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DRIVERS OF CUSTOMER SATISFACTION AND LOYALTY: THE MODERATING EFFECT OF CUSTOMER EXPERIENCE

The paper examines the effects of product performance and supplier reputation on customer satisfaction and loyalty. All the effects, except for the effects of customer satisfaction on loyalty, are found to be significant and positive. The most important finding is that supplier reputation has a great impact on loyalty, while the effect of customer satisfaction on loyalty lacks empirical support.

Furthermore, the moderating effect of customer experience is explored. The study provides empirical support for the moderating effects of customer experience on the impact of supplier reputation on customer satisfaction, and on the impact of supplier reputation on loyalty: supplier reputation has the greatest effect on satisfaction for "low-experienced" customers, while the effect of supplier reputation on loyalty was greatest for "high-experienced" customers.

1. INTRODUCTION

In economies of shortage and markets close to monopolies, firms do not have incentives to make efforts to retain customers. In sellers' markets the buyers will simply buy the products that are available. When the firms in the domestic market face increased supply, in many cases encouraged by foreign firms entering the domestic market, the customers can stop buying from the sellers they have had to be dependent on for years. Consequently, competition in the future will be the battle for the customers. The firms that can retain customers will probably benefit from such performance. Customer loyalty or customer retention can be important to the firm for several reasons. First, loyal customers help reduce the firm's marketing costs. Second, loyal customers are more willing to pay higher prices and are less price sensitive. Third, customer loyalty can function as an entry barrier for competitors (Aaker 1991). As a result, customer loyalty can have a positive influence on firm profitability. Indeed, Reichheld and Sasser (1990) proposed that "reducing (customer) defections by 5% boosts profits from 25% to 85%". For the study of marketing, it is important to distinguish between the financial performance and

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the market performance of a firm because so many influences on financial performance are outside of the control of marketing managers. Therefore, an important and appropriate indicator of the firm's success in the market (i.e. market performance) is customer loyalty.

Jacoby and Kyner (1973/2) have defined customer loyalty as: "the biased (i.e. nonrandom), behavioral response (i.e. purchase), expressed over time, by some decision-making unit, with respect to one or more alternative brands out of a set of such brands, and is a function of psychological (i.e. decision making, evaluative) processes". This definition emphasizes that a loyal customer intends to purchase a certain brand and that the intention is based on a certain commitment to the brand. Brand commitment is important to distinguishing true customer loyalty from simple repeat purchasing behavior. This study explores customer loyalty from this perspective. Foreign firms have long traditions of intensive competition for the customers' money and loyalty. East-European firms have to learn how to adapt itself to such competition to be successful. This study examines three central drivers of customer loyalty. Each of them can be developed and monitored by the firms in all industries and for different customer and product segments. So doing, this study can be a contribution to firms in which it enables them to improve loyalty through some important means they can control by themselves. In this study we will explore some antecedents of loyalty. One central route to loyalty is assumed to be through customer satisfaction (e.g. Oliver 1980).

As a parallel to the attitude literature, product performance may be viewed as beliefs, and customer satisfaction may be viewed as attitude toward object (see Lutz 1991). The formation of customer satisfaction may not always take place as a response to product performance. To some extent, customers may also evaluate their satisfaction with a product benchmarked to other persons' beliefs and experience (which is a common assumption in attribution research, see e.g. Folkes 1988). This antecedent of satisfaction will be discussed below. In addition to intrinsic cues (i.e. the product performance route to loyalty), extrinsic cues seem to play an important role in order to affect customer loyalty (Fiore and Damhorst 1992). Selnes (1993) argues that "a key function of a brand is that it facilitates choice when intrinsic cues or attributes are difficult or impossible to employ". In this study these extrinsic cues are labelled as "supplier reputation". According to Selnes (1993), supplier reputation will be defined as "a perception of quality associated with the name". This perception is characterized by shared beliefs in a population, or part of a population.

The research objectives in this study are how customer satisfaction is influenced by product performance and seller reputation, and how loyalty is influenced by customer satisfaction and supplier reputation.

