

**PASSENGER SATISFACTION AND LOYALTY:
A CASE OF INTER-CITY COACH TRAVEL IN MALAYSIA**

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Abstract

The purpose of this paper is to investigate the relationship between service delivery process, passenger satisfaction and loyalty in express coach industry in Malaysia. Five components of service process were identified: experience before travel, experience during travel, experience after travel, terminal facilities and bus operations. Data were solicited from passengers of one express coach service plying a route of Kota Bharu to Kuala Lumpur using a structured questionnaire. Results show that three out of five areas of service process are significantly related with passenger satisfaction. Terminal facilities emerged as the best predictor for passenger satisfaction, followed by the bus operations and experience after travel. The analysis also indicates a statistically significant correlation between passengers' satisfaction and loyalty.

Keywords: passenger satisfaction, loyalty, service quality, express coach, Malaysia.

Abstrak

Kertas ini bertujuan untuk meneliti hubungan antara proses penyampaian perkhidmatan, kepuasan penumpang dan kesetiaan dalam industri bas ekspres di Malaysia. Lima komponen proses perkhidmatan telah dikenalpasti: pengalaman sebelum perjalanan, pengalaman ketika perjalanan, pengalaman selepas perjalanan, kemudahan di terminal dan operasi bas. Data diperoleh daripada penumpang bas ekspres bagi laluan Kota Bharu ke Kuala Lumpur dengan menggunakan borang soal selidik berstruktur. Hasil kajian mendapati tiga daripada lima proses perkhidmatan berkait secara signifikan dengan kepuasan penumpang. Kemudahan di terminal muncul sebagai peramal terbaik bagi kepuasan penumpang, diikuti oleh operasi bas dan pengalaman selepas perjalanan. Analisis juga menunjukkan korelasi yang signifikan di antara kepuasan penumpang dan kesetiaan.

Introduction

Most cities in developing countries rely heavily on the use of buses as the major means of mobility, particularly for the urban problem. People in urban area rely very much on buses for their daily movement either traveling to and from work, shopping and recreational trips. Even in cities with extensive rail networks, the majority of trips are made on buses or minibuses. An estimated of 600 million trips a day in 1980 were being made in buses in the developing cities and by 2000, this figure will have at least doubled. With so many people affected, it is not surprising to find the quantity and quality of bus services as a worldwide topic of considerable concern among passengers, service operators and policy-makers (Amstrong-Wright and Thiriez 1987).

Better services are provided for the public when passengers are given the opportunity to make choices based on comfort, reliability, frequency and price. Experience indicates that many people are willing to pay more for better services (Heskett, Sasser and Schlesinger 1997). As income arise, improved services can help to retain high levels of patronage, thereby avoiding a switch from public transport to private cars. Given freedom in the choice of buses, operators are able to respond more closely to the preferences of passengers, which are likely to range from vehicle offering basic facilities at low fares to more comfortable vehicles at higher fares. Where incomes increase and more people are able to buy cars, the transport system will need to include more attractive services if bus patronage is to be retained. Certainly, there will be a growing

demand for bus services if better facilities such as seating, air conditioning or leg space are provided. Indeed, many passengers will be willing to pay extra for such levels of comfort.

As we had seen in most nations, whether developed or developing ones, bus services still form the backbone of public transport in towns and cities as a mode of inter-city travel. This is the cheapest means of transportation in and around the city in the world. In the perspective of local bus operations in Malaysia, it is interesting to note that the express coach services in this country normally dominated by private operators and the nature of operation is quite fragmented. While there may be overwhelming evidence to show that bus services under private ownership invariably are self-supporting, sometimes there is considerable concern that this is achieved at the expense of quality and safety. An additional concern, in comparison with public operator, is that privately owned buses are inclined to cause undue traffic congestion and provide unfair competition and employ fierce price-cutting. These impressions arise mainly because of the highly motivated and sometimes aggressive behaviour of private operators. But even though they may appear chaotic at times, given the opportunity, private operators can provide services that are very efficient and responsive to the needs of the public. In fact, from a number of studies comparing services in the same cities (Calcutta, Istanbul, Bangkok and Jakarta), the quality of private bus service generally seems as good, if not better, than those under public ownership charging similar fares. In a large number of cities, private operators provide a higher standard of service, as is evident from the higher fares they are able to command in comparison with their public counterparts. Also there is little concrete evidence to support the concern that privately owned bus services are less safe than those publicly owned (Amstrong-Wright and Thiriez 1987).

