

STUDY ON THE RELATIONSHIPS AMONG CUSTOMER SATISFACTION, BRAND LOYALTY AND REPURCHASE INTENTION

¹JI FENG ²HE YANRU

¹Asstt Prof., School of Management, China University of Mining and Technology,

²Graduate student, School of Management, China University of Mining and Technology,

E-mail: ¹msjifeng@126.com, ²hycumt@163.com

ABSTRACT

To explore the influences of multiple reference on brand assessment and build relationships among them, this research used “expectancy disconfirmation, brand preference and alternative attractiveness” as the comparison result and “customer satisfaction, brand loyalty and repurchase intention” as the result of brand assessment, and chose “brand consumers of mobile communication service providers” as the research subject. Having empirical analysis, expectancy disconfirmation and brand preference presented positive relations to customer satisfaction, and brand preference had a positive effect on repurchase intention, while alternative attractiveness revealed negative relations to repurchase intention. In addition, expectancy disconfirmation and brand preference affected repurchase intention through single intervening variable (customer satisfaction) or dual intervening variables (customer satisfaction and brand loyalty), and brand preference did not regulate the influence of alternative attractiveness on customer satisfaction, whereas, brand preference adjusted the effect of alternative attractiveness on repurchase intention.

Keywords: *Alternative Attractiveness, Customer Satisfaction, Brand Loyalty, Repurchase Intention*

1. BACKGROUND

It has gradually become the consensus of all walks of life that improving customer satisfaction can help business make profits. Since customer satisfaction not only builds relationships with the old customers, but also is a cost-saving way for fighting for new customers, it is an effective way for enterprises enhancing their profitability to retain old customers and keep them have a higher retained willingness. In the relevant literature exploring the customer satisfaction and brand equity, Hellier et al (2003) pointed out that customer satisfaction resulted from the measurement of products and service to meet their desires, expectations and demand, and it was the overall level of customer pleasure and contentment. Customer satisfaction was widely identified as the underlying determinant of long-term customer behavior (Oliver, 1980), and the more satisfied customer was, the higher retained willingness was (Anderson and Sullivan, 1993; Fornel, 1992). Several studies, however, indicated that customers with high satisfaction might not keep on staying and customers with low satisfaction

might not leave (Heskett et al, 1994; Schneider and Brown, 1999). Therefore, customer satisfaction could not be used as the only factor to explain the enhancement of brand equity, there must exist some interference factors between customer satisfaction and retained willingness, such as expectancy disconfirmation paradigm (Sirgy, 1980), switching cost (Ranaweera and Prabhu, 2003), and brand preference (Hellier et al, 2003). Past studies widely used models to explore the results of the assessment formed by the reference points under different scenarios. In the literature of studying satisfaction, expectancy disconfirmation paradigm thought that customers took the pre-purchase expectation as the reference point of assessing the post-purchase satisfaction (Oliver, 1980) [1]. In the literature of studying consumer behavior and social psychology, switching cost was deemed to be the reference point of customers comparing products with other brands' and had an effect on the consumer's assessment (Rusbult, 1980; Ping, 1993)[2]. Some studies on brand preference literature pointed out that the consumer used self-concept as a reference point to assess whether the brand user image match

with self-image, which affected their satisfaction or purchase intentions.

2. LITERATURE REVIEW & HYPOTHESES

2.1 Literature Review

2.1.1 Customer satisfaction

Since customer satisfaction was introduced into marketing by Cardozo(1965), customer satisfaction has become an important indicator of business performance, as well as the guiding indicator of the development of new products and correction power of new services. The satisfaction of a customer depended on the result of the use of the goods conforming to the expectation of the customer (Cardozo,1965; Oliver,1980). If the result exceeded the level of expectation, they were satisfied; on the contrary, they were dissatisfied. Hemple (1977) believed that customer satisfaction was decided at the degree of realization of the product or service benefits the customer expected, and it reflected the consistent level of the expectation and actual result. In addition, customer satisfaction was not only the attitude but also the post-purchase evaluation, which reflected the extent of like or dislike after consuming experience (Woodside and Daly, 1989)[3]. Therefore, customer satisfaction was decided at the degree of realization of the product or service benefits the customer expected, and it reflected the consistent level of the expectation and actual result. The level of customer expectation based on some foundations, namely the company's tangible commitment, intangible commitment, reputation and past purchasing experiences. The enterprises committed themselves to improving customers' expectations and meeting their needs to produce customer satisfaction. Therefore, customer satisfaction was considered as the customer's overall attitude towards a product / service (Solomon, 1991)[4].

