

## **The Influence of Customer Participation and Service Involvement on Customer Satisfaction**

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### **Abstract**

*This research conducts an empirical study on the influence of customer personality traits and service involvement on customer participation and the influence of customer participation and service involvement on customer satisfaction. Both impact on customer loyalty. Customers of the hair beauty industry are the objects of this study. 299 valid questionnaires were collected and analysed using the LISREL model. The result shows that there's a significant positive influence of customers' personality traits on customer participation, a significant positive influence of service involvement on customer participation, a significant positive influence of customer participation on customer satisfaction, and a significant positive influence of customer satisfaction on customer loyalty.*

**Keywords:** five personality traits, customer participation, service involvement, customer satisfaction, customer loyalty

### **1. Introduction**

Customer participation is a behavioural concept which emphasises that the customer plays an active role in service. Lovelock and Young (1979) and Bateson and Langeard (1982) indicate customers have different extents of participation desire. Namely, when customers believe that participation is intrinsically attractive, most prefer being active rather than passive. Moreover, customer participation desire influences the evaluation criteria when varied services are provided.

In order to ensure the relationship between customer participation and staff in this empirical study, another empirical study is also carried out to explore the causes of customer participation. This study includes identifying customer participation desires (personality traits, level of involvement) and the effects of customer feelings (feelings of being served, customer satisfaction) which increase customer loyalty.

This research aims at integrating empirical and experimental studies in Taiwan and establish a model for analysing the causality of customer participation, using the hair beauty industry as an example to verify the influence of customer participation and personality traits on customer satisfaction and loyalty, providing a reference for service providers on customer personality traits and for planning market segmentation, and identifying customer personality traits and participation desire to assist service providers in establishing business strategies and service procedures.

### **2. Literature Review**

#### **2.1 Personality Traits**

Traits are behavioural tendencies of people which are closely related to their growth and development. However, traits are also complicated and difficult to detect.

Some people believe that traits are inherited, and some believe that they are acquired. Others believe that there is a reciprocal effect.

The five-factor model (FFM) is analysed through language used in daily life. Personality traits described by common adjectives are used for the descriptions (Digman and Inouye, 1986; Pervin, 1993).

The five factors include: neuroticism, extroversion, openness to experience, agreeableness and conscientiousness.

2.1.1 Neuroticism deals with level of insecurity and nervousness, e.g. anxiousness, insecurity, nervousness and worrying.

2.1.2 Extroversion describes one's energy and sociability, e.g. optimistic, sociable and active.

2.1.3 Openness to experience is the willingness to face or imagine new experiences, e.g. creative, imaginative and open to change.

2.1.4 Agreeableness suggests one's tendency to be kind and trustworthy, e.g. helpful, kind and compassionate.

2.1.5 Conscientiousness is the tendency to be self-disciplined, e.g. self-controlled, persevering and careful.

In addition to cultural generalizability, Wiggins and Grapnel also analyse the five-factor model from a dyadic interactional view.

A literature review shows that personality traits are personal characteristics which are different for each individual. The following hypotheses indicate the influence of the personality traits from the FFM on customer participation desire.

Hypothesis 1: Customers whose participation is based on optimism have a positive influence on participation.

Interactions between customers and staff are positively influenced by customers who are optimistic, enjoying making friends and are peaceful and friendly.

Hypothesis 1-1: Customers who are careful and responsible have a positive influence on customer participation.

Hypothesis 1-2: Customers whose personality tendency is open to experience have a positive influence on customer participation.

Hypothesis 1-3: There is a positive influence on participation from customers who are emotionally stable.

Hypothesis 1-4: Customers who are sensitive have a positive influence on participation.

Hypothesis 1-5: Customers who are friendly have a positive influence on customer participation.

## 2.2 Customer Participation

Customer participation is the activity or resource provided by customers. It includes psychological, physical and even emotional offerings during the process of producing or delivering services (Rodi and Klein, 2000). Through serving themselves or working with staff, customers actually participate in the service to create service value (Claycomb, 2001). Their behaviour may seriously involve them in organisation management and development (Van, Graham and Dienesch, 1994). Kelly, Donnelly and Skinner (1990) believe that customer participation in the process of service delivery can be presented by providing information and actual working service.

