IMPACT: International Journal of Research in Business Management (IMPACT: IJRBM) ISSN(P): 2347-4572; ISSN(E): 2321-886X

Vol. 5, Issue 5, May 2017, 85-96

© Impact Journals

jmpact ournats

ANALYSIS OF RELATIONSHIP BETWEEN EMPLOYEE SATISFACTION AND EFFICIENCY: A CASE STUDY FROM TOOLS MANUFACTURER IN LIA INDUSTRIAL ZONE IN IRAN

ALI SANEE SCOYI

Department of Management, Savitribai Phule Pune University, Pune, Maharashtra, India

ABSTRACT

This paper points out that proper management of human resources can increase personnel's job satisfaction. In this case study, satisfaction rates were investigated and it was attempted to determine their satisfaction condition in the subscales of supervision, coworkers, job, procedures and regulations, payment and fringe benefits, work conditions, and welfare services. It was concluded that the expected increase in efficiency is not attributable to machines. The case was not technology, but the low satisfaction level among personnel; i.e. inappropriate and undesirable performance of personnel in the production section. It was noted that company's personnel are highly satisfied with their communication to other coworkers and vice versa, as well as their communication with supervisors. The relationship between demographic and organizational variables has been also investigated. In sum, there were 4 out of 7 subscales that don't have desirable satisfaction. Considering job satisfaction condition, it was found that in the subscales of procedures and regulations, work condition, and welfare services, payment and fringe benefits, low satisfaction was observed. But in the subscales of coworkers, supervision, and the job, rather high satisfaction was observed.

KEYWORDS: Job Satisfaction, Efficiency, Employee Satisfaction

INTRODUCTION

Efficiency is the ratio of real yield achieved with standard and defined (expected) yield or, in fact, the ratio of work done to work to be done, whereas, effectiveness is rate of achieving defined objectives. In other words, effectiveness indicates that how much results are achieved by the efforts made, whereas how to use and utilize resources for achieving results relates to efficiency. In fact, effectiveness relates to performance and providing human with satisfaction for the efforts made, and efficiency relates to proper utilization of resources. It can be seen that the efficiency is qualitative in nature.

For job satisfaction, salary and promotion opportunity are fundamental factors. Many evidences from different studies shows that salary and wage are fundamental factors in job satisfaction, especially when received salary is found to be fairly compared to other people's payment and advance level (Locke, 1976). Also, organizational policies and procedures play a significant role in determining total job satisfaction rates. Policies often dominate over personnel's behavior, and may result in positive and/or negative feeling against the organization. Immediate factors of work environment also can influence personnel's job satisfaction rate in various ways. One of these factors is supervision pattern or method.

A number of surveys indicated that thoughtful supervision results in higher levels of satisfaction. Studies have indicated that there is a fixed relationship between size of work group and satisfaction rate. It means that larger groups lead to lower levels of satisfaction.

Quality of relationships among coworkers also continuously relates to satisfaction rate. People generally have tended to and feel comfortable with those coworkers who possess characteristics, interests and ideas similar to them. Where there is agreement and congeniality, one can expect that passive reaction against work environment will decrease. There are some evidences showing that work condition can influence personnel's attitude. People value cleanliness and neat work environment, adequate equipment for work, and acceptable quality levels in work environment (temperature, humidity, noise, chemical pollution, lighting, etc.).

BACKGROUND OF THE STUDY

Most people take a loss of efficiency and productivity the same. When we discuss about efficiency, the term productivity occurs to mind, but these two terms are not synonymous. Rather, meaning of productivity is more comprehensive and wider than that of efficiency. Efficiency is one component of productivity, another component being effected. A person's attitude toward his/her job is among the subjects on which most research has been done. Undoubtedly, managers should be sensitive to personnel's satisfaction of dissatisfaction. Factors influencing job satisfaction can be categorized into three factors: organizational, group, and personal factors. Therefore, five factors of salary and wage, promotion opportunity, nature of the job, organizational policies and work conditions will affect satisfaction in a different manner. The personnel's satisfaction rate for each of these factors is different. For example, a person may feel satisfied with his salary, while being dissatisfied with other factors. Person's satisfaction about work group may be influenced by his/her coworkers, managers and supervisors. The supervisor can be regarded as an organizational element, but it should be considered that organizations and personal factors can affect satisfaction rate. Human resource management theorists have long been seeking for the fundamental causes of job satisfaction in organizing. Despite a number of fixed factors relating to job satisfaction have been identified, a comprehensive experimental model has not yet achieved. However, some actors can be mentioned briefly. Porter and Steers (1973) suggest that factors influencing tendencies and behavior of personnel can be categorized into four completely differentiated groups as follows:

- Overall organizational factors;
- Immediate factors of work environment.
- Job content factors or actual occupational activities.
- Personal factors (characteristics differentiating person from other people)

Table 1

Overall Organizational Factors	Immediate Factors of Work Environment	Job Content Factors	Personal Factors
 Salary and fringe benefits system Promotion opportunity Organizational procedures & policies Organizational structure 	 Supervision pattern Participation in decision making Size of work group Coworkers relationships Work condition 	Work scopeClarity of role and conflict	AgeWorkexperiencePersonality

For job satisfaction, salary and promotion opportunity are fundamental factors. Many evidences show that salary and wage are fundamental factors in job satisfaction, especially when received salary is found to be fairly compared to other people's payment and advance level (Locke, 1976).

