

To explore the relationship between the customer values, attitudes, satisfactions, and service quality: An empirical study of Taiwan's skin-care service industry

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Abstract

Today, beauty salons represent a service-intensive business in which service quality is increasingly important. "Skin-care business" means performing skin-care service and treatment by a professional operator. Nevertheless, customers interact with the service provider in several ways. Most of the interactions traditionally occur during the service transaction. These points are needed for researchers to identify the factors that determine acceptance of services by the customers. Based on a sample of 534 customers from thirty beauty-salons which offered skin-care services in Taiwan, a majority of the hypothesized relationships are strongly supported. This research was found that not only customer values and service quality, but also customer attitudes, had a positive effect on customer satisfaction. The investigation also revealed that both customer values and customer attitudes are determinants of service quality, although service quality illustrates greater influences on the values-satisfaction link than the attitudes-satisfaction link, it clearly suggests that service quality plays a crucial role in mediating the influence of customer attitudes on customer satisfaction.

Keywords: Skin-care business, customers' interaction, mediating, customer values, attitudes and satisfaction.

1. Introduction: Research Background and Motivation

The impacts of price competition and global economy on the marketing of skin care in Taiwan have entailed a major change in the long term strategy with a change from a product orientation to a consumer orientation. Hence, the focus today is not only on ensuring customer satisfaction with products and services but also on cultivating to deep relationships so as to maintain consumer loyalty. That is, for Taiwan's skin-care operators, their long-term competitive advantage is now determined by large measures from the feedback based of customers'. The study focusing on customer s' psychological dynamics such as customer's values and attitudes which may in turn predict consumer behavior and pertaining to the services quality and satisfaction. This study consists of four sections, each of which will briefly summarize in the following: Section One includes the research background, motivation, and purpose. Section Two will present a research methodology. It features a research model that suggests the integrative relationships among key constructs, i.e., customer values, customer attitudes, service quality and customer satisfaction. Section Three presents the outcomes from factor analysis, analysis of variance and structure-equation modeling are included as well. Section Four is a summary of findings and contributions of the present study. Also suggestions for future research and the results' managerial implications are presented.

2. Research Methodology

2.1 Research Model

The present study used an integrated research model through questionnaires, the hypothesis was illustrated below, and its conceptual model is shown in Figure 2-1.

- H1: Customer values will have a significant effect on customer attitudes toward a skin-care service.
- H2: Customer values will have a significant effect on customers' perception of skin-care service quality.
- H3: Customer attitudes will have a significant effect on customers' perception of skin-care service quality.
- H4: Skin-care service quality will have a significant effect on customer satisfaction with a skin-care service.
- H5: Customer values will have a significant effect on customer satisfaction with a skin-care service.
- H6: Customer attitudes will have a significant effect on customer satisfaction with a skin-care service.