The failure of bus operators to understand the main differences between service structure and service delivery process will cause inefficient services to customers and consequently decreasing their satisfaction. This weakness is always present in express bus operators because the management does not emphasize on the customer needs. They always use the same and standard approach hoping that the needs and wants of customers are always constant. The obvious different characteristics of product and service are that service management has an abstract structure, which might vary in different setting and nature. These characteristics are not found in product management philosophies. Thus, using product management philosophy to manage a service provider will cause problems that may affect its overall customer services.

It has been suggested that customer satisfaction is a key issue for every company wishing to increase customer loyalty and thereby create a better business performance (Grempty, Martensen and Kristensen 2000). Failure to achieve satisfaction from an express bus service is as much the fault of the customer for not identifying precise needs, yet it must also be recognised that consumers may not have a precise need to communicate and this is central to the delivery of service satisfaction and beneficial to passengers (Gabbott and Hogg 1994). The real service quality benchmark caused by passenger evaluation is when they experience or “consume” the service. All complains must be considered if they are rational and supported by clear evidence. The perceptions of the customer and the service provider are always different. But, all passenger perceptions must be considered, so that both parties get mutual benefits of quality delivery service.

The purpose of this paper is to determine how passengers evaluate the service processes provided by the bus companies in Malaysia and how these evaluations can affect their satisfaction with respect to the service rendered. Specifically, in this study, three issues were examined: (1) the components of service processes which are salient in assessing service delivery in the express bus industry, (2) the relationship between different process area of express coach service and how this is related to the satisfaction of passengers, and (3) the relationship between passenger satisfaction and loyalty in their usage of express coach service.

Literature Review

Customer satisfaction has come to represent an important cornerstone for customer-oriented business practices across a multitude of companies operating in diverse industries. An analysis of the literature concerned with customer satisfaction in 1992 revealed a large and ever growing body of research with some 15,000 trade and academic articles, which had been written on the topic over the previous two decades (Peterson and Wilson 1992). This emphasis on businesses’ having satisfied customers further serves to accentuate the potential value resulting from documented findings on the antecedents and consequences of customer satisfaction (Szymanski and Henard 2001).

The concept of customer satisfaction has been defined in various ways. For example, Zeithaml, Berry and Parasuraman (1993) suggested that customer satisfaction is a function of the customer’s assessment of service quality, product quality and price. Oliva, Oliver and Bearden

(1995) suggested that satisfaction is a function of product performance relative to consumer expectations. Bachelet (1995) considered satisfaction to be an emotional reaction by the consumer in response to an experience with a product or service. He believed that this definition included the last contact with a product or service, the satisfaction experience since the time of purchase as well as the general satisfaction experienced by regular users. Hill (1996) defined customer satisfaction as the customers' perceptions that a supplier has met or exceeded their expectations.

Jones and Sasser (1995), on the other hand, defined customer satisfaction by identifying four factors they postulated affected it. The factors were: (1) essential elements of the product or service that customers expected all rivals to deliver, (2) basic support services such as customer assistance, (3) a recovery process to make up for bad experiences and (4) "customization" which were factors that met customers' personal preferences, values, or needs. Ostrom and Iacobucci (1995) examined a number of definitions from other researchers and distinguished between the concept of consumer value and customer satisfaction. They stated that customer satisfaction was best judged after purchase, was experiential and took into account the qualities and benefits as well as the costs and efforts associated with a purchase.

Researchers of customer satisfaction are more interested to focus their studies in service setting to explore the satisfaction levels of customers (Cadotte, Woodruff and Jenkins 1987; Oliver and Swan 1989; Fornell 1992). Though these studies have treated customer satisfaction and service quality as a separate research, these two constructs has been widely recognised as the key influence in the formation of customers' purchase intention in service environments. A review of the existing literature suggests that the specific nature of the relationship between these important constructs in the determination of customers' purchase intentions continue to elude marketing scholars (Bitner and Hubert 1994; Rust and Oliver 1994).

