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AN EVALUATION OF MOTOR CARRIER SALES REPRESENTATIVES: THE PERSPECTIVE OF CARRIER SALES MANAGERS

by

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INTRODUCTION

The growing body of literature on services marketing increasingly recognizes the crucial role played by salespeople in the marketing of services. For example, early writings pointed out that salespeople could be helpful in reducing customer anxiety associated with the purchasing of services, which tend to be intangible in nature.¹ More recent work suggests that service firms utilize sales representatives to communicate customer service policies to their customers.²

However, it appears as if motor carriers have been slow to recognize the importance of a well-managed sales force. For instance, a leading distribution executive has asserted that a professional and knowledgeable motor carrier sales force can lead to increased market shares for individual motor carriers in part by attracting business from competing firms.³ In addition, an annual survey conducted by *Distribution Magazine*, which asks users of trucking services to rate individual carriers along the dimensions of service, price, convenience and sales, has consistently found motor carriers to be ranked lowest on the sales component.⁴

In many instances, the task of improving sales force performance falls to sales managers. While motor carrier sales managers have a number of responsibilities, certainly some of the most important

involve the recruitment, selection and training of sales personnel. Poor recruitment and selection, along with inadequate training, increase the likelihood of sales force turnover; the out-of-pocket costs of such turnover in the motor carrier industry have been estimated at nearly \$40,000 per sales representative.⁵

Moreover, the recruitment, selection and training of new sales representatives will reflect the sales manager's perception of various attributes that should be possessed by individual salespeople. If a sales manager feels that a salesperson should be outgoing, then selection techniques, such as psychological testing, might be utilized to learn about the personality of each recruit. Similarly, training programs will be structured to feature the types of knowledge that a sales manager deems necessary for successful sales force performance.

The purpose of this paper is to learn more about characteristics associated with successful performance by motor carrier sales personnel, as perceived by motor carrier sales managers. Specifically, this paper will investigate the following issues:

1. What are the absolute and relative importance of various salesperson characteristics in the selling of motor carrier services?
2. Are there statistically significant relationships between responses to these attributes and selected demographic variables?
3. Have motor carrier sales managers altered their perceptions of desirable sales force characteristics between the mid-1970s and the late 1980s?
4. What implications do the findings of this study have for sales force management in the motor carrier industry?

METHODOLOGY

Four hundred U.S. motor carriers, randomly selected from a recent edition of the Official Motor Carrier Directory, were sent a survey dealing with the importance of selected sales force characteristics. A concerted effort was made to address the survey to the highest ranking sales executive at individual firms. One hundred seventy-nine usable returns were received, for a response rate of 44.8%. This response rate was considered high for a mail survey of this type and indicated an apparent interest in the study topic.

A demographic profile of respondents is presented in Table 1. The one hundred and seventy-nine responding companies represent a variety of size categories; 53% have annual revenues of under \$25,000,000, while 19% of the responses came from motor carriers with annual revenues in excess of \$100,000,000. Respondents appeared to be well-compensated (75% earn at least \$40,000 per year) and fairly well-educated (45% possess at least a four year college degree). Likewise, survey participants were overwhelmingly male, with only six of the 179 respondents being female. The remainder of the paper will be devoted to a presentation and discussion of other empirical findings.

IMPORTANCE OF SALESPERSON CHARACTERISTICS

One portion of the survey asked sales managers to evaluate the importance of 26 salesperson characteristics along a five point scale ranging from 0 = "no importance to" 4 = "maximum importance"; twenty-two of these attributes were drawn from a similar study conducted in the mid-1970s.⁶ Four characteristics (knowledge of electronic data interchange (EDI), knowledge of the deregulated transportation environment, knowledge of intermodal transport opportunities, and communication skills) were added in this study to reflect changes in both the transportation industry and overall business environment since the mid-1970s.

TABLE 1
DEMOGRAPHIC PROFILE OF RESPONDENTS (n = 179)

AGE							
	<u>20-29</u>	<u>30-39</u>	<u>40-49</u>	<u>50-59</u>	<u>60 and over</u>		
	3.9%	33.0%	30.7%	18.4%	14.0%		

ANNUAL SALARY:								
	<u>Under</u>	<u>\$30,000-</u>	<u>\$40,000-</u>	<u>\$50,000-</u>	<u>\$60,000-</u>	<u>\$70,000-</u>	<u>\$80,000-</u>	<u>\$100,000-</u>
	<u>\$30,000</u>	<u>\$39,999</u>	<u>\$49,999</u>	<u>\$59,999</u>	<u>\$69,999</u>	<u>\$79,999</u>	<u>\$99,000</u>	<u>and over</u>
	7.0%	17.4%	15.7%	20.9%	9.9%	8.7%	7.6%	12.8%

