

**DRIVER JOB SATISFACTION, TURNOVER AND JOB
PERFORMANCE: A CONCEPTUAL FRAMEWORK
AND EMPIRICAL EVIDENCE**

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DRIVER JOB SATISFACTION, TURNOVER AND JOB PERFORMANCE: A CONCEPTUAL FRAMEWORK AND EMPIRICAL EVIDENCE

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INTRODUCTION

The important role of truck transport to the U.S. economy, both as an artery of commerce and as a contribution to economic activity by itself, is indisputable. Within the truck sector of the freight transportation industry, the truckload carrier is the most significant and dominant carrier type. They account for nearly a third of the tonnage and ton-miles. ¹ Building material, retail goods, paper products, petroleum products, steel, machinery, and much more are transported by truckload carriers. Truckload operations are usually irregular-route in nature; they are characterized by a tractor and trailer moving between different destinations providing service to a multitude of shippers and receivers. Trips range from short to long and may require the driver to be away for extended periods.

Truckload carriers depend on two types of drivers to move freight: company drivers and independent contractors. This paper focuses on company drivers. Although owner-operators supply a significant portion of the truckload capacity, their issues are somewhat different and have been addressed in a separate study. ²

Truckload carrier management has exhibited a great deal of interest in driver retention in the past few years because of extremely high turnover rates. Driver turnover

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rates vary among companies, but rates of 70 to 100 percent are not uncommon and can be significantly higher. This predicament presents unusual and costly problems for the truckload industry.

For firms relying on company drivers for all or part of their production capacity, it is important to create the best possible working environment. This results in a competitive advantage for the company. A positive relationship between a carrier and its drivers will result in reduced costs, improved customer satisfaction, and potential for business growth. Costs are lowered through reduced turnover and absenteeism (which are directly related to job satisfaction).³ Turnover increases costs through reduced performance, increased accident rates, and higher insurance costs. Customer satisfaction, a major factor in retaining business, is tied directly to employee job satisfaction. Maximum customer satisfaction can only be achieved with satisfied employees.⁴ These two factors (reduced costs and improved customer satisfaction) should motivate trucking firms to create positive and satisfying relationships between themselves and drivers.

In summary, trucking firms relying on company drivers to any extent will not achieve an advantage in a highly competitive industry if they do not understand their employees. But understanding them is only the first step in creating that competitive advantage. This understanding must be carried into a program of earnest partnership in which both the driver and trucking firm benefit. The study, which this paper is based on, provides information to encourage that first step—understanding the driver's concerns, needs, and wants.⁵

CONCEPTUAL FRAMEWORK

The purpose of this paper is twofold: (1) to develop a conceptual framework which provides a pragmatic justification for being concerned about job satisfaction from a

business perspective; and, (2) present some empirical evidence resulting from a national study of drivers conducted at the Upper Great Plains Transportation Institute. The reason for the first purpose should be quite obvious. Jobs are created by business. Business organizations are profit-oriented, therefore, why would business be interested in job satisfaction unless it was somehow related to the viability of the firm. The second purpose of the paper is fundamentally connected to successfully making a connection between job satisfaction and the viability of the firm. It is quite obvious that if that connection does not exist empirical evidence regarding job satisfaction is quite useless from a business perspective.

Two fundamental pragmatic questions must then be asked before proceeding with this approach. The first is "what is the relationship between job satisfaction and job performance?"

It would seem intuitive, or at least based on personal experience, that there is a positive relationship between the two. Thus, one would expect to experience such things as improved customer relations, better safety and on-time delivery performance, and a more positive attitude toward cost containment in an environment in which job satisfaction is increased.

The second fundamental question that must be asked is, "what is the relationship between job satisfaction and driver retention turnover?" Again, it would almost seem intuitive that a positive relationship exists without getting into the issue of what constitutes job satisfaction. Job satisfaction is a complex issue which will be briefly addressed in this paper.

This paper assumes that a positive relationship exists between job satisfaction and both job performance and retention. The literature the authors have reviewed does not

suggest anything to the contrary, although debate certainly does exist about the strength of the relationship. Even though the strength of the relationship is debatable it may be more a function of appropriately defining what constitutes job satisfaction than a fundamental concern of the innate existence of such a relationship. Thus, if one accurately defines what job satisfaction is and then implements human resource strategies based on that definition, a strong relationship between retention and performance and job satisfaction should exist.

There is one more very fundamental reason for studying job satisfaction as a business strategy to improve one's competitive position in the trucking industry; that is the atomistic nature and the resulting competitive environment of the industry. The trucking industry is characterized as a fragmented industry which is defined as "...an industry in which no firm has a significant market share and can strongly influence the industry outcome." Usually fragmented industries are populated by a large number of small and medium-sized companies, many of them privately held. There is no single precise quantitative definition of a fragmented industry, and such a definition is probably unnecessary for purposes of discussing the strategic issues in this important environment. The essential notion that makes these industries a unique environment in which to compete is the absence of market leaders with the power to shape industry events."⁶ This definition seems to aptly apply to the truckload carrier industry. The four largest carriers—Schneider, Landstar, Hunt and Werner—account for probably less than eight percent in a \$44 billion market.⁷ Furthermore, there are more than 30,000 carriers registered with the ICC and USDOT with a majority of them being truckload carriers.

The competitive environment of the truckload industry is the second factor supporting the adoption of an enlightened human resource management strategy by the industry.

This is supported using Porter's five factor model of competition as a framework for analysis.⁸ (Figure 1) The five factors seem to adequately explain the extreme competitiveness of the industry. First and foremost is the intense rivalry among existing firms. It is common knowledge that truckload carriers are aggressive price and service competitors. Bargaining power of suppliers would not appear to have a tremendous influence on the competitiveness of the industry, however, bargaining power of buyers is substantial in the truckload industry. Large shippers have significant leverage over suppliers in which intense rivalry exists. Also entry is relatively easy and substitutes, such as container traffic, increases the competitive nature of the industry. Because of these factors the industry is extremely competitive and it is difficult to conceive that the industry will overcome this fragmentation any time soon in the future.

Factors of Competition

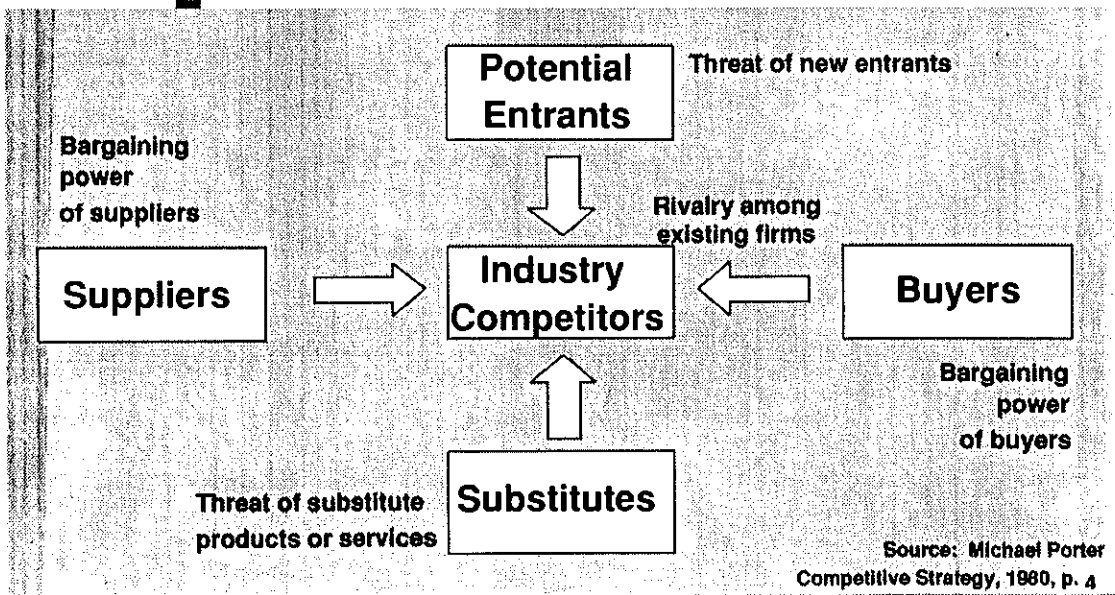


FIGURE 1 - Porter's Five-Factor Model of Industry Competition

Many firms have accepted this structure and have developed strategies to cope with this fragmentation and the resulting competitiveness of the industry. Since consolidation is not likely to occur at a very rapid rate and even if it does, the industry could remain essentially as competitive as it currently is because of other factors coping seems to be the only alternative. Firms have coped in various ways, ranging from becoming a niche carrier to operating a bare bones operation (Figure 2).⁹ One of the problems with these coping strategies is that they can be easily mimicked. A nontraditional method of creating a competitive advantage in such a fragmented industry would be to develop a human capital strategy based on job satisfaction. Since the resources for operating a truckload carrier are equally available to everyone in the business, it is difficult to differentiate a firm through the application of resources such as tractors, trailers, etc. However, a human

Fragmented Industry Strategies

- ▲ **Overcoming fragmentation**
 - Consolidation
- ▲ **Coping with fragmentation**
 - Increase value added
 - Specialization by service type or segment
 - Specialization by customer type
 - Specialization by type of order
 - Focused geographic area
 - Bare bones / no frills operation

Source: Michael Porter

FIGURE 2 - Methods for Coping with Fragmentation

capital strategy which focuses on motivating and developing the firm's work force has two advantages. First, human capital is about the only way to differentiate one's firm long term from another, and second, since the task is challenging and complex it will be difficult for other firms to replicate.

