

IMPACT OF VOLUME USAGE ON FIRM LOYALTY AND PURCHASE DECISION CRITERIA

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This research examined differences in volume usage of customers and their loyalty to one firm across four industries. In addition, purchase decision criteria were examined within the context of volume usage. Results indicate firm loyalty declines as volume usage increases. The top quartile of consumers produce from 48% to 68% of a firm's revenue. Analysis of purchase criteria indicate few differences among heavy users of a service and moderate users and that service related criteria are the most important factors in choosing a service firm. Managerial implications of this research are presented.

INTRODUCTION

For successful marketing in the 1990s, service firms must build a loyal customer base while attracting new, high-potential market segments. However, maintaining customer service loyalty from high potential/heavy usage segments will become increasingly difficult as the proliferation of alternative service providers continues. As questions continue regarding the rising costs and efficiencies of attracting new customers through traditional promotional activities, focusing efforts on building service-loyal consumer behavior will become more important.

Many marketing scholars agree that a positive past experience with a service provider will lead to future patronage and positive word of mouth (Kurtz and Clow, 1991; Bitner 1990; Parasuraman, Zeithaml, and Berry, 1985;). However, due to the competitive nature of today's service sector, the focus must shift from ensuring future patronage to building and maintaining true consumer service loyalty. Although brand loyalty has received attention in previous research (Jacoby and Chestnut 1978, Bulkley 1991, Caudron 1993) additional study into the factors

affecting consumer-service loyalty and patronage behavior is needed.

This research focuses on consumer service loyalty and patronage behavior. Central to the study is the impact that usage rate has on firm loyalty and patronage behavior. Results of an examination into the interaction of usage rate, firm loyalty, and choice behavior is presented. A better understanding of the relationship between these variables will provide valuable insight for the formulation of marketing strategies designed to attract and maintain a loyal customer base for service firms. A discussion of the managerial implications of the findings will be presented along with suggestions for future research.

CONSUMER LOYALTY

With an increase in the number of competitors fighting for market share, maintaining a loyal consumer base becomes more difficult. Rising cost sensitivity, reduction in advertising effectiveness, and the proliferation of brands have all contributed to a gradual decline in consumer brand loyalty (Caudron 1993.) Many similar forces that affect consumer brand loyalty are shaping the competitive climate of the service sector.

Parasuraman, Zeithaml, and Berry (1993) proposed that the number of perceived service alternatives does

affect a consumer's perception of service quality by affecting the level of adequate service that a consumer expects. A consumer's overall satisfaction with a service encounter has been found to affect both the consumer's evaluation of service quality and future patronage decisions (Woodside, Frey, and Daly 1989). An unsatisfactory experience with a service provider will likely lead to firm switching (Bitner 1990). However, the amount of consumer involvement in the purchase and the severity of the dissatisfaction with a service encounter will also affect the firm switching decision (Oliva, Oliver, and MacMillan 1992).

Previous studies into pricing strategy in the service industries have included price recall, price-based promotions, and consumer brand-switching. Turley and Cabaniss (1995) found that most consumers cannot recall the last price they paid for a particular service. Frequency of usage, home ownership, and education were found to contribute to levels of consumer price recall. Bulkley (1992) showed that fostering consumer loyalty through loyalty discounts is an effective strategy when consumers are unsure of the value they place on a future purchase. The growing popularity of these discounts are evident in the airline industry where "frequent flier" programs are offered. Clow, Harris, and Quigley (1994) found that targeting unsatisfied consumers through price-related promotions would be an effective method of inducing firm-switching behavior. The restaurant industry in particular has seen an increased emphasis on price-based competition as consumers view price as a significant cue in their choice criteria (Crawford-Welch, 1995).

USAGE STUDIES

The importance of focusing marketing efforts on heavy users of services has been examined in existent research (Goff and Walters 1990, Spotts and Mahoney 1991, Reichheld and Aspinall 1993). Among Reichheld and Aspinall's (1993) recommendations for improving banking profitability and customer retention is focusing marketing efforts on high potential/heavy usage market segments. According to this study, high value customers value the firm's offerings over the alternatives and should therefore be valued most by the firm.