From the perspective of service marketing, satisfaction can be defined as an emotional state that occurs in response to an evaluation of service interaction experiences (Westbrook 1981). The service marketing literature argues that customer satisfaction is the result of a customer's perception of the value received (Hallowell 1996). As stated by Fornell, Johnson, Cha and Bryant (1996), the first determinant of overall customer satisfaction is perceived quality; and secondly the perceived value. Customers currently demand higher quality service and often perceive existing levels to fall short of expectations. It is believed that as consumers perceive a

widening gap between expected and desired levels of service, feelings of dissatisfaction will increasingly develop. Positive evaluations of customer complaint encounter have been shown to be viewed as “second-order” satisfaction and help to build customer loyalty and higher levels of repurchase intention (Etzel and Silverman 1981).

Oliver (1980) observed a strong correlation between high level of customer satisfaction and its consequences. The researcher in general concluded that high customer satisfaction should increased loyalty for current customers, reduced price elasticities, insulation of current customers from competitive efforts, lower costs of future transactions, reduced failure costs, lower costs of attracting new customers and enhanced reputation for the firm. In tandem with this view, Robertson and Gatignon (1986) believed that an increase in customer satisfaction should also enhance the overall reputation of the firm and it can aid in introducing new products by providing instant awareness and lowering the buyer’s risk of trial.

Jones and Sasser (1995) has determined three second-order effects of customer loyalty: (1) revenues grows as a result of repeat purchases and referrals, (2) costs decline as a result of lower acquisition expenses and from the efficiencies of serving experienced customer and (3) employee retention increases because job pride and satisfaction increase. Similarly, Heskett et al. (1997) suggests that customer loyalty should (1) decline the costs of serving the customers; (2) increase the volume of purchase by the customers; (3) increase the price premium that customers would tolerate and (4) increase their willingness to spread favourable word of mouth. The converse of this is that a dissatisfied customer will tell more people of their dissatisfaction, possibly complain to the company and if sufficiently disenfranchised, change to another company for their product or service, or totally withdraw from the market (Anderson and Sullivan 1993; Fornell, Ittner and Larcker 1995; Oliva, Oliver and Bearden 1995).

Reichheld (1996) argues that the economic benefits of customer loyalty often explain why one firm is more profitable than a competitor. Loyal customers often become less expensive to serve as they become more efficient in their dealings with the supplier and increase their spending over time (not just in volume but also in terms of willingness to pays price premium on occasion). Hence, most service marketers today have recognised the importance of keeping customers and making them into better customers (Berry 1983). It is also obvious that acquiring a new customer entails one-time costs for advertising, promotions and the like. As the company gains experience with its customers, it can serve them more efficiently.

Methodology

The following describes the development of survey instrument, data collection process and response rate as well as sample characteristics.

Survey instrument

Based on a qualitative study using an in-depth interview technique, a structured questionnaire was prepared for use in the survey. The questionnaire was self-administered. On the front cover, a title, the name of institution, the name of the researcher and information about confidentiality of data were provided. On addition, on the top of the first page, the questionnaires were numbered serially for the control of questionnaires and later data analyses. The questions were organized into eight sections that measured: (1) passengers' travel experience (section 1 to 5), (2) passengers' satisfaction, (3) loyalty and (4) demographic variables. With the exception of demographic variables, all items were measured on 4-point type scale (1 = strongly agree, 4 = strongly disagree).

To ensure the validity of the survey instrument, the questionnaire was distributed to three faculty members at Universiti Malaysia Terengganu to gain their feedback regarding the content, layout, wording and ease of understanding the measurement items. They were also asked to offer suggestions for improving the proposed scale and to edit the items to enhance clarity, readability, and content adequacy. The feedback was taken into account in revising the questionnaire. Ten undergraduate students were interviewed about the revised questionnaire. The students were mainly asked clarity of the questionnaire. Changes were made based on the verbal feedback received. Then, the newly revised questionnaire was pilot tested.

The main reason for conducting a pilot test is to determine the potential effectiveness of the questionnaire and whether further revision is needed prior to conducting the survey. In addition, the pilot study was conducted to ensure the validity, sequence and relevance of the questionnaire to this study. It should be noted that the test was not used for statistical purposes and therefore responses from the pilot test were not included in the research findings.