Many networks in service trading require multiple elements of customer participation. For example, when trading with brokerage firms, customers must expend both mental and physical effort. The empirical study of Ennew and Binks (1999) shows that participation between service provider and customers shows three aspects of participation: information sharing, responsible behaviour and personal interaction.

A literature review points out that customer participation could maximise the effectiveness of service and satisfy the needs of service customisation. Consequently, the more customers participate, the higher their satisfaction will be.

Hypothesis 2: Customer participation has a positive influence on customer satisfaction.

The higher customer participation is; the higher customer satisfaction will be.

## 2.3 Service Involvement

Lilach Nachum (1999) compiled the relevant studies on the categorisation of production input and proposed two components of service production: involvement of service providers and involvement of customers.

The categorisation of service involvement not only includes direct involvement (labour power, capital, raw materials, etc.), but also includes indirect involvement that has a long-term influence on service production (accumulation of experience and professional knowledge, further education, etc).

This leads to the determination that there is a positive correlation between service involvement and customer participation desire.

Hypothesis 3: Service involvement has a positive influence on customer participation.

The more service involvement there is; the higher customer participation will be.

#### **2.4 Customer Satisfaction**

Formell (1992) indicates that satisfaction is a general feeling that can be directly evaluated. Consumers will compare products and services with their ideal standards. They might feel satisfied with products and services at first but change their opinions after comparing them with their original expectations. Miller (1997) argues that satisfaction is a result of the interaction of “customer anticipation value” and “cognitive performance.” Zeithaml and Bitner (1996) point out that customer satisfaction and service quality can be seen together as a single service encounter level, a general level. Since customer satisfaction is often seen as a concept larger than service quality, service quality is only one of the components of customer satisfaction.

Cardozo (1965) states that customer satisfaction will be reinforced by consumption behaviour; there are chances for them to buy other products. Customer satisfaction is the result of evaluation. It includes cognition and emotion (Oliver, 1981) and also involves obtainment and evaluation by the providers (Howard and Sheth, 1969; Churchill and Surprenant, 1982). Spreng (1993) believes that customer satisfaction is based on the perceptual and rational feelings raised from estimation during and after consumption.

Hypothesis 4: Service involvement has a positive influence on customer satisfaction.

The more service involvement there is; the higher customer satisfaction will be.

#### **2.5 Customer Loyalty**

Jones and Sasser (1995) believe that customer loyalty stems from the customer’s decision to consume a specific service or product again in the future. Customer loyalty can also be divided into long-term and short-term. Long-term loyalty means that customers will not consume from other stores while short-term loyalty means that customers will readily consume in any shop which provides better or equal service. In a study on loyalty, Oliver (1999) defines loyalty as, “a deeply held commitment to re-buy or re-patronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behaviour.”

Hypothesis 5: Customer satisfaction has a positive influence on loyalty.

The higher customer satisfaction is; the higher customer loyalty will be.

### **3. Methodology**

First, the researcher decided on the study direction, ensured the topic and established hypotheses. Based on the research hypotheses, we searched the relevant literature and established a framework and design and sent out questionnaires. The hypotheses were examined using the analytical results of the questionnaires. After the questionnaires were collected, the primary data were analysed using a statistics software system. The analytical data have been described and results organized in order to verify the hypotheses.

In accordance with the verification of hypotheses, conclusions, contributions and management practises, research limitations and suggestions for future research possibilities are proposed.

### **4. Results Analysis**

The results from the questionnaires were analysed. This chapter is divided into five sections. Section one presents the descriptive statistics analysis of the samplings.

Section two provides the reliability analysis of the questionnaires. Section three gives the factor analysis. Section four provides the model construction (LISREL Model). Section five provides the findings.

