

**How Customer Participation Affects Service Quality and Relationship  
Quality in an Aesthetic Medical Chain in Taiwan**

**Yung Chin Huang**

Ph.D. Student

Department of Marketing and Distribution Management  
National Kaohsiung First University, Taiwan

**Yi Ting Lin**

Master Student

Department of Marketing and Distribution Management  
National Kaohsiung First University, Taiwan

**Albert Jing-Fuh Yang**

Chair of IMBA & Associate Professor

Department of Marketing and Distribution Management  
National Kaohsiung First University, Taiwan  
2 Jhuoyue Rd., Nanzih District, Kaohsiung 811, Taiwan  
Tel: 886-7-6011000, ext.4222  
E-mail: jfyang@nkfust.edu.tw

## **Abstract**

With economic, medical technology and biotechnology change, consumers are increasing demand for beauty. Aesthetic medical industry has become one of the most important industries in Taiwan. It is thus critical for aesthetic medical clinics to maintain good relationships with existing customers and gain their loyalty. Customer participation is for a firm to constructively include customers in service creation and delivery process to provide more value and better experience for customers. It is imperative for firms to incorporate this concept nowadays.

This study delineates and empirically tests hypotheses regarding the effects of customer participation on service evaluation and relationship quality in the context of a chain of 12 aesthetic medical clinics. A total of 475 valid survey questionnaires are received and structure equation modeling techniques are employed to test hypotheses. The major research findings are as the followings: (1) customer participation positively affects technical quality and functional quality; (2) technical quality and functional quality positively affect customer satisfaction; (3) customer satisfaction positively affects trust; (4) trust positively affects loyalty and commitment; and finally (5) commitment positively affects loyalty. The mediation effect among trust, commitment and loyalty is also examined and it shows that commitment is the partial mediator between trust and loyalty. In addition to the implication of the empirical results, the directions for future research on related issues were also suggested.

keywords: customer participation, service evaluation, relationship quality, aesthetic medicine

## **1. Introduction**

Significant changes in both marketing thought and the marketplace suggest that simply being customer oriented is not enough; firms must learn from and collaborate with customers to create values that meet their individual and dynamic needs (Prahalad and Ramaswamy 2000). To maintain a competitive advantage, businesses must be innovative and provide a variety of products and services to meet customer needs. Therefore, firms must learn from and collaborate with customers to create values that meet their individual and dynamic needs. Encouraging customer participation may represent the next frontier in competitive effectiveness (Bendapudi and Leone 2003), and it reflects a major shift from a goods-centered to a service-centered logic for marketing (Vargo and Lusch 2004). This new service-dominant logic views customers as proactive co-creators rather than as passive receivers of value and views companies as facilitators of the value co-creation process rather than as producers of standardized value (Payne, Storbacka and Frow, 2008).

Value co-creation is a central tenet of the service-dominant logic and the main premise of customer participation. Customer participation should deliver value to both customers and firms, and customers who perceive more value from their service encounters tend to be more satisfied (Ouschan, Sweeney, and Johnson 2006; Patterson and Smith 2001). Such customer participation should benefit customers through improved service quality, more customization, and better service control (Dabholkar 1990; Xie, Bagozzi, and Troye 2008), and it should benefit firms through increased customer satisfaction and productivity gains. Bendapudi and Leone (2003) found that participating customers are more satisfied than nonparticipating customers when the service outcome is better than expected.

The notion of value co-creation is particularly important among professional services

(e.g., financial, medical), which are customized, high contact, and high in credence properties. Customer participation is also more salient and offers greater value creation opportunities for service providers and customers in professional services that feature high credence qualities, high degrees of customer contact and customization, and high interdependence between customers and service providers for co-creating favorable outcomes. For example, customers of professional financial services participate by providing information to their financial advisor and jointly making decisions about investment plans (Auh et al. 2007). Thus, Customer participation enables service providers to co-create customized services with customers to suit their needs.

Customer participation has received relatively little attention in the marketing literature; the goal of this study is to fill this gap in the literature. However, extant findings about the effect of customer participation on customer satisfaction, commitment and loyalty are, at best, mixed and inconsistent (e.g., Auh et al. 2007; Bendapudi and Leone 2003; Ennew and Binks 1999). Moreover, most evidence pertaining to value co-creation either is theoretical or reflects anecdotal accounts in business-to-business literature (e.g., Lusch, Brown and Brunswick 1992; Normann and Ramírez 1993; Prahalad and Ramaswamy 2000; Ulaga 2003). Little empirical research has examined or confirmed the value co-creation process in the business-to-consumer context. In this research, we empirically test how customer participation drives service outcomes (i.e., satisfaction, trust, commitment, and loyalty) through the effects of service quality in the business-to-consumer context of aesthetic plastic surgery service.