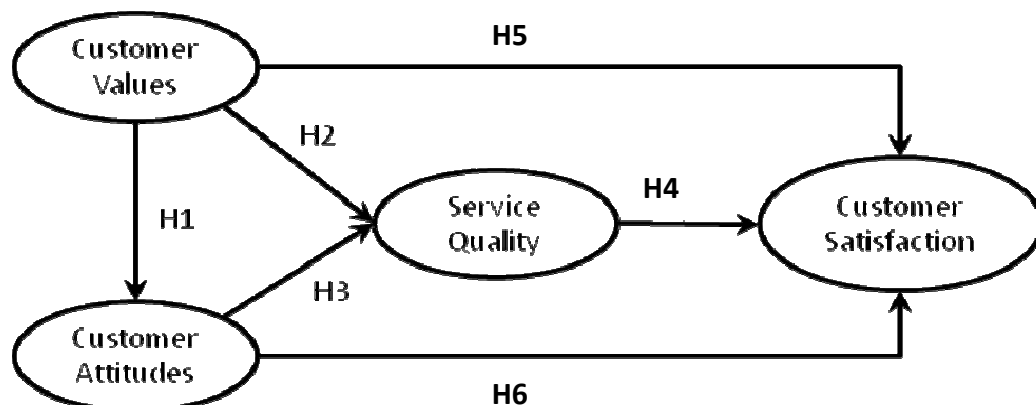


Figure 2-1 The Research Model

2.2 Questionnaire Design

As discussed in Section 2, a 32-item survey questionnaire was developed to obtain the responses from skin-care customers regarding their opinions on various research variables. This questionnaire consists of four constructs: customer values (eight items), customer attitudes (three items), service quality (seventeen items) and customer satisfaction (four items) to see Table 2-1 for an illustration. The sampling plan of the present study consisted of those who had purchased skin-care products/services. Data were collected via questionnaires disseminated by a skin-care company. This procedure resulted in 534 fully usable questionnaires.

2.3 Data Analysis Procedures

In testing the hypotheses, SPSS 13.0 and AMO 7.0 software were applied to analyze the collected data. The following is a brief introduction of the statistical models used in data analyses within SEM. Generally speaking, the SEM (structural equation modeling) is combined with aspects of a multiple regression and a factor analysis to estimate the interrelationships. SEM express how unobserved concepts, or latent variables, in those relationships account for the error value during the estimation process. The goodness-of-fit measurements may be used to assess actual or observed input matrices, such as covariance and correlation variables from the research model.

3. Analyses and Results

3.1 Measurement Results of the Research Variables: The Goodness-of-Fit of CFA was examined by evaluating the observed data which are consistent with the theoretical model of the present study (Hair et al., 1998). Several model-fit indices were used, including the recommended value: $\chi^2/df \leq 3$, GFI (goodness of fit index) ≥ 0.9 , RMSEA (root mean square error of approximation) ≤ 0.1 , AGFI (adjusted goodness of fit index) ≥ 0.9 , (e.g., Hair et al., 1998). Measurements of other constructs (i.e., customer satisfaction, tangibility of service quality) were composed of only three items, leading to zero degree of freedom. Therefore, the goodness-of-fit for those constructs couldn't be tested by accessing CFA. Reliability of these constructs was instead tested by calculating the values of composite reliability (CR) and variance extracted (AVE). The principles provided by Bagozzi and Yi (1988) to assess the internal-structure-model fit are listed in the following at Table 3-1 and Figure 3-1.