#### 4.1 Descriptive Statistical Analysis

According to the survey, the backgrounds and present status of the interviewees are understood. Based on the information from the valid samplings (299 copies), the occupation for most of the interviewees is “college or university student.” After analysing the number and percentage for each consumer variable, the distribution of the interviewees’ background variables is as follows.

##### 4.1.1 Experience at Hair Salons

100% of the interviewees answered “Yes.”

##### 4.1.2 Most Often Visited Hair Salons

The analysis shows that “chain hair salon” had the most frequent usage, about 38.46%, followed by “non-chain hair salon” at 35.11%, “quick haircut” at 13.71%, “family barbershop” at 11.70% and “others” at 1.00%.

##### 4.1.3 Consumption Period Frequency

The analysis shows that “60 days” was the highest at 44.48%, followed by “30 days” at 26.09% and “other” at 24.75%.

#### 4.2 Reliability Analysis

Cuieford (1976) argues that when Cronbach’s  $\alpha$  is higher than 0.7, reliability is high. Nunnally (1978) also argues that a reliability higher than 0.7 indicates a highly reliable result. The reliability of each factor in this research is higher than 0.7, which indicates a reliable, stable and consistent result.

#### 4.3 Factor Analysis

The first part of the questionnaire contains 50 questions related to personality traits. After conducting a principal component analysis of a standard varimax rotation, principal components with a character value higher than 1 were kept. Items with a factor loading lower than 0.5 were induced into new factors. Five factors were selected as below.

**Table 1: Factor 1 Careful and Responsible Personality**

Variables	Factor Loadings	Eigen values	Explained variance	cronbach's $\alpha$
I do things carefully.				0.742
I always prepare before I do things.				0.737
I follow a schedule when I do things.				0.668
I place my personal belongings randomly.				0.658
I often forget to put things back in their original places	0.657	9.44	18.88%	0.785
I insist that if things can be finished at once, they must be finished at once.				0.655
I pay attention to details				0.627
I will achieve my goals through my own efforts				0.520

#### Factor 2 Openness to experience

Variables	Factor Loadings	Eigen values	Explained variance	cronbach's $\alpha$
I like to participate in meetings with many people.				0.706
I like to go to places with many people.				0.636
I like to keep a low profile without being noticed.				0.627
I don't talk much.	0.599	5.03	10.05%	0.503
I like making friends.				0.590
When meeting people, I am the one to open a conversation.				0.549
I don't mind being the focus of others.				0.506

**Factor 3 Stable emotion**

Variables	Factor Loadings	Eigen values	Explained variance	cronbach's $\alpha$
I will think a lot when someone says something.				0.683
My emotions usually change suddenly.				0.648
I think about conversations with friends before I sleep.				0.618
I often suspect that people treat me nicely because of ulterior motives.	0.546	3.43	6.87%	0.714
I feel worried very often.				0.766
I don't often feel anxious.				0.716
I am relaxed most of the time.				0.515

**Factor 4 Sensitivity**

Variables	Factor Loadings	Eigen values	Explained variance	cronbach's $\alpha$
I often come up with good ideas to solve problems.				0.800
I have a poor imagination.				0.793
I can understand things quickly.	0.735	2.54	5.07%	0.640
I have a good imagination.				0.606
I am not interested in abstract ideas.				0.592