EDUCATION LEVEL:						
	<u>High</u>	<u>College</u>	<u>4 Year College</u>	<u>Graduate School</u>	<u>Master's</u>	<u>Ph.D</u>
	<u>School</u>	<u>No Degree</u>	<u>Degree</u>	<u>No Degree</u>	<u>Degree</u>	<u></u>
	17.3%	37.4%	36.9%	3.4%	5.0%	0.0%

SEX:	
<u>Male</u>	<u>Female</u>
96.6%	3.4%

n = Number of Respondents

TABLE 1 Continued
 DEMOGRAPHIC PROFILE OF RESPONDENTS (n = 179)

ANNUAL FIRM REVENUES:					
Under	\$25,000,000-	\$50,000,000-	\$100,000,000-	\$500,000,000-	
<u>\$25,000,000</u>	<u>\$49,999,999</u>	<u>\$99,999,999</u>	<u>\$499,999,999</u>	<u>and over</u>	
52.6%	17.9%	10.4%	11.0%	8.1%	

YEARS WITH PRESENT EMPLOYER (Company Tenure):					
Less than	1 - 5	6 - 10	11 - 15	16 - 20	Over 20
<u>years</u>	<u>years</u>	<u>years</u>	<u>years</u>	<u>years</u>	<u>years</u>
3.4%	24.0%	25.7%	17.3%	9.5%	20.1%

YEARS IN PRESENT JOB (Job Tenure):					
Less than	1 - 5	6 - 10	11 - 15	16 - 20	Over 20
<u>years</u>	<u>years</u>	<u>years</u>	<u>years</u>	<u>years</u>	<u>years</u>
4.5%	44.1%	24.0%	9.5%	7.8%	10.1%

n = Number of Respondents

The results for the twenty-six characteristics, presented in Table 2, show that the most important attribute is ethical conduct by the salesperson. Ethical behavior, such as fairness and honesty, is also important to shippers. A recent study conducted by Traffic Management found that users value motor carrier honesty above all other traits.⁷

This emphasis on ethical behavior is an interesting finding, given the questionable tactics that have been employed by some carriers and their salespeople in the past, most notably with respect to the undercharge issue.⁸ In addition, false or misleading presentations by carrier sales personnel appear to be a common complaint in the less-than-truckload (LTL) segment of the motor carrier industry.⁹ The fact that 75% of this study's respondents feel that ethical sales force conduct is of maximum importance, is a clear indication that most truckers want harmonious relationships with their users.

Moreover, the commitment of sales managers to ethical conduct by their sales personnel is seen in the response to gratuities (or gifts) offered by salespeople. This attribute is the lowest ranked of the 26 characteristics; nearly 60% of the respondents indicate that gratuities are of no importance or of slight importance for effective sales performance. These gratuities, which can take many forms, such as meals and entertainment, may be viewed as an attempt to "buy" clients. Although this trait is the least importance of those investigated, it is interesting to note that roughly 10% of the respondents feel that gratuities are of great or maximum importance for successful performance by motor carrier sales representatives.

The survey results also suggest that a salesperson's promptness in dealing with customers is the second most important characteristic, with nearly two-thirds of the respondents assigning this trait to the "maximum importance" category. One explanation for this finding is that sales managers have recognized the importance of customer service in a deregulated environment, and that in service industries (such as trucking) customer service arises from frequent contact between the customer and the supplier.¹⁰

TABLE 2
ABSOLUTE AND RELATIVE IMPORTANCE OF SALES FORCE CHARACTERISTICS (n = 179)

Characteristic	Of No Importance	Of Slight Importance	Of Moderate Importance	Of Great Importance	Of Maximum Importance	Mean Score ^a Importance
Ethical conduct by salesperson	0.0%	0.0%	1.15%	22.9%	76.0% ^c	3.749 ^b
Promptness in overall dealings with customers	0.0%	0.0%	1.7%	31.8%	66.5%	3.648
Knowledge of carrier's operating schedules	0.0%	0.6%	6.7%	34.6%	58.1%	3.503
Self-confidence	0.0%	0.6%	5.6%	39.3%	54.5%	3.478
Knowledge of carrier's route structure	0.0%	1.5%	6.7%	44.1%	47.5%	3.409
Communication skills	0.6%	0.0%	5.0%	51.4%	43.0%	3.363
Knowledge of carrier's equipment	0.0%	1.1%	11.2%	40.8%	46.9%	3.335
Neat appearance	0.0%	0.0%	6.7%	54.2%	39.1%	3.324
Knowledge of customer's logistics system	0.0%	0.6%	10.1%	48.0%	41.3%	3.302
Willingness to arrange expedited service	0.6%	1.7%	11.2%	41.8%	44.7%	3.285
Knowledge of carrier's rates	0.0%	0.0%	9.5%	54.2%	36.3%	3.268
Information feedback provided by salesperson	0.6%	1.1%	10.6%	50.3%	37.4%	3.229
Friendly personality	0.0%	0.0%	15.6%	49.2%	35.2%	3.196
Knowledge of customer's product	0.0%	1.1%	20.7%	47.5%	30.7%	3.078