Schlesinger and Heskitt have developed a "Service-Profit Chain" model which revolves around a human resource strategy based on job satisfaction.¹⁰ They argue that employee retention, external service quality, and customer satisfaction are all related and rooted in employee job satisfaction (Figure 3). They emphasize front line workers in this process. Their proposition is that front line workers create extraordinary customer satisfaction by providing extraordinary levels of service to customers. That level of service, they maintain, cannot be provided in an environment of high turnover, but will be provided by

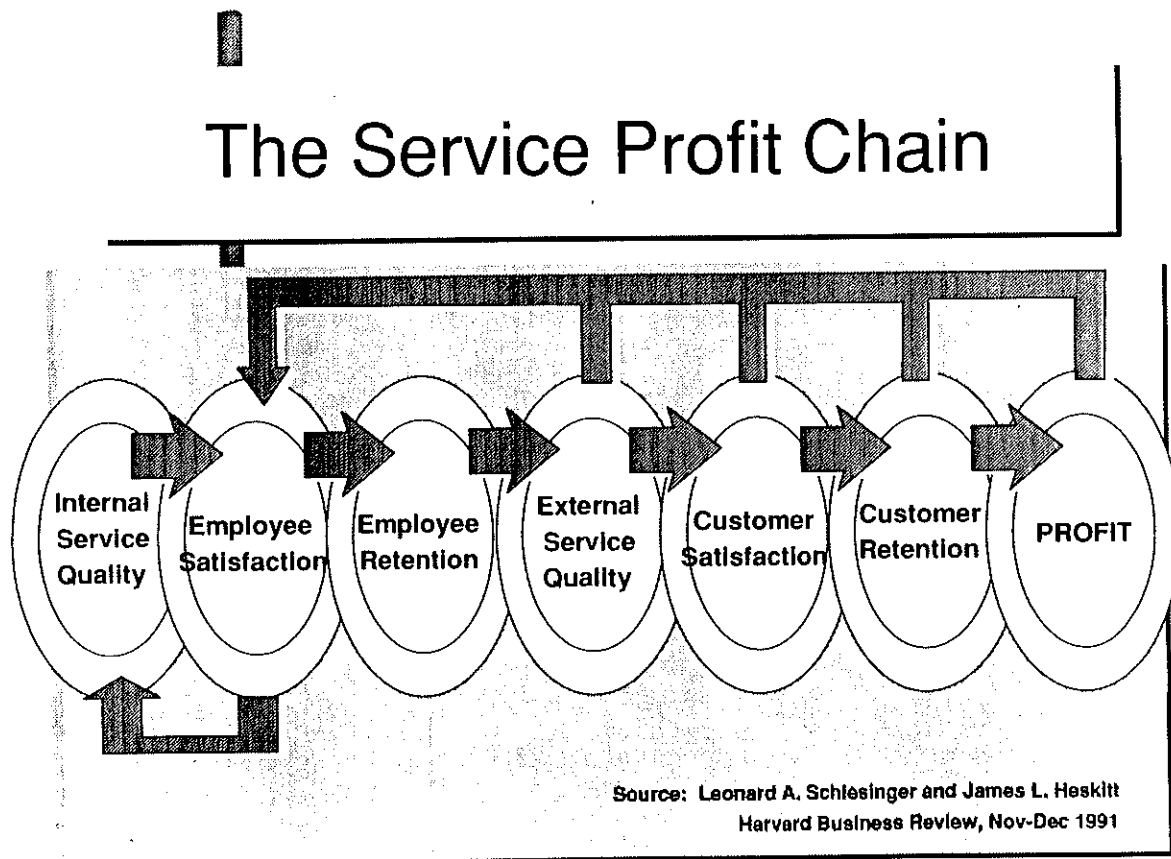


FIGURE 3 - The Service Profit Chain

employees who experience a great deal of job satisfaction, which results in retention. They further argue that all these results increase profits.

Theory Of Job Satisfaction

The term "job satisfaction" has a different meaning for different people. Locke defined job satisfaction as "a pleasurable or positive emotional state, resulting from the appraisal of one's job or job experience."¹¹ Vroom described it as "affective orientations on the part of individuals towards work roles which they are presently occupying."¹² In attempting to describe job satisfaction, "...the distinction between being 'satisfied with' and 'deriving satisfaction from' one's job must be kept in mind."¹³ A driver who is "satisfied with" his job will put forth an acceptable level of effort. However, a driver who "derives satisfaction from" his job will put forth extra, discretionary effort. The importance of this discretionary effort is related by Yankelovich: "Our productivity as a nation, in cost-cutting and competition, depends on how well we mobilize our discretionary effort."¹⁴

Theories of job satisfaction, developed this century, as a response to new organizational structures, resulted from the industrial revolution. Job satisfaction describes how people feel about their work, which affects their behavior. This study uses Herzberg's "Two-Factor Theory of Job Satisfaction." This theory is based on Maslow's "Hierarchy of Human Needs" and is analogous to it in several respects. Therefore, a short treatment of Maslow's hierarchy will be useful in understanding job satisfaction.^{15,16}

Maslow's Hierarchy of Human Needs

Maslow theorized five levels of human needs (see Figure 4). They are:

1. physiological needs,
2. safety needs,

3. belongingness and love needs,
4. esteem needs, and
5. a need for self-actualization.

The lower levels of the hierarchy are more physiologically based while the upper levels tend to emphasize psychological needs. Thus, man needs to first survive as an animal and then grow as a human being.

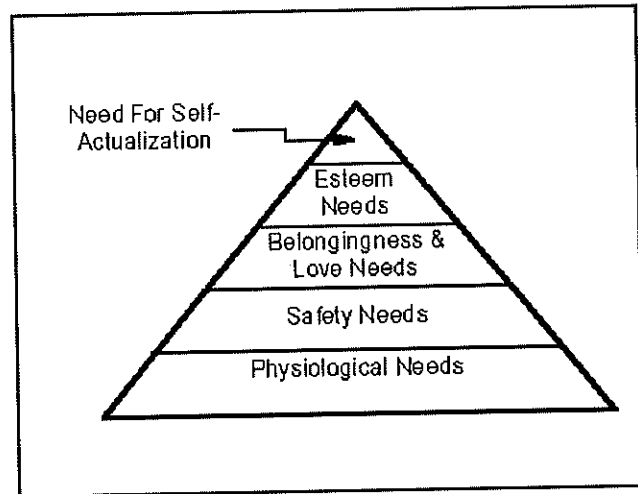


Figure 4. Maslow's Hierarchy of Human Needs.

Physiological Needs

These needs include food, water, shelter, and clothing needs. If these essential needs are not met, the human animal cannot survive. This does not include the simple appetite, thirst, or chill that is felt every day. This is hunger at the point of life or death. When this need is strong enough, all other levels of the hierarchy will be risked or forsaken to fulfill the primary level of needs.

Physiological needs in a modern economy manifest themselves as a job that provides income. The state provides a minimum income for those unable to meet their bare physiological needs, in part, to ensure the safety of other people. When these needs are at risk, so is society. Without sufficient income to meet the physiological needs of the individual and the family, it is difficult for people to concern themselves with higher needs.

Safety Needs

One tier up from physiological needs are safety needs. This is the need to be free of danger, risk, or injury. For example, a person verging on starvation might climb a cliff to get to food. However, if starvation was not imminent, that person would not risk the climb. They would look for food in a safer environment. This may put the physiological needs at risk (food might not be available elsewhere), but safety needs dominate when one's immediate physiological needs are met. In modern society, safety needs can be a factor of income. Health insurance and health care, housing in a safe neighborhood, life insurance, safe automobiles and trucks—all contribute to the individual's safety and are tied to income as direct payments or fringe benefits.

Belongingness and Love Needs

These are the needs to have contact with and be accepted by other people. This need is the gray area between the animalistic survival needs and humanistic psychological needs. If physiological and safety needs are satiated, this allows individuals to pursue fulfillment of belongingness and love needs. Conversely, until belongingness and love needs have been satiated, higher needs seem unimportant and unobtainable; lower needs distract attention from higher needs.

Esteem Needs

These needs include self-esteem and having the esteem of others. These needs concentrate on respect: self-respect and the respect of others. Maslow lists several aspects of these needs and how they can be satisfied.

These needs may be classified into two subsidiary sets. These are, first, the desire for strength, for achievement, for adequacy, for mastery and competence, for confidence in the face of the world, and for independence and freedom. Second, we have what we may call the desire for reputation or prestige (defining it as respect or esteem from other people), status, dominance, recognition, attention, importance, or appreciation.¹⁷

These needs are like all others; the need is most evident when it is lacking fulfillment. Lower needs may be jeopardized and higher needs may be unrecognized when a single tier of need dominates.

The Need for Self-Actualization

This need is the highest tier of human needs. It is purely a psychological growth need. It is the need to be self-fulfilled. Self-actualization is related to positive, humanistic ideals such as beauty, peace, justice, and creativity. If a person is the best possible driver, but their talents and interests lie in music, this need will not be met. Thus, the nature of the work is important in fulfilling this need. Thus, if the work is very rewarding to the individual and the individual has a sense of making a contribution through their work, some level of self (who I am) may be achieved. It is difficult to achieve this level of need; many people never recognize, much less satisfy, this need.

Herzberg's Two-Factor Theory of Job Satisfaction

Herzberg's theory is based on the hypothesis that humans have two separate and distinct needs: (1) those that arise from humans being animals opposed to pain, and (2) the needs of humans for psychological growth.^{18,19} Herzberg's theory is closely related to Maslow's hierarchy of needs.

The two-factor theory involves two separate, bipolar parallel vectors: one for job satisfaction and one for job dissatisfaction (see Figure 5). The worst case is for a worker to have no job satisfaction and a great deal of job dissatisfaction (C, A). Alternatively, the best case would be a worker with no job dissatisfaction and much job satisfaction (B, D). However, most people will fall somewhere between the endpoints on both vectors (E, F). This causes them to weigh dissatisfaction and satisfaction with their job. Overall job attitude depends on which vector outweighs the other.

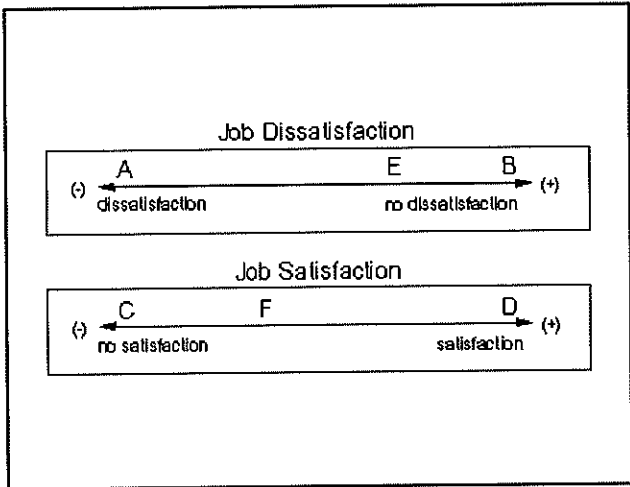


Figure 5. Herzberg's Two-Factor Theory of Job Satisfaction.

A note must be made about the difference between "being satisfied with" and "deriving satisfaction from" a job. "Being satisfied with" one's job usually relates to the environment of the job or the environment in which one works. This corresponds to the job dissatisfaction vector in Figure 5. "Deriving satisfaction from" a job relates to psychological well-being and personal growth and is represented by the job satisfaction vector. Theories of job satisfaction place emphasis on both ideas.

Hygiene Factors (Dissatisfiers or Aggravators)

Hygiene factors define the conditions necessary for man to avoid pain in the work environment. "Hygiene" comes from the medical use of the word to mean "preventative and environmental." Hygiene factors, as they relate to job satisfaction, include:

- 1) company policy and administration,
- 2) supervision,
- 3) salary,
- 4) interpersonal relations,
- 5) working conditions.