The researcher distributed the questionnaire to 20 bus passengers as a sample group for pilot testing. The subjects were asked if they had any problems understanding the questionnaire or have specific comments regarding the questionnaire. The format for responding was through

open-ended questions. The subjects were encouraged to be very free with their responses, make suggestions for improvement and delineate any difficulties they found.

After each questionnaire was completed, each subject was asked what he/she meant in checking various answers. Comments were solicited on the clarity of the questions and what the changes should be done in order to make the questions simpler. These respondents also gave their comments on understanding the instructions about the scaling and the time taken to answer the questions. The test found no serious problems and minor amendments were made to the survey questions based on the verbal feedback received from the interview. The final result of the pilot test finally indicated that the questions had face validity. Table 1 depicts the measurement of the main variables and its Cronbach's alpha coefficients. The alpha coefficients ranged between 0.5 and 0.72, indicating high internal consistencies and reliability of the items (Kerlinger and Lee 2000).

[Insert table 1 about here]

Data collection

A survey method was employed to obtain information directly from individual passengers of express buses. Prior to the survey, permission was obtained from Syarikat Kenderaan Melayu Kelantan (SKMK) to distribute the questionnaires to the passengers. Thirteen buses plying the route of Kota Bharu to Kuala Lumpur were involved in this four weeks period of data collection. A total of 500 questionnaires were sent out for the survey. The data collection process started with the bus driver distributed the structured questionnaires to the passengers before the journey. Passengers were asked to fill up the questionnaire when they started the journey or when the bus stopped for a break. The drivers then collected the questionnaires after the arrival at the destination.

Of a total of 500 questionnaires distributed during the survey period, 378 questionnaires were returned, accounting for 75.6 percent of the total administered. However, 178 questionnaires were discarded because they were either incomplete or invalid responses. Thus, only 200 sets were deemed usable for data analysis.

Sample characteristics

The sample consists of 53.5% male and 46.5% female. Malay constitutes the largest ethnic group, accounting for 87% of the respondents, followed by the Chinese (11%) and the Indians (2%). An examination of the marital status of the respondents shows that the largest single persons account for 53.5% single and 45% married. In terms of age, the majority of the respondents were below 25 years old, accounting for 36.5% of the total respondents. The second largest age group was the 25 to 34 bracket (29.5%), followed by 35 to 44 age group (23%), 45 to 54 age group (19.5%) and 55 years old and above (0.5%). Table 2 presents the characteristics of respondents involved in this study.

[Insert table 2 about here]

Data Analysis and Results

This section describes the results of data analysis. The Statistical Package for Social Science (SPSS) version 11.5 for Windows was used for all statistical procedures.

Relationships of service variables with passenger satisfaction

To examine the effect of service variables on passenger satisfaction, a multiple linear regression analysis was run with service variables as predictors and with passenger satisfaction as a criterion variable. This statistical technique was favourable because it can be used to explain the movements of one variable, the dependent variable (i.e. satisfaction) as a function of movements in a set of other independent or predictor variables (i.e. service). Using principles of correlation, the multivariate use of regression analysis is a way of using the association between variables as a method of prediction (Studenmund 2001). The product should be what is known a “variate”, that is, the independent’s variable linear combination that may predict best the dependent variable. The variables’ weights convey their input to the overall prediction. Specifically, we used ordinary least-square (OLS) regression to estimate:

$$PS = f(BT, DT, AT, TF, BO)$$

where:

PS = passenger satisfaction

BT = experience before travel

DT = experience during travel

AT = experience after travel

TF = terminal facilities
BO = bus operation

An automated selection procedure of stepwise procedure was applied to find the best regression model without testing all possible regressions. The use of this procedure was justified for this study because there were no theoretical a priori assumptions regarding the importance of each variable. In addition, it allows the researcher to examine the contribution of each predictor variable to the explained variance of the criterion variable. Each predictor variable is considered for inclusion prior to developing the main equation. The predictor variable with the greatest contribution is added first. Predictor variables are then selected for inclusion based on their incremental contribution over the variable(s) already in the equation. An alpha level of 0.1 was used as the entry cut-off value. This level of significance was chosen because the researchers was concerned that some of the variables would be excluded if the lower level of significance was used and the researchers tried to minimize the effect of collinearity as far as possible through variable selection following the advice of Speed (1994).