Spotts and Mahoney (1991) distinguished between heavy users of a travel region with heavy spenders for regional travel marketing. This study showed that while heavy spenders accounted for only thirty-three percent of travelers sampled, their expenditures equaled seventy-eight percent of the sample as a whole. These findings reflect the "80/20 principle" that states that 80% of a firm's sales come from 20% of the firm's customers.

Spiller and Hamilton (1993) found that senior citizens vary in their usage of senior discount programs according to usage behavior. Their study showed that heavy users of senior discount programs tend to use these programs generically, i.e., across product and industry lines. These programs are similar to frequent flier programs found in the airline industry.

Goff and Walters (1990) found that heavy users of home equity lines of credit do not differ from light users in their selection of type of provider (e.g., commercial banks, savings and loans) or number of institutions considered in their decision process. Their research called for additional study into the viability of segmenting home equity credit consumers according to usage patterns.

PATRONAGE DECISION CUES

Because of the intangibility, inseparability, variability, and perishability of services, consumers use contextual cues in developing both expected levels of service and in their choice of service firms to patronize (Burton 1990; Crane and Clarke 1988; Crane and Lynch 1988; Kurtz and Clow 1991, 1992-1993; Sweeny, Johnson, and Armstrong 1992). Tangible cues such as the firm's location and the appearance of the facility are used in patronage decisions (Berry and Clark 1986; Bitner 1986; Clow, Kurtz, and Ozment 1991). Intangible cues such as security, dependability, and behavioral variables are also significant in the purchase decision (Berry, Zeithaml, and Parasuraman 1985; Clow, Garretson, and O'Bryan 1995, Garretson, Clow, and Kurtz 1995; Gronroos 1990; Haywood-Farmer 1988; Parasuraman, Zeithaml, and Berry 1985). The relative importance of these contextual cues should

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vary depending on a consumer's experience with a firm. It would be expected to see an increase in the importance of intangible cues and a decline in importance of tangible cues as a consumer's experience with a particular firm increases.

METHODOLOGY

Four service industries were selected for this study. The four industries - dry cleaning services, hotel/motel service, tax services, and medical services - are not exhaustive of all service firms, but they do present a cross-section of service categories that vary along key dimensions of service categories such as "high contact/low contact" services (Lovelock 1980, 1983). A questionnaire was designed that asked respondents questions pertaining to usage rate, firm loyalty, and purchase selection criteria in their next purchase of that particular type of service.

The development of choice cues used in this study is based on procedures utilized by Gehrt and Pinto (1991), Crane and Lynch (1988), and Srivastava, Shocker, and Day (1978). The procedure ensures that choice cues under investigation in the study are consumer-based rather than academically selected. Using this procedure, 15 choice cues were selected from the results of a 2 hour focus interview with 35 senior and graduate students at a Midwestern university. Efforts were made to ensure that the group was equally dispersed according to age, sex, income, and gender. Approximately 35% of the focus interview group were non-traditional students (i.e., aged 25 years or older). Using cues that were mutually agreed upon, questionnaires were designed, edited, and mailed to the members of the sample.

Data were collected from the Arkansas Household Research Panel (AHRP). A total of 1200 questionnaires were mailed. Of the 740 returned, 716 were usable for the study, yielding a 59.7% response rate. The sample consisted of 37.3% males and 62.7% females. In terms of annual income, 15.8% of the respondents reported incomes under \$20,000, 39.4% reported incomes between \$20,000 - \$39,999, 27% had incomes between \$40,000 - \$59,999, and 17.9% reported incomes of \$60,000 or above. Approximately 10% of the sample was under 35,

26.3% were 36 -50, 32.1% were 51 -65, and 31.4% were 66 years of age or older.

Patrons were divided into three categories based on usage rate among the four service industries. Heavy users of a service were defined as those consumers who reported usage rate within the top quartile of the total reported usage rate for the category. Light users were defined as those consumers with a reported usage rate within the lower quartile of total reported usage, and the middle 50% of users were defined as medium-rate users. This method for developing usage categories has been used in previous research (Goff and Walters 1990; Spotts and Mahoney, 1991). The resultant breakdown of the categories can be found in Table 1.

