Consumer Perceptions of Service Quality in the Texas Retail Floral Industry

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Abstract. After a survey describing the range of products and services offered by Texas florists and supermarket floral departments, a modified SERVQUAL instrument measured customer perceptions and expectations of floral service quality. Florist customers were 3.2 years older, had a slightly higher household income, bought floral products twice as often from a florist, spent \$14.53 more on each florist purchase than supermarket customers; they also made four fewer floral purchases from supermarkets during the previous 6 months. Supermarket customers spent \$14.40 more on each supermarket floral purchase than did florist customers. Reliability was the most important and tangibles were the least important of the five service quality dimensions. Although expectations for both groups were similar on 18 of 22 service quality items, florists' customers perceived higher service quality than did supermarket customers. Although customers of both retail outlets had expectations higher than perceptions, florist customers had smaller, less negative gap scores. This result showed that florists better met customer expectations than did supermarket floral departments, a potential competitive advantage.

Mass marketers have developed floral retailing since the 1970s. Supermarkets, in particular, have both expanded floral market size and reduced traditional florists' market share. Miller (1994) reported that 40% of all households in a survey panel bought floral products from some type of mass-marketer, for example, supermarkets, while only 34% bought floral products from a specialty retail outlet, including the traditional florist. Supermarkets and florists have access to the same suppliers who provide similar product variety and quality. Developing a service mix to profitably meet customer needs gives retailers one basis for differentiation. Understanding consumer perceptions of service quality is a first step to establish and evaluate quality assurance programs. Retailers need to develop marketing strategies to better meet consumer expecta-

tions, build on competitive strengths, and improve perceived weaknesses to remain competitive and profitable. To date, there are no published studies of perceived service quality in the retail floral industry.

Services are perishable because they cannot be produced and stored, or manufactured to specifications in advance. Each encounter between service provider and consumer is unique. Inconsistencies in provider and consumer behavior, expectations, and perceptions make it difficult to assure uniform quality, causing a high degree of heterogeneity in service provision (Knisely, 1979; Langeard et al., 1981). Perceptions of service quality may have a more lasting effect than the service itself.

The floral industry includes high levels of service with a tangible product. Only in the last few decades have consumers been able to purchase flowers at the floral equivalent of fast-food outlets, for example, mass markets such as supermarkets. These outlets have not eliminated the services, rather they have shifted the burden of them onto the consumer. In limited-service supermarket floral departments, design and delivery are not performed by the retailer, but by the consumer.

In 1989, 67% of U.S. supermarkets had floral departments in 1989 (PMA/FMI, 1990). Of those stores, 95% carried fresh flower bouquets, 94% sold fresh arrangements, and 85% offered fresh flowers by the stem. The floral departments were also classified according to service level: 43% were limited-service, 24% self-service, 20% extended full-service, and 12% full-service. Because nearly all florists carry essentially the same goods and offer the same services, they must

distinguish themselves by performing better than the competition (Adamczak, 1989).

Becker (1993) studied 173 traditional retail floral outlets and 40 supermarket floral departments to assess their product and service offerings. Both types of retailers offered similar perishable products, differing only in the percentage of firms offering (a) ready-made fresh flower bunches (62% florists vs. 87% supermarkets) and (b) bedding plants in season (13% florists vs. 64% supermarkets). They differed highly in service offerings. Becker defined 22 core services, finding more florists providing more of the core services than supermarket floral departments. Thus, product offerings were similar and service offerings were less for supermarket floral departments.

Consumer and market research pertaining to floral customers was reviewed by Behe (1993), including several studies pertained to supermarket customer behavior. Behe and Wolnick (1991) reported that florist customers spent more per purchase, gave more floral gifts, purchased cut flowers more often, were less likely female, and were more likely employed outside the home when compared to supermarket customers.

Parasuraman et al. (1988) developed SERVQUAL, an instrument for assessing service quality. Zeithaml et al. (1990) modified the original instrument to 22 items used to evaluate the service quality in various industries. The model reduced 22 items to five service quality dimensions through factor analysis: tangibles, reliability, responsiveness, assurance, and empathy. SERVQUAL methodology has been used extensively to assess service quality in nonhorticultural industries (Chasten, 1994; Fick and Ritchie, 1991). Most researchers found the methodology useful and the instrument to be highly reliable and valid in assessing service quality in these diverse industries.