Independent variables were entered into the regression model as the predictors and passenger satisfaction as the criterion. Following Hair, Anderson, Tatham and Black (1998), the regression model was tested to see if all the assumptions to apply this analysis are fulfilled. To test whether the assumptions of linearity, homoscedasticity and independence were met by the data, checks were undertaken by inspecting the normal probability plot and residuals scatterplot. An examination of the normal probability plot of indicated that the residual plots were almost close to the normal straight diagonal line, suggesting that the residuals were approximate normal distribution. In addition, the residual scatterplot verified that the residuals were linear and homoscedastic.

To test for a possible of a multicollinearity problem, two values were examined. First, the correlation matrix for the predictor variables was run. All correlations turned out to be rather low (under 0.5). Next, the tolerance values of the independent variables were assessed while the stepwise multiple regression was run by using the conventional tolerance value of 0.1 as the cut-off point for high multicollinearity (Hair et al. 1998). The results of the analysis showed that all independent variables in the regression equation had high tolerance values ranging from 0.7 to 0.925, showing an absence of multicollinearity problem. Therefore it can be concluded that the assumptions underlying regression analysis had not been violated.

Table 3 presents the summary of stepwise regression results of process variables with passenger satisfaction. It was observed that three out of five variables were significant predictors of passenger satisfaction with the F test statistic ($F = 20.142$) significant at $p < 0.0001$. The effect size of service process variables as reported by adjusted R^2 was 0.224, suggesting that process variables were able to explain 22.4% of the variation in the passenger satisfaction. According to the classification system of effect size by Sawyer and Ball (1981), the regression equation in the present study can be classified as medium to large.

The stepwise ordering of the predictor variables that entered the equation is as follows. Terminal facilities (TF) was the first variable selected into the model as it was the most salient in explaining passenger satisfaction. It alone explained 15.2 per cent of the variation. At step 2, Bus operation (BO) entered the equation and accounted for an additional 4.2 per cent of the variation in passenger satisfaction. The last variable selected was experience after travel (AT) and accounted for an additional 3 per cent of the variation in passenger satisfaction. The multiple linear regression equation can be presented as follows:

$$PS = 1.855 + 0.297 TF + 0.259 BO + 0.189 AT$$

As shown in the final regression equation, passenger satisfaction was positively correlated with terminal facilities ($\beta = 0.297$, $t = 3.918$, $p < 0.001$) and bus operation ($\beta = 0.259$, $t = 3.478$, $p < 0.0001$). This relationship shows that all scheduled operations or service provided by express coach such as promptness of bus arrival and departure, fare, safety and reliability while traveling are important as the determinants of their satisfaction. Experience after travel was also correlated to passengers' satisfaction ($\beta = 0.189$, $t = 2.943$, $p < 0.004$), implying that terminal facilities such as location of luggage room, ticket counters and prayer room are considered by passengers as the factors that determine their satisfaction on service delivery processes. However, experience before travel (BT) is non-significant predictor variable of passengers' satisfaction, meaning that the passengers do not consider their experience before travel as a determinant of satisfaction. There is also a non-significant correlation between experience during travel (DT) and passengers' satisfaction. This result implies that passengers' experience with the service process during travel does not contribute to their satisfaction level.

The relative importance of variables was indicated by their standardized beta coefficients. The service variable having the strongest effect on passenger satisfaction was terminal facilities

(0.297). The next most important was bus operations (0.259) followed by experience after travel (0.189).

[Insert table 3 about here]

Relationships of passenger satisfaction with loyalty

To describe the degree to which passenger satisfaction is linearly related to loyalty, Pearson Product-Moment correlation analysis was conducted. Three measures of loyalty were included in the analysis namely repeat usage, fare increase and positive word of mouth. Table 4 reports the correlation coefficients (r) and coefficient of determination (r^2) between passengers' satisfaction and loyalty variables.