3.2 Overall Model of Fit

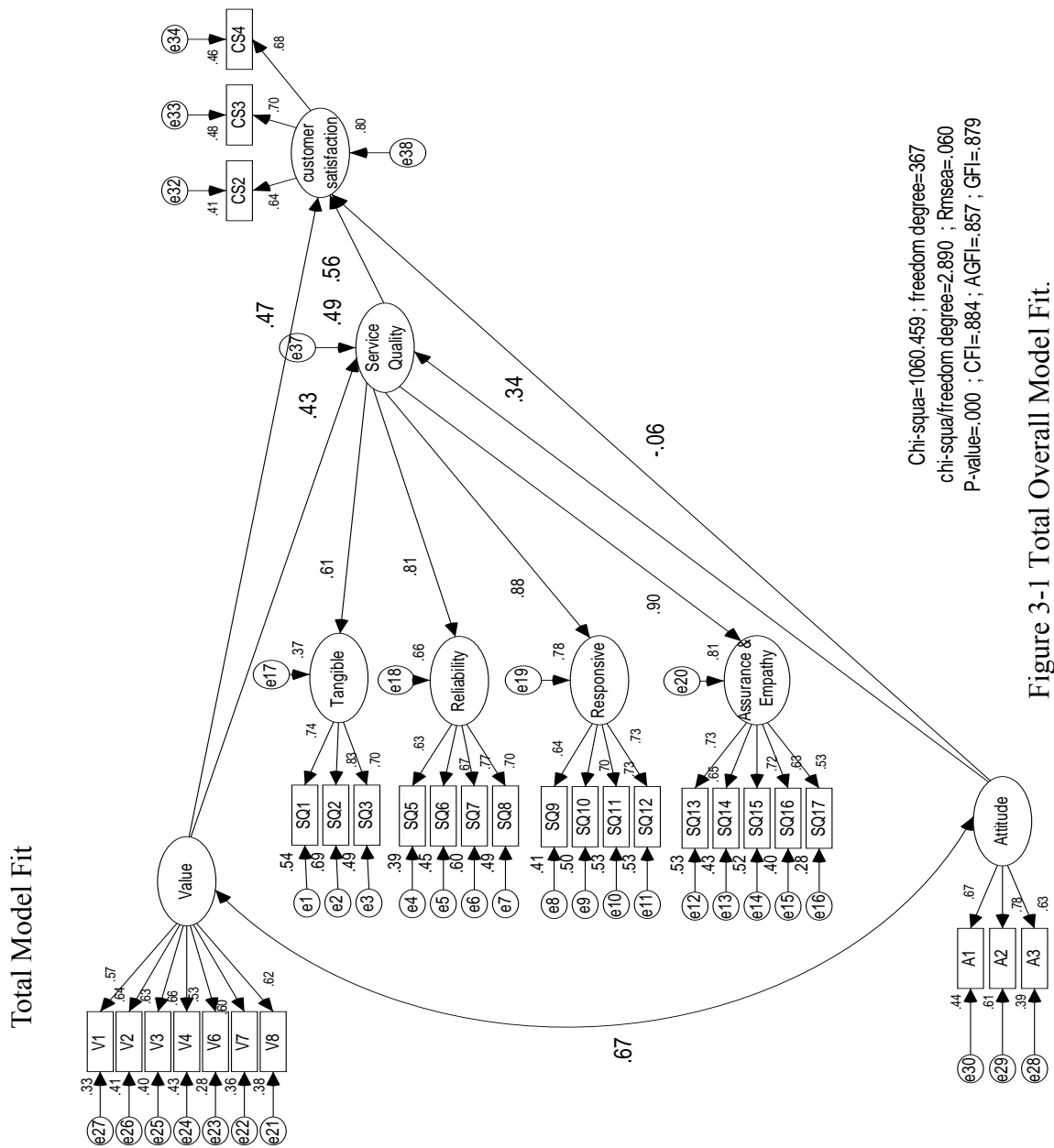
The chi-square for this research model is 1060.459, with 367 degrees of freedom at the significant level of 0.000, indicating an adequate fit. Table 3-1 and Figure 3-1 shows that χ^2/df is 2.89, which falls below the more liberal upper limit of 5.0 (Hair et al., 1998). RMSEA stay within the threshold values of 0.08 and 0.05. AGFI has exceeded the 0.8 criteria level. The three fit measures, GFI, CFI and NFI, are close enough to the recommended level and, thus, are acceptable.

Table 2-1. Questionnaire of Skin-Care Service Quality, Values and Attitudes.