Improvements were made to ease answering (Babakus and Boller, 1992; Brown et al., 1993). Martin (1993) suggested that perceptions of service performance should be assessed relative to some appropriate benchmark. The three developers have improved the original instrument themselves (Parasuraman et al., 1994). The extensive use of this tool led us to consider its use in evaluating floral retailer service quality.

We tested the hypothesis that consumers' perceptions and expectations would be similar, regardless of the outlet from which they had made purchases within the last 3 months. We wanted to define the size and dimension of service quality gaps for traditional retail florists and supermarket floral departments based on the SERVQUAL methodology.

Materials and Methods

Expectations and perceptions instruments were developed by modifying the SERVQUAL instrument to: 1) measure expectations and perceptions separately; 2) measure perceived quality with the perception items only, not as a difference score between perceptions and

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expectations; and (3) collect demographic information, including age, household income, education level, and gender. In the expectations instrument, florist customers were asked about their expectations from an "excellent florist shop"; supermarket floral customers were asked about expectations from an "excellent supermarket floral department." This approach was consistent with a consumer-oriented marketing concept.

The expectations instrument had a structured, undisguised format, and consisted of the 22 SERVQUAL service quality expectations items measured with a 7-point Likert scale. Part 2 asked respondents allocate 100 points among the five dimensions according to their importance. The final section of the expectations form consisted of demographic and floral buying behavior questions.

The perceptions instrument was designed to measure customer perceptions of floral product and service quality for a particular floral retailer and was of a structured, undisguised format. A cover letter stated the retailer to be evaluated, and, for supermarket chain store customers, a particular location was specified (the floral department of the store from which the questionnaire was received and with which they had recently conducted business). The participating florist shops were all single-location businesses, eliminating any potential multi-location confusion. The perceptions instrument also consisted of the 22 SERVQUAL service quality perceptions items measured by a 7-point Likert scale. The last part contained the same demographic and floral purchasing questions as the expectations instrument.

A purposive sample of 16 floral retailing companies participated in the consumer study, including eight florists and eight supermarket chains selected from a previous study (Becker, 1993). In 1992, Texas had 17.7 million residents (6.9% of the U.S. population) and \$139 billion in retail sales (7.0% of U.S. retail sales), with household income and age distribution similar to the U.S. average (Sales and Marketing Management, 1993). Cooperating retailers were geographically distributed throughout Texas and all were single-location businesses. However, the number of participating locations per supermarket chain ranged from one to six. At the end of a previous retailer questionnaire, respondents were asked to indicate if they were interested in participating in a study of their customers' perceptions of their service quality; 17 florists and 17 supermarket chains indicated interest.

The study was discussed with each of the retailers' floral managers, copies of preliminary instruments were sent for their consideration, and suggestions for improving the instruments were solicited. Eight florists were selected based primarily on their willingness to participate. The study was also discussed with the regional directors of nine supermarket chains operating stores in Texas. Copies of the preliminary instruments were sent to the directors, and they were asked to discuss the questionnaires with one or more of their floral department managers as well as with

upper-level management and to make suggestions for improving the instruments. A total of 22 locations were selected, with eight companies represented by 1, 2, 2, 2, 3, 3, 3, and 6 locations.

We attempted to distribute 600 questionnaires (100 expectations and 500 perceptions instruments) to a sample of each florist's and supermarket location's customers. To sample as broad a range of customers as possible, including in-store and telephone customers, mail and in-store distribution were used. Instruments were distributed to florist customers in Aug. and Sept. 1992, and to supermarket customers from Sept. through Nov. 1992.

Florists provided estimates of the proportion of their sales, in percentages, that were conducted in-store vs. on the telephone. These proportions were then applied to the distribution scheme to determine how many of the 600 questionnaires should be mailed vs. handed out. Percentages of mailed questionnaires ranged from 60% to 73% among the 8 participating florists. Mailing lists included only customers who had purchased within the last 3 months. A random sample of the predetermined size was drawn from each list.