The data indicates a positive, statistically significant correlation between passenger satisfaction and repeat usage, $r(198) = 0.204$, $p < 0.01$, suggesting that the higher the passengers' satisfaction with the service delivery process, the more likely they are to travel with the same express bus service in the future. Passengers' satisfaction was also positively correlated to fare increase, $r(198) = 0.24$, $p < 0.01$, suggesting that passengers who are satisfied with the service delivery process of a particular express coach provider are more willing to travel with the same coach service regardless of fare increase. Further, the study found passengers' satisfaction to be associated with their positive word-of-mouth, $r(198) = 0.45$, $p < 0.01$. This relationship indicates that the more passengers are satisfied with the service, the more they are willing to recommend the service to other person. It should be noted that correlation coefficient value between satisfaction and positive word-of-mouth is much higher ($r = 0.45$) than other loyalty variables, with 20.3% of the variance (0.45^2) of this variable is accounted for by its linear relationship with passenger satisfaction.

[Insert Table 4 about here]

Discussion and Implications

This study was designed to examine the antecedent of passenger satisfaction (i.e. passengers' experience with the bus service) and the relationship between satisfaction and loyalty behaviour outcomes (i.e. repeat usage, fare increase and positive word of mouth). The results clearly show that experience before travel, terminal facilities and bus operations to be significantly related to passengers' satisfaction. Together with this, passengers' satisfaction

appeared to serve as a significant source of their loyalty. For express coach companies, information obtained from the findings of this study can be useful and important in formulating their marketing strategies and service delivery to customers. They should always remember that service delivery process begins when customers bought their ticket at the counter and ended when they arrived at their destinations. If one service processes fall below passengers' satisfaction level, it could affect the entire service processes.

Express coach companies that wish to use the quality of their service as a marketing tool should attempt to achieve at least desired level of performance and should strive to design and improve their processes to meet the ideal level of services. Any firm wanting to compete profitably in the market should adopt a service that performs at par or better than the competitors or in accordance with value-based expectations. They should design a service that maximizes the customers' sense of what they get for what they pay. Perhaps the challenge faced by a express coach companies is to contain the extent of variability in the delivery of the service so that the performance levels of the processes are generally predictable, but still maintain the flexibility to deal with special cases and individual situations. This can be done by designing the routine transactions to take place smoothly, effortlessly and predictably. This certainly gives the express coach companies to concentrate on abnormal situations, fulfill special request and deliver that extra level of personalized service to satisfy customers with different needs.

It is apparent from the findings that passengers' experience before and during travel seems to have insignificant influence on their satisfaction level. Thus, in order to increase passengers' overall satisfaction, coach service providers should consider these two factors in their service delivery process. More emphasis should be given to courteous service provided by frontline staff. Frontline employees must be trained to serve customers politely. Marketing and human resource management departments should work together, jointly establishing hiring criteria, training needs and promotional opportunities to help the firm attract and retain employees who can deliver the level of service quality expected by the firm's target market. To the extent that this is true, frontline employees can be expected to look frequently for cues that tell them how customers will accept the service.

Although it was found that experienced after travel, terminal facilities and bus operations are the determinants of passengers' satisfaction, express coach providers should not under emphasize these findings by simply believing that passengers will continue to be satisfied with

their service. The implication of this finding should be viewed in a broader scope with a question of how to retain these passengers. Express coach providers should realize that loyalty only come with satisfaction. The favourable experiences that passengers had with the service would certainly encourage them to continue using the particular coach service. Express coach providers should therefore constantly monitor their services in an effort to detect any weaknesses, which might cause customers' dissatisfaction and defection. This point to the need for improvement on the overall image of their service by offering a high standard of bus operation such as safe journey, better roominess and leg-space in coach itself, terminal facilities and punctuality. In addition, information about services should be provided and proper timetable will help the customers to plan their journey effectively, in form of catalogues, brochures, pamphlets and website.

The findings of this study provide an encouraging start in understanding the service dimensions that affect passengers' overall satisfaction. However, as with all research, it is important to acknowledge and learn from the limitations of the study. First and foremost, in considering the findings, one should recognise the exploratory nature of this study in that it attempts to discover associations between service delivery, satisfaction and loyalty. It is also correlation (associative) and not causal in nature and is intended to build upon the existing work in this field. In addition, this study has limitations in generalizing the findings in that it included only one express coach provider in Malaysia. Thus, it is recommended that future research should be conducted using several coach operators believed to be operating within the high-volume service sector to ensure that the results can be generalized across firms in the same industry. This is also to include samples with wider geographical distributions and travel routes in Malaysia.