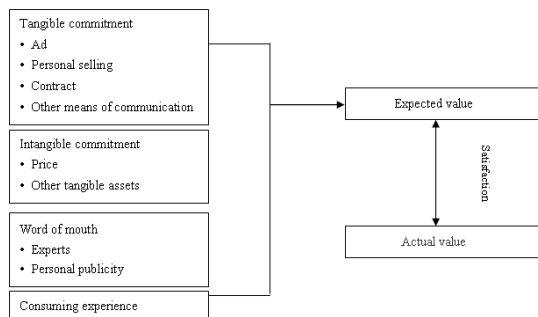


Figure 1. Theoretical concept of customer satisfaction

2.1.2 Brand loyalty

Prus & Brandt (1995) suggested that the brand loyalty was driven by the customer satisfaction, and brand loyalty reflected a long-term choice probability for the brand or company and was comprised of both customers' attitudes and behaviors. Customers' attitudinal component represented notions like: repurchase intention or purchasing additional products or services from the same company, willingness of recommending the company to others, demonstration of such commitment to the company by exhibiting a resistance to switching to another competitor. On the other hand, the behavioral aspect of brand loyalty represented repurchasing, purchasing additional products or services from the same company and recommending the company to others. In measuring brand loyalty, Gronholdt, Martensen & Kristensen (2000) regarded four dimensions as repurchase intention, willingness of recommending the company to others, price tolerance and willingness of cross-buying[5]. According to the model proposed by Jacoby & Chestnut (1978), Oliver (1999) mentioned that loyalty presented as the consumers' attitudes firstly and then external purchasing behaviors, and that brand loyalty had 4 stages: cognitive loyalty, affective loyalty, Behavioral intentions loyalty and action loyalty.

This research claimed that both cognitive factors and affective factors of brand loyalty would have an effect on the purchase intention, and brand loyalty could be measured through two dimensions: cognitive loyalty and affective loyalty, while repurchase intention was considered as another variable to explore.

2.1.3 Repurchase intention

Janes & Sasser(1995) explained that repurchase intention was the derivative behavior of customer loyalty. Kotler indicated that the customer experienced satisfaction or dissatisfaction after purchasing products or services, and the customer's internal psychological change affected the subsequent behaviors. If the customer was satisfied, it was more likely to have willingness to buy again, namely repeating to purchase or recommending others to buy.

2.2 Relationships Among Variables And Hypotheses

2.2.1 Relationships among expectancy disconfirmation, brand preference, alternative attractiveness and customer satisfaction

Expectancy disconfirmation played an important role in studying satisfaction, and it was a major predictor variable (Churchill & Suprenant, 1982). Customer satisfaction depended on the result of the use of the goods conforming to the expectation of the customer (Oliver, 1980; Yi, 1990), and positive disconfirmation would produce satisfaction, while negative disconfirmation would lead to dissatisfaction (Oliver, 1980). Churchill and Suprenant (1982) found that there was a positive relationship between satisfaction and disconfirmation in the survey of determinants of customer satisfaction, and that disconfirmation was the significant determinant of satisfaction (Olson & Dover, 1976; Bearden & Teel, 1983; Oliver, 1993) [6]. Therefore, the higher positive disconfirmation was, the more satisfied the customer would be.