The routes to customer satisfaction and loyalty are suggested to be influenced by customer experience. It is assumed that a customer that has had several transactions with a firm will use the routes to customer satisfaction and loyalty differently compared to a customer that has used a supplier only once. Formation of the overall product evaluation (i.e. customer satisfaction) is assumed to be affected by the customer's degree of knowledge (i.e. justified true beliefs) about the firm's product performance. Thus, this study is also intended to explore how customer experience moderates the effects of customer satisfaction and supplier reputation on loyalty, and the effects of product performance and supplier reputation on customer satisfaction.

2. HYPOTHESES

Drivers of customer satisfaction

The relationship between these constructs is based on the assumption that a rational process of attributes evaluation leads to satisfaction with the product: the more positive the evaluation is of a products' performance, the more satisfied are the customers. This relationship is well-documented in several studies (e.g. Selnes 1993; Troye et al. 1995; Fornell 1992; Tse and Wilton 1988; Oliver and Desarbo 1988; Cronin and Taylor 1992). Accordingly, the following hypothesis is stated:

Hypothesis 1: Product performance has a positive effect on customer satisfaction.

In this study the effect of supplier reputation on customer satisfaction is analysed. It is suggested that customer satisfaction, in part, relies on supplier reputation in the market. Assessment of overall satisfaction is a complex cognitive process. According to Deighton (1992) "there is room for latitude in the way the consumer allocates credit or blame for the performance between actor here: consumer and object. Therefore it is better to describe the satisfaction judgement as an attribution process". Related to the context of use, the attribution theory in general predicts the presence of consistency between customer satisfaction/dissatisfaction and supplier reputation (see e.g. Folkes 1988). It is assumed that some of the satisfaction/dissatisfaction will be attributed to the product in order to consistently assess the supplier's reputation in the market.

This leads to the development of:

Hypothesis 2: Supplier reputation has a positive effect on customer satisfaction.

Additionally, it is proposed that different degree of customer experience has a moderating effect on routes to customer satisfaction. Experienced customers are assumed to use intrinsic cues more than extrinsic cues in order to form an overall assessment of the product. As noted by Moser and Nat (1987), knowledge is based on beliefs, but beliefs are not necessarily based on deep and extensive knowledge. The more customer experience, the more "justified true beliefs" (Nonaka 1994) the customer has about the product. These "justified true beliefs" are proposed to be highly associated with customer satisfaction formation. Customers with beliefs which are "less justified" are proposed to rely more on extrinsic cues (see Selnes 1993; Aaker 1992) and less on intrinsic cues when forming satisfaction judgment toward the product. Such argumentation is consistent with the ELM and determinants of central and peripheral routes to persuasion (Petty, Cacioppo and Shumann 1983). Therefore, the following two hypotheses are formulated:

Hypothesis 1A: Customer experience positively moderates the effect of product performance on customer satisfaction.

Hypothesis 2A: Customer experience negatively moderates the effect of supplier reputation on customer satisfaction.

Drivers of customer loyalty

Several studies report a positive relationship between customer satisfaction and loyalty (Fornell 1992; Boulding et al. 1993; Yi 1990). The rationale behind such a relationship is that a satisfied customer will continue to use the same supplier since the firm favourably covers the consumer's needs and requirements. Most studies have analyzed the effects of customer satisfaction on loyalty independent of supplier reputation. In so doing, some of the variance related to customer satisfaction may instead be attributed to supplier reputation.

Hypothesis 3: Customer satisfaction has a positive effect on loyalty.

In addition to the customer satisfaction route to loyalty we expect that supplier reputation will influence customer loyalty. In some situations customers have limited ability to assess the satisfaction with the product and therefore will rely on the firm's reputation in the market (Bloom and Reve 1990). This may be the situation for products which are long lasting and intangible by nature (e.g. vacations, consulting etc.) and, therefore, difficult to evaluate ex ante and ex post. Supplier reputation in the market can often be seen as more valid information (since it is shared by several persons) and therefore prevents the customer from making an adverse selection of a supplier. Moreover, consumers buying products that are consumed publicly and are not necessities are proposed to rely on the beliefs of reference groups to a great

extent (Bearden and Etzel 1982). The motivation to comply with normative beliefs is suggested to be higher for such products in consumption situations.