References

- Armstrong-Wright, I. and Thiriez, S. (1987). Bus services: reducing costs, rising standards. World Bank Technical Paper No. 68, Urban Transport Series.
- Anderson, E.W. and Sullivan, M.W. (1993). The antecedents and consequences of customer satisfaction for firms. *Marketing Science*, 12 (Spring): 125-143.

- Bachelet, D. (1995). Measuring satisfaction, or the chain, the tree and the nest. In *Customer Satisfaction Research*, edited by R. Brooks. Amsterdam: European Society for Opinion and Marketing Research.
- Berry, L. L. (1983). Relationship marketing. In: *Emerging Perspectives on Service Marketing*, edited by L. L. Berry, G. L. Shostack and G. D. Upah (Chicago: American Marketing Association), pp. 25-28.
- Bitner, M.J. and Hubert, A.R. (1994). Encounter satisfaction versus overall satisfaction versus quality: the customer's voice In: *Service Quality: New Directions in Theory and Practice*, edited by R. Rust and R. Oliver (Sage Publications Inc.).
- Cadotte, E. R., Woodruff, R. B. and Jenkins, R. L. (1987). Expectations and norms in models of customer satisfaction. *Journal of Marketing Research*, 24 (August): 305-314.
- Etzel, M.J. and Silverman, B.I. (1981). A managerial perspective on directions for retail customer dissatisfaction research. *Journal of Retailing*, 57 (Fall): 124-36.
- Fornell, C. (1992). A national customer satisfaction barometer: the Swedish experience. *Journal of Marketing*, 56 (January): 6-21
- Fornell, C., Johnson, M. D., Anderson, E. W., Cha, J. and Bryant, B. E. (1996). The American customer satisfaction index: nature, purpose and findings. *Journal of Marketing*, 60 (October): 7-18.
- Fornell, C., Ittner, C.D. and Larcker, D.F. (1995). Understanding and using the American Customer Satisfaction Index (ACSI): assessing the financial impact of quality initiatives. Juran Institute's Conference on Managing Quality.
- Gabbott, M. and Hogg, G. (1994). Customer behavior and services: a review. *Journal of Marketing Management*, 10: 311-324.
- Grempty, S. L., Martensen, A. and Kristensen, K. (2000). The relationship between customer satisfaction and loyalty: cross-industry differences. *Total Quality Management*, 11: S509.
- Hair, J. F., Anderson, R. E., Tatham, R. L., and Black, W. C. (1998). *Multivariate Data Analysis, fifth edition*, New Jersey: Prentice Hall.
- Hallowell, R. (1996). The relationship of customer satisfaction, customer loyalty and profitability: an empirical study. *The International Journal of Service Industry Management*, 7 (4): 27-42.
- Heskett, J. L., Sasser, W. E. and Schlesinger, L. A. (1997). *The Service Profit Chain*, New York: The Free Press.
- Hill, N. (1996). *Handbook of Customer Satisfaction*. Aldershot: Gower Publishing Limited.

- Jones, T. O. and Sasser, W. E. (1995). Why satisfied customer defect. *Harvard Business Review*, Nov/Dec: 88-99.
- Kerlinger, F.N. and Lee, H.B. (2000). *Foundations of Behavioral Research*, 4th edition, Wadsworth /Thomson Learning.
- Oliva, T.A., Oliver, R.L. and Bearden, W.O. (1995). The relationships among consumer satisfaction, involvement and product performance: a catastrophe theory application. *Behavioural Science*, 40 (2): 104-132.
- Oliver, R.L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17: 460-9.
- Oliver, R. L. and Swan, J. E. (1989). Customer perceptions of interpersonal equity and satisfaction in transactions: a field survey approach. *Journal of Marketing*, 53 (2): 21-35.
- Ostrom, A. and Iacobucci, D. (1995). Consumer trade-offs and the evaluation of services. *Journal of Marketing*, 59: 17-28.
- Peterson, R.A. and Wilson, W.R. (1992). Measuring Customer Satisfaction: Fact and Artefact. *Journal of the Academy of Marketing Science*, 20: 61-71.
- Reichheld, F. F. (1996). *The Loyalty Effect*, Massachusetts: Harvard Business School Press.
- Robertson, T. S. and Gatignon, H. (1986). Competitive effects on technology diffusion. *Journal of Marketing*, 50 (July): 1-12.
- Rust, R. T. and Oliver, R. L. (1994). Service quality: insights and managerial implication from the frontier. In: *Service Quality: New Direction in Theory and Practice*, edited by R. T. Rust and R. L. Oliver (Thousand Oaks: Sage), pp. 1-19.
- Sawyer, A. G. and Ball, A. D. (1981). Statistical power and effect size in marketing research. *Journal of Marketing Research*, 18 (August): 275-290.
- Speed, R. (1994). Regression type technique and small samples: a guide to good practice. *Journal of Marketing Management*, 10: 89-104.
- Studenmund, A. H. (2001). *Using Econometrics: A Practical Guide*, 4th ed. Boston, MA: Addison Wesley Longman.
- Szymanski, D. M. and Henard, D. H. (2001). Customer satisfaction: a meta analysis of the empirical evidence. *Journal of the Academy of Marketing Science*, 29 (1): 16-35.
- Westbrook, R. A. (1981). Sources of satisfaction with retail outlets. *Journal of Retailing*, 57 (Fall): 68-85.