For 21 of the supermarket locations, either no sales were conducted on the phone or no mailing list was available. For these 21 stores, personnel at each location attempted to distribute the 600 questionnaires to their customers. One supermarket location conducted a considerable amount of business on the telephone and had an available mailing list. For this location, a combination of mail and in-store distribution was used as with the florists. Of the 600 questionnaires allocated for distribution by this location, 42% were mailed.

For in-store distribution, the florists and floral managers were instructed to hand out their allotment of instruments to "as random a sample as possible." The retailers were asked to keep a record of the number of questionnaires distributed. Each floral department manager determined how the questionnaires would be distributed. Some managers chose an active approach, having employees hand out questionnaires to floral customers along with a few words of explanation and encouragement. Others set up a counter display in the floral department with signs to encourage customers to complete a questionnaire.

All completed, returned instruments were checked for usability based on completeness, legibility, and consistency. All usable questionnaires were then coded, and the data were entered into the computer for statistical analysis using SPSS (1983).

SERVQUAL results include expectations, perceptions, and gap scores for each of the 22 SERVQUAL items. The gap scores indicated how well the participating florist and supermarket retailer groups performed from their customers' perspectives. Because gap scores were calculated as perceptions minus expectations, positive scores indicated that customer expectations were exceeded. Negative scores indicated that customer expectations had not been met. The gap score for each item was calculated by subtracting a customer group's

mean expectations score for the item from each perceptions respondent's score on the item.

Because expectations, perceptions, and gap scores were not normally distributed, differences between florist and supermarket customer groups were investigated using the Mann-Whitney U mean rank test (SPSS, 1983). Judgments of significant difference were based on the mean ranks of the scores for the two customer groups with $P \leq 0.05$.

Florists distributed 4,620 questionnaires, yielding an effective distribution of 96%. Florist customers returned 840 instruments, 816 of which were usable, for a usable response rate of 18%. Supermarkets distributed 9,614 questionnaires, yielding an effective distribution of 73%. Supermarket floral customers returned 528 instruments, 508 of which were usable, for a usable response rate of 5.3%.

Of questionnaires mailed by florists and one supermarket, 4% were undeliverable. Also, a portion of the instruments designated for in-store distribution did not reach customer hands; the supermarkets had rates of effective distribution ranging from 10% to 100%. Some supermarkets could only provide an estimate of the number of questionnaires distributed.

For analysis of perceptions, questionnaires were included only if the respondents had made a floral purchase within the previous 3 months from the retailer they had evaluated. This provided at least partial control over potential time effects while maintaining adequate sample sizes for both retailer groups. After applying the selection criteria, 426 florist and 339 supermarket customer perceptions questionnaires were included in the analysis.

Results and Discussion

Sample characteristics. We first compared expectations and perceptions respondents on five demographic characteristics: mean age, gender distribution, education level, mean household size, and 1991 household income. Florist expectations and perceptions respondents were similar in age (45.3 and 44.8 years, $P = 0.74$), as were supermarket expectations and perceptions respondents (43.3 years and 41.3 years, $P = 0.30$). Of the florist expectations customers, 82% were female; similar percentages were found among the florist perceptions respondents ($P = 0.97$), and supermarkets' perceptions and expectations respondents ($P = 0.39$). Both florist and supermarket expectations and perceptions respondents had a similar level of education ($P = 0.44$ and $P = 0.20$, respectively) with the largest percentage of respondents having completed some college or technical school (30%, 30% florist customers and 18%, 33% supermarket customers). For florist and supermarket expectations and perceptions respondents, there was no difference in mean household size; the largest proportion of respondents had two-person households ($P = 0.52$, $P = 0.24$). Respondents were asked categorize their pre-tax 1991 household income; there was no difference in the income distribution for either groups' expectations and perceptions respon-

dents ($P = 0.26$, $P = 0.81$). Expectations and perceptions respondents for florist and supermarket customers were similar demographically.

Florist expectations respondents spent more on floral purchases from supermarkets within the previous 6 months than did the perceptions respondents (Table 1), yet were similar on the other floral purchase variables. Given the similarity in demographic characteristics between expectations and perceptions respondents for both retailers, the groups were combined. Further comparisons were made between supermarket and florist customers.