Hypothesis 4: Supplier reputation has a positive effect on loyalty.

The positive effect of supplier reputation is assumed to differ depending on customer experience. Customers that have used a supplier several times (i.e. experienced customers) are expected to use intrinsic cues more than extrinsic cues (see e.g. Selnes 1993; Bloom and Reve 1990). One might also assume that many products are difficult to evaluate for inexperienced customers due to lack of comparison standards. For example, "satisfaction-as-surprise" might be important for the formation of customer satisfaction and loyalty within a variety of services (see Rust and Oliver 1994). Accordingly, two hypotheses are stated as following:

Hypothesis 3A: Customer experience positively moderates the effect of customer satisfaction on loyalty.

Hypothesis 4A: Customer experience negatively moderates the effect of supplier reputation on loyalty.

3. THE STUDY

Data

The results to be reported are based on survey data. The leisure product offered is a combination of a bus tour and hospitality services in various destinations all over Europe. Each of the three coach tour operators in the study provided complete lists of customers who had traveled with the company last summer. A simple random sample was drawn from the total list. Mail questionnaires were sent to 600 respondents with a response rate of 38% (226 respondents).

Measures

The variables included in this study are product performance, customer satisfaction, supplier reputation, loyalty, and customer experience.

The respondents were asked to give ratings of aspects concerning the various attributes of the product. The attributes were identified in previous exploratory interviews with customers and managers of the industry. Product performance was measured with 12 items reflecting various aspects of the product: bus tour, hotel accommodation, food, and destination. These items should reflect important facets of the product the customers will experience during consumption.

Customer satisfaction was measured by using two items in order to cover the overall satisfaction and the price/benefit-satisfaction with the product (see Fornell 1992).

Loyalty was measured by using the likelihood of buying a product from the supplier in the future and word-of-mouth (i.e. the likelihood of recommending the supplier to friends and family). This measurement of the construct is consistent with previous research (e.g. Boulding et al. 1990; Selnes 1993).

Supplier reputation was measured by using two items in order to assess the supplier's overall reputation per se, and was compared to its competitors. These measures are consistent with Selnes (1993).

Customer experience is measured by asking respondents how many times the particular coach tour operator was used. The variable is dichotomized. Respondents with no experience were labelled "low-experienced", and respondents with earlier experience were labelled "high-experienced". Due to the sample size, it was not possible to distinguish more fine-grained among the customers' degree of experience.

Scales

In exploring customer satisfaction, the likelihood of getting a high mean and a small standard deviation is high. As found by Fornell (1992), more than 80% of the respondents were satisfied with the products (shoes, hospital, clothes etc.). In order to achieve higher variance in the measures, a scale from 1 to 10 was used for all measures. The scales for customer satisfaction were labelled "very little satisfied" to "very satisfied", and the scales for loyalty (buying intentions) were labelled "very unlikely" to "very likely". However, these measures did not have a satisfactory skewness and kurtosis. In order to overcome these data weaknesses the four variables of customer satisfaction and loyalty were, defined as ordinal data and polychoric correlations were estimated for these variables. According to Jöreskog and Sörbom (1993), it is proposed that such maximum likelihood estimation of correlations is less sensitive with regards to lack of normality.

The scales for product performance were labelled "very little satisfied" to "very satisfied". Such subject anchored labelling should increase the variance (Troye et al. 1995). Moreover, the scales for supplier reputation were labelled "very negative reputation" to "very positive reputation".

Construct validity assessment

In order to assess convergent validity of the congeneric measures, *T*-values for the free estimators are reported in Table 1. The presence of convergent validity is expected when the indicator's estimated pattern coefficient for its underlying construct factor is significant. In this case all items have satisfactory convergent validity (Anderson and Gerbing 1988).

