors that influence consumers' loyalty to their dentist. Data was collected through a self-administered survey to consumers; 489 responses were received and 108 surveys were completed and analyzed. The proposed relationships were tested by using regression analysis in Statistical Package for the Social Sciences (SPSS). Results indicate that consumers' trust toward their dentist has an effect on consumer loyalty. Further, consumers' perceived value tends to influence consumer loyalty. However, e-WOM and service's price do not have an impact on consumer loyalty. These findings have important implications for a manager in dentistry. Managers should increase consumers' trust and perceived value to keep the consumers coming back to the dental office.

Keywords: customer loyalty, trust, perceived value, e-WOM, price

JEL Classification: M31

#### 1. Introduction

The dental clinic market has changed the business model of the sector. The center of these changes is to ensure that the consumer (i.e., patient) comes back again to the clinic or in marketing terms, that it ensures consumer loyalty. It is important to focus on patients' loyalty because it could drive customer retention, repurchase, long-term profitability and a better relationship (Caruana and Fenech, 2005).

Dental patients' loyalty (Holt and McHugh, 1997; Caruana and Fenech, 2005; Patterson, 2007; Mariani and Zavarrone, 2011) has not be been reviewed as much as consumers' satisfaction and service quality (Bienstock et al., 2003; Ueltschy et al., 2007). This study sheds light on dental consumers' loyalty.

Many variables may affect dental consumers' loyalty; however, service marketing literature has focused on perceived value, trust, price, electronic word-of-mouth, and switching cost (Zeithaml 1988; McAlexander et al., 2002; Chu and Kim, 2011). The effect of these variables on loyalty needs to be fully understood to help practitioners to keep consumers' coming back after the first visit.

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Dental consumers are not likely to return to the dentist after their first visit. This emphasizes the importance of studying consumers' loyalty to ensure that consumers comeback again and be loyal to a dentist. Also, the literature does not provide much evidence of investigation of customer loyalty within a dentistry context (Caruana and Fenech, 2005). This happened because of the moderate view of marketing and advertising activates among dentists which is mostly mistaken. It is argued that a loyal consumer may be critical to the survival of the business such as a dental office. Thus, this paper investigates the effect of perceived value, trust, price, word-of-mouth, and switching cost on consumer loyalty.

The paper examines the consumer loyalty and the variables that impact it. The implications of the results from this paper may help dental practices develop stronger understanding of consumer loyalty. Limitations and future research opportunities are noted at the end of the paper.

#### 2. Literature Review

#### 2.1. Dental Consumer Loyalty

Pervious research indicates that the consumer plays a co-creator role in his/her dentist experience (Sondell et al., 2002; Shigli and Awinashe, 2010; Hamasaki et al., 2011). This experience should make consumers come back again and make the consumers loyal to his/her dentist.

There are three different perspectives to loyalty. The first perspective focuses on consumers' attitude rather than their behavior which means that a favorable attitude towards a given brand or the intention of purchase. The attitudinal perspective looks at the cognitive aspects of the consumer such as: previous knowledge, brand value, emotional situations, moods, feelings (Dick and Basu, 1994), impulses, switching costs and purchase intentions (Riley et al., 1997). This perspective of loyalty explains the consumer behavior of coming back to the same service provider. Consumers of dental practices experience the same behavior of attitudinal perspective.

The second perspective, focuses on the behavioral aspect of consumers such as repeated purchases (Ehrenberg and Goodhardt, 2002). Other scholars look at loyal customer based on other factor of the market such as market share, product sales (Yim and Kannan, 1999). The third perspective of loyalty is a combination of the two perspective which means evaluating customer loyalty through attitudinal and behavioral factors. For example, repeated purchases, revisits, spending, etc. are combinations of the two perspectives. This research focus on the consumers' attitude and the formulation of their attitude.

#### **2.2.** Trust

In the service sector, because there is high interaction between consumer and service provider, trusting the service provider influences consumer loyalty (McAlexander et al., 2002). In healthcare, trusting the service provider could influence revisiting the clinic and creating loyal consumers (Suki, 2011). Additionally, Yi and La (2004) found that customer satisfaction may lead to trust, which plays a major role in increasing repurchase intention. Trust is a critical factor to understand service marketing and marketing relationships (Morgan and Hunt, 1994).

Trust defined as the psychological state in the mind of consumers (Rousseau et al., 1998). Several definitions were found in the literature for trust. One of these definitions state that "trust reduces complexity in situations of uncertainty" (Grabner-Kraeuter, 2002). Also, Mayers et al. (1995) defined trust as "the willingness of a party to believe the actions of another party based on the expectation that the other will perform a particular action properly, irrespective of the ability to monitor or control the other party." Thus, trust leads consumers to reduce their uncertainty.