Florist customers were 3.2 years older than supermarket customers ($P = 0.00$). For florist customers, the largest percentage (27%) were in the 41- to 50-year category. The highest percentage of supermarket customers (29%) were in the 31- to 40-year category. The proportion of female to male customers was similar for florist and supermarket customers (82% and 79% females, respectively, $P = 0.25$). Level of education was similar when florist and supermarket customers were compared. The category with the highest percentage was some college or technical school completed, with 33% and 34%, respectively ($P = 0.30$). They were similar, too, in terms of household size, with the highest percentage of florists and supermarket customers in a two-person household (39% and 39%, $P = 0.30$). Median income for florist customers was between \$45,000 and \$49,999, compared to median income for supermarket customers, \$40,000 to \$44,999 ($P = 0.04$).

Floral purchases. While they were similar on four of five demographic characteristics, florist and supermarket customers bought flowers differently. Customers patronized "their" retailer more often than the other retail outlet and spent more at "their" retailer. However, both shopped at supermarket and florist outlets, spending some money at each outlet. The customers were not patronizing only one floral outlet. Florist customers bought floral products twice as often as supermarket customers (Table 2). Florist customers spent \$14.53 more on each florist purchase than did the supermarkets customers. Florist customers made four fewer floral purchases from supermarkets during the previous 6 months than did supermarket customers. Supermarket customers spent \$14.40 more on their supermarket floral purchases than did florist customers. This result was consistent with those of Behe and Wolnick (1991).

Consumer expectations. Florist and supermarket customers had similar expectations for three of the four of the tangible items for the retailer they evaluated, yet florists customers had lower expectations of modern-looking equipment (Table 3). Both groups had similar perceptions of the tangible items, but florist customers had higher perceptions of visually appealing printed materials when compared to supermarket customers. Gap scores for three of four tangibles items were identified for florist and supermarket customers. Florist customer scores yielded a positive gap for modern-looking equipment, indicating florists exceeded

customer expectations, whereas supermarket customer gap scores were positive for neat-appearing employees. Both customer groups' gap scores were negative for visually appealing stores, indicating a service quality deficit. Supermarket customers showed a gap score twice as large on visually appealing stores when compared to traditional florist customers.

Florist and supermarket customers had similar expectation scores of the retailers' interest in solving customer problems, performing services right the first time, and insisting on error-free records (Table 4). However, florist customers had higher expectation scores for their retailer doing what was promised and performing services at the time promised when compared to supermarket customer scores. Florist customers had higher perception scores for all five reliability items, indicating that they received better service than supermarket customers. All gap scores for reliability were negative, indicating a shortfall in meeting customer expectations. However, all florist customer gap scores were significantly smaller than supermarket customer gap scores, indicating better reliability on the part of the florist.

There were no significant differences between florist and supermarket customer expectation scores for the four responsiveness items (Table 5). Florist customers' perceptions scores were higher on each item. Florists had two positive gaps: telling exactly when the service will be performed and never being too busy to respond to requests. Other gap scores were negative, but smaller than supermarket customer gap scores. Florists provided better responsiveness in their customers' eyes when

compared to that of supermarket customers.

On each of the expectations item scores, florist and supermarket customer mean scores were similar (Table 6), and the florist customer mean scores were higher for all items. Florist customers had higher perception scores and smaller negative gap scores on all four assurance items. Florists provided more assurance in their customers' view.

Florist and supermarket customers had similar expectations from their respective retailers on four of five empathy dimensions (Table 7). Supermarket customers expected more convenient hours than did florist customers. However, perceptions differed for both groups. Florist customers had higher perception scores on all items when compared to supermarket customers. Gap scores showed florists had three positive gaps, substantially higher than supermarket gaps on those items. Having the customer's best interest at heart was an item for which both retailers had a negative gap score, yet the florists had a less negative gap than supermarkets. Florists provided more empathy from their customers' perspective.

In summary, florist and supermarket customers' scores were similar on 18 of 22 expectations items, with the exception of modern-looking equipment, doing what was promised, performing services at the time promised, and convenient hours. The florist customers' expectations were higher on doing what was promised and performing services at the time promised, while supermarket customers' expectations were higher on modern-looking equipment and convenient hours. On perceptions items, the customer groups differed on all items 4 through 22. On each of those 19

Table 1. Comparison of expectations and perceptions respondents for florist and supermarket customers on mean (n) floral purchases within the previous 6 months from two types of floral outlets.