Discriminant validity between the two exogenous constructs (loyalty and product performance) is assessed by the size of the phi ($\phi_{1,2}$) which is estimated

Table 1
Parameter estimates for assessment of convergent validity

Parameter	Loading	T-value
ξ_1 – Product Performance		
$\lambda_{x1,1}$	1.0	–
$\lambda_{x2,1}$	1.20	6.44
$\lambda_{x3,1}$	1.44	7.32
$\lambda_{x4,1}$	1.06	7.21
$\lambda_{x5,1}$	1.14	6.62
$\lambda_{x6,1}$	1.26	7.87
$\lambda_{x7,1}$	1.15	7.64
$\lambda_{x8,1}$	1.14	6.68
$\lambda_{x9,1}$	1.41	7.61
$\lambda_{x10,1}$	1.39	7.47
$\lambda_{x11,1}$	1.15	7.77
$\lambda_{x12,1}$	1.38	7.59
ξ_2 – Supplier Reputation		
$\lambda_{x13,2}$	1.0	–
$\lambda_{x14,2}$	0.98	15.29
η_1 – Customer Satisfaction		
$\lambda_{y1,1}$	1.0	–
$\lambda_{y2,1}$	1.06	18.28
η_2 – Loyalty		
$\lambda_{y3,2}$	1.0	–
$\lambda_{y4,2}$	1.17	19.83

Source: own research.

to be 0.21. This correlation is further assessed by constraining the estimated $\phi_{1,2} = 1.0$ and then performing a χ^2 difference test for the constrained and unconstrained model. The χ^2 for the unconstrained model is 449.22 (132 degrees of freedom) and χ^2 for the constrained model is 489.14 (133 degrees of freedom). In this case, a satisfactory discriminant validity is indicated (see Anderson and Gerbing 1988).

Additionally, three of the errors terms for the product performance indicators were allowed to be interconstruct correlated. So doing, we adjusted for the fact that the product's attributes are not only reflect the overall product performance but also reflect the construct's sub-dimensions. The fit of the model improved substantially.

4. FINDINGS

The data is analyzed in two steps. First, the main model and its hypotheses across groups are analyzed. Further, the data set is split into two groups: one group of customers which have used the supplier twice or more ($N = 143$), and one group that has only used the supplier once ($N = 83$).

To assess the overall fit of the main model, the maximum likelihood estimation¹ in LISREL8 was used. The results of the analysis are reported in Table 2.

Table 2
Goodness-of-fit-indices for the baseline model

Goodness-of-fitindex	Baseline model	Rule-of-thumb
Chi-square	307	
Degrees of freedom	130	
Chi-square/degrees of freedom	2.36	close to 1
Root mean square error of approximation (RMSEA)	0.078	good fit < 0.05 reasonable fit < 0.08
Goodness-of-fitindex	0.86	close to 1

Source: own research.

As reported in the goodness-of-fit indices, the model has a reasonable fit to the data. The chi-square measures the degree of exact fit between the predicted covariance matrix (Σ') and the sample covariance matrix (S), i.e. a test of $H_0: \Sigma' - S = 0$. In a similar way, GFI measures the relative amount of variances and covariances in S predicted by Σ' (Bollen 1989; Jöreskog and Sörbom 1989). Since testing structural equation models is a more accurate a test of overidentified restrictions, i.e. the more degrees of freedom the stronger, and more risky, the test of the theory. The difficulty is that the fit can be improved by increasing the number of parameters. Therefore, there is a conflict between parsimony of a model and its goodness of fit. A solution to this problem can be to estimate the approximation error of the theory. According to Browne and Cudeck (1993:146) a test of close fit with a corresponding statistical test is most realistic. The test procedure provided by Browne and Cudeck is a $\sqrt{(F_0/d)} \leq 0.05$ root mean square error of approximation (RMSEA) where $H_0: \sqrt{(F_0/d)} \leq 0.05$, where F_0 is the chi-square distributed fit function of the model, and d is the number of degrees of freedom of the model². Consequently,

¹ ML is suggested to be more stable across sample sizes and it is penalizing misspecified models harder than other estimator techniques (e.g. GLS) (see Olsson 1998).