According to Ba (2001), in service marketing, "trust is mainly the most important element in the transaction processes". Generally, "studies have pointed out that trust has a positive influence on buying behavior because it reduces the uncertainty level to both seller and buyer" (Kenning, 2008). Therefore, this study's hypothesis is the following:

H1: Consumer trust is positively associated with consumer loyalty.

#### 2.3. Perceived Value

Perceived value has been considered in the marketing literature, especially in service marketing, to deliver the desired value to targeted consumers. The concept has been proposed as an intervening construct between service information (price and non-price) and purchase intention (Zeithaml, 1988). Some researchers (Sawyer and Dickson 1984; Dodds and Monroe, 1985) found that perceived value is the trade-off between what consumers give and what they get in return. In the context of a dentist, the perceived value for consumer

is the trade-off between the money paid, pain, time of waiting, etc., and what they get in terms of esthetics and function. Therefore, this study hypothesis the following:

H2: Perceived value is positively associated with consumer loyalty.

#### **2.4. Price**

Consumers are irrational based on behavioral economics thinking, and they might compromise when they make decisions, satisficing their alternatives (Kahneman, 2003). Some consumers pay high prices for low services and others pay, or perceive, low prices and receive high services. Thus, price fairness is hard to set especially in dental practice.

Price fairness could be influenced by social and economic factors (Maxwell, 1995). The perception of price fairness for consumers may be articulated by perceived value, word of mouth, and trust. The price fairness defined as the comparison of prices in given context and with reference, pertinent standard or norm (Xia et al., 2004). Another definition of price fairness is "the consumers' judgment of a price as reasonable, just, and legitimate" (Haws and Bearden, 2006; Campbell, 2007).

Price literature suggests that there should be a balance between trust and fair price, which means that "consumers are willing to pay higher when they trust the service provider" (e.g., dentist) (Kahneman et al., 1986; Aaker, 1996). For example, consumers are prepared to pay higher prices for a trusted dentist than to pay less money to an unknown or untrusted dentist (Krishnamurthi and Raj, 1991). Thus, price of a trusted dentist is higher than the price of an untrusted one. Therefore, this study hypothesis the following:

H3: Dental price is positively associated with consumer loyalty.

#### 2.5. Word-of-Mouth (WOM) and electronic-WOM e-WOM)

Word-of-Mouth (WOM) has been the focus of recent literature due to the impact of WOM in consumers' choice (e.g., Richins, 1983), post-purchase product perception (e.g., Bone, 1995), and personal selling (e.g., Engel et al., 1969). Consumers accept a non-formal communication more than a formal one from the service provider because it is more natural. WOM happens every day and everywhere, especially in electronic format.

In e-WOM users choose to participate and are exposed to commercials communications at any given time (Chu and Kim, 2011). Moreover, e-WOM convey more credible and relevant information than typical marketer information on the web (Gruen et al., 2006). e-WOM can be defined as the informal product-related communication that consumer provide and seek (Chu and Kim, 2011). Marketers recently have realized the impact of e-WOM and how informal commutation can be more credible and relevant than any high paid advertisement especially when these communications come from a friend (Bickart and Schindler, 2001; Gruen, et al., 2006; Liang and Scammon, 2011). Thus, e-WOM received a lot of attention because it empowers each and every consumer (Hung and Li, 2007; King et al., 2014). Therefore, this study hypothesis the following:

H4: Electronic Word-of-Mouth (e-WOM) is positively associated with consumer loyalty.

#### 2.6. Switching Costs

Researchers and practitioners have raised the importance of switching cost (Sharma and Patterson, 2000; Yang and Peterson, 2004). Also, switching cost is the onetime cost that the consumer pays when they switch from one service provider to another. Switching cost could be more than money such as psychological and emotional cost (Sharma and Patterson, 2000).

The goal of many service providers is to deliver the highest value derived from excellent service and quality product (Parasuraman and Grewal, 2000). Also, some researchers argue that switching cost can influence consumer loyalty (Fornell, 1992; Oliver, 1999; Yang and Peterson, 2004). However, up to our knowledge, the impact of switching cost in dental practice has never been studied. In this research, we are trying to understand the impact of switching cost on dental practice. Therefore, this study hypothesis the following:

*H5: Switching cost is positively associated with consumer loyalty.* 

#### 3. Research Methodology

#### 3.1. Research Model

Based on the proposed hypotheses from section 2, this study is based on the following proposed model, displayed in Figure 1.