Variable	Customer			
	Expectations	Perceptions	Expectations	Perceptions
	Florist		Supermarket	
Number of floral purchases from florist shops	7.3 (84)	6.7 (419)	3.8 (80)	2.5 (334)
	$P = 0.72^z$		$P = 0.14^z$	
Dollar amount spent on floral purchases from florist shops	32.67 (84)	31.33 (418)	17.03 (80)	17.02 (328)
	$P = 0.71^z$		$P = 1.00^z$	
Number of floral purchases from supermarkets	1.8 (84)	1.2 (423)	7.1 (80)	6.2 (334)
	$P = 0.10^z$		$P = 0.54^z$	
Dollar amount spent on floral purchases from supermarkets	6.36 (84)	4.22 (422)	18.91 (80)	19.00 (318)
	$P = 0.02^z$		$P = 0.98^z$	

^zTwo-tailed probability of separate and pooled variance *t* tests, respectively.

Table 2. Comparison of florist and supermarket customers means (n) on floral purchasing within the previous 6 months.

Variable	Customers of		Probability
	Florist	Supermarket	
Floral purchases from florist shops (no.)	6.8 (503)	2.7 (414)	$P = 0.00^z$
Amount spent on floral purchases from florist shops (\$)	31.55 (502)	17.02 (408)	$P = 0.00^z$
Floral purchases from supermarkets (no.)	1.26 (507)	6.39 (414)	$P = 0.00^z$
Amount spent on floral purchases from supermarkets (\$)	4.58 (506)	18.98 (398)	$P = 0.00^z$

^zTwo-tailed probability of separate variance *t* tests.

Table 3. Comparison of florist and supermarket customers on mean expectations, perceptions, and gap scores for four items comprising tangibles measured on a 7-point Likert scale.

No.	Item Description		Expectations		Perceptions		Gap	
			Florist	Supermarket	Florist	Supermarket	Florist	Supermarket
1.	Modern-looking equipment	Mean	4.15	4.85	5.60	5.65	1.447	0.800
		Mean rank ^a	72.6	91.1	371	370	411	321
			$P = 0.01$		$P = 0.99$		$P = 0.00$	
2.	Visually appealing store	Mean	6.23	6.41	5.60	5.99	-0.207	-0.424
		Mean rank	77.7	87.5	377	370	430	305
			$P = 0.12$		$P = 0.62$		$P = 0.00$	
3.	Neat-appearing employees	Mean	6.23	6.30	6.19	6.32	-0.032	0.018
		Mean rank	81.5	83.6	362	384	426	303
			$P = 0.75$		$P = 0.13$		$P = 0.00$	
4.	Visually appealing printed materials	Mean	5.13	4.93	5.92	5.16	0.792	0.231
		Mean rank	84.7	80.2	408	306	373	351
			$P = 0.54$		$P = 0.00$		$P = 0.16$	

^aMean rank compared using Mann-Whitney U mean rank test, $P \leq 0.05$.

Table 4. Comparison of florist and supermarket customers on mean expectations, perceptions, and gap scores for five items comprising reliability measured on a 7-point Likert scale.

No.	Item Description		Expectations		Perceptions		Gap	
			Florist	Supermarket	Florist	Supermarket	Florist	Supermarket
5.	Do what is promised	Mean	6.97	6.79	6.68	6.07	-0.294	-0.716
		Mean rank ^a	85.6	79.25	428	303	360	392
			$P = 0.04$		$P = 0.00$		$P = 0.04$	
6.	Interest in solving customer problems	Mean	6.86	6.81	6.67	6.14	-0.187	-0.656
		Mean rank	82.1	81.9	415	327	337	427
			$P = 0.95$		$P = 0.00$		$P = 0.00$	
7.	Perform service right the first time	Mean	6.80	6.66	6.60	6.13	-0.200	-0.534
		Mean rank	84.5	80.4	418	323	348	414
			$P = 0.41$		$P = 0.00$		$P = 0.00$	
8.	Perform service at time promised	Mean	6.96	6.78	6.71	6.19	-0.250	-0.584
		Mean rank	85.7	79.2	412	319	335	421
			$P = 0.05$		$P = 0.00$		$P = 0.00$	
9.	Insist on error-free records	Mean	6.51	6.58	6.49	5.90	-0.018	-0.678
		Mean rank	79.4	85.7	397	293	449	219
			$P = 0.28$		$P = 0.00$		$P = 0.00$	

^aMean rank compared using Mann-Whitney U mean rank test, $P \leq 0.05$.

perceptions items, the florist customers' scores were higher.