² Browne and Cudeck (1993, p. 141-142) divide overall error into two kinds, error of estimation $F(\Xi(\theta), \Sigma(\theta))$, and error of approximation $F(\Sigma, \Sigma(\theta))$. Error of approximation is the lack of fit between the model (i.e., the theory based covariance matrix $\Sigma(\theta)$) and the true population covariance matrix Σ . Error of estimation $F(\Sigma(\theta), \Sigma(\theta'))$ is the discrepancy between the model fitted to the population $\Sigma(\theta)$, and the model fitted to the sample $\Sigma(\theta')$. Furthermore, they propose the estimation error to be a function of number of free parameters, d , and the sample size, n : $F(\Sigma(\theta), \Sigma(\theta')) \approx n^{-1}d$. As the sample size increases the discrepancy due to random sampling error decreases. Furthermore, as the number of free parameters increases so does the total amount of lack of fit due to estimation error. However, the error of approximation decreases when the

RMSEA rewards parsimonious models. Finally, RMSEA has a known sampling distribution and can, therefore, be applied as a test statistic. Therefore, the RMSEA-test is a test of the likelihood of the theory to be an acceptable approximation of the data (i.e., the real world phenomenon). The model in this study has a "reasonable error" and can therefore be accepted.

A test of the parameters associated with the hypotheses are reported in Table 3. Three of the four main hypotheses are supported. Surprisingly, there is no support for the hypothesized effect of customer satisfaction on loyalty. This linkage is strongly suggested in the literature (see e.g. Boulding et al. 1993; Selnes 1993; Bloemer and Kasper 1994) and was expected to get empirical support in this study.

Table 3
The structural coefficients

Produkt Performance → Customer Satisfaction	$\gamma_{1,1} = 1.16 (t = 8.34)$
Supplier Reputation → Customer Satisfaction	$\gamma_{1,2} = 0.18 (t = 2.04)$
Customer Satisfaction → Loyalty	$\beta_{2,1} = 0.01 (t = 0.33)$
Supplier Reputation → Loyalty	$\gamma_{2,2} = 0.89 (t = 12.42)$

T-values above 2.6 are significant at the 0.001 level. T-values above 1.64 are significant at the 0.05 level.

Source: own research.

To test for the moderating effects, comparison of structural equations for the two groups was made. In LISREL8 comparing parameters across groups is a test of the assumption that the two models are indifferent. This implies that the Gamma matrix (Γ) and the Beta matrix (B) are equal for both groups. Formally, the hypothesis can be stated as follows:

$$H_0: \begin{matrix} \Gamma_{\text{high-experienced customers}} = \Gamma_{\text{low-experienced customers}} \\ B_{\text{high-experienced customers}} = B_{\text{low-experienced customers}} \end{matrix}$$

In order to test the hypotheses, one model for each of the two groups (high-experienced customers and low-experienced customers) was made. The model of low-experienced customers is assumed to be invariate compared to the model of high-experienced customers (Bollen 1989). To test whether

number of free parameters increases. Consequently, it can be expressed as $F(\Sigma, \Sigma(\theta')) \approx F(\Sigma, \Sigma(\theta)) + n^{-1}d$. Adjusting for estimation error, the error of approximation can be estimated through $F_0 = \max\{F - n^{-1}d, 0\}$, where 0 indicates that only positive values of F_0 are estimated. Moreover, the average error of approximation per degree of freedom is a squared value: $\varepsilon = \sqrt{F_0/d}$. Consequently, the error of approximation, ε , gives information about how well the model (with unknown but optimally chosen parameter values) would fit the population's covariance matrix.

a parameter is significantly different in the two groups, the χ^2 for invariate models is compared to χ^2 for models which differ in the structural parameters. A single structural parameter is found to be different in the two groups if the models with different parameters achieve a significantly better fit (i.e. a lower χ^2) than the invariate models. Technically, the parameters are tested individually. The results are reported in Table 4.