These factors produce short-term changes in job satisfaction. They describe the circumstances under which people perform their work. Hygiene factors "led to job dissatisfaction because of a need to *avoid* unpleasantness."²⁰ While these factors may cause job *dissatisfaction*, they do not contribute to job *satisfaction*. A driver is likely to be dissatisfied with a low salary. An adequate salary, however, does not contribute to job satisfaction. Safety is another hygiene factor. A driver is likely to be dissatisfied with an unsafe job. The presence of safety, however, does not contribute to job satisfaction. These two factors, salary and safety, fill the first two levels of Maslow's hierarchy and thus fulfill man's physiological needs in work.

Motivating Factors (Satisfiers or Motivators)

Motivators contribute to fulfillment of higher, psychological growth levels of Maslow's hierarchy. These factors include:

- 1) achievement,
- 2) recognition,
- 3) the work itself,
- 4) responsibility,
- 5) advancement.

Motivators produce long-term changes in job satisfaction (longer than hygiene factors). Work related events involving these factors "led to job satisfaction because of a need for growth or self-actualization." Motivators also fulfill esteem needs. They characterize the relationship a person has with what they do. As an example, recognition contributes to driver satisfaction. Lack of recognition, however, does not contribute to job dissatisfaction. Recognition can only affect job satisfaction. The same is true of achievement, advancement, responsibility, and the work itself.

Another way to view the theory is to think of satisfaction and dissatisfaction in terms of a good attitude and a poor attitude, respectively, regarding the job. A good attitude is achieved by applying the motivators (see Figure 6). Setting up achievement, recognition

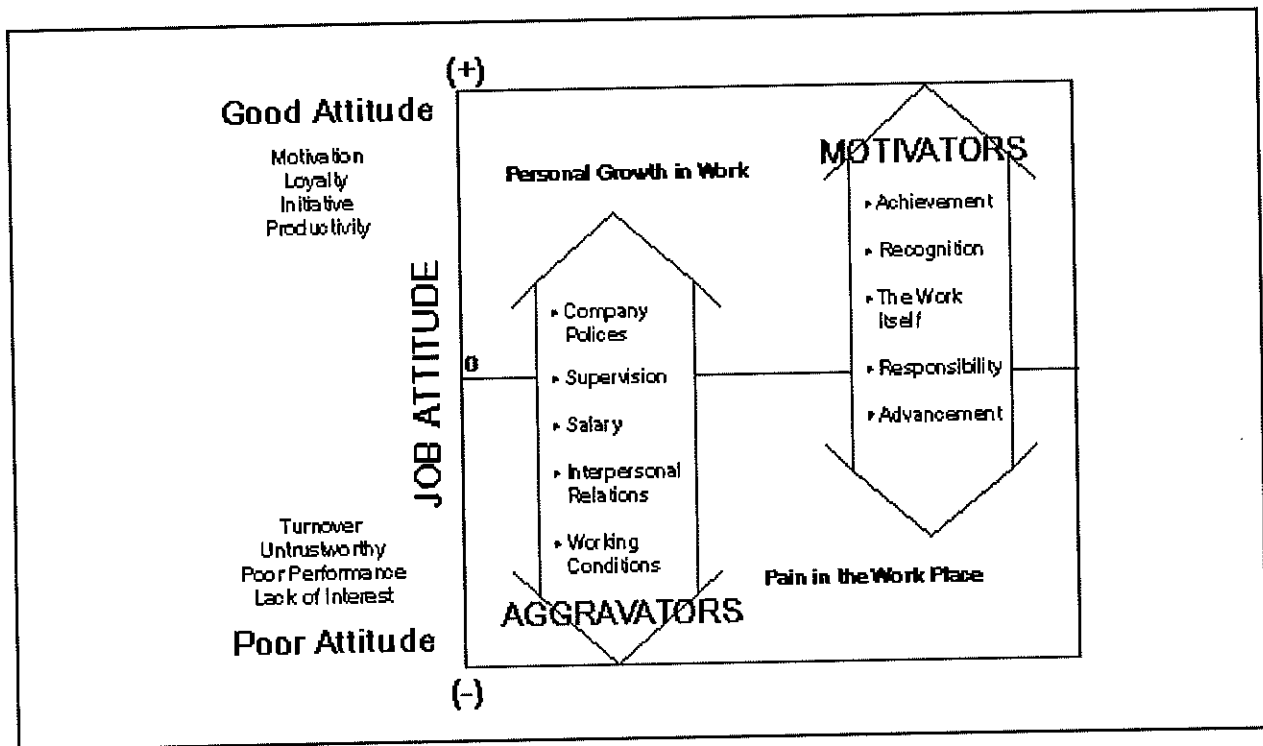


Figure 6. Attributes of Job Satisfaction.

for achievement, responsibility, and advancement when defining the job results in motivation, initiative, loyalty, and productivity. Applying these factors results in personal

growth. The absence of motivators will not result in great job dissatisfaction, but will prevent individuals from deriving satisfaction from their job and having a positive job attitude.

The aggravators, on the other hand, must meet minimum criteria to prevent job dissatisfaction and a negative job attitude. A certain level of physiological, safety, and belonging needs must be achieved to eliminate pain in the work place. However, having achieved that level, more will not result in a significantly positive job attitude. Satiation of the aggravators simply allows motivators to be more effectively applied. If the level of aggravators is unacceptable, a poor job attitude will develop, resulting in turnover, untrustworthiness, poor performance, and lack of interest. These attributes are not desired in a driver. The attributes resulting from a positive job attitude are exactly what is expected of a driver who represents the firm.

EMPIRICAL EVIDENCE

Research, Design, Sampling Methods, and Questionnaire

The sample for the study this paper is based on, consisted of company drivers and owner-operators who worked for/or contracted with thirteen truckload carriers located throughout the United States (see Figure 7). All companies surveyed were truckload carriers; however, they included a range of types including dry van, liquid bulk, refrigerated, and flatbed. The carriers varied significantly in size, ranging from several dozen to several thousand drivers. Although the companies surveyed used both company drivers and owner-operators, company drivers were the dominant employees in each company. Furthermore, **ONLY COMPANY DRIVERS WERE USED FOR THE ANALYSIS IN THIS PAPER.**

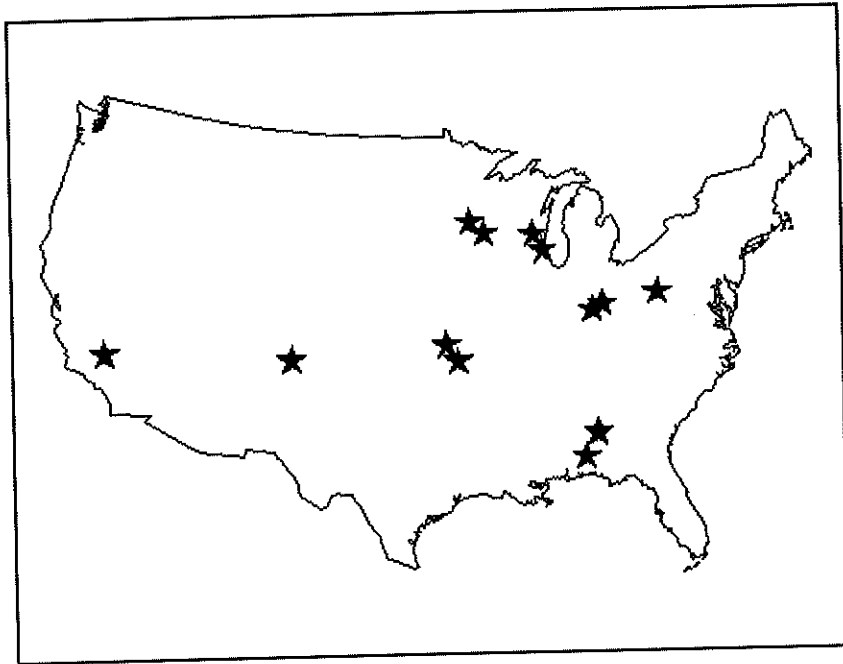


Figure 7. Location of Firms in the Analysis.

The firms were selected because they were willing to participate and help fund the study. At the time of the survey, there was a lack of good sources of mailing lists of drivers. It was virtually impossible to develop a national random sample of firms or drivers in the United States. Thus,

the reliance on a representative sample. The sample used in this survey can only be said to representative of the truckload industry. It is believed that, for this segment, it does so accurately.

The survey instrument was modified from a previous study of drivers of North Dakota trucking firms. The instrument consisted of a twenty-page, sixty-eight question booklet with forced and open-ended questions.

To form the study sample, each firm provided either a random sample or a complete list of drivers, depending on the size of the firm. The initial mailing was sent to 11,390 drivers and included the survey, a cover letter, and a business-reply envelope. Within two weeks, a postcard reminder was sent. A second survey was mailed to drivers who did not respond to the first mailing. A third mailing was sent to those who did not respond to the first or second. A total of 3,910 drivers returned usable surveys for a response rate of 34.3 percent.

Results of the drivers' surveys were weighted to give equal importance to responses from each firm. This eliminated bias by specific firms due to the disparity of sizes and number of responses.

DEMOGRAPHICS AND DRIVER CHARACTERISTICS

Although the sample of drivers included company drivers and owner-operators, these results are based exclusively on company drivers. This was done for two reasons. First, a similar study focusing strictly on owner-operators was also conducted at the Upper Great Plains Transportation Institute by the same authors. Secondly, and more importantly, the results for company drivers are more homogeneous than those for combined company drivers and independent contractors. Thus, the results of company drivers should have greater predictive power and therefore be more useful to management of trucking firms.

Company drivers are dominated by white males. Ninety-one percent of the drivers were **MALE** and 90.0 percent were **WHITE**. This is in contrast to the population of the United States that is 48.1 percent male²¹ and 84.1 percent white.²² Furthermore, only 7.0 percent of the drivers identified themselves as **BLACK** in contrast to 12.4 percent of the population in the United States.²³ It appears that truckload companies have not recruited these people and/or there is a lack of interested and qualified females and blacks for the driving profession. These groups provide a pool of potential drivers not significantly drawn upon yet.

The average age of all drivers was 38 years and ranged from 20-68 years. Seventeen percent were **SINGLE/WIDOWED**, 14 percent were **SEPARATED/DIVORCED**, and 69 percent were **MARRIED/LIVING TOGETHER**. Fifty percent of drivers had children under 18, with an average of 1.2 per driver.

This group of drivers was better educated than the average citizen. Only 8.5 percent of the drivers had a **LESS THAN HIGH SCHOOL** education compared with 22.5 percent for the adult population over 18 in the United States.²⁴ Furthermore, roughly a third, 36 percent, had a high **SCHOOL DIPLOMA**, 18.5 percent had received **TECHNICAL SCHOOL** training, 28 percent had attended **SOME COLLEGE**, and 7 percent received a **COLLEGE DEGREE**. A small number, 1.5 percent, had completed **GRADUATE WORK**.