Morgan and Hunt (1994) stated that brand trust was an important driving factor for the customer maintaining a long-term relationship with the service providers, and it meant that higher brand trust generated higher retained willingness. In addition, Jones and Sasser (1995) also pointed out that, in the highly competitive market environment, it was likely for dissatisfied customers to convert service providers, however, higher brand preference would reduce the possibility of converting service providers. Therefore, we claimed that brand preference and satisfaction had a binary interaction effect on retained willingness.

Alternative attractiveness was argued to be an antecedent of satisfaction, and the obligation of current relationship would decrease when alternative attractiveness improved the overall satisfaction (Thibaut & Kelley, 1959; Johnson, 1982; the Ping 2003). Johnson (1982) argued that satisfaction was the result of a comparison of relationship's rewards and costs to those available from other relationships, in addition to the rewards and costs in the present relationship, and the relative payoffs or equity between the relationship partners. Ping (2003) indicated that alternative attractiveness reduced satisfaction. Regret theory showed that if the choice of alternative led to a better (worse) result, customers felt sorry (pleased) when they assessed the result (Bell, 1982; Loomes & Sugden, 1982). Marketing study found that the performance of the alternative would reduce the post-purchase evaluation of selected brands, such as satisfaction assessment (Inman, Dyer, & Jia, 1997; Taylor, 1997), or decide whether customers continue this service relationship (Lemon, White, & Winer, 2002)[7]. Therefore, satisfaction and the

continuity of relationship would be reduced when the customer perceived higher alternative attractiveness.

Based on the aforementioned depiction, the following hypotheses were proposed in this study:

H1: The positive disconfirmation and satisfaction of customers for specific brand presented positive relation.

H2: The brand preference and satisfaction of customers for specific brand appeared positive relation.

H3: The alternative attractiveness and satisfaction of customers for specific brand showed negative relation.

2.2.2 Relationships among expectancy disconfirmation, brand preference, alternative attractiveness and repurchase intention

In relationship marketing framework, White and Schneider (2000) assumed that the level of customer expectations had customers in different commitment levels because of disconfirmation of the different service aspects, and the empirical results stated disconfirmation could predict the level of repurchase intention. Disconfirmation was introduced into the control variables of the service assessment model by Yim et al. (2007), and the study found disconfirmation was positively related to repurchase intention.

In the empirical research of the service assessment model, Yim et al. (2007) suggested that the higher brand preference for specific service was, the higher repurchase intention was. According to the concept of the person-organization fit, O'Reilly et al. (1991) mentioned that the organization preference (Tom, 1971) and loyalty were influenced by the organization image preference[8].

Alternative attractiveness affected the repurchase intention, and the consumer would have more repurchase intention when he perceived less alternative attractiveness, (Rusbult, 1980; Impett, Beals, & Peplau, 2002). Yim et al. (2007) pointed out that the higher alternative attractiveness was, the lower repurchase intention was.

Based on the aforementioned depiction, this research put forth some hypotheses as follows:

H4: The positive disconfirmation and repurchase intention of customers for specific brand presented positive relation.

H5: The brand preference and repurchase intention of customers for specific brand appeared positive relation.

H6: The alternative attractiveness and repurchase intention of customers for specific brand showed negative relation.

2.2.3 Relationships among customer satisfaction, brand loyalty and repurchase intention

Dharmmesta (1999b) claimed that the loyalty included four stages: cognitive loyalty, affective loyalty, conative loyalty and action loyalty, and that satisfaction belonged to affective loyalty, while commitment belonged to conative loyalty or action loyalty, therefore, satisfaction could be regarded as the antecedent variable of commitment. Previous findings generally supported that satisfaction improved the level of loyalty, for example, Morgan and Hunt (1994) showed that overall satisfaction had a positive relationship with loyalty, and in the satisfaction research, Zulganef (2006) pointed out that the overall satisfaction was positively related to brand loyalty.

In the survey of customer satisfaction in Swedish, Anderson and Sullivan (1990) found that customer loyalty was positively related to repurchase behavior. Reichheld & Sasser (1990) suggested that the loyalty of satisfied consumers would be improved, which meant the probability of repurchasing increased. Taylor & Baker (1994) took different types of service industries as the samples and indicated that the quality of service and repurchase intention presented positive relation[9].