Zeithaml, V.A., Berry, L.L. and Parasuraman, A. (1993). The nature and determinants of customer expectations of service. *Journal of the Academy of Marketing Science*, 21 (1): 1-12.

Table 1 Measurement and Reliabilities of the Variables

Variables	Items	Alpha
Experience before travel (4 items)	Queuing time to buy a ticket at the counter Courteous service provided by frontline employee Waiting time for the arrival of the bus Seating arrangement	0.72
Experience during travel (9 items)	Seat in the bus Condition of the bus Driver's attitude while driving during the journey Arrangement for smoking and non-smoking area Condition of toilet facilities Comfortable of aisle Arrival/departure as per schedule	0.51
Experience after travel (5 items)	Luggage condition Frequency of incidents missing luggage Delayed journey Arrival time Incidents of damaged luggage	0.60
Terminal facilities (5 items)	Terminal design Location of ticket counter Prayer room Condition of rest room Luggage room	0.72
Bus operations (6 items)	Technical problems of the bus Fare price for the service provided The safety guaranteed towards delay Reliability of buses while traveling Other services	0.50
Composite scale: Passenger satisfaction (3 items)	An overall rating of satisfaction The degree to which performance falls short or exceeds expectations A rating of performance relative to the passengers' ideal of good service in the category	0.60

Table 2 Sample Characteristics

Characteristics	<i>N</i>	Percent (%)
Gender		
Male	107	53.5
Female	93	46.5
Age		
25 and below	73	36.5
26 – 34	59	29.5
35 – 44	46	23
45 – 54	21	10.5
55 and above	1	0.5
Ethnic		
Malay	174	87
Chinese	90	11
Indian	3	2
Marital status		
Single	107	53.5
Married	90	45
Widowed	3	1.5
Occupation		
Management	46	23
Agriculture/forestry	2	1
Clerical	25	12.5
Sales and business	47	23.5
Service	12	6
Factory and construction	11	5.5
Technical and engineering	7	3.5
Others	50	25
Monthly income		
Below RM1,000	61	30.5
RM1,001 – RM2,000	62	31
RM2,001 – RM3,000	37	18.5
RM3,001 – RM5,000	36	18
RM5,001 and above	4	2

Table 3 Stepwise Multiple Regression Results

Step	Model	B coefficient	Standardized Beta (β) coefficient	t-statistics	F-ratio for the equation	Adjusted R ²
1	Constant	1.924		12.489**	36.743***	0.152
	TF	0.338	0.396	6.062**		
2	Constant	1.519		7.874**	24.915***	0.194
	TF	0.220	0.257	3.381**		
	BO	0.271	0.254	3.346**		
3	Constant	1.855		8.392**	20.142***	0.224
	TF	0.254	0.197	3.918**		
	BO	0.277	0.259	3.478**		
	AT	0.173	0.189	2.943*		

Note: TF = terminal facilities; BO = bus operations; AT = experience after travel
 *** p < 0.0001; ** p < 0.001; * p < 0.01

Table 4 Correlation Coefficients for Passenger Satisfaction and Loyalty

Loyalty	Coefficients (r)	Coefficient of Determination (r ²)
Repeat usage	0.204**	0.042
Fare increase	0.240**	0.058
Positive word of mouth	0.450**	0.203

**p < 0.01