Constructs	Measurement Items	Literature
Service Quality	<p>Tangibility</p> <ol style="list-style-type: none"> 1. This skin-care company is clean, unobstructed inside and outside store appearance, including seats, mirrors and has modern-looking facilities. 2. This skin-care company has a comfortable ambiance, including decorative designs and materials, all being visually appealing. 3. The employees of this company are dressed up appropriately. 4. This skin-care company offers reasonable prices for services and products. 	(Parasuraman et al., 1998)
	<p>Reliability</p> <ol style="list-style-type: none"> 5. If this skin-care company promises to do something by a certain time, they will do so. 6. When customers have a problem, this skin-care company will show a sincere interest in solving it. 7. The skin-care company provides the services at the time it promised. 8. This company insists on an error-free record. 	
	<p>Responsiveness</p> <ol style="list-style-type: none"> 9. Business hours meet customer requirements. 10. Employee of this company will give prompt service to customers. 11. Employees show kind attitudes and willingness to quickly solve my problems. 12. Employees of this skin-care company will never be too busy to respond to customer requests. 	
	<p>Assurance and Empathy</p> <ol style="list-style-type: none"> 13. I feel like my privacy (include body, mind, and spirit) is protected in this skin-care company. 14. I feel safe in my transaction with this skin-care company. 15. This skin-care offers high-quality communication which meets my requests, that is, communication focusing on speedy responses and efficient solution of my personal problems, 16. This company has adequate security features. 17. I feel that I can trust this skin-car business. 	
Customer values	<p>Utilitarian value</p> <ol style="list-style-type: none"> 1. Using a skin-care spa makes me feel comfortable and relaxed, like at home. 2. After a skin-care service, I have warmer relationships with my friends and family. 3. I begin to like myself after a skin-care service. 4. The skincare products and services can better my personal situations and sexual attraction. 5. The skin-care service helps create an enjoyable and fun life, which meets my ideals. 6. The skin-care company services make me have emotional security. 7. The skin-care company services enhance my status and ensure an extension of my ego. 8. Skin-care services and products will improve my sense of accomplishment and sensuous satisfaction. 	Kahle (1983), Kennedy (1989)
Customer attitudes	<ol style="list-style-type: none"> 1. I like to have a skin-care treatment in my life. 2. I usually have a skin-care at least twice a month. 3. Through my skin-care experiences, I have gained some useful knowledge about skin-care and product effects. 	Katz (1960)
Customer satisfaction	<ol style="list-style-type: none"> 1. With this skin-care company, I feel very satisfied. 2. Overall, I am satisfied with decision to buy this skin-care product and services. 3. My choice to buy this skin-care product and service was a wise one. 4. If I had it to do all over again, I would feel differently about the skin-care program. 	Oliver (1980)

Table 3-1 Overall Model Fit for the Research Model

Fit Measure	Criteria	Results of Study	Literature Source
χ^2 (df), P-value	P < 0.05	1060.46 (367), 0.00	Bagozzi and Yi (1998)
χ^2/df	1.0 to 5.0	2.890	Hair et al. (1998)
RMSEA	0.05 to 0.08	0.06	Hair et al. (1998)
GFI	> 0.9	0.879	Hu and Bentler (1999)
AGFI	> 0.8	0.857	Gefen et al. (2000); Hair et al. (1988)
CFI	> 0.9	0.884	Bagozzi and Yi (1998)
NFI	> 0.9	0.834	Hu and Bentler (1999)



Chi-squa=1060.459 ; freedom degree=367
 chi-squa/freedom degree=2.890 ; Rmse= .060
 P-value= .000 ; CFI=.884 ; AGFI=.857 ; GFI=.879

Figure 3-1 Total Overall Model Fit.

4. Conclusion and Implications

Based on the data analyses exhibited in the previous chapter, the results of hypothesis testing for the present study are summarized in Table 4-1, which indicates that Hypotheses 1 to 4, assuming direct correlations among the research variables, were supported by data. Hypotheses 5 and 6, which depict indirect links among these variables, were also supported, albeit to a lesser extent. All hypotheses, from one to six, were supported at the 0.05 significance level.

Table 4-1. A Summary of Hypothesis Testing.

	Hypothesis	Results
H1	Customer values will have a significant effect on customer attitudes toward skin-care services.	Supported
H2	Customer values will have a significant effect on customers' perception of skin-care service quality.	Supported
H3	Customer attitudes will have a significant effect on customers' perception of skin-care service quality.	Supported
H4	Skin-care service quality will have a significant effect on customer satisfaction with skin-care services.	Supported
H5	Customer values will have a significant effect on customer satisfaction with skin-care services.	Moderately supported
H6	Customer attitudes will have a significant effect on customer satisfaction with the skin-care services.	Weakly supported

For instance, the correlation between customer values and customer satisfaction is 0.47, but the same relationship, when intervened by service quality, is 0.61; this pattern suggests that service quality can increase the effect between customer value and customer satisfactions. Therefore, it may be concluded that Hypothesis 5 is moderately supported, and so is Hypothesis 6. However, when relayed by service quality, the correlation between customer attitudes and customer satisfaction in Hypothesis 6 jumped from 0.13 to 0.74. Eventually, then, it has to be concluded that service quality plays a critical role between customer attitudes and customer satisfaction. In the present study, all direct interrelationships among the major latent variables (i.e., customer values, customer attitudes, service quality, and customer satisfaction) are statistically significant. It was found that not only customer values and service quality, but also customer attitudes, had a positive effect on customer satisfaction. The investigation also revealed that both customer values and customer attitudes are determinants of service quality, although service quality illustrates greater influences on the values-satisfaction link than the attitudes-satisfaction link. These findings are consistent with previous studies which were based on a model of service quality, customer values and customer satisfaction, even though the present study included an addition component: customer attitudes.