Table 4
Group comparison model

Parameter	High-experienced customers	Low-experienced customers $\Delta\chi^2$
Product perf. \rightarrow C. Satisfaction ($\gamma_{1,1}$) Expectancy:	1.85 >	1.41 1 (1 df)
S. Reputation \rightarrow C. Satisfaction ($\gamma_{1,2}$) Expectancy:	0.2 <	0.52 2 (1 df)
Customer Satisfaction \rightarrow Loyalty ($\beta_{2,1}$) Expectancy:	0.01 >	0.02 0 (1 df)
Supplier Reputation \rightarrow Loyalty ($\gamma_{2,2}$) Expectancy:	2.65 <	1.61 3.3 (1 df)

χ^2 -differences above 1.9 are (one-tailed) significant at the 0.05 level and differences above 3.3 are significant at the 0.01 level.

Source: own research.

The results provide support for two of the four hypotheses. Customer satisfaction is formed on different sources depending upon the degree of supplier experience. Supplier reputation has a significantly higher effect on customer satisfaction for the "low-experienced customers" than for the "high-experienced customers". Consequently, product performance has a weaker effect on customer satisfaction for the "low-experienced customers" than for the "high-experienced customers", but this effect is not significant. Contrary to what was expected, supplier reputation has the greatest effect on loyalty for the high-experienced customers. The effect of customer satisfaction on loyalty was absent for both groups.

5. DISCUSSION AND IMPLICATIONS

The strong effect of supplier reputation on loyalty and customer satisfaction is notable. The effects of extrinsic cues, brand name, and subjective norm, have been emphasized in the marketing literature. The effect of supplier reputation on loyalty is found by Selnes (1993). Recent attention to the brand effect and brand value (Aaker 1991) is adequate in this case. The strong support for reputation as an important determinant of loyalty should support the

importance of maintaining the firm's reputation in the market. The positive effect of supplier reputation on customer satisfaction, as found in this study, is anchored in the attribution literature (Folkes 1988). For products which are difficult to evaluate by the customers it is proposed that reputation or signaling is highly important for the customers to assess the satisfaction with the product (Bloom and Reve 1990). The products of a coach tour operator are difficult to benchmark due to the heterogeneity in the destinations and whether the success or failures are caused by the operator, or persons outside the control of the operator, or the customer him/herself (see Deighton 1992; Folkes 1988).

In addition to the effects of supplier reputation, we also proposed a positive effect of customer satisfaction on loyalty. This was not found in this study. This zero effect of customer satisfaction is also found in two of the four samples of Selnes (1993). However, the literature propose (and empirically support) the relationship to be positive (e.g. Fornell 1992; Bloemer and Kasper 1994; Boulding et al. 1993). Therefore, it is too early to reject this effect which is consistent with theory and previous findings in other studies. However, the lack of support may indicate that the effects of customer satisfaction are more important for some products than others. As Bloom and Reve (1990) propose, buying decisions on services may rely more upon the reputation than the customer's own judgment and satisfaction. Furthermore, as proposed by Bearden and Etzel (1982), products consumed publicly and]or exclusively are bought more on information from extrinsic cues rather than intrinsic cues. A product provided by coach tour operators may be considered as both publicly and exclusively consumed.

The effects of product performance on customer satisfaction indicates that customer satisfaction is a rational overall assessment of the different facets of the product consumed, as is found in several studies (Troye et al. 1995; Selnes 1993). In addition, the effect of product performance is absorbed by customer satisfaction and there is no evidence (i.e. modification indices) that product performance has a direct effect on loyalty. The moderating effects of customer experience were present for the customers' satisfaction formation. "Low-experienced" customers rely more upon extrinsic cues (i.e. supplier reputation) than "high-experienced" customers (see e.g. Moser and Nat 1987; Nonaka 1994). Beliefs (about the different product performance facets) are suggested to be stronger when the experience is high. Thus, the association between product performance and customer satisfaction is proposed to be greater. Customers with beliefs which are less justified are proposed to rely more on supplier reputation. In this study, the effect of product performance on customer satisfaction was stronger for the "high-experienced" customers than for the "low-experienced" customers. However, the relationship was not significant.