TABLE 1
Usage Groups¹

Industry	Light Usage	Medium Usage	Heavy Usage
Hotels	0-1	2-8	9+
Dry cleaners	0-3	4-15	16+
Tax service	0-8	9-12	13+
Medical	0-2	3-7	8+

¹ Usage groups are based on number of times the consumer patronized the service during the last year, except for the tax service, which is the number of times over the last 10 years.

Service loyalty measurement was derived from the percentage the consumers' usage of one particular service provider for every service encounter (e.g., .99 means that the consumer selected the same service provider 99% of the time). Using this method, specific time frames were arbitrarily selected. Dry cleaning, hotel/motel, and medical services loyalty indices were reported within a one-year time frame (e.g., "Please indicate the number of times that you used your last dry cleaner during the last year). In contrast, the tax service loyalty measure was reported over the last ten year period. This is due to the fact that the majority of consumers will use tax services only once a year, for income tax reporting purposes.

The first step in the analysis was to compare the loyalty index of the three usage groups. This

analysis was done using ANOVA tests. The second part of the analysis was to calculate the percentage of revenue each of the usage groups contributed to a particular industry's total revenue. Each percentage was calculated by multiplying three values: the average yearly expenditure provided by respondents, the percentage of respondents in that particular usage group, and the loyalty index of that usage group. The result was then divided by the total yearly average contribution of the three usage groups. The last part of the analysis consisted of individual t-tests to determine if there were significant differences in each of the choice criteria for each of the four industries. The t-tests compared the mean responses of the heavy usage groups and the medium usage groups.

RESULTS

The results of the ANOVA test of service loyalty based on usage rate is presented in Table 2 for each of the four service industries. All industries are significant at the .001 level. As indicated in the table, consumers of heavy usage patterns appear to be less firm loyal than light usage consumers. Heavy usage consumers of hotels appear to be the least loyal to a particular firm with a firm loyalty index of .50 compared to dry cleaners heavy usage loyalty index of .87. For consumers in the light usage quartile, the lowest loyalty index across the four industries was .93, which was for tax services.

TABLE 2
Firm Loyalty Based on Volume Usage

Industry	Light Usage	Medium Usage	Heavy Usage	F-Value	P-Value
Hotels	.98	.63	.50	69.09	.0000
Dry cleaners	.99	.90	.87	8.85	.0006
Tax	.93	.88	.69	12.38	.0000
Medical	.97	.83	.65	41.29	.0000
All Groups	.97	.80	.67	87.13	.0000

Table 3 illustrates the impact of usage volume on contribution to a firm's income. Although light usage consumers are highly loyal to a particular firm they account for only from 1.94% of a typical firm's

revenue in the tax service industry to 4.5% in the medical industry. For hotels, 55.76% of a firm's revenue is from the heavy-usage consumers while 40.95% of the revenue is generated from the middle 50% of the consumers. Dry cleaners and medical service industries see a closer ratio between the middle and heavy users in terms of percentage of revenue contribution. The largest contrast is with tax services with 68.17% of the revenue from the heavy usage group compared to 29.89% for the middle 50%.

To determine the impact of firm loyalty on revenue, the increase in revenue was calculated for the medium and heavy usage group based on a 1% increase in firm loyalty. No calculations were made for the light usage group since the firm loyalty already ranged from .93 to .99. The results of this analysis is reported Table 4. For the medium usage group, a 1% increase in firm loyalty will increase revenues from 0.34% to 0.65%. For the heavy usage group, the increase ranges from 0.66% to 1.12%.