Westbrook (1987) found that satisfaction was often regarded as the mediating variable of post-purchase behavior, linking the beliefs of prior selection of products to cognitive architecture, consumer communication and repurchase intention. In the post-purchase behavior pattern, Francken (1983) mentioned that consumers would have the willingness of re-purchasing when they were satisfied with the product or service[10]. Therefore, consumer satisfaction and willingness to buy appeared remarkably relation, and the probability of repeating to purchase the same brand products was higher. Engel et al. (1968) believed that the experience of dissatisfied consumers could cause brand switching.

Based on the aforementioned depiction of relationships among customer satisfaction, brand trust and brand commitment, this study proposed H7 ~ H9:

H7: The customer satisfaction and repurchase intention of customers for specific brand presented positive relation.

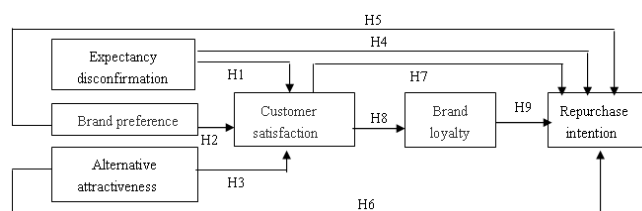
H8: The customer satisfaction and brand loyalty of customers for specific brand appeared positive relation.

H9: The brand loyalty and repurchase intention of customers for specific brand showed positive relation.

3. FRAMEWORK AND METHODS

3.1 Research Framework

Based on the above research background, motivation, and the research question, this study



proposed research framework as follows:

Figure 2. Research framework

3.2 Measures

The research questionnaire questions referred to the relevant empirical research literature: to measure the customer satisfaction, we referred to the questionnaire items of Oliver (1980,1993); brand loyalty was measured by using the items developed by Oliver (1999) according to questionnaire items of Jacoby & Chestnut (1978) ; repurchase intention was measured by using the items developed by Hellier (2003). To measure the expectancy disconfirmation, we referred to the questionnaire items of Oliver(1980); Yi & La(2003); Yim et al(2007), the items of brand preference were taken from Martensen (1993) and Oliver et al. (1992); the questionnaire items of alternative attractiveness used the items of Jones et al.(2000). All questionnaire items were measured by using Likert seven-point scale. First, we took 20 students of China University of Mining and Technology as the object of questionnaire. After deleting the items whose exploratory factor analysis was too low, we confirmed the final questionnaire items.

3.3 Research Subject, The Design Of The Questionnaire And Recycling

This research chose “students of China University of Mining and Technology, Xuzhou Normal University, Pengcheng College” as the research subject and used quota sampling approach. A total of 600 questionnaires were distributed, and



582 questionnaires were collected finally through the group discussions and surveys, including 6 invalid questionnaires and 576 valid questionnaires.

4. DATA ANALYSIS AND RESULTS

To conduct descriptive statistical analysis, reliability and validity analysis, structural equation modeling, and regression analysis, SPSS 15.0 and AMOS 7.0 statistical package were used.

4.1 Reliability And Validity Analysis

In this study, the internal consistency of the questionnaire was measured by the Cronbach's α coefficient, composite reliability and extracted variables. First, the reliability of the scales was analyzed with Cronbach's α coefficient. According to Cuieford (1965), the scale existed internal consistency when Cronbach's α coefficient was greater than 0.7, while the internal consistency was low when the coefficient was less than 0.35. Based on the reliability analysis results of this study, Cronbach's α coefficient of the expectancy disconfirmation was 0.798, Cronbach's α coefficient of the brand preference was 0.911, Cronbach's α coefficient of the alternative attractiveness was 0.867, and Cronbach's α coefficient of the customer satisfaction was 0.883, Cronbach's α coefficient of the brand loyalty was 0.862, and Cronbach's α coefficient of the repurchase intention was 0.887. Overall, all Cronbach's α coefficients of scales in this study were greater than 0.700, which meant the internal consistency reached a satisfactory level.