The drivers surveyed had driven professionally an average of seven years; they had worked for their present company a little more than two years. These two statistics indicate the extent of driver turnover in the industry. Furthermore, drivers had worked for an average of three companies during their career. These statistics support the hypothesis that there are many new drivers with not much experience and that they tend to move between companies or exit the industry. Furthermore, many of the drivers, 31.4 percent, did not think they would be working for their present firm within one year (see Table I). An additional third thought they would leave the firm they were working for in 2-5 years.

Table I. HOW LONG DRIVERS EXPECT TO REMAIN WITH THEIR COMPANY

(n=2,991)	Percent
1 year or less	31.4
2 to 5 years	34.4
6 to 10 years	10.0
Over 10 years	24.2

A significant majority of drivers were non-union, 90.0 percent, and 50.8 percent of them earned between \$20,000 and \$30,000 per year (see Figure 8). Nineteen percent earned less than \$20,000 per year and 30 percent earned more than \$30,000. Most drivers drove solo, as opposed to teams, most of the time (76 percent versus 24 percent, respectively) and they were

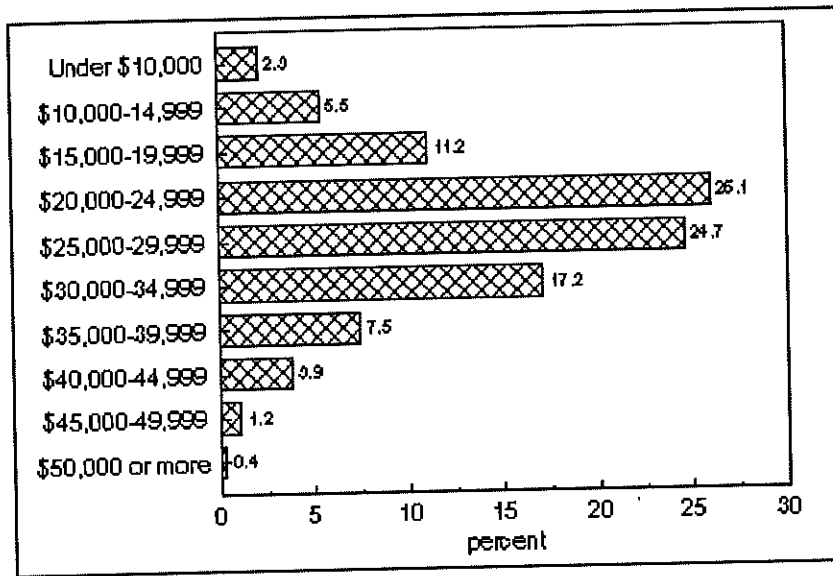


Figure 8. Gross Annual Income Received From Driving.

predominantly paid by the mile (89.4 percent). The average haul was reported as 1,036 miles long and average number of miles driven in a year was 108,472. Finally, most drivers (85.4 percent) said that an individual tractor was ALWAYS (56.8 percent)

or USUALLY (28.6 percent) assigned to them.

The demographics and general characteristics of the respondents are consistent with what the authors have observed in the general population of drivers. This observation gives credibility to the belief that the study represents the population of truckload drivers even though a random sample was not drawn.

Attitude Toward Various Aspects of Job

Truckload company drivers were positive about "Driving The Truck" and the "Independent Lifestyle." They liked these most of twenty-one different aspects of the business (see Table II). Ninety-one percent of the drivers REALLY LIKED or LIKED "Driving The Truck" and nearly the same was true, 83 percent, for "Independent Lifestyle." This is extremely important to job attitude and motivation. They are related to responsibility and the work itself, and both are motivators. A driver could easily see the "Independent Lifestyle" as responsibility since the independence gained must be answered with

Table II. ATTITUDES OF DRIVERS TOWARD VARIOUS ASPECTS OF THE JOB

Q-1. WHICH OF THE FOLLOWING DO YOU LIKE OR DISLIKE ABOUT YOUR JOB AS A PROFESSIONAL DRIVER?							
Item	Percentages						
	Posi- tives	Really Like	Like	Neutral	Dislike	Really Dislike	Dislike + Really Dislike
1. Driving the truck	91.1	54.9	36.2	7.6	1.1	0.2	1.3
2. Independent lifestyle	83.1	43.0	40.1	13.7	2.6	0.5	3.1
3. Meeting safety requirements	76.8	30.8	46.0	21.3	1.6	0.4	2.0
4. Travelling out-of-town	67.2	25.8	41.4	22.0	7.8	3.0	10.8
5. Drug testing	66.5	40.8	25.7	22.9	7.1	3.5	10.6
6. Your present company	66.2	26.9	39.3	17.6	10.5	5.8	16.3
7. Visiting with other drivers	65.6	18.9	46.7	29.7	4.3	0.4	4.7
8. Tractor/trailer maintenance	64.3	24.6	39.7	25.6	7.8	2.2	10.0
9. Relations with shippers/customers	61.0	16.8	44.2	32.0	5.3	1.7	7.0
10. Recommending new customers	51.3	13.2	38.1	46.2	1.9	0.6	2.5
11. Controlling costs of operation	39.8	6.8	33.0	52.7	5.7	1.8	7.5
12. Loading/unloading palletized freight	35.7	12.5	23.2	29.4	13.3	21.6	34.9
13. Company management	35.1	6.7	28.4	38.2	17.5	9.2	26.7
14. Commercial drivers license	33.4	11.9	21.5	26.1	17.5	23.1	40.6
15. Vehicle inspections by officials	32.8	8.6	24.2	35.0	22.9	9.3	32.2
16. Satellite communications	32.6	16.0	16.6	44.8	12.7	9.8	22.5
17. Dealing with highway patrol	20.6	2.5	18.1	51.6	17.9	9.9	27.8
18. Paperwork	20.2	1.4	18.8	49.0	23.7	7.1	30.8
19. Company speed limits	18.7	4.6	14.1	35.9	28.8	16.7	45.5
20. Slip seat operations	8.8	1.5	7.3	19.3	23.4	48.4	71.8
21. Hand loading/unloading freight	7.7	0.7	7.0	19.9	24.9	47.5	72.4

commitment if they want their job. Driving the truck is the main element of the work itself. Since both result in a positive job attitude, a significant base of motivation already exists among drivers.

Drivers also liked "Meeting Safety Requirements" (76.8 percent); only 2.0 percent **DISLIKED** or **REALLY DISLIKED** this. "Traveling Out-Of-Town," "Drug Testing," "Your Present Company," "Visiting With Other Drivers," "Tractor-Trailer Maintenance," "Relationships With Shippers/Customers," and "Recommending New Customers" were all aspects of the job that were viewed positively (by 50 percent or more). Most of these would be classified as the work itself and, therefore, would contribute to job satisfaction and motivation. It is significant to note that 16.3 percent or less of the drivers **DISLIKED** or **REALLY DISLIKED** any of these aspects. The distribution is skewed heavily to the positive or neutral area for these categories, indicating a universal perception of these elements. It is also interesting that only 3.5 percent of company drivers **REALLY DISLIKED** drug testing. This could suggest they feel drug testing will improve driver professionalism. Of further interest, only 5.8 percent of drivers **REALLY DISLIKED** their present company. Thus high turnover rates would not appear so much related to what a company is doing, but may be more related to industry wide characteristics or possibly what a company is not doing.

Attitudes toward the remaining eleven aspects of the job range from heavily neutral, evenly split, to strong dislike. "Company Speed Limits" and "Hand Loading/Unloading Freight" were among the most disliked aspects of the job. Both are considered working conditions. As such they would not contribute to job satisfaction, but would definitely contribute to job dissatisfaction. If prevalent in the work place and severe enough, issues

like these can literally force people out of their job. These two particular issues are complicated by the fact that they adversely affect another factor, salary, because of the piecework method of payment prevalent in the industry.²⁵

Company speed limits and time spent handling freight hinder a driver's income because most drivers are paid per mile. Thus, these two policies could have a double impact on job dissatisfaction. Another area of intense dislike was "Slip Seat Operations;" 71.8 percent disliked this aspect of the job. This practice may be in direct conflict with the independent lifestyle drivers prize so much. The "Commercial Driver's License" was also viewed negatively with 40.6 percent saying that they **DISLIKED** or **REALLY DISLIKED** this. This may be more an indication of nervous anticipation than actual dislike, since the survey was conducted in the summer of 1990, before many drivers had taken their first CDL test.

Areas that were heavily **NEUTRAL** included "Controlling Costs of Operation," 52.7 percent; "Dealing With Highway Patrol," 51.6 percent; and "Paperwork," 49.0 percent. This suggests a certain ambivalence toward these aspects of the job. They are probably viewed as "just-part-of-the-job." "Satellite Communications" was viewed indifferently by 44.8 percent of the drivers. However, this may be learned behavior. Those drivers who had experience using satellites were much more positive about them than those not exposed to this technology. Satellite communications usually result in more efficient use of a driver's time and increases productivity. The net result of this is less stress, increased discretionary time, increased income, or a combination of these.

Although there are some working conditions that are viewed quite negatively, they are outweighed by neutral to positive attitudes toward other working conditions. Furthermore, there is a very positive attitude toward motivators (such as driving the

truck, the job itself, and independent lifestyle) which could be equated to responsibility. In reviewing Table II it is difficult to find a single element or even a combination of elements that would cause the high turnover rates experienced.

AGGRAVATORS

Time Away From Home

Time away from home has been a major point of discussion in the problem of turnover and retention. Many companies and managers believe if drivers could be brought home more often, turnover problems would be resolved and better relations with drivers would prevail. This attitude is incompatible with job satisfaction theory. First, job attitude is not a single-issue condition; it is a very complex set of interrelated issues. Second, time away from home is a working condition. Therefore, it must be at some acceptable level, but it will not provide long-term satisfaction.