Since the medium and heavy usage groups account for 95% or more of a firm's revenue, t-tests were used to determine significant differences in the purchase criteria between the heavy and medium usage groups. The results are provided in Tables 5 through 8. For hotels, the only significant difference was in the alternatives of available services (See Table 5). Alternatives became more important as usage volume increased. For dry cleaning services, quality of service, past experience, dependability, staff behavior, reputation, and the appearance of the facility were all significantly different (See Table 6). For all of the criteria, except reputation, a higher mean was reported for the heavy usage group than the medium usage group. Reputation was more important for the medium usage group than for the heavy usage group. For tax services, advertising was the only criteria significantly different (See Table 7). Advertising was less important for the heavy usage group. Convenience and location were the only two criteria significantly different in the selection of medical services (See Table 8). For both cues, importance declined with usage.

TABLE 3
Percentage of Revenue Contributed By Each Usage Group

Industry	Usage	Avg. Yrly Revenue	% of Patrons	Loyalty	Avg. Yearly Contribution	% Total Revenue
Hotel	Light	37.80	.25	.98	\$ 9.26	3.29%
	Medium	366.34	.50	.63	\$ 115.40	40.95%
	Heavy	1257.06	.25	.50	\$ 157.13	55.76%
Dry Cleaners	Light	18.83	.25	.99	\$ 4.66	4.36%
	Medium	90.30	.50	.90	\$ 40.64	38.06%
	Heavy	282.70	.25	.87	\$ 61.49	57.58%
Tax	Light	24.25	.25	.93	\$ 5.64	1.94%
	Medium	197.92	.50	.88	\$ 87.08	29.89%
	Heavy	1151.25	.25	.69	\$ 198.59	68.17%
Medical	Light	373.62	.25	.97	\$ 90.60	4.50%
	Medium	2260.96	.50	.83	\$ 938.30	46.57%
	Heavy	6066.67	.25	.65	\$ 985.83	48.93%

TABLE 4
Impact of a 1% Increase in Loyalty on Revenue

Industry	Usage Group	Change in Revenue	Combined Change ¹
Hotel	Medium	0.65%	
	Heavy	1.12%	1.77%
Dry cleaners	Medium	0.42%	
	Heavy	0.66%	1.08%
Tax	Medium	0.34%	
	Heavy	0.99%	1.33%
Medical	Medium	0.56%	
	Heavy	0.75%	1.31%

¹ This would be the resulting change if both the medium and heavy usage group would increase in firm loyalty by 1% simultaneously.

DISCUSSION

Traditionally, many marketers have used the "80/20 rule" to justify marketing to the heavy users of a service based on the rationale that the heavy users were responsible for approximately 80% of the firm's revenue. This research indicates that in the service sector of the economy, this principle may not be valid. The top quartile of consumers produced from 48.93% to a high of 68.17% of the firms' revenues. Service operations will need to concentrate their

resources on more than the heavy users of their service. The middle 50% of the users of a service category will produce from 29.89% to 46.57% of a firm's revenues. To survive the intensity of competition found in most service industries, these medium users of a service category will have to be considered. The good news for managers of services is that for most services the purchase choice criteria between medium users of a service category and heavy users is practically the same. Few differences exist. However, for some service industries, such as

TABLE 5
Purchase Decision Criteria For Hotels

Criteria ¹	Usage		F-Value	P-Value
	Medium	Heavy		
Security	6.70	6.79	0.89	.376
Dependability	6.27	6.32	0.28	.776
Service Quality	6.25	6.32	0.45	.657
Past Service	6.17	6.26	0.46	.645
Staff Behavior	6.01	6.13	0.62	.534
Location	5.77	5.94	0.72	.474
Facility (Ext)	5.98	5.93	0.23	.815
Price	6.09	5.89	0.99	.326
Convenience	5.77	5.85	0.39	.698
Reputation	5.75	5.62	0.63	.531
Alternatives	4.35	4.96	2.41	.018**
Word-of-Mouth	4.81	4.81	0.02	.986
Familiar Name	4.78	4.60	0.69	.494
Advertising	3.99	3.91	0.26	.793

** Significant at $p < .05$

¹ Each criteria was evaluated on a scale of 1 to 7 with 7 being very important and 1 being very unimportant.