TABLE 2 Continued
 ABSOLUTE AND RELATIVE IMPORTANCE OF SALES FORCE CHARACTERISTICS (n = 179)

Characteristic	Of No Importance	Of Slight Importance	Of Moderate Importance	Of Great Importance	Of Maximum Importance	Mean Score ^a Importance
Willingness to discuss rate change proposals	0.0%	2.8%	19.6%	51.4%	26.3%	3.011
Knowledge of carrier's competitors	0.6%	3.9%	16.2%	54.7%	24.6%	2.989
Knowledge of the deregulated transportation environment	0.6%	4.5%	23.5%	44.7%	26.8%	2.927
Claims assistance	0.0%	5.6%	39.7%	44.7%	10.0%	2.592
Ability to influence loss and damage	0.0%	10.6%	34.6%	41.3%	13.4%	2.575
Knowledge of overall transportation industry	0.6%	5.1%	42.0%	44.4%	7.9%	2.539
Knowledge of interline connections	9.0%	9.0%	34.3%	28.7%	19.0%	2.399
Knowledge of electronic data interchange	1.1%	12.3%	41.9%	36.3%	8.4%	2.385
Education level achieved	5.0%	6.7%	58.1%	25.7%	4.5%	2.179
Knowledge of intermodal transport opportunities	3.9%	16.3%	50.0%	24.2%	5.6%	2.112
Attendance at professional meetings	4.0%	26.6%	52.5%	15.2%	1.7%	1.842
Gratuities offered by the salesperson	30.9%	28.7%	32.0%	6.2%	2.2%	1.202

^aMean score based on 0 = no importance and 4 = maximum importance

^bCharacteristics are presented from highest mean score to lowest mean score

^cPercentages may not add up to 100% due to rounding

The information in Table 2 further indicates that motor carrier sales managers feel that their sales representatives must be knowledgeable about carrier operations, specifically carrier schedules, routes and equipment. For example, knowledge of operating schedules emerges as the third most important attribute, with nearly 60% of respondents indicating that such knowledge is of maximum importance for successful sales force performance. One explanation for this finding is that the motor carrier industry's increasing involvement with Just-in-Time inventory systems places high priority on reliable operating schedules; irregularity can lead to stockouts and/or production line shutdowns, both of which create customer dissatisfaction.

The increasing motor carrier participation in JIT traffic also provides an explanation for the importance of sales force knowledge of carrier equipment (mean score = 3.35). For instance, one equipment consideration involves the average fleet age for individual carriers; older equipment is more likely to break down, which obviously impacts transit time reliability. In addition, a number of large LTL carriers are adding smaller trailers (e.g., 28 ft. trailers known as "pups") to their fleets, due in part to the smaller, more frequent orders associated with JIT systems.

Survey participants also suggest that sales representatives should be knowledgeable as to their carrier's route structure. There are several explanations for this finding, with one being that since passage of the Motor Carrier Act (MCA) of 1980 many shippers have reduced the number of carriers they use; one factor in this decision is the scope of geographic coverage. Secondly, shippers are actively seeking to reduce interlining due to the slower transit times and increased handling of goods. Since shippers generally prefer those carriers with the ability to provide direct service between particular city pairs, motor carrier sales representatives need to be cognizant of their carrier's route structure.

Furthermore, the information in Table 2 suggests that sales managers emphasize personal characteristics of sales representatives, with self-confidence ranked fourth most important, communication skills as sixth in importance, and neat appearance ranked as the eighth most important attribute. This might influence the practices used in the selection of motor carrier sales representatives; for example, personal interviews would appear to be an excellent method for evaluating a candidate's self-confidence, appearance and communication abilities.

Turning to low-ranked attributes, respondents assigned low importance to a salesperson's attendance at professional meetings (mean = 1.842) as well as his/her educational history (mean = 2.179). The finding on professional meetings is not surprising in that many motor carriers have reduced their participation at such events because of potential antitrust (e.g., collusion with shippers) concerns. However, the results on education are somewhat unexpected, given that universities are the recruiting source most likely to be added by LTL motor carriers over the next several years ¹¹

In addition, two of the least important sales force characteristics, knowledge of intermodal transport opportunities (ranked 24th out of the 26 traits) and knowledge of electronic data interchange (ranked 22nd) had been included in this study to reflect changes in the transportation industry and American business since the mid-1970s. The finding on intermodal knowledge may be a reflection of the fact that motor carriers are not considered major players in the marketing of intermodal services and that brokers, railroads and third party agents are more likely to dominate this phase of intermodal activities.