From a managerial point of view, in order to retain the customers and create their positive perceptions of the skin-care services, owners of skin-care companies should improve service quality via knowledge of customers' values and attitudes so as to achieve profound customer satisfaction. This means that customer's satisfaction is obtained jointly via values, attitudes and service quality, rather than by means of only one or two variables. That is, it will be an incomplete strategy to consider only one variable while ignoring the effects of others. Furthermore, due to the direct links described above, the four indirect relationships among the variables are also significantly corroborated. The indirect path with highest effect is one that proceeds from customer attitudes to customer satisfaction via service quality.

This indirect route accounts for a greater effect on customer satisfaction than does the direct route, and it clearly suggests that service quality plays a crucial role in mediating the influence of customer attitudes on customer satisfaction. Moreover, value exerts an indirect effect on customer satisfaction, through service quality, greater than its direct effect on satisfaction.

Finally, the indirect effect of customer values on service quality, through customer attitudes, is also greater than the direct effect of values on quality, although this indirect relationship was not envisioned in the original hypothesis testing. This extra finding corroborates those of Ostrom and Iacobucci (1995), who found that, for the service industry, a service has both direct and indirect influences on customers' perception because of the customer's values and that service quality and customer attitudes will affect customer's feelings. However, the findings of the present study accentuate the importance of customer attitudes in the field of skin-care services. Because a service is unique to each individual customer, from a managerial perspective, it is recommended that skin-care operators not only focus on their direct paths to customer satisfaction but also pay attention to an indirect route to customer satisfaction, via service quality. Both direct and indirect relationships among customer values, customer attitudes, service quality and customer satisfaction would have consequences on customer's desired outcomes. Because the indirect link is different from the direct one, it will possibly affect the behavioral consequence differently. Therefore, skin-care operators should clarify those direct and indirect relationships before designing their skin-care service procedures and strategies. In addition, for the instruments of customer values and customer attitudes adopted in the present study, there is adequate validity. Regarding customer values, the present study treated them from a utilitarian-value perspective, especially for emotional security, sense of belongingness and sense of accomplishment, all of which being relevant in Taiwan's skin-care industry.

The results show that what are important to skin-care customers are that "the skin-care patronage makes me have emotional security," that "using a skin-care SPA makes me feel comfortable and relaxed, just like at home," and that "the skin-care service often results in an enjoyable and fun life, one that meets my ideal." These results may help skin-care operators in Taiwan develop strategies that recognize the differences between physical and psychology service designs so as to be able to create competitive advantages in their businesses.

For instance, in person-to-person interactions during a skin-care service, the insentient personality of a service provider may make customers lose patience and interest in revisiting the facility. To proceed further on service quality, it is interesting to notice that the most important factors are service responsiveness and service reliability, which were indexed by such customer statements as "the employees show kindness toward me and a willingness to quickly solve my problems," "when customers have a problem, this skin-care company will show a sincere interest in solving it," and "it's business hours suit its customers' needs." According to the effects results, conducted with structure equation modeling, service quality has a substantial total effect on customer attitudes and customer values. Although service quality may directly affect customer satisfaction, the new findings from the present study indicate that the direct influence of customer attitudes on customer satisfaction is lower than the indirect influence of these attitudes on customer satisfaction, via the relay of service quality. This finding suggests that service quality plays a mediator role, between customer values (or customer attitudes) and customer satisfaction, suggesting that a skin-care manager's shortest route to customer satisfaction is through service quality.

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