TABLE 6
Purchase Decision Criteria For Dry Cleaners

Criteria ¹	Usage		F-Value	P-Value
	Medium	Heavy		
Service Quality	6.33	6.81	2.86	.005***
Past Service	6.43	6.72	1.85	.066*
Dependability	6.40	6.72	2.14	.035**
Security	6.10	6.44	1.50	.135
Staff Behavior	5.45	5.91	2.00	.048**
Convenience	5.63	5.70	0.30	.766
Price	5.61	5.56	0.23	.822
Location	5.29	5.55	0.98	.328
Reputation	5.68	5.16	1.94	.055*
Facility (Ext)	4.38	4.91	1.93	.056*
Word-of-Mouth	4.30	4.70	1.28	.205
Alternatives	4.16	4.47	0.89	.377
Familiar Name	3.63	4.02	1.20	.234
Advertising	3.16	3.23	0.22	.826

* Significant at $p < .10$

** Significant at $p < .05$

*** Significant at $p < .01$

¹ Each criteria was evaluated on a scale of 1 to 7 with 7 being very important and 1 being very unimportant.

TABLE 7
Purchase Decision Criteria For Tax Services

Criteria ¹	Usage		F-Value	P-Value
	Medium	Heavy		
Dependability	6.81	6.82	0.05	.964
Service Quality	6.74	6.79	0.51	.609
Security	6.49	6.72	1.42	.160
Past Service	6.76	6.71	0.36	.722
Reputation	6.57	6.44	0.76	.449
Staff Behavior	6.49	6.36	0.69	.489
Price	5.68	5.74	0.23	.820
Convenience	4.95	4.85	0.32	.750
Alternatives	4.38	4.66	0.85	.396
Facility (Ext)	4.30	4.46	0.56	.574
Location	4.34	4.37	0.09	.929
Word-of-Mouth	4.65	4.31	0.91	.366
Familiar Name	3.93	4.10	0.42	.679
Advertising	3.07	2.49	1.79	.078*

* Significant at $p < .10$ ¹ Each criteria was evaluated on a scale of 1 to 7 with 7 being very important and 1 being very unimportant.

TABLE 8
Purchase Decision Criteria For Medical Services

Criteria ¹	Usage		F-Value	P-Value
	Medium	Heavy		
Dependability	6.67	6.73	0.61	.546
Past Service	6.61	6.51	0.71	.477
Service Quality	6.53	6.47	0.34	.333
Reputation	6.32	6.23	0.50	.615
Staff Behavior	6.37	6.11	0.07	.941
Security	6.00	5.79	0.95	.346
Alternatives	5.60	5.75	0.74	.463
Facility (Ext)	5.11	5.02	0.41	.686
Word-of-Mouth	5.09	5.02	0.31	.754
Price	5.34	4.94	1.49	.139
Convenience	5.20	4.73	1.70	.092*
Location	4.71	4.13	1.92	.058*
Familiar Name	3.89	4.10	0.96	.341
Advertising	2.57	2.52	0.20	.840

* Significant at $p < .10$ *** Significant at $p < .01$ ¹ Each criteria was evaluated on a scale of 1 to 7 with 7 being very important and 1 being very unimportant.

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dry cleaners, a substantial difference does occur. Although differences in the mean ratings exist between the medium and heavy users of dry cleaners, the rank order of the criteria examined are very similar.

In the marketing of hotels, 96.71% of the revenue is generated by the medium and heavy users of the service. The only significant difference in these two groups was in terms of availability of alternatives. Heavy users consider alternatives more before making a purchase decision than medium users. The five most important criteria for both groups include personal security, dependable service, service quality, past experience with a particular hotel or hotel franchise, and behavior of the staff. All of these criteria deal with the operations of the facility and how the staff interacts with customers. By providing a high quality experience, hotel managers can increase the probability of a customer returning. Since these criteria are ranked high by both the medium and heavy users of hotels, improved service will result in increased loyalty for both the medium and heavy users. A 1% increase in both groups would result in a 1.77% increase in revenues.