## **2. Literature Review and Hypotheses Development**

### **2.1 Aesthetic Medical Industry in Taiwan**

The Chinese Society of Cosmetic Surgery and Anti-aging Medicine (CSCSM) defines aesthetic medicine as “an emerging branch of medicine aimed at enhancing the aesthetics and quality of everyday life based on three pillars: medical expertise, cosmetic theories and principles of beauty in human physical appearance; its approach combines medical ethics, medical aesthetics and technologies in order to aesthetically maintain, restore, create and reshape the human body”.

The popularity of Korean pop culture has drastically driven Taiwanese’s demand for aesthetic medicine. In the report that suggests a similar trend worldwide, the American Society for Aesthetic Plastic Surgery (ASAPS) reveals that the U.S. demand for both non-surgical and surgical aesthetic procedures increased 10~12% per year. The ASAPS statistics also shows that surgical procedures accounted for 17% of total cosmetic procedures performed in the U.S., and 61% of the total output of the U.S.’s medical aesthetics sector. The relatively low-priced non-surgical procedures, on the other hand, constitute 83% of all procedures performed in the U.S., but only 39% of the sector’s total revenue.

According to an Industry & Technology Intelligence Services (ITIS) report, not only were there 1,000 aesthetic medical clinics in Taiwan as of 2013, mostly concentrated in Taipei City, but Taiwan also currently boasts an adequate number of well-trained aesthetic medical practitioners who are as competent as their counterparts in other countries. The “Flagship Programs of International Health Services” introduced by the Department of Health, Executive Yuan in 2007 was an effort to attract foreign visitors and boost cross-

border tourism by providing a package of wellness-related solutions such as aesthetic medical and dental services. Taiwan lies in the vicinity of multiple Asian regions with constant tourist arrivals from China that, according to Taiwan's Tourism Bureau, had reached 1,630,735 as of 2010, exceeding the number of Japanese visitors. Despite China's thriving economy, its technologically backward clinics hardly meet the people's surging demand for cosmetic medical services. Taiwan's aesthetic medical sector, therefore, enjoys an advantage over its Chinese counterpart (in terms of technology or service) besides unlimited business potential if it strategically partners with tourism and insurance sectors.

## **2.2 Conceptual Model Development**

Customer participation is fundamental to the service logic to co-create value (Grönroos 2006; Vargo and Lusch 2004). In fact, service is the process of doing things in interaction with the customer. In this view, company may focus on customers' ideas because they have the right to decide what service they should accept. In support of this conceptual structure is the knowledge that customer participation is linked to satisfaction through perceptions of value-creating activities (Chan et al. 2010), which we conceptualize as dimensions of service quality. In addition, satisfaction would affect relationship quality and loyalty as often mentioned discusses in the literature.

### ***2.2.1 Customer Participation***

Customer participation in service process can create the meaningful, cooperative contributions to the service process. Service providers can make the process more efficiency and productivity, lower costs and reduce the price that you pay by customer participation actively. For instance, in the delivery of medical service or healthcare, more

customer participation behaviors are voluntary, even contributions might involve patient participation before treatment (Auh et al. 2007).

The definitions of customer participation employ many forms and degrees, from firm production to joint production to customer production. Because our purpose is to understand the value creation process when customers participate and interact with employees in services, we do not consider firm and customer production (Dabholkar and Bagozzi 2002; Meuter et al. 2005). We adapt previous definitions of customer participation to our research context by conceptualizing customer participation as a behavioral construct that measures the extent to which customers provide or share information, make suggestions, and become involved in decision making during the service co-creation and delivery process (Auh et al. 2007; Chan et al. 2010).

### ***2.2.2 Service Evaluations***

Service quality perceptions are the ways that evaluate services from providers, and customers own service quality perceptions when they have some service experience. There are two dimensions in the service quality (Dagger and Sweeney 2006; Taylor and Cronin 1994). One is functional quality, it means “how” the customer receives the service and it focuses on the way of accepting service and tending to care about the customers’ feeling. The other is technical quality. It means “what” component customer can receive during service experience, including the evaluation of material content like tangible surgery or intangible service, and the capability of the service provider, meaning the team and the team’s expertise of plastic surgery and other techniques (Gronroos 1983).