**Factor 5 Friendliness**

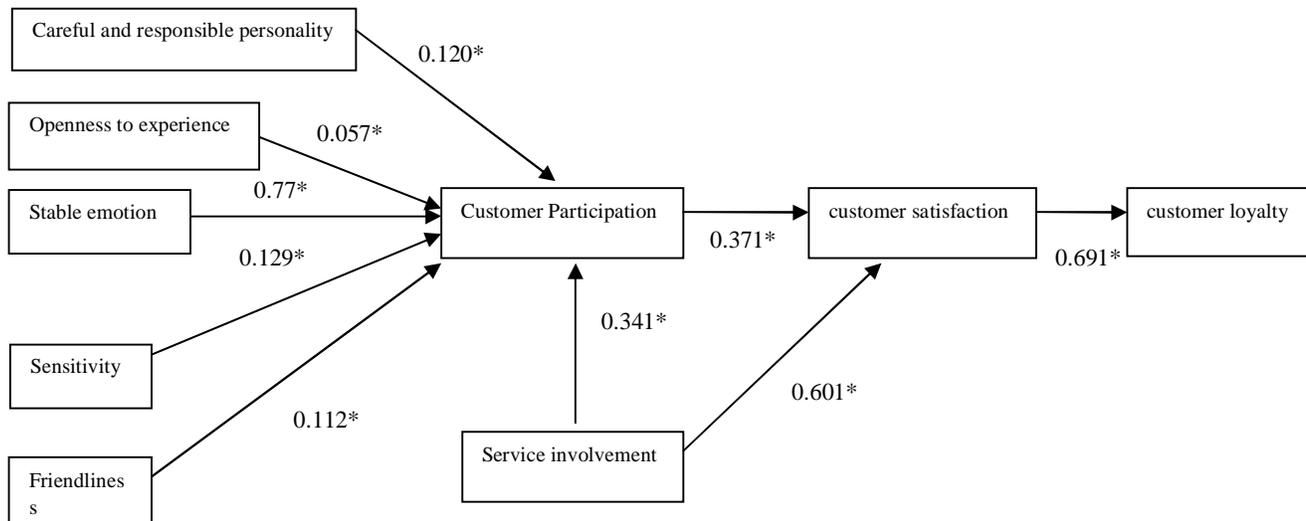
Variables	Factor Loadings	Eigen values	Explained variance	cronbach's $\alpha$
I am willing to listen to other people.				0.717
I always put myself in the other person's shoes.				0.709
I understand other people's emotions.				0.708
I like to help other people.	0.645	2.08	4.15%	0.842
I treat people politely.				0.622
I like to work with other people and dislike competition.				0.602
I rarely care about other people.				0.514

**4.4 Model Construction - LISREL Model**

The data analysis of this research was constructed under the LISREL Model, and a confirmatory factor analysis with a unidimensional scale was used. The results show that the Goodness of Fit Index (GFI) = 0.937, and the Adjusted Goodness of Fit Index (AGFI) = 0.762. Both GFI and AGFI were higher than 0.7. The closer to 1 GFI and AGFI are, the better the fit. Root Mean Square Residual (RMSR) = 0.0278, which is smaller than 0.05. It presents a high fit for this model.

**4.5 Research Findings**

Fig. 1 describes the LISREL model in terms of the influence of customer participation and service involvement on customer satisfaction. Fig. 1 shows the causality between customer participation and service involvement for the five personality traits as well as for the relationships between significant customer satisfaction and loyalty.



Minimum Fit Function Chi-Square = 95.775 (P = 0.00)

Normal Theory Weighted Least Squares Chi-Square = 90.722 (P = 0.00)

Standardized RMR = 0.0607

**Fig. 1 LISREL Model of Customer Participation**

As the numbers in Fig. 1 indicate, there is causality between the five personality traits and customer participation; the influence coefficient between customers with “careful and responsible” personality traits and “customer participation” is 0.120, which is a significant positive influence and supports H1-1. The influence coefficient between customers with the “openness to experience” personality trait and “customer participation” is 0.057, which is a significant positive influence and supports H1-2. The influence coefficient between customers with the “stable emotion” personality trait and “customer participation” is 0.077, which is a significant positive influence and supports H1-3. The influence coefficient between customers with the “sensitive thinking” personality trait and “customer participation” is 0.129, which is a significant positive influence and supports H1-4.

The influence coefficient between customers with the “friendly” personality trait and “customer participation” is 0.112, which is a significant positive influence and supports H1-5. The influence coefficient between “customer participation” and “customer satisfaction” is 0.371, which is a significant positive influence and supports H2. The influence coefficient between “service involvement” of the staff and “customer participation” is 0.341, which is a significant positive influence and supports H3. The influence coefficient between “service involvement” of the staff and “customer satisfaction” is 0.601, which is a significant positive influence and supports H4. The influence coefficient between “customer satisfaction” and “customer loyalty” is 0.691, which is a significant positive influence and supports H5.