The proposed moderating effect on the impact of supplier reputation on loyalty was not supported. The proposed effect was that the more experience a customer has with a supplier, the more the customer will rely on his or her own product experience and less on supplier reputation. However, as found in the data, the opposite was reported. Experienced customers relied more on supplier reputation than the customers with little supplier experience. One explanation may be that customers using a supplier several times are more aware of the reputation of that particular supplier. Moreover, the effect may also be spurious since the study does not control for factors such as involvement and experience with this kind of product in general.

The main finding of this study is that supplier reputation has a great impact on loyalty. Therefore, the managerial implications should be to emphasize the importance of the firm's reputation in the market. The other finding is that the formation of customer satisfaction is more based on product performance for those customers with supplier experience and on supplier reputation for those customers with less supplier experience.

In this study the effects of product performance, customer satisfaction, and reputation on customer loyalty have been examined. However, other factors also affect loyalty. From the industrial organization perspective we know that 'lock-in' effects regarding customers can be very efficient to the firms making use of such competition approach (Granhang and Gilly 1989). Particularly, transaction specific investments and small number bargaining situations facilitate such 'lock-in'. The market treatment observed in the market is progressive rebate systems which prevent the customers to benefit from switching sellers. Examples are found in the airline industry (frequent flyer programs) and the beverage industry (store's beverage brand share bonus program). The first example applies for both consumer and industrial markets and the latter for the industrial (retailer) market. This study does not include such lock-in treatments but strongly recommend future studies to do so. Accordingly, such a study could explore whether customer satisfaction, brand reputation, or 'lock-in' have the strongest impact on customer loyalty.

6. LIMITATIONS

This study has several limitations. First, the hypotheses are deduced from the theory, but the design, however, does not provide any support for the causal relationships among the variables. Second, the lack of control variables may not account for possible spurious covariations. Possible control variables could be: product involvement, product knowledge, product experience, kind of product (e.g. destination, number of days, and price). Third, the measures

should be further developed. Research on measure of true brand loyalty versus spurious brand loyalty (Bloemer and Kasper 1994), and product performance (Troye et al. 1995) should be taken into account. Furthermore, since supplier reputation has a great impact, a more fine-grained construct and measures should be developed in order to capture more facets of reputation. Fourth, if the effects in this study vary across products and industries, further studies should explore more moderating effects.