There were differences between the two customer groups' gap scores on all items except visually appealing printed materials. The florist customers' scores were less negative than the supermarket customers' scores on all of the items except neat-appearing employees. This was the only item on which the supermarket customers' gap score was significantly more positive than that of the florist customers. The florist customers' gap scores were positive on seven items while gap scores of supermarket customers were positive on four items. It was in these few areas that the retailers exceeded customer expectations.

There were no differences between the florist and supermarket customer groups' expectations scores on any of the five dimension scores (Table 8). There were differences, however, between the two customer groups' per-

ceptions scores on all dimensions. Florist customers have consistently higher perceptions of their retailer. On each dimension, and for the total SERVQUAL, florist customers' gap scores were either more positive or less negative than the scores of the supermarket customers. On the tangibles dimension, both groups' gap scores were positive. On the reliability, responsiveness, and assurance dimensions, both groups' gap scores were negative, indicating a service quality deficit. The florist customers' gap score on the empathy dimension was positive, while that of the supermarket customers was negative. Florists exceeded their customers' empathy expectation while supermarkets did not. Similarly, the florist customers' total scale gap score was positive (0.05), while that of the supermarket customers was negative (-0.37). Florists slightly exceeded their customers' expectations while supermarkets did not.

In a separate question, the expectations survey respondents were asked to rate each of the five SERVQUAL dimensions. The respondents were requested to allocate a total of 100 points among the five dimensions to indicate relative importance (Table 9). Florist customers allocated most points to reliability, followed by responsiveness, assurance, empathy, and tangibles. For the florist customer group, the dimensions were ranked on importance without ties.

Supermarket customers allocated about an equal number of points to reliability and responsiveness, but both differed significantly from the means of the other three dimensions. The supermarket customers' average points allocated to empathy and assurance were similar. The mean number of points allocated to empathy, while not significantly different from the value on assurance, was significantly different from the means of the other three dimensions. The average on the assurance dimension, however, was not significantly different from the values on either the empathy or tangibles dimension. The tangibles dimension had the lowest observed mean point value, but this value was not significantly different from the average on assurance.

Instrument utility. SERVQUAL was judged to have content validity, and evidence supporting its convergent and concurrent validity was found (data not shown). The distinctiveness of the five SERVQUAL dimensions was supported by the florist customers allocating significantly different numbers of points to each of the five dimensions based on the dimensions' relative importance. The relative importance question results were less supportive of the dimensions' distinctiveness for the supermarket customers. The dimensions may be distinct, but not all of differing degrees of importance for supermarket customers. For both customer groups, the reliability dimension was ranked as most important and the tangibles dimension as least important.

Conclusions

Based on expectations scores, florist customers' expectations of florists and supermarket customers' expectations of supermarket floral departments were very similar. Yet

Table 5. Comparison of florist and supermarket customers on mean expectations, perceptions, and gap scores for four items comprising responsiveness measured on a 7-point Likert scale.

Item No. Description		Expectations		Perceptions		Gap	
		Florist	Supermarket	Florist	Supermarket	Florist	Supermarket
10. Tell exactly when will perform service	Mean	6.49	6.55	6.51	5.98	0.025	-0.573
	Mean rank ^a	81.4	83.7	407	313	466	231
		$P = 0.70$		$P = 0.00$		$P = 0.00$	
11. Prompt service	Mean	6.68	6.66	6.67	6.12	-0.010	-0.544
	Mean rank	82.4	82.7	426	319	352	414
		$P = 0.96$		$P = 0.00$		$P = 0.00$	
12. Always willing to help	Mean	6.75	6.75	6.63	6.17	-0.119	-0.580
	Mean rank	81.9	83.2	417	336	417	336
		$P = 0.80$		$P = 0.00$		$P = 0.00$	
13. Never too busy to respond to requests	Mean	6.49	6.59	6.54	6.02	0.055	-0.569
	Mean rank	81.7	83.3	415	334	485	245
		$P = 0.80$		$P = 0.00$		$P = 0.00$	

^aMean rank compared using Mann-Whitney U mean rank test, $P \leq 0.05$.