### 5. Conclusion

The study aims to explore the influence of customer personality traits and service involvement on customer participation and the influence of customer participation and service involvement on customer satisfaction and loyalty. The following conclusions result from the analysis described in Chapter Four. It can be referred to for future research.

**Table 2: Hypothesis Results**

Hypothesis	The empirical results
Hypothesis 1: Customers whose participation is based on optimism positively influence on participation.	
Hypothesis 1-1: Customers who are careful and responsible positively influence on customer participation	True
Hypothesis 1-2: Customers whose personality tendency is open to experience positively influence on customer participation.	True
Hypothesis 1-3: There is a positive influence on participation from customers who are emotionally stable.	True
Hypothesis 1-4: Customers who are sensitive positively influence on participation.	True
Hypothesis 1-5: Customers who are friendly positively influence on customer participation.	True
Hypothesis 2: Customer participation positively influences on customer satisfaction.	True
Hypothesis 3: Service involvement positively influences on customer participation.	True
Hypothesis 4: Service involvement positively influences on customer satisfaction.	True
Hypothesis 5: Customer satisfaction positively influences on loyalty.	True

Factor 1: The five sub-items show that the five personality traits have a significant positive influence on customer participation. Therefore, when hair salons, which were used in the customer participation business model, are recruiting service staff, personality traits tests should be included in the screening to help find passionate employees.

Factor 2: “Customer participation” has a significant positive influence on “customer satisfaction.” This demonstrates that the higher the customer participation is, the higher the customer satisfaction will be.

After finding staff with a passion for customer participation, the salons must design service patterns that allow customers to participate in and provide customisation. Every customer has different needs. The higher the customisation, the more the customers will be satisfied; it will reinforce customer satisfaction.

Factor 3: “Service involvement” has a significant positive influence on “customer participation.” The more service involvement there is, the higher the customer participation will be.

Customers will give positive responses to staff providing good service and will be willing to offer more suggestions and participation.

Factor 4: “Service involvement” has a significant positive influence on “customer satisfaction.” The more service involvement there is, the more customers will be satisfied; it reinforces customer satisfaction.

The more service involvement there is, the higher the customer satisfaction will be; however, even more improvements will have to be made.

Factor 5: “Customer satisfaction” has a positive influence on “customer loyalty. The more satisfied customers are, the more loyal they will be.

When customers receive a pleasant and satisfied consuming experience from a salon, they will choose this salon again. They will also introduce this salon to their friends and relatives. The higher the customer satisfaction, the higher the customer loyalty and the more new customers will come.

### 5.1 Suggestions

This survey shows that customers frequent a salon which is customer participation oriented more often. Fewer consumers visit family barbershops. Although customer participation oriented hair salons charge higher prices than family barbershops, customers are willing to pay more for a better environment and service. This shows the importance of changes in consumption habits and customer participation in the hair beauty business. The importance of these changes is important for other industries as well.

The service staff is the first-line facing customers. Employers should give more consideration to staff needs and welfare, so that they will be in a pleasant mood to serve customers. Hair salons are now facing extreme competition; however, if more customised services are provided, more customers will definitely be attracted. Today's customers are discerning. Service must come from the heart; otherwise, careless mistakes will leave a negative impression of the staff or the salon. In general, consumers will not express their discontent with the staff or the salon immediately, but they will choose not to return. Once this happens, it is very difficult to get them back. Therefore, service must be both careful and considerate.

## 5.2 Suggestions for Future Research

This research was conducted through a survey. The designed questionnaires were distributed to customers with experience at using hair salons. Some interviewees noted that some questions did not allow them to fully express their opinions. Future researchers could use this research as a foundation and carry out interviews that would enable customers to better express their thoughts about customer participation. It is hoped that the data on customer participation could be enriched. Most were university students at the school; others were students from graduate institutes, work-study students and alumni. Most of them were from different regions; however, the school surroundings are in a non-metropolitan area which may be a factor. Samplings for future studies could be through direct collection or through the internet.

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