The relative unimportance of EDI is an unexpected result, given the increasing use of computers in American business. In fact, the mean score of 2.385 indicates that survey participants feel that EDI knowledge is only of moderate importance for successful sales force performance. One explanation for the low rating and ranking of this

attribute is that EDI utilization appears to be in the early stages at many trucking companies.¹² As EDI becomes more commonplace in the motor carrier industry, salesperson knowledge of EDI should become a more valuable attribute.

A review of the literature as well as consultation with industry experts indicated that the 26 salesperson characteristics evaluated in this study could be divided into three distinct categories... Personal, Service, and Knowledge. Personal characteristics represent those factors relating to an individual salesperson, their character and professional background. Service-related characteristics represent factors which provide service, assistance or tangible value to the shipper. Finally, Knowledge-related characteristics represent types of information possessed by salespeople relating to the carrier, customer and industry. These three groupings, presented in Table 3, indicate that motor carrier sales managers place heaviest emphasis on personal attributes, with a median category score of 3.324. In addition, five of the seven personal attributes have a mean rating of 3.000 ("great importance") or better. The information in Table 3 also suggests that service (category median = 3.011) and knowledge (category median = 3.035) characteristics are of roughly equal importance.

As previously discussed, personal characteristics of sales personnel may best be addressed in the selection of sales representatives, whereas service and knowledge attributes might be associated with sales force training practices. The fact that respondents, on the whole, favor personal attributes over service and knowledge characteristics might suggest that extra attention is devoted to selection techniques, with a lesser emphasis on training. This subject will be addressed again in the summary, and implications section of the paper.

TABLE 3

IMPORTANCE OF PERSONAL, SERVICE AND KNOWLEDGE-RELATED CHARACTERISTICS

PERSONAL		SERVICE		KNOWLEDGE	
Characteristic	Average Rating	Characteristic	Average Rating	Characteristic	Average Rating
Ethical conduct by salesperson	3.749	Promptness in customer dealings	3.648	Carrier's operating Schedules	3.503
Self-confidence	3.478	Arrange expedited Service	3.285	Carrier's route Structure	3.408
Communication skill	3.363	Information feedback	3.229	Carrier's equipment	3.335
Neat appearance	3.324	Discuss rate change proposals	3.001	Customer's logistics system	3.302
Friendly personality	3.196	Claims assistance	2.592	Carrier's rates	3.268
Educational level Achieved	2.179	Loss and damage	2.575	Customer's products	3.078
Attendance at professional meetings	1.842	Gratuities offered	1.202	Carrier's competitors	2.989

TABLE 3

IMPORTANCE OF PERSONAL, SERVICE AND KNOWLEDGE-RELATED CHARACTERISTICS

PERSONAL		SERVICE		KNOWLEDGE	
Characteristic	Average Rating	Characteristic	Average Rating	Characteristic	Average Rating
				Deregulated transportation environment	2.927
				Overall transportation industry	2.539
				Interline connections	2.399
				Electronic data interchange	2.385
				Intermodal transportation opportunities	2.112
Category Median: ^a	3.324		3.011		3.035

^aThe median represents the middle score in a set of numbers arranged in ascending or descending order.

DEMOGRAPHIC RELATIONSHIPS

Table 4 provides information on the statistically significant relationships, at the .05 level or better, that were discovered when the 26 sales force characteristics were analyzed in terms of six selected demographic variables. Twenty-eight of the 156 (17.95%) possible relationships emerged as statistically significant. The results in Table 4 represent the maximum number of significant relationships that could be identified within a particular demographic variable. For example, although only five significant relationships appear when respondents under 50 years of age are compared to those over 50, other age dimensions (e.g., under 40 vs. over 40) generated fewer statistically significant relationships.

The remainder of this section will focus on the significant differences involving salary and annual revenues because these variables show the highest number of significant relationships when compared to the 26 salesperson characteristics. With respect to salary, t-tests of mean equality for respondents earning less than \$60,000 against those earning \$60,000 or more revealed nine statistically differences, with six of these attributes being more important to respondents with annual revenues of \$60,000 or more. In fact, all four of the significant knowledge attributes are more important to the higher-salaried sales managers. Given that salary often acts as a surrogate for job title and managerial level (i.e., higher salary associated with more prestigious and senior-level jobs), the salary t-tests suggest that motor carrier sales managers increase their opportunities for advancement by developing sales representatives who deal promptly with customers and who are knowledgeable about their company's, rates, routes and operating schedules. In contrast, the lower-salaried sales manager respondents attached greater importance to claims assistance, attendance at professional meetings, and gratuities offered by their salespeople.