Table 6. Comparison of florist and supermarket customers on mean expectations, perceptions, and gap scores for four items comprising assurance measured on a 7-point Likert scale.

Item No. Description		Expectations		Perceptions		Gap	
		Florist	Supermarket	Florist	Supermarket	Florist	Supermarket
14. Behavior instills customer confidence	Mean	6.63	6.46	6.46	6.08	-0.172	-0.378
	Mean rank ^a	84.8	79.1	402	348	332	436
		$P = 0.33$		$P = 0.00$		$P = 0.00$	
15. Make certain customers feel secure	Mean	6.62	6.42	6.55	6.06	-0.074	-0.355
	Mean rank	85.3	76.3	412	328	345	415
		$P = 0.14$		$P = 0.00$		$P = 0.00$	
16. Consistently courteous	Mean	6.77	6.65	6.59	6.20	-0.186	-0.455
	Mean rank	85.5	79.3	411	345	334	443
		$P = 0.25$		$P = 0.00$		$P = 0.00$	
17. Knowledge to answer questions	Mean	6.56	6.54	6.41	5.98	-0.155	-0.565
	Mean rank	81.0	83.0	411	334	353	410
		$P = 0.75$		$P = 0.00$		$P = 0.00$	

^aMean rank compared using Mann-Whitney U mean rank test, $P \leq 0.05$.

florist customers showed that their retailer was providing a relatively better quality of service than supermarket customers perceived their outlet was providing. Florist customers allocated the most points to reliability, followed by responsiveness, assurance, empathy, and, lastly, tangibles. Supermarket customers had a similar ranking, with the exception of reversing the importance of empathy and assurance. Florist customers allocated substantially more points to reliability and responsiveness than to empathy and assurance, showing they valued those attributes more. Supermarket customers felt the non-tangible dimensions were more equally important. Both groups ranked tangibles as the least important component of service quality.

Customer expectations of service quality were similar, regardless of the outlet they

patronized. This similarity of expectations has profound implications for floral retailers because many retailers may operate on the assumption that customer expectations are lower in outlets that offer limited services. It may not be the level of service that customers value as much as how the service is delivered. Since product offerings can be nearly identical, it becomes the quality of service offered, not necessarily level of service, which will enable retailers to distinguish themselves from competitors. Supermarket customers had consistently lower perceptions, yielding consistently more negative gap scores when compared to the traditional florist customers. Overall, florists were meeting their customers' expectations while supermarkets were not. This places traditional retail florists at a competitive advantage. However, both have negative gap

scores, weak areas of service quality, which could be lessened to improve perceived service quality.

The most important service quality dimensions to florist customers were reliability and responsiveness. Florists had negative gaps on all five reliability items, with the largest gap in performing services at the time promised. Improving all aspects of reliability could improve the florists' competitive position relative to supermarkets. Perhaps lowering expectations to meet perceptions could be one strategy. Expanding the time promised for services and meeting or exceeding this expanded expectation could potentially close this gap. The only negative responsiveness gap was for the florist always being willing to help. Perhaps improving the attentiveness of employees may close this gap.

Supermarkets have captured a substantial market share, drawing largely from their expertise in merchandising. Their customers allocated a similar number of points to reliability and responsiveness, indicating these dimensions were equally and very important. The largest gap for supermarkets was in doing what was promised. Improving this item could be as simple as more clearly explaining what services could be offered and when they could be expected. While this change may not alter the perception, it may more accurately define the expectation in customers' minds. Showing more of an interest in solving customer problems, and performing services right the first time and when they are promised also need to be improved. Again, it may be easier to adjust the expectation by being more exact than by attempting to improve the perception. Supermarket retailers had negative gaps on all four responsiveness dimensions. Here, the magnitude was quite similar. Telling more exactly when a service can be performed may reduce the expectation and improve the perception.