Service quality has been modeled to satisfaction consistently and they are distinct constructs (Cronin et al. 2000; Gupta and Zeithamal 2006). Customer satisfaction is a

state that customers' service experience meets or exceeds their need or expectation and it also describes the customers' cognitive and affective state (Oliver 1993). Both negative and positive affective reactions may affect satisfaction formation. Satisfied customers also tend to develop their affiliation with the service provider and their involvement in the service relationship (Bolton 1993).

### ***2.2.3 Relationship Quality***

When we gain the service experience, we have the affective reaction about it. Nevertheless we don't just focus on the past, there are many factors that influence customers to the service providers. As to the future factors, trust and commitment are more concerned with the future service relationship. Both trust and commitment are the key constructs in relationship quality of Relationship Marketing (RM) theory (Morgan and Hunt 1994). RM theory defines the firm reacts with customers, competitors, suppliers, and any shareholders and builds the good relationship with them. RM theory comes from the social exchange theory (George Homans 1961), and it emphasized exchanges of goods and services take place between two parties who are rational entities acting in their own self-interest and who will perform social action based on rewards and costs.

Trust exists when one party has confidence in the exchange partner's reliability and integrity (Morgan and Hunt 1994). Commitment defines as the relative intensity of identification and affiliation with the service provider and the involvement in the relationship (Garbarino and Johnson 1999). Loyalty is the result of relationship marketing (Zeithaml et al. 1996). If customers have a positive relationship toward the organization, they are likely to build trust and commitment. Then it may influence customer loyalty to



the organization. Loyalty measures customers' repurchasing behavior, word of mouth and loyalty behaviors.

### **2.3 Hypotheses**

Customer participation has been linked conceptually to perceived service quality (Dobholkar 1990; Kelley and Hoffman 1997). Different levels of customer participation can vary service quality, because service quality is determined by customers partly on the basis of their level of participation (Edvardsson 2005). Higher participation levels let customers have more opportunities to demonstrate their proficiency at engaging in technical parts, and allow them to get insight about the plastic surgery team's technical expertise (Bell et al. 2005). As for functional quality, mere customer presence and more active customer participation may produce different results of service interaction (Claycomb et al. 2001). We can propose hypotheses as follows:

**H1a** : Customer participation has a positive impact on technical quality.

**H1b** : Customer participation has a positive impact on functional quality.

Customers' perceptions of satisfaction are generated from attribution of quality. While service quality can be measured, customer satisfaction demonstrates customers' feeling and states of the service that they get (Zeithaml 1988). Customers describes their satisfaction by getting their service quality, no matter in technical part or functional part, it also can let customers reflect their satisfaction to the brand. This idea can be supported by an argument for the order in the service quality to satisfaction (Cronin and Taylor 1992; Dagger and Sweeny 2006). We can propose hypotheses as follows:

**H2** : Technical quality has a positive impact on customer satisfaction.

**H3** : Functional quality has a positive impact on customer satisfaction.

Relationship quality defines as “an overall assessment of the strength of a relationship” (De Wulf et al. 2001). In this research, we regard trust and commitment as content of relationship quality. We can understand the relationship of “satisfaction-trust” on prior literature (Morgan and Hunt 1994, Garbarino and Johnson 1999). In our research, customers can feel satisfaction by service quality and their satisfaction can influence on future intend (ig. loyalty). We can propose hypotheses as follows:

**H4** : Customer satisfaction of an organization has a positive effect on its trust.

Based on the trust-commitment theory of relationship marketing (Morgan and Hunt 1994), we conceptualize the relationship with trust, commitment and loyalty. In the prior lecture, the framework is applicable to the business to business (B2B) relationship management, but later it can also applied to the context of “business to customers” (B2C) even talking about relationship management (Sheth and Parvatiyar 1995; Hennig-Thurau, Gwinner, and Gremler 2002). We can propose hypotheses as follows:

**H5** : Trust has a positive impact on commitment.

**H6** : Trust has a positive impact on loyalty.

**H7** : Commitment has a positive impact on loyalty.

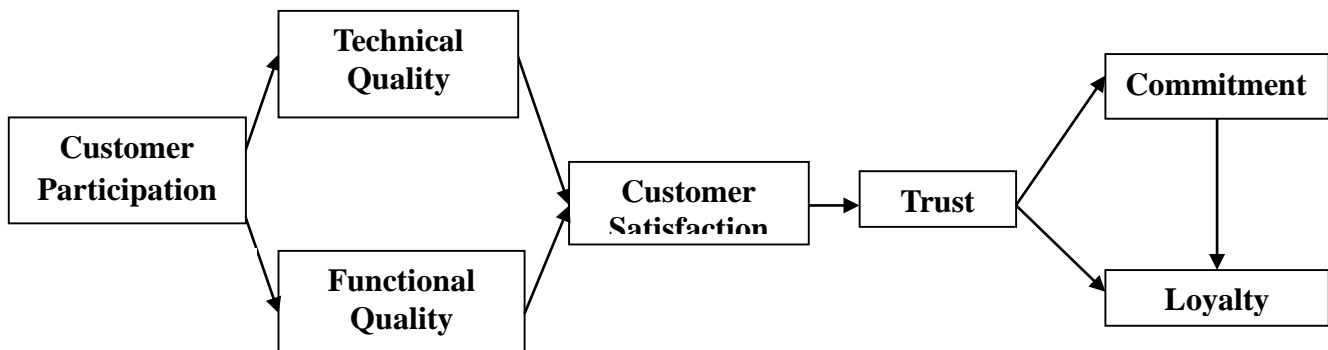
Verhoef (2003) can support part of our research and find that affective commitment plays a mediating role between satisfaction and customer loyalty. Therefore, trust and commitment are affective attachment behavior of the organization. Johnson et al. (2006) investigated the impact of perceived value on customer loyalty is mediated by affective commitment which subsumes the concept of trust to be its sub-dimension. We can propose hypotheses as follows:

**H8** : Commitment has a mediating effect between trust and loyalty.

### 3. Method

#### 3.1 Research Framework and Measurement

According to the result of literature review in the previous section, this study develops the framework which is illustrated as below (Figure 1). There are seven variables in our framework. All measures used in this study are drawn from past studies and necessary modifications are made to adapt them to the specific context of the study. All items are measured on a Likert 5-point scale with strong agree/strong disagree as the scale anchors.



**Figure 1 Proposed Conceptual Framework**

### 3.2 Pretest

For the pretest, we collected on 30 valid samples of customers who receive service in a chain of 12 aesthetic medical clinics in Taiwan. After recovering the questionnaires, we measure the reliability and exploratory factor analysis (EFA) in order to let the questionnaires to be stable and consistency. All of Cronbach's alpha are greater than 0.7 (Nunnally 1978) and Factor loading of all constructs exceed 60 percent, indicating a fairly valid questionnaire. Therefore, there is no need to delete any item in our questionnaire and the final questionnaire is confirmed.

### 3.3 Sample and Data Collection

The empirical investigation samples are collected from the customer who had consultation experiences service in the context of a chain of 12 aesthetic medical clinics. At the 12 clinics around the island (i.e. Taipei, Xinbei, Taoyaun, Taichung, Tainan, Kaohsiung city), we disseminate 512 questionnaires and 475 are effective samples. The effective samples rate is 92.77%. Table 1 illustrates effective samples collected from each area.

**Table 1 Questionnaires Collection**

Area		Quantity	Total Quantity
North of Taiwan	Taipei City	87	251
	Xinbei City	91	
	Taiyuan City	73	
Midland of Taiwan	Taichung City	48	48

<b>South of Taiwan</b>	<b>Tainan City</b>	<b>56</b>	<b>213</b>
	<b>Kaohsiung City</b>	<b>157</b>	

## 4. Results

### 4.1 Confirmatory Factor Analysis

The objective of CFA is to verify a given factor structure, discriminate the validity among constructs and then probe into the research model fit. As Table 2 presents, the factor loadings are all significant ( $p < .001$ ) and greater than 0.5 (Hair, Anderson, Tatham, and Black 2006). In the Table 5, the composite reliability (CR) of all constructs is greater than 0.6 and the average variance extracted (AVE) are greater than 0.5 (Fornell and Larcker 1981). This study can get a supportive evidence of convergent validity and internal consistency.