In the marketing of medical services, very few differences exist between the heavy users and medium users of medical services. The only differences occur in convenience and location. Both are of less importance to heavy users. However, both criteria are relatively low in importance and may not have much impact on the purchase decision. The five most important factors in choosing medical care are dependability, past experience, quality of service, reputation, and staff behavior. Again, since both heavy and medium users show no differences in the most important criteria, improving the quality of service should impact both groups. A 1% increase in loyalty for both groups would result in a 1.31% increase in total revenues.

Marketing of dry cleaners is not as easy. Several significant differences exist between the medium usage group and the heavy usage group. Service quality, past experience, dependability, staff behavior, and the exterior appearance of the facility are more important to the heavy users. The heavy

users account for approximately 57.58% of the firm's revenue and, therefore, should receive the highest priority. Increasing firm loyalty in the dry cleaning industry may be more difficult since the heavy users already use the same dry cleaners 87% of the time and medium users patronize the same business 90% of the time. The cost of increasing loyalty by 1% may be greater than the expected gain in revenue. The best strategy may be to ensure all current customers are being satisfied and will return. By meeting or exceeding customer expectations, firms can ensure that customers will be satisfied.

Tax services show the greatest consistency between the medium and heavy users in terms of purchase criteria. The only significant difference was in advertising, which was of least importance. The medium user group will pay more attention to ads than the heavy users in making a purchase decision. From a marketing perspective, the best group to target are the heavy users. This group account for 68.17% of the firm's revenue and have a loyalty index of only 0.69 while the medium users have a loyalty index of 0.88. It should be less expensive to increase the loyalty of the heavy users than it would the medium users. An increase of 1% in the heavy usage group would result in a 0.99% increase in total revenue for the firm.

For all four industries, advertising appears to have the least impact on the purchase decision while service factors tend to have the most impact. Firms may want to consider taking money now being invested in promotions and transferring theme to their operations to improve the quality of service. Further study needs to be conducted to see if this would be a wise strategy.

This research has found that in most cases, the top 25% of a firm's customers do not produce 80% of the revenue. To be competitive, firms will not only need to market the top 25%, but the middle 50% as well. This research also highlighted the importance of customer retention and firm loyalty. For all four services examined, the most important criteria in choosing a firm are service related criteria. How a customer is treated and the quality of the service received has a major impact on their decision to

patronize the firm in the future. By improving the quality of service, firms can increase the loyalty to their firm and increase total revenue.