To find out drivers' attitudes, they were asked "What Is Your Opinion Of Being Asked To Stay Out For Various Periods Of Time?" The period that drivers find acceptable to be away from home varies with the individual. Seventy-two percent of them thought it was okay to be "Gone 1 Weekend" (see Table III). However, acceptability dropped significantly at two weekends and dropped dramatically again at three weekends. It is interesting that the number of drivers finding it **ACCEPTABLE** or **VERY ACCEPTABLE** to be away from home for a given period drops roughly in half at each successive weekend on the road: 72.4 percent for one weekend, 41.9 percent for two weekends, 22.0 percent for three weekends, and 13.1 percent for a month or more. Having different preference functions for staying out suggests that drivers may find companies who can bring them home on a frequency consistent with their preference. Thus, drivers wanting to be home more often would look for companies whose operational constraints and management philosophies achieve their

Table III. ACCEPTABILITY OF BEING AWAY FROM HOME

Q-2. WHAT IS YOUR OPINION ON BEING ASKED TO STAY OUT FOR:						
Item	Percentages					
	Acceptable + Very Acceptable	Very Acceptable	Acceptable	Unacceptable	Very Unacceptable	Unacceptable + Very Unacceptable
1. Days only	89.4	52.4	37.0	7.0	3.6	10.6
2. Gone less than a week	85.3	35.9	49.4	10.7	4.0	14.7
3. Gone 1 weekend	72.4	14.3	58.1	17.9	9.7	27.6
4. Gone 2 weekends	41.9	6.7	35.2	27.9	30.2	58.1
5. Gone 3 weekends	22.0	3.3	18.7	22.4	55.6	78.0
6. Gone a month or more	13.1	4.5	8.6	11.8	75.2	87.0

home time preferences. This may also be learned behavior. Individuals who get home more often may learn to prefer that frequency; drivers who get home less often may adjust to that lifestyle. However, one must remember that drivers do exhibit different preferences for home time. This lends itself to a system that rewards people for staying out longer. For example, once a driver has been on the road 14 consecutive days their pay rate increases two cents per mile. Such a system identifies those drivers preferring to stay out longer. It also imposes discipline on the firm to get the trucker home, since it would cost the firm more to keep them out longer.

Other Working Conditions

Being a truck driver is widely accepted as a difficult job. It is demanding, performed in less than ideal working conditions, and requires physical and mental skills. Numerous problems can be encountered while on the road or dealing with customers (or management) that can result in a negative job attitude. One section of the questionnaire

addressed working conditions. Working conditions, as was pointed out earlier, do not influence motivation or job satisfaction. However, they can result in job dissatisfaction and become an aggravator resulting in turnover and employees exiting the industry. Poor working conditions can literally drive a person out of the truck forever.

"Road Pavement Conditions," and "Variations Between States' Laws," were overwhelmingly cited as problem areas (see Table 4.) Over 72.9 percent of drivers considered these a **SOME PROBLEM** or **BIG PROBLEM**. Further inspection of the data reveals that over 44 percent thought these were a **BIG PROBLEM**. There are two interesting aspects of this finding; (1) both are public policy issues, and (2) both are aggravators that do not result in positive job attitude but can create negative job attitude. The importance of these two factors should not be understated. Although mitigation, or even total resolution, of these issues will not result in a significant contribution to positive job attitude, they can result in a very negative job attitude if conditions are bad enough. Therefore, management must strive to deal with these issues. However, this is difficult since these issues are governed by public policy. There is a lack of direct control. Management must therefore work through industry organizations and government to influence these factors.

"Relationship With Supervisor," "Boredom On The Road," "Loneliness," and "Staying On Schedule" were not considered major issues by most respondents. Approximately 70 percent of drivers said that these factors were only a **SMALL PROBLEM** or **NO PROBLEM** at all, along with "Health Hazards" (67.6 percent), "Irregular Hours" (63.5 percent) "Routine Communications" (60.9 percent), and "Absence From Home" (59.0 percent). Since half the drivers say that "Absence From Home" is **NO PROBLEM** (31.4 percent) or a **SMALL PROBLEM** (27.6 percent), one would not expect a tremendous reduction in turnover if the

Table IV. WORKING CONDITION PROBLEMS OF DRIVERS

Q-5. WHAT IS YOUR EXPERIENCE WITH THE FOLLOWING ITEMS?						
Item	Percentages					
	Small Problem + No Problem	No Problem	Small Problem	Some Problem	Big Problem	Some Problem + Big Problem
1. Relationship with supervisor	79.9	58.4	21.5	12.5	7.6	20.1
2. Boredom on the road	72.9	36.2	36.7	18.4	8.7	27.1
3. Loneliness	70.5	38.2	32.3	17.0	12.5	29.5
4. Staying on schedule	69.4	39.8	29.6	22.1	8.6	30.7
5. Health hazards	67.6	39.1	28.5	22.5	9.9	32.4
6. Irregular hours	63.5	38.6	24.9	19.7	16.8	36.5
7. Routine communications (dispatch)	60.9	36.4	24.5	22.6	16.5	39.1
8. Absence from home	59.0	31.4	27.6	23.9	17.2	41.1
9. Company assistance after hours	57.4	31.1	26.3	24.4	18.3	42.7
10. Opportunities or facilities to wash up	56.7	29.8	26.9	25.2	18.1	43.3
11. Restricted highway access for trucks	52.3	16.5	35.8	34.5	13.2	47.7
12. Lack of exercise	52.1	26.9	25.2	24.8	23.1	47.9
13. Restricted local access for trucks	42.0	11.8	30.2	40.5	17.5	58.0
14. Variation between states' laws	27.0	10.8	16.2	28.5	44.4	72.9
15. Road pavement conditions	18.0	4.1	13.9	30.7	51.3	82.0

frequency of getting home is improved significantly. There are two reasons for this. First, it does not appear that absence from home is a bigger problem than other areas (only 17.2 percent said it was a **BIG PROBLEM**). Second, and more importantly, it is considered a working condition, which is an aggravator.

Therefore, it will likely result in moving job attitude from the negative end into the neutral area. However, it should be emphatically pointed out this **DOES NOT** mean this issue should be ignored. First, the aggravators (hygiene factors) collectively need to be acceptable or it will be difficult, or impossible, to invoke the motivational aspects of a job. Thus, for instance, if working conditions are horrible, it will be impossible to get people to react positively to responsibility, achievement, and recognition, which result in positive attitudes. Time away from home is one working condition the company has control over. This provides an opportunity for companies to improve working conditions. Second, ignoring the desire to get home to family and/or friends sends a signal to drivers that management is only concerned for the company and has little concern for the individual, their family, and their personal lives.

Drivers tended to be split concerning their perception of other aspects of the working environment. These areas included "Company Assistance After Hours," "Opportunities or Facilities to Wash Up," "Restricted Highway Access for Trucks" and "Lack of Exercise."

"Restricted Local Access for Trucks" was considered **SOME PROBLEM** for 40.5 percent of the respondents. Like variations in state laws and road pavement conditions, this aggravator is a public policy issue which management has only indirect control over. The trucking industry needs to do what it can to improve all these areas. This helps allow for more motivational elements of the job to be set up, resulting in a positive job attitude.

Importance of Equipment Items

One of the most important items related to the work environment for drivers is the tractor-trailer given the time the driver spends with it and in it. This is also true because it is the major piece of equipment required to be in the business of providing transportation service.

Part of the questionnaire was devoted to the importance of equipment related items. Respondents were asked about their choices regarding twenty different items. Almost all items, seventeen of twenty, were considered either **SOMEWHAT IMPORTANT** or **VERY IMPORTANT** by most drivers (see Table 5). "Good Cab Heater" was ranked the most important item; 99.6 percent said it was **SOMEWHAT IMPORTANT** or **VERY IMPORTANT**. Right behind was "Air Ride Seat" (98.9 percent). The unanimity of these items suggests that drivers may have experienced deficiencies with them. While one cannot determine the adequacy of either item, it may suggest that tractors are not known for good cab heaters (since it is assumed that most have them).

Since most items are ranked very high, it is important to note the order of items and how the **VERY IMPORTANT** selection was ranked. "Air Conditioning," "Power Steering," "Sliding Trailer Tandems," "Complete Gauge Set," and "Heated Mirrors" were ranked third through seventh as **VERY IMPORTANT**. "CB Radio," "Engine Brakes," "AM/FM/Cassette Stereo," "Sliding Fifth Wheel," and "Air Ride Suspension" were also ranked high, twelfth of twenty or better. Each of these items either helps the driver do a better job or provides meaningful comfort in the working environment. Some would argue that the "CB Radio" and "AM/FM/Cassette Stereo" do not provide physical comfort or allow for a better job. However, when one considers the role that such devices play in reducing boredom, accessing traffic and weather information, emergency communication, and coping with isolation, the importance of such equipment is easily understood. The ranking of these items suggests these individuals have a practical orientation toward their job. Not many people placed importance in items that don't provide great functional value such as a "Plush Interior," where only 12.6 percent of the drivers said it was **VERY IMPORTANT** to them or "Stand-Up Sleeper," "Double Bunk," and "Refrigerator," which

Table V. IMPORTANCE OF EQUIPMENT RELATED ITEMS

Q-8. HOW IMPORTANT ARE THE FOLLOWING EQUIPMENT-RELATED ITEMS TO YOUR JOB SATISFACTION?							
Item	Percentages						
	Somewhat + Very	Very	Somewhat	Neutral	Not	Not at All	Not + Not at All
1. Good cab heater	99.6	96.0	3.6	0.3	0.1	0.0	0.1
2. Air ride seat	98.9	94.2	4.7	1.0	0.0	0.1	0.1
3. Power steering	98.0	89.7	8.3	1.7	0.2	0.1	0.3
4. Air conditioning	97.0	90.9	6.1	2.5	0.1	0.4	0.5
5. AM/FM/cassette stereo	92.5	66.4	26.1	4.8	1.7	1.0	2.7
6. Heated mirrors	92.1	68.9	23.2	6.2	1.4	0.3	1.7
7. Complete gauge set	90.2	69.3	20.9	7.5	1.7	0.6	2.3
8. Interior storage space	87.3	49.2	38.1	10.0	1.3	1.4	2.7
9. CB radio	87.0	68.8	18.2	7.7	2.5	2.7	5.2
10. Engine brakes (Jake brake)	83.3	63.0	20.3	11.3	2.7	2.6	5.3
11. Sliding fifth wheel	83.0	59.8	23.2	14.3	1.3	1.4	2.7
12. Air ride suspension	81.5	59.8	21.7	15.9	1.6	1.0	2.6
13. Sliding trailer tandems	78.3	70.3	8.0	11.0	3.9	6.8	10.7
14. Bunk heater	72.5	48.8	23.7	11.9	8.2	7.4	15.6
15. Air ride passenger seat	56.2	27.5	28.7	22.8	9.8	11.2	21.0
16. Plush interior	52.8	12.6	40.2	35.2	8.9	3.1	12.0
17. Stand-up sleeper	52.1	22.6	29.5	31.8	8.9	7.1	16.0
18. Double bunk	47.4	26.5	20.9	23.7	14.4	14.5	28.9
19. Refrigerator	27.6	10.6	17.0	27.3	18.5	26.6	45.1
20. Automatic transmission	6.1	1.9	4.2	22.8	21.6	49.6	71.2

were all ranked from fifteenth to nineteenth. The "Automatic Transmission" was overwhelmingly viewed as unimportant with only 1.9 percent saying it was **VERY IMPORTANT**.