**Table 2 Confirmatory Factor Analysis**

<b>Dimensions</b>	<b>Item</b>	<b>Factor loading (<math>\lambda</math>)</b>	<b>SMC</b>	<b>t-value</b>	<b>AVE</b>	<b>CR</b>
<b>CP</b>	<b>CP 1</b>	0.73	0.54	17.573***	0.5580	0.8629
	<b>CP 2</b>	0.79	0.62	19.349***		
	<b>CP 3</b>	0.68	0.46	15.836***		
	<b>CP 4</b>	0.76	0.58	18.318***		
	<b>CP 5</b>	0.77	0.59	18.479***		
<b>TQ</b>	<b>TQ1</b>	0.89	0.79	20.907***	0.7862	0.9169

	<b>TQ2</b>	0.89	0.79	20.494***		
	<b>TQ3</b>	0.88	0.77	20.194***		
<b>FQ</b>	<b>FQ1</b>	0.84	0.71	19.779***	0.7342	0.8923
	<b>FQ2</b>	0.88	0.77	20.519***		
	<b>FQ3</b>	0.85	0.72	19.788***		
<b>SAT</b>	<b>SAT1</b>	0.85	0.72	16.970***	0.7282	0.8893
	<b>SAT2</b>	0.86	0.74	17.279***		
	<b>SAT3</b>	0.85	0.72	16.917***		
<b>TRU</b>	<b>TRU1</b>	0.86	0.74	8.939***	0.684	0.8664
	<b>TRU2</b>	0.82	0.67	8.869***		
	<b>TRU3</b>	0.80	0.64	8.878***		
<b>COM</b>	<b>COM1</b>	0.87	0.76	12.304***	0.7688	0.9089
	<b>COM2</b>	0.90	0.81	12.358***		
	<b>COM3</b>	0.86	0.74	12.161***		
<b>LOY</b>	<b>LOY1</b>	0.85	0.72	18.276***	0.7136	0.9084
	<b>LOY2</b>	0.89	0.79	18.943***		
	<b>LOY3</b>	0.89	0.79	18.899***		
	<b>LOY4</b>	0.74	0.55	16.355**		

Note: \*\*\* Stands for the level of significant<0.001, \*\* Stands for the level of significant<0.01

CP is short for customer participation; TQ is short for technical quality; FQ is short for functional quality; SAT is short for customer satisfaction; TRU is short for trust; COM is short for commitment; LOY is short for loyalty.

The square roots of AVE should be higher than other latent variables of related coefficient which is the basis of assessing the discriminant validity. They are preliminary relations of each pair of the focus variables that provide the foundations of the following test hypotheses. Moreover, discriminate validity testing criterion for each dimension of square root of AVE the number of correlation coefficients greater than the dimensions, at least account for the overall number of more than 75% (Hairs, Anderson, Tatham and Black, 1998). The testing result still can be accepted though the square root of AVE of customer participation is just a little lower than 75%. Overall, discriminate validity for our factor structure is supported (see Table 3).

**Table 3 Mean, Standard Deviation and Correlation Matrix**

Dimensions	Correlation Coefficient								
	Mean	$\sigma$	CP	TQ	FQ	SAT	TRU	COM	LOY
<b>CP</b>	3.936	0.563	<b>0.747</b>						
<b>TQ</b>	4.088	0.577	0.605**	<b>0.887</b>					
<b>FQ</b>	4.161	0.580	0.548**	0.676**	<b>0.857</b>				
<b>SAT</b>	4.105	0.579	0.526**	0.656**	0.755**	<b>0.853</b>			
<b>TRU</b>	4.021	0.602	0.535**	0.635**	0.715**	0.817**	<b>0.827</b>		
<b>COM</b>	3.827	0.695	0.510**	0.504**	0.565**	0.666***	0.756**	<b>0.877</b>	
<b>LOY</b>	3.938	0.646	0.536**	0.540**	0.595**	0.709**	0.735**	0.762**	<b>0.846</b>

Note: The figures in the diagonal block are the square root of AVE, other figures are the correlation coefficient of each pair of dimensions. CP is short for customer participation; TQ is short for technical quality; FQ is short for functional quality; SAT is short for customer satisfaction; TRU is short for trust; COM is short for commitment; LOY is short for loyalty. \*\*\*P<0.001, \*\*P<0.01, \*P<0.05

## 4.2 Estimation of Structural Model

After this study provides evidence of reliability, validity and discrimination for each construct, we can continue to the next stage, the overall model evaluation. First, we should appraise whether the overall fit index is good or not. If the goodness of fit is in accordance with the criterion of previous scholars, we can measure further the reliability and validity. The common indexes of evaluating the overall fitness of model are Chi-square test, goodness of fit, residuals analysis and alternative index and so forth. Overall fit standards and results are summarized in Table 4.