TABLE 4

T-TEST OF RELATIONSHIPS BETWEEN SALESFORCE CHARACTERISTICS AND DEMOGRAPHIC VARIABLES^a

AGE (< 50; ≥ 50)	SALARY (< \$60,000; ≥ \$60,000)	REVENUES (<\$25,000,000; ≥ \$25,000,000)
Claims Assistance (2)	Promptness in Dealing w/Customer (2)	Self-confidence (2)
Knowledge of EDI (1)	Knowledge of Carrier's Route Structure (2)	Knowledge of Carrier's Route Structure (2)
Education Level (2)	Communication Skills (2)	Communication Skills (2)
Knowledge of Intermodal Opport. (2)	Knowledge of Customer's Products (2)	Knowledge of Customer's Logistics Systems (2)
Gratuities (2)	Knowledge of Carrier's Rates (2)	Claims Assistance (1)
	Claims Assistance (1)	Knowledge of EDI (2)
	Attendance at Professional Meetings (1)	Attendance at Professional Meetings (1)
	Gratuities (1)	
	Knowledge of Carrier's Operating Schedule (2)	

^aOnly those relationships statistically significant at the .05 level (or better) are listed in this table.

(1): Indicates that higher mean score was associated with Group 1.

(2): Indicates that higher mean score was associated with Group 2.

TABLE 4 continued

T-TEST OF RELATIONSHIPS BETWEEN SALESFORCE CHARACTERISTICS AND DEMOGRAPHIC VARIABLES^a

EDUCATION (< 4 year college; ≥ 4 yrs)	COMPANY TENURE(≤ 10 years > 10 years)	REVENUES (≤5 years; > 5 years)
Knowledge of Carrier's Equipment (1)	Knowledge of Carrier's Operating Schedule (2)	Ethical Conduct (1)
	Friendly Personality (2)	Knowledge of Customer's Logistics Systems (1)
	Knowledge of Interline Connection (2)	Knowledge of Carrier's Rates (1)

^aOnly those relationships statistically significant at the .05 level (or better) are listed in this table.

(1): Indicates that higher mean score was associated with Group 1.

(2): Indicates that higher mean score was associated with Group 2.

The information in Table 4 also indicates that seven of the 26 sales force characteristics have significantly different means when respondents are classified according to annual firm revenues. Three of the differences involve personal traits, one involves service attributes, and three are concerned with knowledge characteristics. Moreover, in all but two cases, (i.e., claims assistance, and attendance at professional meetings), larger firms indicate that the particular attribute is of more importance than do smaller companies.

For instance, larger carriers (mean = 2.683) place much heavier emphasis on a salesperson's EDI knowledge than do smaller carriers (mean = 2.143), which is in line with the fact that the so-called "Big Three" LTL carriers--Yellow Freight, Roadway, Consolidated Freightways--have been industry leaders in EDI implementation.¹³ It is also noteworthy that larger carriers place more importance on certain personal attributes, such as self-confidence and communication skills. This may be an indication that the larger motor carriers have better developed sales force selection programs, because as previously mentioned, personal attributes can be somewhat controlled through selection practices.

HISTORICAL PERSPECTIVE

As mentioned earlier, twenty-two of the characteristics in this study were also analyzed in a similar project conducted in the mid-1970s; this section discusses the results that emerge from a comparison of these 22, traits. While the sampling procedure was identical, the individual respondents and the carriers they represented did vary between the two studies. A major rationale for this comparison is that the MCA of 1980 has been acknowledged as causing profound changes in the trucking industry. The literature points out that major organizational change, such as deregulation, creates corporate upheaval. As a result, firms can be expected to adjust to change, because failure to do so will increase the length of organizational

uncertainty and instability.¹⁴ For example, recent research has suggested that those motor carriers which have been slow to adapt their sales force management practices to meet the new, competitive environment are characterized by less productive sales forces.¹⁵

A comparison of the 1975 and current studies, presented in Table 5, indicates minor differences in both the absolute and relative importance of the 22 characteristics. With respect to absolute results, the overall mean score for the 1975 study (2.952) differs from that of the current study (2.961) by less than .01. In addition, the mean scores for several attributes are nearly identical in the two studies. For example, the mean rating for information provided by a salesperson in the current study, 3.229, is but .008 lower than the average score for this trait in 1975. Similarly, the differences in mean ratings for promptness in dealing with customers is only .009. Because only summary results exist for the 1975 study, statistical tests for mean differences could not be performed between the two studies.