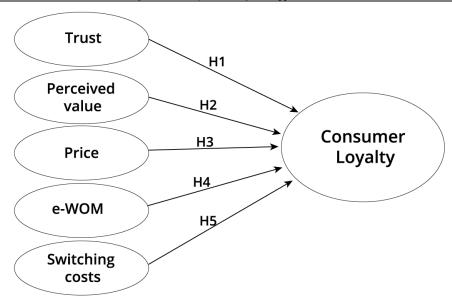


Figure 1. Research Model

#### 3.2. Data Collection Method and Sampling Framework

A survey was offered online through Survey Monkey and was programed to rule out missing data. The data were collected in using the general population via social media (i.e., Twitter) and other online methods. To recruit quality respondents, screening questions were asked, such as whether they went to the dentist in the past 12 months. After screening questions, respondents were presented with the main survey. In approximately three to five weeks, a total of 489 respondents submitted the survey and 108 (56.5% female) completed and submitted usable responses from the sampling frame. A comparison of the mean of responses for the early respondents and late respondents did not vary, thus providing evidence that non-response bias is not an issue.

Based on the responses, it was noted that 31% of the respondents spent 1,001 Saudi Riyals per year on dental services, 44% of them spent between 1 -1000 Saudi Riyals per year on dental services, and 24% did not spend anything. When asked about the reason they visited the dentist, respondents revealed that 55% due to pain, 23% of them visited the dentist for cosmetic reasons, and 18% of them visited the dentist for regular checkup. The high percentage of respondents visit the dentist when they are in pain could be because they do not trust dentist which may take lots of money to prevent teeth problems.

In this study, the independent variables were adopted from existing literature. Perceived value was measured using ten items adapted from Caruana and Fenech (2005). To measure consumer loyalty, a scale with eleven items was used (Jones and Taylor, 2012) and we measured switching costs with a five-item scale developed by Ping (1993). e-WOM was measured by four items adopted from Henning-Thurau et al., (2004). We adopted price fairness scale from Bei and Chiao (2001). Trust scale with four items was adopted from Lau and Lee (1999). The scales, in their original form, were in English, however they were adapted to Arabic. Back translation was performed to ensure consistency of the scale. Demographic questions were added in a separate section at the end of the questionnaire to get deeper understanding of their profile.

#### 3.3. Sample Characteristics

The sample comprised of 108 people including 40 male participants (37%), 61 female participants (56.5%) and 7 missing responses (6.5%). Age group is shown in table 1. All factors showed high reliability ranging from 0.818 to 0.961.

Table 1. Respondents' age segmentation

Age group	Percent		
18 - 23 years	26.8		
24 - 32 years	20.4		
33 - 45 years	30.6		
> 46 years	15.8		

#### 4. Data Analysis

#### 4.1. Exploratory Factor Analysis (EFA)

For the purpose of this paper, the authors aimed to examine a regression analysis. Regression analysis was conducted using Statistical Package for the Social Sciences (SPSS) was used to analyze the data (Hair, 2010). This methodology is widely used and understood with our scope of research. The paths were examined separately to understand the influence of each path.

Following Gerbing and Anderson's (1988), the measurement model was first assessed to check for the reliability and validity. The study scales were adopted from extant literature. The face validity was conducted through the translation and back translation process, as mentioned earlier. An exploratory factor analysis (EFA) was performed to develop the measurement model. EFA extracted four factors for this model. After disregarding one cross-loading item, the factor analysis was confirmed by using SEM (Anderson and Gerbing, 1988). On average, the factor loadings were greater than 0.672 for each construct (please look at table 1 for more details).

Table 2. EFA - Factor Loadings

Table 2. EFA - Factor Loadings  Items Trust Perceived Price e- Switchi							
items	Trust	value	fairness	WOM	Switching cost		
T4 I trust my dentist	0.86	varue	Tarriess	WON	cost		
T6 I feel secure when I go to this dentist because I	0.845						
know that it will never let me down.	0.015						
T2 My dentist can be counted to be good	0.843						
T3 I think my dentist is Reliable	0.84						
T5 I think my dentist is credible	0.826						
T1 My dentist always meets my expectations.	0.82						
T7 This is a honest dentist.	0.77						
PV4 I feel good about my decision to use the dental		0.847					
services provided.  PV3 If I need to do it over again, I would use the dental services provided.		0.8					
PV6I am sure it was the right thing to do to use the dental services provided.		0.768					
PV2 My choice to use the dental services provided has been a wise one.		0.755					
PV1 I am satisfied with my decision to use the dental services provided.		0.733					
PV5 I am happy I used the dental services provided.		0.725					
p6 The prices of my dentist are good deal.			0.854				
p2 At the fees charged, dental services are very			0.846				
economic.							
p3 The price charged for dental services is acceptable.			0.844				
p5 The prices of my dentist are very reasonable.			0.839				
p1 The dental services provided are very good value for money.			0.742	-			
p4 The dental service appeared to be a bargain.	1		0.651	1			
ewom1 I always share my experiences with other member on social media.			3130	0.903			
ewom2 I always provide my opinion with other members on social media				0.898			
ewom3I post links of videos/articles/pictures on social media.				0.758			
SC3 Overall, I would spend a lot if I changed my dentist					0.856		
SC4 Considering everything, the costs to stop going to my dentist and start up with an alternative would be					0.779		
high.  SC2 Generally speaking, the costs in time, money,	-				0.77		
and effort to switch to a new dentist would be high.							
Total Variance (75.425%)	38.317	15.146	9.931	6.597	5.435		
Reliability	0.961	0.927	0.878	0.834	0.818		