To ensure the integrity and comprehensiveness of the variables, this study used measurement items of the variable summarized by relevant theories and literature. In addition, the questionnaire was designed after asking experts' opinions and distributed after pretest. Therefore, this study had a high validity of content and structure.

4.2 Relationships Among Variables And Hypothesis Testing

4.2.1 Assessment analysis of model fit

To assess and analyze model fit, this study used three assessment indicators recommended by Bagozzi and Yi (1988): preliminary fit criteria, overall model fit, fit of internal structure of model. The statistical results of this study showed that, χ^2 , χ^2 / df , GFI, RMR, RMSEA, AGFI, NFI, RFI, IFI, TLI, CFI, PNFI, PCFI and PGFI met the testing

standard, which meant the hypothesis testing model of research had a higher fit.

4.2.2 Hypothesis testing results

The path coefficient and P value of each variable were showed in the table 1. The results indicated that, expectancy disconfirmation had a positive effect on customer satisfaction, which supported H1, conforming to the result claimed by Oliver (1980), Churchill and Suprenant (1982). Brand preference positively affected customer satisfaction, which supported H2, and it was consistent with the result found by Yim et al (2007). The path coefficient of alternative attractiveness to the customer satisfaction was 0.048, P value > 0.1, so H3 was not supported. The path coefficient of expectancy disconfirmation to repurchase intention was -0.045, P value > 0.1, so H4 was also not supported. Brand preference was positively related to repurchase intention, which supported H5, conforming to the result showed by Yim et al (2007), O'Reilly et al (1991). Alternative attractiveness was negatively related to repurchase intention, which supported H6, conforming to the result found by Rusbult (1980), Thorbjornsen et al (2002). Customer satisfaction positively affected the repurchase intention, which supported H7, and it was consistent with the finding of some scholars (Morgan and Hunt, 1994; Zulganef, 2006; Fullerton, 2005). In addition, the customer satisfaction and brand loyalty appeared positive relation, which supported H8, conforming to the result showed by Geyskens et al (1999), Bloemer, and dekerken- Schröder (2002). The brand loyalty and repurchase intention presented positive relation, which supported H9, conforming to the result claimed by Doney & Cannon (1997), Bloemer & Odekerken-Schröder (2002).

Table 1. Path coefficients and hypothesis testing results

Structural path	Path coefficient	Corresponding hypothesis	Testing result
Expectancy disconfirmation →customer satisfaction	0.501***	H1	Yes
brand preference →customer satisfaction	0.453***	H2	Yes
alternative attractiveness →customer satisfaction	0.048	H3	No
Expectancy disconfirmation →repurchase intention	-0.045	H4	No
brand preference →repurchase intention	0.111*	H5	Yes
alternative attractiveness →repurchase intention	-0.151***	H6	Yes
customer satisfaction →repurchase intention	0.675***	H7	Yes
customer satisfaction →brand loyalty	0.511***	H8	Yes
brand loyalty →repurchase intention	0.085*	H9	Yes

*p < .05. **p < .01. ***p < .001.

4.2.2 Structural model testing results

The structural model testing results of each variable were showed in Figure 3:

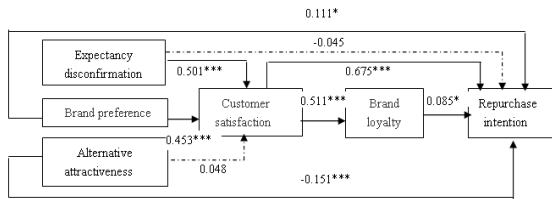


Figure 3. Structural model testing results

4.2.3 The impact analysis of each variable on repurchase intention

The effect of each variable could be divided into direct effect, indirect effect and total effect, and the total effect was equal to the direct effect plus indirect effect. As shown in Table 2:

Table 2. The impact analysis of each variable on repurchase intention

Effect Variable	Direct effect	Indirect effect		Total effect
		Customer satisfaction	Customer satisfaction/ Brand loyalty	
Expectancy disconfirmation	—	0.338	0.022	0.360
Brand preference	0.111	0.306	0.020	0.437
Alternative attractiveness	-0.151	—	—	-0.151
Customer satisfaction	0.675	—	—	0.718
Brand loyalty	0.085	—	—	0.085

It could be seen in the framework of this study that customer satisfaction was the key factor of improving repurchase intention, and it affected repurchase intention directly or indirectly through multi-path. To produce the greatest customer satisfaction, the antecedents of customer satisfaction should be taken into consideration, and brand preference had the greatest effect on repurchase intention among its antecedents, including direct effect and indirect effect. And expectancy disconfirmation had greater effect on repurchase intention, only including the indirect effect which appeared notably through the path of customer satisfaction, so brand marketers should pay attention to customer satisfaction besides expectancy disconfirmation in order to improve repurchase intention. Alternative attractiveness had less effect on repurchase intention, only including the direct effect, therefore, brand marketers could improve repurchase intention when they face to the challenge of alternative attractiveness in the future.

5. FOLLOW-UP STUDY

This study chose “brand consumers of mobile communication service providers” as the research subject, which controlled the impact of differences in cross-industry brand market, but it limited that

the findings were generalized to other brand markets under different competitive environments. Therefore, the follow-up study should consider the characteristics and differences of different industries and then make the research framework. In addition, this study used the three main reference types of consumers across different research fields, which can be brought into variables taking other customers as the reference besides brand assessment model.

REFERENCES:

[1] Yim, C.K., Chan, K.W., & Hung, K., “Multiple reference effects in service evaluations: Roles of alternative attractiveness and self-image congruity”, *Journal of Retailing*, vol. 83, no.1, 2007, pp.147-157.

[2] Cardozo, R.N., “An experimental study of customer effort, expectation, and satisfaction”, *Journal of Marketing Research*, vol. 2, 1965, pp.244-249.

[3] Levy, S.J., “Symbols for sales”, *Harvard Business Review*, vol. 37, no. 4, 1959, pp.117-124.

[4] Lin, C.H., Huang, W.H., & Zeelenberg, M., “Multiple reference points in investor regret”, *Journal of Economic Psychology*, vol. 27, 2006, pp.781-792.

[5] Ping, R., “Salesperson-employer relationships: Salesperson responses to relationship problems and their antecedents”, *Journal of Personal Selling & Sales Management*, vol. 27, no.1, 2007, pp.39-57.

[6] Zulganef, “The existence of overall satisfaction in service customer relationships”, *Gadjah Mada International Journal of Business*, vol. 8, no.3, 2006, pp.301-321.

[7] Rory P. Morgan, “A Consumer-Orientated framework of brand equity and loyalty”, *International Journal of Market Research*, Vol.42, Iss. 1, 2000, pp.65-78.

[8] Gronholdt L, Martensen A, Kristensen K, “The relationship between customer satisfaction and loyalty: cross-industry differences”, *Total Quality Management*, vol. 11(4-6), 2000, pp.509-514.

[9] Hollis, N., “Ten years of learning on how online advertising builds brands”, *Journal of Advertising Research*, Vol.45(2), 2005, pp.255-268.



-
- [10] Morgan A N, Anderson E W, Mittal V, "Understanding firms customer satisfaction information usage", *Journal of Marketing*, vol. 69, 2005, pp.131-151.
- [11] G.V.nadlammai and M.hemalatha , "An enhanced rule approach for network intrusion detection using efficient data adapted decision tree algorithm", *Journal of Theoretical and Applied Information Technology*, Vol. 47. No. 2 , 2013, pp 426 - 433 .
- [12] Janakiraman.S, vasudevan.V, "Information flow analysis between traffic flow time series based on the transfer entropy", *Journal of Theoretical and Applied Information Technology*, Vol. 44. No. 2 ,2012,pp.185-188.