We can discover all values of goodness of freedom in this model such as  $\chi^2$ ,  $\chi^2/df$ , GFI, AGFI, NFI, CFI, RMSEA and RMR are all fit the standard. These goodness-of-fit index figures demonstrate a sound construct validity of all the variables in this research as a whole under each condition respectively.

**Table 4 Overall Fit Standards and Values of this Model**

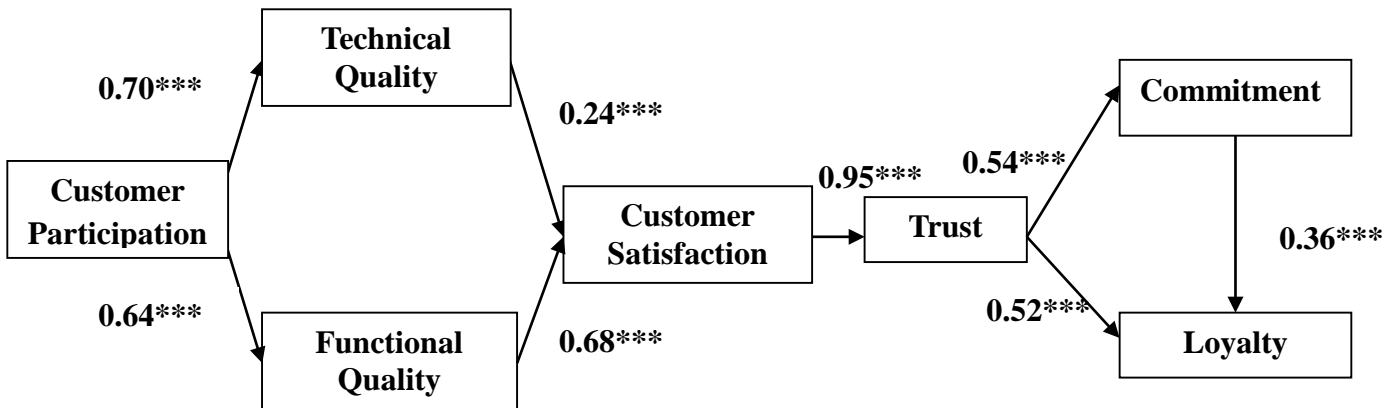
	Fit index	Standard	Result	Resource
<b>Chi-square</b>	$\chi^2$		759.476	Bagozzi & Yi (1988)
	$\chi^2/df$	2~5	3.191	Bollen (1989)
<b>Goodness of fit</b>	<b>GFI</b>	>0.8	0.878	Doll, Xia and Torkzadeh (1994)
	<b>AGFI</b>	>0.8	0.846	Doll, Xia and Torkzadeh (1994)
	<b>NFI</b>	>0.9	0.924	Bentler & Bonett (1980)



	<b>CFI</b>	>0.9	0.946	Hair et al.,(1998)
<b>Alternative index</b>	<b>RMSEA</b>	<0.08	0.068	Hair et al., (2006)
<b>Residuals analysis</b>	<b>RMR</b>	<0.08	0.022	Hu and Bentler (1999)

### 4.3 Hypotheses Testing

Figure 2 shows the direct effect of each variable. The higher the coefficient the greater the representatives of the importance of the causal relationships. Hypotheses testing results are summarized in Table 5.



Note: \*\*\*P<0.001, \*\*P<0.01, \*P<0.05

**Figure 2. The Model of Estimated Path Chart**

**Table 5 Structural Model Results**

<b>Path</b>	<b>Hypothesis</b>	<b>Expected Symbol</b>	<b>Standardized Solution</b>	<b>Result</b>
Customer participation →Technical quality	H <sub>1a</sub>	+	0.70	Supported
Customer participation →Functional quality	H <sub>1b</sub>	+	0.64	Supported
Technical quality →Customer satisfaction	H <sub>2</sub>	+	0.24	Supported
Functional quality →Customer satisfaction	H <sub>3</sub>	+	0.68	Supported
Customer satisfaction →Trust	H <sub>4</sub>	+	0.95	Supported
Trust →Commitment	H <sub>5</sub>	+	0.54	Supported
Trust →Loyalty	H <sub>6</sub>	+	0.52	Supported
Commitment →Loyalty	H <sub>7</sub>	+	0.36	Supported