#### 4.2. Regression Results

Regression analysis showed a significant model (F=85.264, r²= 0.797, p=0.000). The effects of trust, perceived value and switching cost on consumers' loyalty were found to be statistically significant (p=0.000, 0.000, 0.013), respectively while eWOM and price did not show a significant effect on consumers' loyalty (p=0.575, p=961), respectively. Direct statistically significant correlations were found between trust and perceived value, trust and price, trust and switching cost, trust and loyalty, perceived value and price, perceived value and loyalty, price and loyalty, eWOM and switching cost, eWOM and loyalty, and switching cost and loyalty with different degrees of trust. Table 3 shows correlations between factors.

Table 3. Pearson Correlation between Factors

	Trust	Perceived value	Price	eWOM	Switching cost	Loyalty	$\mathbf{r}^2$
Trust	1	.696**	.191*	0.173	.446**	.844**	0.511**
Perceived Value	.696**	1	.243*	0.129	.322**	.790**	0.391**
Price	.191*	.243*	1	0.156	0.005	.195*	-0.002
E-WOM	0.173	0.129	0.156	1	.264**	.198*	0.026
Switching Cost	.446**	.322**	0.005	.264**	1	.487**	$0.126^{*}$
Loyalty	.844**	.790**	.195*	.198*	.487**	1	

Note: \*p<0.05, \*\*p<0.01.

Table 4. Standardized Coefficients of Independent Variables in Relation to the Dependent Variable.

Variable	Trust	Perceived Value	Price	EWOM	<b>Switching Cost</b>
$\mathbb{R}^2$	0.511**	0.391**	-0.002	0.026	$0.126^{*}$

#### 5. Discussion

The study attempts to enhance our understanding of consumer (patients) loyalty toward dentists because many dentists reported high turnover for their consumers. We have examined factors that we think might increase consumer loyalty toward dentists such as trust, perceived value, switching cost, e-WOM, and price. The results of the study indicate that trust has an effect on loyalty. Further, perceived value tendency influence loyalty. However, e-WOM and price do not influence loyalty. This is a counter intuitive discovery for the common practice that price and e-WOM do not play a role in consumer loyalty even though Saudis have the fastest penetration on social media (The Economist, 2014).

A possible explanation for the non-significance of price and e-WOM may lie that they drive consumers to purchase and not to be loyal. Consumers might visit the dentist for the first time based on affordable (lower) prices and recommendations, but that does not lead consumers to be loyal (Bei and Chiao, 2001). Taken together, these findings have important implications for dentists who are trying to have loyal consumers.

From the results of this study, we can imply that trust and perceived value are the most important factors that affect consumer's loyalty. The staff in the dental practice must strive to build a trustworthy relationship with consumers and work here to increase the perceived value from their consumers' perspective in order to gain their loyalty.

Next, the managerial implications pertaining to the results of the study are discussed.

#### 5.1. Managerial Perspectives

This study provides insights for marketers and dentists to effectively make consumers loyal to the dentist. It also adds to the current literature on loyalty for dentist doctors by showing the impact of trust, perceived value, and switching cost. Our results corroborate the findings in previous research on consumer loyalty (Bei and Chiao, 2001; Shigli and Awinashe, 2010; Hamasaki et al., 2011). Trust and perceived value are a powerful impact for consumer loyalty which means that first impression might not lead to loyalty. Also, as we might have hypothesized that e-WOM and price might lead to consumer loyalty was false.

#### **5.2. Limitations and Future Studies**

The current study is limited since it was confined to a single geographical area, hence, its results cannot be generalized to other countries. Since an online survey was used, only those who have access to the internet had the chance to participate in this study. A larger sample from different geographical areas and incorporation of online and offline surveys can be of broader coverage of the population.

This study has certain limitation that need to be mentioned. This study focuses on consumers from Riyadh, and thus, the results may not be applicable to other regions. In future studies, we would include more

major cities in region to generalize the results. Also, this study used self-administered response. In future studies, we would use other methods such as experiments to increase the causal relationship between the independent and dependent variables. One of the limitation of this study is that the consumers chose to opt out from the survey because they have not been to the dentist (service provider) in the last 12 months. In future studies, we would work with a dental office (service provider) to increase the participation of the survey.

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