Analysis of the relative importance of the 22 characteristics also reveals a high degree of similarity between the two studies. As pointed out in Table 5, the Spearman correlation between the 1975 rankings and current rankings generated a coefficient of .898, which is statistically significant at the .001 level and indicative of minimal ranking differences between the two studies. In fact, eight of the 22 attributes have the same rankings in both 1975 and at present; ethical behavior is most important in both studies, while gratuities are least important.

Nevertheless, several of the characteristics exhibit notable rating and ranking differences, with the most prominent involving pricing issues. In the 1975 study, a salesperson's willingness to discuss rate change proposals had an average score of 2.115 and was ranked twentieth in importance. This attribute's mean rating in the present study was 3.011 (an increase of .896) and was ranked 14th (an increase of six positions). In a similar vein, a salesperson's knowl-

TABLE 5
COMPARISON OF 1975 AND CURRENT STUDIES^a

Salesperson Characteristic	1975 ^b Mean (Rank)	Current Mean (Rank)
Neat appearance	3.305 (7)	3.324 (7)
Knowledge of carrier's equipment	3.321 (6)	3.335 (6)
Friendly personality	3.237 (11)	3.197 (12)
Knowledge of carrier's operating schedules	3.603 (3)	3.503 (3)
Attendance at professional meetings	1.939 (21)	1.842 (21)
Knowledge of customer's logistics system	3.206 (12)	3.302 (8)
Education level achieved	2.351 (19)	2.179 (20)
Willingness to discuss rate change proposals	2.115 (20)	3.011 (14)
Ability to influence loss and damage	2.382 (18)	2.575 (17)
Willingness to arrange expedited service	3.450 (5)	3.285 (9)
Knowledge of carrier's competitors	3.168 (13)	2.989 (15)
Knowledge of customer's products	3.252 (9)	3.078 (13)
Gratuities offered by the salesperson	1.344 (22)	1.202 (22)
Knowledge of overall transportation industry	2.626 (16)	2.539 (18)
Ethical conduct by salesperson	3.771 (1)	3.749 (1)
Self-confidence	3.565 (4)	3.478 (4)
Promptness in overall dealings with customer	3.656 (2)	3.648 (2)
Claims assistance	2.771 (15)	2.592 (16)
Information feedback provided by salesperson	3.237 (10)	3.229 (11)
Knowledge of carrier's rates	2.527 (17)	3.268 (10)
Knowledge of carrier's route structures	3.298 (8)	3.408 (5)
Knowledge of interline connection	2.809 (14)	2.399 (19)
OVERALL MEAN	2.952	2.961

^aInvolving characteristic used in both studies.

^bPoist, Richard and Peter Lynagh, *The Motor Carrier Salesman*, (Washington, D.C.: American Trucking Association), 1975.
Spearman coefficient of rank = .898, significant at $p < .001$.

edge of rates had a mean of 2.527 in 1975 and was 17th in importance. In the current study the mean rating had risen to 3.268 (an increase of .741) and was ranked tenth in importance, representing an improvement of seven positions. These results support previous assertions that deregulation has caused motor carrier pricing practices to assume higher priority as a carrier selection tool.¹⁶

Another characteristic exhibiting marked change between 1975 and at present involves a salesperson's knowledge of interline connections. Unlike the pricing attributes discussed in the previous paragraph, both the absolute and relative importance of interline knowledge has decreased since the mid-1970s. The mean rating for interline knowledge dropped from 2.809 in 1975 to 2.399 currently, a decrease of .410; likewise, the 1975 ranking of 14th is five places higher than today. These findings are due likely to the increased route freedoms fostered by the MCA, which have made it easier for carriers to operate over broader geographic areas, thus reducing the need for interlining.

The preceding paragraphs suggest that both the absolute and relative importance of many of the 22 attributes common to both studies remain virtually unchanged, an indication that motor carriers may have been slow to adapt to the opportunities and challenges of the contemporary trucking industry. This, in turn, can have important strategic implications, not the least of which is that tentative reaction to major change hinders the chances for organizational growth and survival.¹⁷ In this vein, work by Smith and Grimm has found that railroads pursuing the same strategy prior to and following deregulation had noticeably inferior performance to those that changed their strategies in response to the Staggers Act.¹⁸

SUMMARY AND IMPLICATIONS

The purpose of the study was to identify characteristics associated with successful performance by motor carrier sales representatives. Armed with this information, carrier sales executives can design more effective selling strategies as well as improve recruiting and training practices.

In terms of designing sales strategies, the study findings should prove valuable in several ways. First, the results provide insight as to the types of salesperson characteristics perceived to be most and least important by a large sample of sales executives. For individual sales managers and representatives this information should provide a useful benchmark with which to compare one's own opinions. Likewise, relatively unexperienced sales managers can benefit from the opinions of their more experienced peers.