SUPERVISION

The results of the questions regarding drivers' opinion of their supervisor were also mixed. Drivers had some negative opinions of their supervisors in some respects and positive opinions in others. Specific areas where drivers thought their companies were doing a good job in their relations were in the competence of supervisors (presumably technical competence) expressing expectations, and knowing the job of the driver (see Table 6). These areas are more technical in orientation. Other areas where there was more emphasis in human relations and human resource management, drivers showed a much lower approval rating. This ranged from 31.2 percent of the drivers saying that the supervisor did not treat them with respect or dignity to an abysmal 57.5 percent of them feeling that their supervisor did not ask for drivers opinions.

There are two major points of interest resulting from this data. First, given the expressed desire for (1) being more involved with other areas of the business, (2) participatory management, (3) personal communication, and (4) recognition for achievement, it seems that companies have many areas they can improve to create a positive relationship between carriers and drivers. Examples such as "Is He/She Receptive To Suggestions" (43.6 percent negative), "Does He/She Ask For Drivers Opinions" (57.5 percent negative), "Does He/She Take Time To Listen To You" (35.7 percent negative), and "Does Your Supervisor Give You Credit Or Thank You For Doing A Good Job" (40.4 percent negative), all suggest a lack of attention to some basic human resource management tasks.

The second, and maybe more important point is the question of how much training in human resource management managers have undergone. A simple average of 62.6 percent of respondents felt their company was doing a good job in all categories. Is this an

Table VI. DRIVERS' OPINIONS OF THEIR SUPERVISOR

Q-23. PLEASE DESCRIBE YOUR SUPERVISOR:						
Item	Percentages					
	Somewhat + Very Much	Very Much	Somewhat	Slightly	Not at All	Slightly + Not at All
1. Are his/her expectations clear to you	76.4	42.3	34.1	17.0	6.7	23.7
2. Is he/she competent	73.7	34.7	39.0	16.4	10.0	26.4
3. Is he/she familiar with your job	69.6	36.0	33.6	17.1	13.3	30.4
4. Does he/she treat you with respect and dignity	68.8	34.0	34.8	17.4	13.8	31.2
5. Do you like to work with your supervisor	68.5	31.5	37.0	18.4	13.2	31.6
6. Is he/she supportive of you and your work	67.2	35.2	32.0	21.5	11.4	32.9
7. Is he/she trustworthy	65.2	31.6	33.6	17.2	17.6	34.8
8. Would your supervisor be upset if you took an unresolved problem to upper management	64.7	33.9	30.8	19.4	16.0	35.4
9. Does he/she take the time to listen to you	64.2	33.5	30.7	23.2	12.5	35.7
10. Does he/she follow up on problems	61.1	28.9	32.2	25.3	13.6	38.9
11. Is he/she fair to all drivers	59.7	27.3	32.4	20.9	19.4	40.3
12. Does your supervisor give you credit or thank you for doing a good job	59.6	28.1	31.5	17.9	22.5	40.4
13. Does he/she communicate on-going problems to upper management	58.9	20.5	38.4	26.2	14.9	41.1
14. Is he/she receptive to suggestions	56.4	15.5	40.9	27.3	16.3	43.6
15. Does he/she demand instead of ask things from you	45.8	18.8	27.0	26.9	27.3	54.2
16. Does he/she ask for drivers' opinions	42.5	11.7	30.8	22.0	35.5	57.5

indication of a lack of emphasis on specifics? This data is impossible to compare with attitudes of workers in other industries. However, in an absolute sense it seems

management has some soul searching, and perhaps a lot of work, to do. Serious consideration should be given to providing human resource management training to those who have contact with and manage drivers.

MOTIVATORS

Participation in Other Aspects of the Business

Encouraging personnel to become involved in aspects of the business other than their main responsibility (job enrichment) could be a motivator. This strategy implies additional responsibility as a form of achievement, advancement, and possibly recognition as well. These are classified as motivators by Herzberg and lead to improved job satisfaction. It is the observation of the authors that drivers are not integrated into the business to any significant degree in the industry, although it does vary from firm to firm. This is typical of the U.S. industry as a whole. The benefits of involving front line workers in segments other than their traditional roles are only beginning to be understood. However, drivers exhibit a very strong desire to contribute to the well being of the firm in all of the areas asked.

Drivers were asked, "In addition to driving, are you interested in getting involved with the following?" (see Table 7). They overwhelmingly responded positively in all nine categories of additional involvement.

Concerning "Safety," "Customer Relations," "Cost Reduction Goals," and "Equipment Purchases," 74.4 to 70.1 percent of drivers said they were **VERY INTERESTED** or **SOMEWHAT INTERESTED** in getting involved with these in addition to driving. Involvement of drivers in two categories, safety and equipment purchases, benefits both the company and the driver in obvious ways. Customer relations and cost reduction goals, ranked

Table VII. DRIVERS INTERESTS IN BUSINESS AREAS IN ADDITION TO DRIVING

Q-3. IN ADDITION TO DRIVING, ARE YOU INTERESTED IN GETTING INVOLVED WITH THE FOLLOWING?						
Item	Percentages					
	Somewhat + Very	Very	Somewhat	Slightly	Not	Slightly + Not
1. Safety	77.4	47.8	29.6	12.1	10.4	22.5
2. Customer relations	77.1	45.0	32.1	12.4	10.6	23.0
3. Cost reduction goals	73.4	32.8	40.6	15.5	11.1	26.6
4. Equipment purchases	70.1	39.8	30.3	13.6	16.3	29.9
5. Maintenance and repair	64.0	37.1	26.9	12.8	23.2	36.0
6. Training	58.8	26.3	32.5	15.3	25.9	41.2
7. Group leader of drivers	53.0	22.5	30.5	18.7	28.3	47.0
8. Recruiting	51.6	22.3	29.3	23.5	24.9	48.4
9. Sales	47.5	19.3	28.2	21.0	31.5	52.5

second and third respectively, seem to provide more benefit to the company. However, drivers would benefit in improved job security through a more viable company.

"Maintenance and Repair," "Training," "Group Leader of Drivers," and "Recruiting" also were areas where drivers expressed interest in getting involved. These ranged from 51.6 to 64.0 percent of the drivers who were either **VERY INTERESTED** or **SOMEWHAT INTERESTED**. Again, except for personal satisfaction, a positive involvement in these areas mostly benefits the company. The least often cited category was "Sales" where even 47.5 percent of the drivers expressed they were either **VERY INTERESTED** or **SOMEWHAT INTERESTED**.

Responses to this question are very important when developing a strategy to reduce turnover and increase retention. Drivers have suggested they would like to make increased contributions to the company through involvement in other aspects of the

business. It is important to note the variety of interests and the fact that not everyone is interested in the same areas. This is good, since it would be impossible to have everyone participating in the same way.

The sensible question arises: How will it affect the short and long run profitability of the company? Management has to develop a program which results in cost saving or increased revenue at least equal to the cost of the program. Such a program would reduce driver mileage as a result of involvement. Somehow, the driver's income must be maintained, if not increased. This could be accomplished by an increased rate per mile while driving, or by hourly or salary pay while working on other aspects. There also is a potential loss in equipment productivity, depending on the operational practices of the firm.

Involvement

Participatory management is thought to provide better decision making, increased productivity and performance, improved employee attitude, and a sense of belonging. This can translate into increased profitability and improved competitiveness. Participatory management can be construed as a motivator since it implies responsibility, achievement, and recognition. Drivers exhibited an overwhelming desire to influence management in several areas.

Drivers were asked "How important is it to you to influence management regarding the following?" (see Table 8) They were exceedingly interested in all areas. The least amount of interest was regarding "Driver Lounges." Even so, 68.5 percent of the drivers expressed they were either **VERY INTERESTED** or **SOMEWHAT INTERESTED** in influencing management regarding driver lounges. Approximately 90 percent said they were **VERY INTERESTED** or **SOMEWHAT INTERESTED** in influencing management about "Maintenance,"

Table VIII. IMPORTANCE TO DRIVERS OF INFLUENCING THEIR COMPANY ABOUT SELECTED BUSINESS PRACTICES

Q-10. HOW IMPORTANT IS IT TO YOU TO INFLUENCE MANAGEMENT REGARDING THE FOLLOWING?							
Item	Percentages						
	Somewhat + Very	Very	Somewhat	Neutral	Not	Not at All	Not + Not at All
1. Maintenance	90.3	71.7	18.6	7.8	0.7	1.1	1.8
2. Dispatch procedures	90.0	64.4	25.6	8.2	1.0	0.8	1.8
3. Fringe benefit package	89.9	65.3	24.6	8.3	0.6	1.1	1.7
4. Safety improvements	88.7	62.9	25.8	9.6	1.0	0.6	1.6
5. Cleanliness of your rig	85.9	56.0	29.9	10.4	2.2	1.6	3.8
6. Improving customer service	81.7	50.5	31.2	15.8	1.0	1.3	2.3
7. Ways to cut costs	74.6	40.3	34.3	21.5	2.4	1.5	3.9
8. Ordering new equipment	71.0	37.7	33.3	23.9	2.4	2.6	5.0
9. Where you buy fuel	68.7	37.3	31.4	24.7	3.2	3.4	6.6
10. Driver lounges	68.5	34.3	34.2	23.8	4.5	3.2	7.7

"Dispatch Procedures," "Fringe Benefit Package," and "Safety Improvements." Between 75 and 85 percent of drivers were interested in influencing management concerning "Ways to Cut Costs," "Improving Customer Service," and "Cleanliness of Your Rig." Other areas of significant interest were "Ordering New Equipment" and "Where to Buy Fuel."

It is important to note that very few drivers, 8 percent or less, were not interested in influencing management in the ten areas. Furthermore, improvements in several areas such as "Ways to Cut Costs," "Improving Customer Service," and "Maintenance" would benefit the company more than the driver. Thus, it appears that drivers desire to contribute to the well-being of the firm as much as they would like to improve their own well being. If any of these areas could be improved, it is a win-win situation. Either job

satisfaction and retention is improved, or the efficiency, competitiveness, and profitability of the firm is increased. One final thought: drivers' interest in involvement is an indication of a work force that would respond to motivators.

Training

Continued training is a means of motivating employees. Training is a form of achievement, but can be used for advancement, as a form of recognition, and can imply additional responsibility. Thus, training can be a comprehensive means of addressing the motivators. Therefore, a question with twenty-three categories of training was incorporated into the questionnaire.

Drivers expressed an exceptionally strong desire for additional training in a variety of areas. Some would provide the driver direct benefits and some would benefit the company as well as the driver. However, it must be recognized that the company indirectly benefits from training through increased motivation, regardless of who realizes the direct benefits. Most drivers were **VERY INTERESTED** or **SOMEWHAT INTERESTED** in twenty-two of twenty-three categories (see Table 9). The only category where less than half expressed interest in additional training was "Tax Accounting for Owner-Operators." Remember that the respondents were all company drivers. Even so, 42.2 percent said they were **VERY INTERESTED** or **SOMEWHAT INTERESTED** in owner-operator tax accounting. This interest in training suggests the person responding is a motivation seeker, one who welcomes opportunities to learn about their job and chances to apply that learning.