As for the hypothesis H8 is concerned, the mediation effect of commitment has to be tested to determine whether or not the effect of trust on loyalty is direct or indirect or both (i.e., partial mediation). According to Barron and Kenny's (1986) suggestion, three

following steps can be used to examine whether a variable is a mediator: (1) the independent variable significantly relates to mediator variable, (2) the mediator variable significantly relates to the dependent variable, and (3) when (1) and (2) are controlled, a previously significant relation between the independent and dependent variables is no longer significant.

Path coefficient analysis divides the correlation coefficients into direct and indirect effect. In this research, we consider commitment for mediation effect. Table 6 illustrates the direct and indirect effects. The value for the path of dependent variable to independent variable achieves significant level. It means commitment have partially mediated effect. To sum up, both of loyalty and commitment have the effect on trust.

**Table 6 Direct and Indirect Results**

<b>Dependent Variable</b>	<b>Independent Variable</b>	<b>Mediator Variable</b>	<b>Direct Effect</b>	<b>Indirect Effect</b>	<b>Total Effect</b>
Loyalty	Trust	Commitment	0.36***	0.54 * 0.52 = 0.2808***	0.36 + 0.2808 = 0.6408***

Note: \*\*\*P<0.001, \*\*P<0.01, \*P<0.05

In addition, we conduct Sobel test to further confirm whether or not the mediator effect is significant. The Sobel test z-value is 6.429 at p<0.001 significant level (see Table 7). This result indicates that the commitment is the partial mediator between trust and loyalty.

**Table 7 Sobel Test Statistic**

<b>Dependent Variable</b>	<b>Independent Variable</b>	<b>Mediator Variable</b>	<b>Independent Variable → Mediator Variable</b>	<b>Indirect Effect → Dependent Variable</b>	<b>Mediator Variable → Dependent Variable</b>	<b>Sobel Test (z-value)</b>
Loyalty	Trust	Commitment	0.54*** (S.E.=0.0248)	0.52*** (S.E.=0.0527)	0.36*** (S.E.=0.0535)	6.429***

$$z = \frac{ab}{\sqrt{(b^2SE_a^2) + (a^2SE_b^2)}}$$

Note: Where a is the regression coefficient for the relationship between the independent variable and the mediator, b is the regression coefficient for the relationship between the mediator and the dependent variable, SEa is the standard error of the relationship between the independent variable and the mediator, and SEb is the standard error of the relationship between the mediator variable and the dependent variable. \*\*\*P<0.001, \*\*P<0.01, \*P<0.05

## 5. Discussion

From the research results, we realize that customer participation may affect service quality and relationship quality, and increase loyalty finally. The aesthetic medical industry is an industry that customers tend to have high contact with service providers. Customers can easily contact with service providers and provide their opinions and suggestions regarding the service they received. Ways of increasing customers' involvement in the service process are thus should be considered from both customers'

and clinics' perspectives. Customers are entitled to express their desire with the aesthetic medical team. Customers are more likely to obtain expected service if they are willing to discuss more with doctors and other employees along the way. On the other hand, clinics should encourage employees to communicate well with customers to understand their needs and wants for the service. Thus clinics are more like to provide good service quality and establish customer loyalty.

Aesthetic medical clinics may enhance customers' trust, commitment and loyalty by improving their service quality (i.e. technical quality and functional quality). For example, aesthetic medical clinics can increase their technical quality through well-established continuous education programs. As far as functional quality is concerned, clinics may send cards and gifts to customers on special days such as birthday, wedding anniversary, and so forth to strengthen their relationships with customers.

Though the research results are compelled, there are still some limitations. First of all, the collecting data are from customers of an aesthetic medical chain only and thus the generalization of the result of this study might be limited. For future study, the research could try to collect data from various chains of aesthetic medical clinics. Second, the results of this study are relevant only to the aesthetic medical industry. There is another avenue for the future research which is a replication of this study with other industries such as dental clinics, financial service sector, law firms, accounting firms and so forth to see whether it would help to demonstrate the generalization. At last, respondents answer every item of the questionnaire. It is prone to be criticized by common method variance. Data collected from both customers' and companies' sides could be designed and organized for the future study.

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