Secondly, the results provide insight as to the distinctive features of selling strategies traceable to demographic differences of respondents. For, example, the result suggest that sales managers of larger carriers are emphasizing effective salesperson communication skills as well as knowledge of the customer's logistics system and EDI to set them apart from smaller carriers in their sales efforts. In contrast, sales managers from smaller carriers are stressing claims assistance and sales rep attendance at professional meetings in differentiating their sales efforts. While space does not permit a more elaborate discussion, similar distinctions in strategy can be observed with respect to other demographic variables by referring to Table 4. For the carrier sales executive who wants to keep abreast of what other carriers are thinking and doing, such information can prove useful in gaining and/or maintaining a competitive edge.

Likewise, the study results should prove useful for improving recruiting and training practices. For example, sales manager respondents indicate that the most important sales force characteristic is ethical behavior, such as honesty and fairness. The importance

of ethical conduct is further emphasized by the fact that a salesperson's usage of gratuities emerged as the lowest ranked attribute in this study.

One ramification of these findings is that sales force training programs should devote time to learning about ethical behavior, perhaps through the use of case studies. In addition, motor carrier sales executives might explore selection techniques, such as psychological testing, that offer indications on the ethical makeup of sales recruits. It has been suggested also that a strong code of ethics be adopted to govern shipper-carrier relations.¹⁹

Sales manager respondents also point out that motor carrier salespeople need to be knowledgeable about various aspects of carrier operations, specifically with respect to equipment, route structure and operating schedules. At a minimum, these findings suggest increased training content devoted to operations information. In addition, these findings illustrated the interfaces that exist between the selling and operations functions; as a result, it is important for sales representatives to be aware of carrier operational capabilities so that unrealistic service promises are not made to customers. One way of ensuring this is through a job rotation or exchange program involving the sales and operations departments. Likewise so-called "Quality Circles" might be created to discuss problems of mutual interest and thereby improve communications among sales and operations personnel.

Moreover, it can be postulated that a major environmental upheaval, such as the MCA of 1980, should result in changes in sales force practice. However, one of the key findings of this study is that the motor carrier industry's perception of desirable sales force attributes have changed minimally between the mid-1970s and the present. One explanation for this is that deregulation has encouraged greater emphasis and change regarding pricing and new service offerings at the expense of personal selling efforts.

Likewise, during this timespan, sales managers continued to place heavier emphasis on a sales representative's personal characteristics than on either service or knowledge attributes. For example, such personal attributes as ethical conduct, self-confidence, communication skills, and neat appearance were rated as being of "maximum importance" by 40 percent or more of respondents. As previously mentioned, this emphasis on personal characteristics might suggest that greater attention is currently being devoted to the selection process with regard to sales reps with a lesser attention to training. This may help to explain the fact that recent research has indicated that average sales force training in the trucking industry is noticeably shorter than in many other service industries.²⁰

At the same time, there is strong evidence to suggest that shippers are dissatisfied with the lack of customer orientation displayed by motor carrier sales representatives. This was true prior to deregulation as well as at present.²¹ As previously mentioned in the introduction to this paper, *Distribution's* annual shipper survey consistently finds motor carriers to be weakest on the sales dimension. In the magazine's 1988 survey, it was reported that "Shippers are nearly unanimous in their panning of carrier sales reps. Many shippers complain that they never see a sales rep; others say the ones they see are woefully unfit for the job"²²

Other anecdotal evidence also exists. For example, a top distribution executive at Computerland Corporation was quoted as saying "...today's carrier representatives need to be more professional and businesslike in their approach... the day of 'Polyester Harry' with a cigar and a bottle of booze are passe." This executive also indicated that personal characteristics such as neat appearance are part of professionalism, but stressed that sales reps need to be more knowledgeable about rates and pricing and need to do their homework before visiting customers.²³

In essence, it appears that shippers would prefer to deal with more knowledgeable and professional sales personnel, whereas motor carriers appear to be emphasizing style (i.e., in the form of

personal attributes) over substance in their current sales practices. Consequently, sales force practices in the motor carrier industry need to be reviewed and perhaps, revised. The successful motor carrier of the future will be one that thoroughly understand its shippers' need and preferences and is able to tailor its services and sales efforts accordingly.

The key to this success is for carriers to modify the "operations orientation" which has been so prevalent in the past and combine it with a strong "customer orientation". A number of carriers are actively striving to achieve such an orientation. For example, Yellow Freight has developed a Quality Assurance Program that stresses the following principles: (1) Teamwork, (2) Doing the basics right the first time, (3) Productivity improvement, (4) Customer satisfaction, (5) Improved communication, (6) Continuous training and education, and (7) Searching for continuous improvements for the good of the carrier and its customers ²⁴

Regarding the importance of customer satisfaction, Craig Cina, Director of Market Planning for Yellow states "Now, more than ever before, it's essential that we listen to our customers, understand what they're saying as it applies to serving them better, and then respond to what they tell us."²⁵ To facilitate these efforts, the carrier is developing a quantitative customer satisfaction measurement and feedback system to demonstrate their commitment to listening and improving.