REFERENCES

- Aaker, D. A. (1991): *Managing Brand Equity: Capitalizing on the Value of Brand Name*. The Free Press, New York.
- Anderson, J. C., Gerbing, D. W. (1988): *Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach*, "Psychological Bulletin" vol. 3, p. 411-423.
- Bearden, W. O., Etzel, M. J. (1982): *Reference Group Influence on Product and Brand Purchase Decisions*, "Journal of Consumer Research" vol. 9 (September), p. 183-194.
- Bloemer, J., Kasper, H. (1994): *Brand Loyalty and Brand Satisfaction: The Case of Buying Audio Cassettes Anew in the Netherlands*. EMAC, Proceedings, p. 183-199.
- Bloom, P. N., Reve, T. (1990): *Transmitting Signals to Consumer for Competitive Advantage* "Business Horizons" (July-August), p. 58-66.
- Bollen, K. A. (1989): *Structural Equations with Latent Variables*. Wiley, New York.
- Boulding, W., Kalra, A., Staelin, R., Zeithaml, V. A. (1993): *A Dynamic Process Model of Service Quality: From Expectations to Behavioral Intentions*, "Journal of Marketing Research" vol. 30 (February), p. 7-27.
- Browne, M. W., Cudeck, R. (1993): *Alternative Ways of Assessing Model Fit*, in: Bollen, K. A., Long, J. S. eds.: *Testing Structural Equation Models*. Sage, London, p. 136-162.
- Capusky, J. R. & Wolf, M. J. (1990): *Relationship Marketing: Positioning for the Future*, "The Journal of Business Strategy" (July/August).
- Deighton, J. (1992): *The Consumption of Performance*, "Journal of Consumer Research" no. 19 (December), p. 362-372.
- Fiore, A. M., Damhorst, M. L. (1992): *5, Intrinsic Cues as Predictors of Perceived Quality Apparel*, "Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behaviour" vol. p. 168-178.
- Folkes, V. S. (1988): *Recent Attribution Research in Consumer Behavior: A Review and New Directions*, "Journal of Consumer Research" no. 14 (March), p. 548-565.
- Fornell, C. (1992): *A National Customer Satisfaction Barometer: The Swedish Experience*, "Journal of Marketing" no. 55 (January), p. 1-21.
- Jacoby, J., Kyner D. B., (1973): *Brand Loyalty vs. Repeat Purchasing Behaviour*, "Journal of Marketing Research" no. 5 (February), p. 1-9.
- Johanson, M. D., Fornell, C., (1991): *A Framework for Comparing Customer Satisfaction Across Individuals and Product Categories*, "Journal of Economic Psychology" vol. 12, p. 267-286.
- Jöreskog, K. G., Sörbom, D. (1993): *LISREL 8. Scientific Software*. Inc., Illinois, Chicago.
- Lutz, R. J. (1991): *The Role of Attitude Theory in Marketing*, in: Kassarian, H. H., Robertson, T. S., eds.: *Perspectives in Consumer Behaviour*. Prentice-Hall, New York, p. 317-339.
- Moser, P. K., Nat, A.v. (1987): *Human Knowledge: Classical and Contemporary Approaches*. Oxford University Press, New York.

- Nonaka, I. (1994): *A Dynamic Theory of Organizational Knowledge Creation*, "Organization Science" vol. 5 (February), p. 14-37.
- Oliva, T. A., Oliver, R. L., MacMillan, I. C. (1992): *A Catastrophe Model for Developing Service Satisfaction Strategies*, "Journal of Marketing" vol. 56 (July), p. 83-95.
- Oliver, R. L. and Swan, J. E. (1989): *Consumer Perception of Interpersonal Equity and Satisfaction in Transactions: A Field Survey Approach*, "Journal of Marketing" no. 53 (April), 21-35.
- Olsson, U. H., Howell, R. D., Troye, S. V. (1998): *Convergence and Stability of Alternative Estimators in Misspecified Covariance Structures*, *Multivariate Behavioral Research*, *Forthcoming*.
- Petty, R. E., Cacioppo, J. T., Schumann D. (1983): *Central and Peripheral Routes to Advertising Effectiveness: The Moderating Role of Involvement*, "Journal of Consumer Research" no. 10 (September), p. 135-146.
- Reichheld, F. F., Sasser, W. E. (1990): *Zero Defections: Quality Comes to Services*, "Harvard Business Review" (September-October), p. 105-111.
- Rust, R. T., Oliver, R. L. (1994): *Service Quality – Insight and Managerial Implication from the Frontier*, in: Rust, R. T., Oliver, R. L., eds.: *Service Quality: New Directions in Theory and Practice*. Sage, New York.
- Selnes, F. (1993): *An Examination of the Effect of Product Performance on Brand Reputation, Satisfaction and Loyalty*, "European Journal of Marketing" vol. 27, no. 9, p. 19-35.
- Troye, S. V., Gaard, T., Henjesand, I. J. (1995): *The Triple Importance of Service: An Alternative Model of Service and Product Quality*. EMAC, Proceedings, p. 1135-1154.
- Woodruff, R. B., Cadotte, E. R. and Jenkins, R. L. (1983): *Modeling Consumer Satisfaction Processes Using Experience-Based Norms*, "Journal of Marketing Research" no. 20 (August), p. 296-304.
- Yi, Y. (1990): *A Critical Review of Consumer Satisfaction*, in: Zeithaml, V. A., ed.: *Review of Marketing*. AMA, Chicago.