Drivers were most interested in additional training related to the safety of the truck and the driver. This is important. Safety doesn't cost, it pays. "Defensive Driving" was ranked first with 89.4 percent of the drivers saying that they were **VERY INTERESTED** or **SOMEWHAT INTERESTED** in additional training, followed by "Safety Regulations"

Table IX. DRIVERS' INTEREST IN ADDITIONAL TRAINING

Q-14. IN WHAT AREAS ARE YOU INTERESTED IN MORE TRAINING TO BE A MORE EFFECTIVE AND PROFESSIONAL DRIVER?						
Item	Percentages					
	Somewhat + Very	Very	Somewhat	Slightly	Not	Slightly+ Not
1. Defensive driving	89.4	66.7	22.7	6.6	4.0	10.6
2. Safety regulations	86.1	52.4	33.7	10.4	3.5	13.9
3. Injury prevention	84.5	51.0	33.5	11.1	4.3	15.4
4. Accident procedures	82.8	48.8	34.0	12.1	5.1	17.2
5. Equipment inspections	81.9	47.5	34.4	11.4	6.7	18.1
6. First aid	81.8	49.4	32.4	11.5	6.7	18.2
7. Hazardous materials	80.2	55.2	25.0	9.1	10.7	19.8
8. Your company's strategy and direction	80.2	47.2	33.0	12.5	7.3	19.8
9. Problem solving skills	78.2	45.0	33.2	14.1	7.7	21.8
10. Customer service	77.8	37.4	40.4	14.2	7.9	22.1
11. Maintenance procedures	76.1	43.4	32.7	15.3	8.6	23.9
12. Company policies	74.4	31.5	42.9	18.1	7.5	25.6
13. Getting along with other people	72.7	43.0	29.7	15.0	12.3	27.3
14. Commercial drivers license	72.1	46.9	25.2	10.4	17.6	28.0
15. Managing family issues away from home	69.5	41.8	27.7	12.6	17.9	30.5
16. Learning more about customers' industries	69.3	30.1	39.2	18.9	11.8	30.7
17. Personal money management	68.4	37.2	31.2	17.1	14.4	31.5
18. Trip planning	67.6	35.7	31.9	18.3	14.0	32.3
19. Forms and permits	66.7	25.7	41.0	20.8	12.6	33.4
20. Transportation industry costs and trends	64.3	23.9	40.4	22.7	13.0	35.7
21. Paperwork completion	60.4	16.5	43.9	22.9	16.7	39.6
22. Cargo loading and unloading	55.3	25.1	30.2	19.2	25.4	44.6
23. Tax accounting for owner-operators	42.2	17.9	24.3	15.6	42.3	57.9

(86.1 percent), "Injury Prevention" (84.5 percent), "Accident Procedures" (82.8 percent), "Equipment Inspections" (81.9 percent), and "First Aid" (81.8 percent). Interestingly, drivers ranked areas related to safety, in terms of prevention or response, above all other areas of training. This seems to suggest a responsible person who is interested not only in their personal safety, but also that of others and their equipment and cargo. Between 70 and 80 percent of drivers were interested in learning more about "Your Company's Strategy and Direction," "Problem Solving Skills," "Customer Service," "Maintenance Procedures," "Company Policies," "Getting Along with Other People," and "Commercial Drivers License." Additionally, 60 to 70 percent of the drivers were interested in training in "Managing Family Issues While Away From Home," "Learning More About Their Customers' Industries," "Personal Money Management," "Trip Planning," "Forms and Permits," "Transportation Industry Costs and Trends," and "Paperwork Completion." Even 55.3 percent of drivers were interested in more training in "Cargo Loading and Unloading," something they previously expressed a great deal of dislike for.

The interest expressed in additional training could be a key in improving driver retention. Management should consider training a tool in reducing turnover because of the high level of interest in a broad array of topics benefitting the driver and the company. Training is definitely a motivator and can significantly contribute to job satisfaction through job enrichment. The interest in training, involvement with other aspects of the business, and participatory management indicate drivers are people whose potential is waiting to be tapped.

Recognition

Recognition for achievement is a strong motivator and creates a positive job attitude. However, these programs must be conducted properly. Individuals must be recognized for

actual and meaningful achievements and not superficial awards routinely handed out to anyone. A simple pat on the back is a great form of recognition, if it is meaningful. However, if an award is superficial and perceived as insincere by the receiver, then it could have a negative influence on motivation and job attitude. Because of the value of recognition as a motivator, two questions were devoted to this subject. Drivers were asked how important recognition programs were in eleven areas. Ten of the eleven areas for recognition were thought to be **VERY IMPORTANT** or **SOMEWHAT IMPORTANT** to 81 percent or more of the drivers (see Table 10). Ninety-six percent of the drivers thought "Accident Free Operation" was **VERY IMPORTANT** or **SOMEWHAT IMPORTANT** followed closely by "On

Table X. IMPORTANCE OF SELECTED FORMS OF RECOGNITION.

Q-21. THE FOLLOWING LIST INCLUDES SOME AREAS FOR RECOGNITION. HOW DO YOU FEEL ABOUT THESE PROGRAMS, EVEN IF THEY ARE NOT OFFERED TO YOU?						
Item	Percentages					
	Somewhat + Very	Very	Somewhat	Slightly	Not	Slightly + Not
1. Accident free operation	96.3	80.9	15.4	2.2	1.5	3.7
2. On-time pickup and delivery	95.4	77.8	17.6	3.4	1.2	4.6
3. Minimizing cargo loss and damage	93.8	70.9	22.9	4.6	1.6	6.2
4. Miles of driving	93.1	68.2	24.9	4.7	2.2	6.9
5. Working injury-free	92.8	75.2	17.6	5.1	2.1	7.2
6. Performing duties above base standards	90.1	52.8	37.3	7.3	2.6	9.9
7. Getting paperwork done accurately and on-time	86.1	55.5	30.6	10.9	3.0	13.9
8. Dock courtesy	84.9	52.7	32.2	11.3	3.9	15.2
9. Good Samaritan acts	83.1	41.9	41.2	12.0	4.9	16.9
10. Miles per gallon efficiency	81.0	35.5	45.5	13.9	5.1	19.0
11. On-board monitoring results	45.3	18.2	27.1	22.3	32.4	54.7

Time Pickup And Delivery" at 95 percent. The least important (except for "On-Board Monitoring Results") was put on "Miles Per Gallon Efficiency" in which 81 percent of the drivers thought it was a **VERY IMPORTANT** or **SOMEWHAT IMPORTANT** form of recognition.

This high ranking of all but one factor suggests two things. First, note that each recognition is for achievement and/or contribution to the company. This suggests drivers are very interested in programs to recognize achievement and make a contribution. Secondly, this supports the thesis that drivers are motivation seekers who are independent in nature and wish to be rewarded based on individual performance. The one area of recognition that fell below 50 percent was "On-Board Monitoring Results." There are probably at least two reasons for this. First, on-board monitoring has been used as the "big brother" approach to management. It is perceived by some as an infringement of a driver's privacy and independence and a disdain of the driver's skill. It is also seen as an attempt to automate the process of driving. The second reason may be the manner in which on-board monitoring is presented to drivers and used by management. If it is used for deciding who is punished or reprimanded, drivers will not react positively to recognition based on this performance. However, if it is used to reward achievement and encourage driving skill development, then such recognition will probably have a greater appreciation.

Career Advancement

Career advancement is an important motivator in any line of work. However, it is severely lacking for drivers in the truckload industry. Many times drivers with proven safety records who have been with the company 20 years are treated the same and paid the same as drivers who were hired last week. There is no reward for the drivers loyalty and performance and no investment that is forfeited when switching firms.

On top of this, career advancement is very important to drivers. Nearly 82 percent said advancement was **VERY IMPORTANT** or **SOMEWHAT IMPORTANT** to them. Better than half the drivers, 54.8 percent, thought career advancement was **VERY IMPORTANT**. Only 3.6 percent thought it was **UNIMPORTANT**

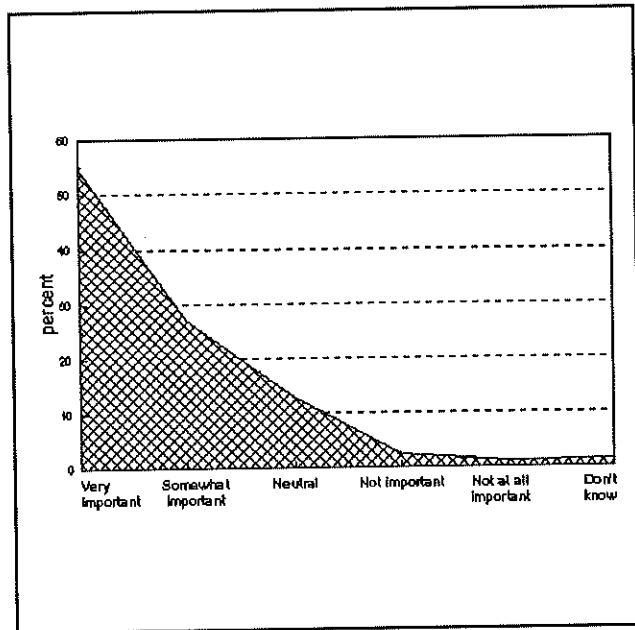


Figure 9. Importance of Career Advancement.

(see Figure 9). The importance of career advancement varied by drivers' age with younger drivers putting more importance on it than drivers soon facing retirement. Still, over half the drivers in their sixties thought that opportunities for advancement were important.

The importance placed on career advancement is in stark contrast to drivers' perception of the opportunities for advancement. Fifty-four percent of drivers thought opportunities for career advancement within their company were **POOR** or **VERY POOR** (see Figure 10). Similarly, the same percentage thought opportunities within the trucking industry were **POOR** or **VERY POOR** (see Figure 10). Only about a third of the drivers thought there were potential opportunities for advancement within the industry or within their company.