REFERENCES

- Berry, Leonard L. and Terry Clark (1986), "Four Ways to Make Services More Tangible," Business, October-December, 53-54.
- Bitner, Mary J., "Consumer Responses to the Physical Environment in Service Settings," Creativity in Service Marketing, M. Vanketesan, D. Schmalensee, and C. Marshall, eds., Chicago: American Marketing Association, 89-93.
- Bitner, Mary J. (1990), "Evaluating Service Encounter: The Effects of Physical Surroundings and Employee Responses," Journal of Marketing, Vol. 54 (April), 69-82.
- Bulkley, George (1991), "The Role of Loyalty Discounts When Consumers Are Unsure of the Value of Repeat Purchases," International Journal of Industrial Organization, Vol. 10, 91-101.
- Burton, Scot (1990), "The Framing of Purchase for Services," The Journal of Services Marketing, Vol. 4 (Fall), 55-67.
- Caudron, Shari (1993), "Brand Loyalty: Can It Be Revived," Industry Week, (April), 11-12, 14.
- Clow, Garretson, and O'Bryan (1995), "Situational Influences on the Choice Criteria of Hotels For Leisure Travelers," Journal of Hospitality & Leisure Marketing, Vol. 3 (3), 5-20.
- Clow, Kenneth E., Eric G. Harris, and Angela S. Quigley (1994), "Situational Factors Affecting Choice Behavior in Highly Competitive Service Industries," Marketing: Advances in Theory and Thought, B. Engelland and A. Busch, eds., Southern Marketing Association Proceedings, 12-17.
- Clow, Kenneth E., David L. Kurtz, and John Ozment (1991), "How Consumers Form Expectations of Service Quality Prior To A First Time Purchase," in Symposium on Patronage Behavior and Retail Strategy: Cutting Edge II, W. Darden, R. Lusch, and B. Mason, eds., Baton Rouge, LA: American Marketing Association and Louisiana State University, 99-110.
- Crane, F.G. and T.K. Clarke (1988), "Consumer Selection of Physicians and Dentists: An Examination of Choice Criteria and Cue Usage," Journal of Health Care Marketing, Vol. 8 (September), 16-19.
- Crane F.G., and J.E. Lynch (1988), "Consumer Selection of Physicians and Dentists: An Examination of Choice Criteria and Cue Usage," Journal of Health Care Marketing, Vol. 8 (3), 16-19.
- Crawford-Welch, Simon (1994), "Restaurant and Foodservice Marketing: Into the Twenty-First Century," Journal of Restaurant and Foodservice Marketing, Vol.1(1), 1-19.
- Garretson, Clow, and Kurtz (1995), "Risk Reduction Strategies Used by Leisure Travelers in the New-Buy Hotel Selection Purchase Situation," Journal of Hospitality & Leisure Marketing, Vol. 3 (3), 35-54.
- Gehrt, Kenneth C., and Mary Beth Pinto (1991), "The Impact of Situational Factors on Health Care Preferences: Exploring the Prospect of Situationally Based Segmentation," Journal of Health Care Marketing, Vol. 11 (June), 41-52.
- Goff, Brent G., and David L. Walters (1990), "Heavy and Light Users of Home Equity Lines of Credit," Journal of Retail Banking, Vol. 12 (Spring), 39-44.
- Gronroos, Christian (1990), Service Management and Marketing: Managing the Moments of Truth in Services Competition, Lexington, MA: Lexington Books.
- Haywood-Farmer, John (1987), "A Conceptual Model of Service Quality," International Journal of Operations and Production Management, Vol. 8, No. 6, 19-29.
- Jacoby, Jacob, and Robert W. Chestnut (1978), Brand Loyalty: Measurement and Management, New York: John Wiley & Sons, Inc.
- Kurtz, David L., and Kenneth E. Clow (1991), "A Model For Evaluating Service Quality," The Journal of Services Marketing, Vol. 1 (1), 51-60.
- Kurtz, David L., and Kenneth E. Clow (1992-1993), "Managing Consumer Expectations of Services," The Journal of Marketing Management, Vol. 2 (2), 19-25.

- Lovelock, Christopher H. (1980), "The Marketing Aspects of Service Quality," in Emerging Perspectives on Services Marketing, L. Berry, G. Shostack, and G. Upah, eds., Chicago: American Marketing Association, 72-76.
- Lovelock, Christopher H. (1983), "Classifying Services to Gain Strategic Marketing Insights," Journal of Marketing, Vol. 47 (Summer), 9-20.
- Oliva, Terence A., Richard L. Oliver, and Ian C. MacMillan. (1992) "A Catastrophe Model for Developing Service Satisfaction Strategies", Journal of Marketing, Vol. 56, 83-95.
- Parasuraman, A., Valerie A. Zeithaml, and Leonard L. Berry (1985), "A Conceptual Model of Service Quality and Its Implications for Future research", Journal of Marketing, Vol. 49 (Fall), 41-50.
- Reichheld, Frederick, and Keith Aspinall, "Building High-Loyalty Business Systems," Journal of Retail Banking, Vol. 15 (4), 21-29.
- Spiller, Lisa D., and Richard A. Hamilton, "Senior Citizen Discount Programs", Journal of Consumer Marketing, Vol. 10 (1), 42-51.
- Spotts, Daniel M., and Edward M. Mahoney (1991), "Segmenting Visitors to a Destination Region Based on the Volume of Their Expenditures", Journal of Travel Research, Vol. 29 (4), 24-31.
- Turley, L.W. and Roy F. Cabaniss (1995) , "Price Knowledge for Services: An Empirical Investigation", Journal of Professional Services Marketing, Vol. 12 (1), 39-52.
- Woodside, Arch G., Lisa J. Frey, and Robert Timothy Daly (1989), "Linking Service Quality, Customer Satisfaction, and Behavioral Intention", Journal of Health care Marketing, Vol. 9 (4), 5-17.