Tangibles were the least important dimension for both retailers, indicating that the physical aspects of the service quality are not as important as the personal aspects of service quality. Trained employees, sensitive to customer expectations, may be most able to provide a realistic expectation the service provider can meet or exceed. The skills and dedication of employees reflect strongly on service quality, regardless of outlet. The fact that both customer groups had similar expectations means that either retailer could potentially gain or regain market share from the other by reducing negative gaps, especially ones related to personnel.

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Table 7. Comparison of florist and supermarket customers on mean expectations, perceptions, and gap scores for five items comprising empathy measured on a 7-point Likert scale.

Item No. Description		Expectations		Perceptions		Gap	
		Florist	Supermarket	Florist	Supermarket	Florist	Supermarket
18. Give customers individual attention	Mean	6.55	6.58	6.64	6.14	0.094	-0.437
	Mean rank ^z	82.0	83.1	420	326	495	232
		$P = 0.86$		$P = 0.00$		$P = 0.00$	
19. Convenient hours	Mean	5.89	6.20	6.48	6.33	0.583	0.130
	Mean rank	75.3	90.1	391	365	470	265
		$P = 0.03$		$P = 0.05$		$P = 0.00$	
20. Give customers personal attention	Mean	6.44	6.51	6.55	6.15	0.112	-0.358
	Mean rank	80.9	84.2	409	340	482	246
		$P = 0.60$		$P = 0.00$		$P = 0.00$	
21. Have customer's best interests at heart	Mean	6.53	6.55	6.55	6.08	-0.036	-0.474
	Mean rank	82.3	82.7	415	327	347	414
		$P = 0.95$		$P = 0.00$		$P = 0.00$	
22. Understand customers' specific needs	Mean	6.30	6.40	6.46	5.92	0.167	-0.484
	Mean rank	80.1	85.0	412	322	471	245
		$P = 0.46$		$P = 0.00$		$P = 0.00$	

^zMean rank compared using Mann-Whitney U mean rank test, $P \leq 0.05$.

Table 8. Comparison of florist and supermarket customers on mean expectations, perceptions, and gap scores for five service quality dimensions measured on a 7-point Likert scale.

Item	Expectations		Perceptions		Gap	
	Florist	Supermarket	Florist	Supermarket	Florist	Supermarket
Tangibles	5.43 (84)	5.63 (80)	5.94 (417)	5.78 (336)	0.50 (417)	0.15 (336)
	$P = 0.18^z$		$P = 0.03^z$		$P = 0.00^y$	
Reliability	6.82 (84)	6.72 (80)	6.63 (426)	6.06 (333)	-0.19 (426)	-0.64 (333)
	$P = 0.15^y$		$P = 0.00^y$		$P = 0.00^y$	
Responsiveness	6.60 (84)	6.64 (80)	6.59 (426)	6.07 (337)	-0.02 (426)	-0.57 (337)
	$P = 0.66^z$		$P = 0.00^y$		$P = 0.00^y$	
Assurance	6.65 (84)	6.52 (80)	6.50 (426)	6.08 (338)	-0.15 (426)	-0.44 (338)
	$P = 0.17^z$		$P = 0.00^y$		$P = 0.00^y$	
Empathy	6.35 (84)	6.45 (80)	6.54 (426)	6.13 (337)	0.18 (426)	-0.32 (337)
	$P = 0.35^z$		$P = 0.00^y$		$P = 0.00^y$	
SERVQUAL	6.39 (84)	6.41 (80)	6.45 (426)	6.03 (339)	0.05 (426)	-0.37 (339)
	$P = 0.82^z$		$P = 0.00^y$		$P = 0.00^y$	

^{z,y}Two-tailed probability of pooled and separate variance t tests, respectively.

Table 9. Point allocation and relative importance of the five SERVQUAL dimensions for florist and supermarket customers.^z

Dimension	Customers			
	Florist		Supermarket	
	Points ^z	Rank	Points ^z	Rank
Reliability	33.1	1	24.2	1
Responsiveness	22.0	2	22.2	1
Assurance	17.0	3	20.0	2
Empathy	15.1	4	18.0	2-3
Tangibles	12.8	5	16.1	3

^zCustomer group's average number of points allocated to each dimension.

^yRankings based Wilcoxon signed-ranks test.

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