This is a very serious problem because advancement is a fundamental component of job satisfaction and motivation. The difference between the desire for some form of opportunity, for career advancement and the perceived lack of opportunity is alarming. One possible method of advancement is a merit-based classification system. Such a system

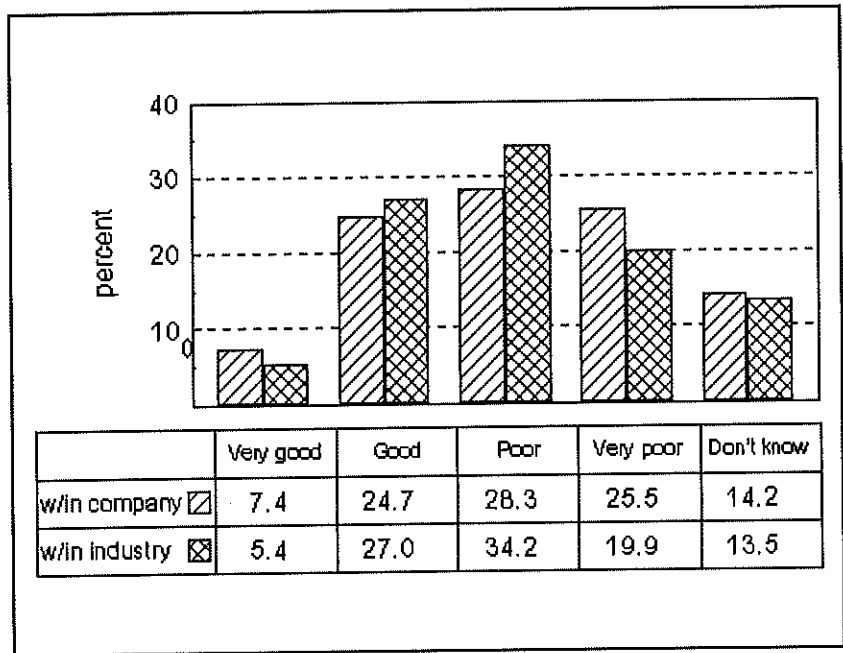


Figure 10. Perception of Opportunities for Career Advancement.

would classify drivers by skills, performance, and responsibility. A

hypothetical system could consist of five categories such as: (1) apprentice driver, (2) certified driver, (3) advanced driver, (4) senior driver, and (5) master driver.

Advancement between classifications requires increased driving skill and performance, as well as increased business responsibility.

An example of this responsibility would be serving as a customer service representative while remaining a driver. Drivers were very positive about such a system. Seventy-nine percent of the respondents **STRONGLY FAVOR** or **FAVOR** such a system, while only 5.9 percent are against such a system (see Figure 11). Thus, it appears that one potential solution to the career advancement problem would be the development of some merit based system of promotion.

This system must allow drivers to continue to drive while also emphasizing improved skill, performance achievement, and additional business responsibility.

When asked what their definition of career advancement was, 80 percent of the drivers said, "More Money" followed by "Getting A More Regular Schedule / Dedicated Route," (55 percent) and "Getting Home More Often" (48 percent) (see Table 11).

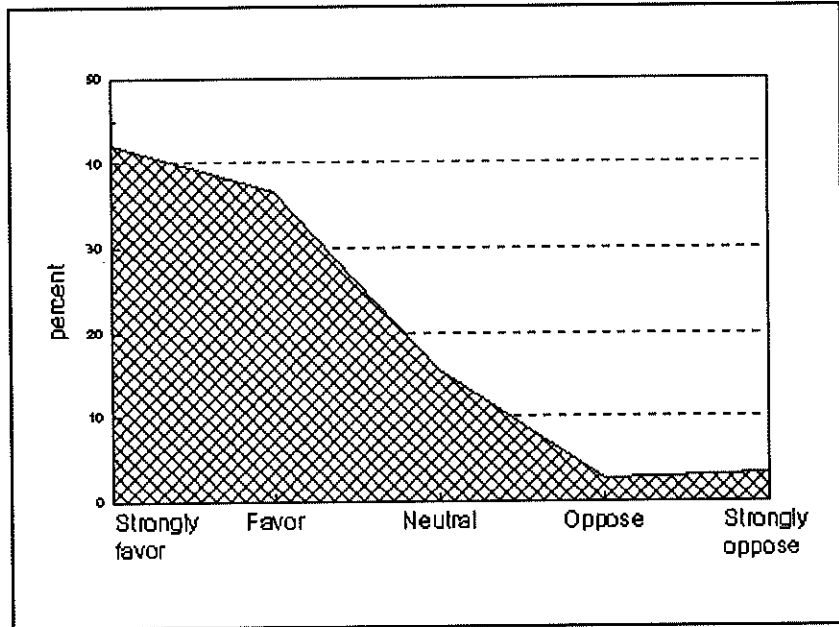


Figure 11. Opinion of a Merit Based System of Classification and Advancement.

The fourth most frequent definition of career advancement was "Moving Through A Driver Classification System Based On Personal Performance" (45 percent), followed by "Move Into Management Or Supervision" (38 percent).

Together, all of the responses to the various questions seem to suggest that the industry must make improvements in both the aggravators and the motivators. Improved pay, regular schedules, and more home time could be tied to a system of advancement while at the same time providing a mechanism for achievement and recognition. Drivers could become more involved in the business, which they have shown a strong desire for, as well as participate in management, and policy decisions as a way of adding responsibility to the job. Furthermore, the thirst for training could be addressed. Training and testing would be a necessary component of any true merit-based system of advancement. The challenge for the firm that attempts to carry out such a strategy, is to do it so the changes result in a positive contribution to the company profitability.

Table XI. DRIVERS' DEFINITION OF CAREER ADVANCEMENT

Q-31. WHAT IS YOUR DEFINITION OF CAREER ADVANCEMENT FOR DRIVERS?		
Item (n=22,906.8) [*]	Frequency [*]	Percent
1. More money	18,375.1	80.22
2. Getting a more regular schedule / dedicated route	12,683.7	55.37
3. Getting home more often	11,084.0	48.39
4. Move through a driver classification system based on personal performance	10,364.9	45.25
5. Move into management or supervision	8,690.52	37.94
6. Move through a driver classification system based on length of service or miles driven	8,465.51	36.96
7. Safety trainer	6,908.18	30.16
8. Increased driving skill	6,010.98	26.24
9. Train new drivers	5,248.22	22.91
10. Driver recruiter	4,202.16	18.34
11. Lead driver on a team	2,400.76	10.48
12. Other	1,400.71	6.11

^{*}These are weighted frequencies, not actual frequencies.

Job Satisfaction

As was shown earlier, drivers derive a great deal of satisfaction from their job. They really like driving and the independent lifestyle associated with it. Drivers were asked to rank how much personal satisfaction they received from their job on a scale of 1 to 9 with 1 being very satisfied and 9 being very dissatisfied (see Figure 12). Fifty-four percent of the drivers said they gained a great deal of satisfaction from their job by ranking their opinion as 1, 2, or 3. This percentage is radically different than those who said that they were very dissatisfied (7, 8, or 9) with their job, which accounted for only 15.7 percent of the respondents.

These statistics suggest that drivers as a whole are a very positive work force. This compares very favorably with the results of a study of owner-operators. In that study 53.7 percent of the owner-operators expressed deriving a great deal of satisfaction from their job ranking it 1, 2 or 3. Similarly

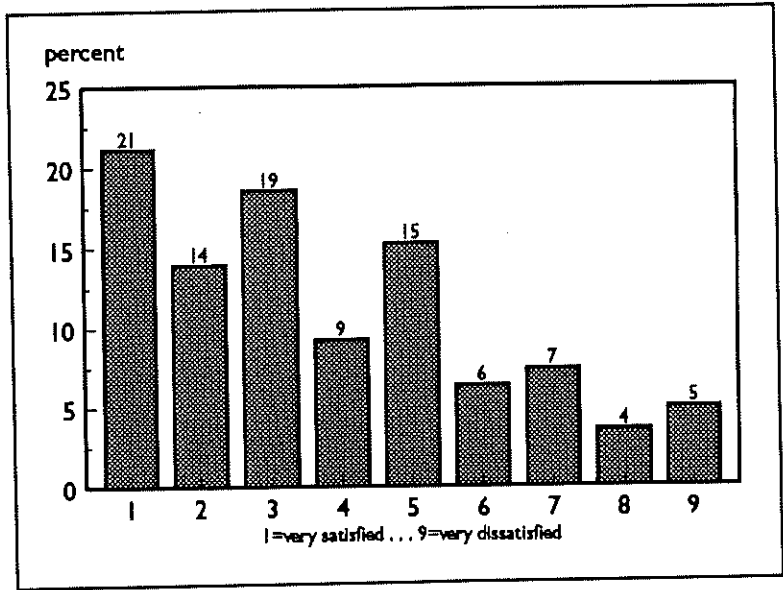


Figure 12. Ranking of Personal Satisfaction from Their Job.

only 14.0 percent said they were very dissatisfied with their job. It appears there is a large group of drivers, that is responsive to motivation and improvement in the work environment. This conclusion is supported by the results of a question regarding the components of job satisfaction-dissatisfaction.

"The Work Itself" was ranked third behind "Salary And Benefits" and "Working Conditions" (see Table 12). This was followed by "Advancement" and "Responsibility" which were ranked fourth and fifth, respectively. The important point of this question is the large number of drivers, nearly half, who said "The Work Itself" was very important to job satisfaction. Again, this supports the thesis that drivers are a group that can be motivated. However, it does appear from the response to "Salary And Benefits" and "Working Conditions" that the industry has to work to improve these areas before improvement in the motivators will have the greatest possible impact.

Table XII. RANKING OF MOTIVATOR AND AGGRAVATOR FACTORS

Q-45. THE FOLLOWING ITEMS CONTRIBUTE, ONE WAY OR ANOTHER, TO YOUR JOB ATTITUDE. PLEASE RANK THE FOLLOWING MAJOR AREAS IN THEIR ORDER OF IMPORTANCE TO YOUR INDIVIDUAL JOB SATISFACTION.										
Item	1 = most important					10 = least important				
	1	2	3	4	5	6	7	8	9	10
Salary & benefits	53.2	19.5	10.4	5.1	3.2	3.2	1.8	1.7	1.2	0.8
Working conditions	27.6	33.9	14.7	8.0	6.5	2.4	1.8	2.8	0.9	1.4
The work itself	8.1	15.0	25.0	14.8	10.9	7.4	7.0	3.8	6.2	1.7
Advancement	3.2	9.0	10.6	10.2	11.4	12.1	8.5	12.7	10.6	11.7
Responsibility	2.4	4.6	9.0	11.7	13.6	17.6	15.2	11.6	9.5	4.8
Supervision	2.7	5.1	7.6	10.5	12.4	7.9	13.0	15.2	15.8	9.7
Achievement	0.6	5.2	5.0	10.8	10.3	11.5	15.1	12.0	13.4	15.9
Recognition for achievement	0.6	3.1	7.0	12.2	10.1	10.6	13.2	12.6	15.0	15.7
Interpersonal relations	1.0	3.0	5.2	8.3	10.2	10.3	13.6	13.1	12.0	23.4
Company policies	0.7	1.7	5.5	9.0	11.5	16.8	10.5	14.4	15.3	14.7

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