Finally, this study also has implications for shippers or users of trucking services by providing greater insight into the training and selection of sales reps as well as identifying sales preferences based upon demographic variables. Moreover, if their needs are to be met, shippers must communicate their wants and expectations regarding carrier salespeople. In other words, shippers should play an active role in helping carriers assess and define what is lacking in current sales relations.

In turn, carriers must make a commitment to listen and strive to address deficiencies if they are to be truly dedicated to a "customer orientation". Rather than adversaries working at cross purposes, shippers and carriers should view themselves as partners or allies striving for a mutual goal. It is this so-called "Win-Win" scenario in which both parties benefit that is required for success in today's highly competitive and rapidly changing transportation environment.

ENDNOTES

¹Kelly, J. Patrick and William George. (1980), "Perceptions of the Personal Selling Function in Service Marketing: A Field Study," in Marketing in the 1980's Changes and Challenges, Chicago: American Marketing Association, pp. 244-247.

²Zeithaml, Valarie, Leonard Berry and A. Parasuraman. (1988), "Communication and Control Processes in the Delivery of Service Quality," Journal of Marketing, (April), pp. 35-48.

³Butler, Robert. (1987), "Market-Driven Truck Field 'Ain't Seen Nothing Yet!'," Traffic World, (May 11), p. 20.

⁴Anonymous. (1987), "Quest for Quality," Distribution, (August), p. 17. Also, Distribution, (August 1986), p. 18.

⁵Murphy, Paul and Thomas Corsi. (1989), "An Exploratory Model of Sales Force Turnover Among LTL Motor Carriers," Transportation Journal, (Fall), pp. 25-37.

⁶Poist, Richard and Peter Lynagh. (1975), The Motor Carrier Salesman: A Comparative Evaluation, Washington, D.C.: American Trucking Associations.

⁷Quinn, Francis. (1987), "How Shippers Choose a Motor Carrier," Traffic Management, (November), p. 43.

⁸Wastler, A. (1988), "Flood of Undercharge Claims Driving Shippers to Congress," Traffic World, March 28, p. 4.

⁹Murphy, Paul and James Daly. (1989), "Ethical Practices Among LTL Motor Carriers," John Carroll University, Working Paper.

¹⁰Zeithaml et al (1988), op. cit.

¹¹Murphy, Paul and Thomas Corsi, (1987), "Sales Force Management in a Deregulated Environment: General Freight Carriers," Journal of the Transportation Research Forum, Vol. 28, p. 313.

¹²Schulz, John. (1988), "Big Three Motor Carriers Lead Trucking Drive to EDI," (December 19), p. 28.

¹³Ibid.

¹⁴Tushman, Michael, William Newman and Elaine Romanelli. (1986), "Convergence and Upheaval: Managing the Unsteady Pace of Organizational Evolution," California Management Review, Vol. 29, No. 1, pp. 29-44.

¹⁵Murphy, Paul and Thomas Corsi. (1988), "Strategic Differentiation Among LTL General Freight Carriers: Sales Force Management Policies," The Logistics and Transportation Review (September), pp. 217-235.

¹⁶Johnson, James and Donald Wood. (1986), Contemporary Physical Distribution and Logistics, New York: MacMillan Publishing, p. 210.

¹⁷Tushman et al (1986), op. cit.

¹⁸Smith, Kenneth and Curtis Grimm. (1987), "Environmental Variation, Strategic Change and Firm Performance: A Study of Railroad Deregulation," Strategic Management Journal, Vol. 8, pp. 363-376.

¹⁹Schulz, J. (1989), "Truck Ethics Code Embraced by Shippers and Carriers," Traffic World, March 20, pp. 10-11.

²⁰Murphy, Paul and Thomas Corsi. (1987), "Current Status of Sales Force Management Practices Among LTL General Freight Carriers," Transportation Journal, (Fall), pp. 23-35.

²¹Saleh, Farouk, James Robeson and John Grabner. (1971), Creative Selling and the Systems Concept: The Motor Carrier Selection Process, Washington, D.C.: American Trucking Associations, Chapter 1.

²²Anonymous. (1988), "Quest for Quality," Distribution, August, p. 34.

²³Butler, (1987), op. cit. p. 21.

²⁴Anonymous. (1989), "Quality Assurance," Yellow in Motion, Spring, pp. 10-11.

²⁵Anonymous. (1989), "Customer Satisfaction: On Target," Yellow in Motion, Fall, p. 9.