If personnel feel that their salary and fringe benefits satisfies their expectancies and are equal to their advance level, they will be satisfied with their job. Also, organizational policies and procedures play a significant role in determining total job satisfaction rates. Policies often dominate over personnel's behavior, and may result in positive and/or negative feeling against the organization. Immediate factors of work environment also can influence personnel's job satisfaction rate in various ways. One of these factors is supervision pattern or method. A number of surveys indicated that thoughtful supervision results in higher levels of satisfaction. It shows that "Thoughtful supervision does not necessarily results in more yields, but it just results in satisfaction." Therefore, care must be taken in interpreting results because satisfaction rate cannot be determined with certainty. Supervisory considerations mean the participation of personnel in decisions effective in their jobs studies, especially when decisions are made by important personnel (Scott, Mitchell, 1976).

Studies have indicated that two aspects of the job itself have significant effects on satisfaction rate:

- Job scope
- Clarity of role

Job scope determines job properties such as amount of diversity and independence in work. Many studies have been conducted about the effects of job scope on people's tendencies, and it has been found that job scope and increase in satisfaction rate are interrelated. In many people, ambiguity and role conflict also causes reduction in their satisfaction with their job.

A fourth factor influencing job satisfaction is personal characteristics of personnel. Extensive studies have indicated that age and work experience are positively related to desirable job tendencies (Herman, Dunham, 1975). By some explanations, the reason for this relationship may be clarified. By increasing related work experience, people achieve organizational superiority, generally positions bearing more responsibility. These people often receive a kind of organizational bonus to stay in the organization. At last, it is possible that older people further modify their expectancies with realistic levels, thus becoming more satisfied with available bonuses influence job satisfaction rate.

Locke (1976) summarizes what considers as the most important factors influencing satisfaction rate, as follows:

A risky mental work to which person can adapt successfully.

- Personal interest in job itself.
- Job that is not excessively tiresome physically.
- Bonus for fair, instructive performance, according to personal desires of person.
- Work conditions that are compatible with physical needs and help occupational objectives.
- Feeling self-respect by employee.
- Those factors that facilitate achieving job values in the work environment- like an interesting job, salary, and job promotion. These factors should exceed personal values and should minimize role conflict and ambiguity.

In a study conducted by personnel of Venezuelan Petroleum Industry, it was found that communication with other people and emotional intelligence play a determinative role in job satisfaction. Researchers found that desirable human relations among personnel and between them and supervisors and managers can increase satisfaction rate. Therefore, one of the determinative factors in job satisfaction is establishing human relations with coworkers, supervisors and managers.

In a study on verification of factors influencing job satisfaction, Leary and Toth (1993) suggested that demographic characteristics influenced job satisfaction rate, and always there was a special balance between personal factors and organizational and environmental factors in explaining satisfaction. Among them, such factors as gender, education, age, and cultural and ethnical backgrounds can be named.

In a study on identification of factors influencing job satisfaction in personnel of Iraqi Petroleum Company (1999), it was found that occupational stresses can reduce job satisfaction. Role conflict, ambiguity in the role and excessive work are the most important factors that deteriorate job satisfaction, and in addition to decreasing job satisfaction, it can disorder mental health. Among Factors that can result in an increase in job satisfaction and mental health is Social support, which is identified as personnel praise in industrial environments (Robert, 1999).

In a study titled effect of money on increase in personnel's job satisfaction (1999), about 65% of research samples stated that revenue increase had no significant effect on job satisfaction and money could not be considered as a factor influencing job satisfaction. Also, more than 74% of research samples Believed that appropriate job opportunities were. The most important factors in job satisfaction, increase (Palumbo, 1999).

METHODOLOGY

In this study, in order to measure personnel's satisfaction rate, a normalized questionnaire has been used. Based on studies and statistical tests conducted, this questionnaire is found to be the most desirable tool for measurement of job satisfaction rate in personnel of the Companies. Main scale of this study is personnel's satisfaction, which in turn is divided into 7 subscales, including: coworkers, supervision, job, payment and benefits, procedures and regulations, welfare services, and work conditions. Any of these subscales has factors, each of which corresponds with a question in a questionnaire. The above questionnaire has apparent reliability, construct and content, and can accurately measure job satisfaction in The Company's personnel.

First, this questionnaire was presented to 20 people as pilot and randomly and after gathering them, Reliability Test was conducted by SPSS Software. If α < 60, then respective subscale does not have reliability required for satisfying desirable results. Test results are as follows:

Coworkers ($\alpha = 86.53$), Supervision ($\alpha = 93.87$), Job ($\alpha = 86.55$), Work conditions ($\alpha = 78.63$), Procedures and regulations ($\alpha = 90.50$), Welfare services ($\alpha = 70.39$), Payment and benefits ($\alpha = 82.99$). And questionnaire maximum a being 84.21. It is necessary to note that the above project has been graded objectively and based on suppositions of 6-score Likert Scale, and grading and interpretation are performed under identical conditions.

It has normalized quantitative norm, z, and 6-score discrete qualitative norms in range of;

- Completely disagree,
- Disagree,
- Almost disagree,
- Almost agree,
- Agree,
- Completely agree.

Therefore, tool used in this study has acceptable credibility and reliability, is completely normative for interpretation of scores, and can accurately measure constructs building job satisfaction in personnel's of The Companies.

In this survey 75 participants were considered. Using the census method, 97.34 % of statistical population participated in the study and there was no sampling error. In census method, descriptive statistical method is used instead of inference statistics. The analytical techniques used in this study were mean and frequency tests.

RESULTS AND OBSERVATION

The rate of satisfaction and profitability has a coordinate relationship and increment in work force's job satisfaction rate will without a doubt result in efficiency increment, and generation increment pattern can be effortlessly watched. Conversely, when staff's job satisfaction rate diminishes, managerial offenses increments, as well as the creation and administration frameworks of the organization endure extraordinary harms. Thusly, considering that job satisfaction variable has awesome significance in hierarchical conduct and additionally underway process, it must be attempted to give fitting answers for increment job satisfaction rate on the one hand and to decline job dissatisfaction on the other, by getting central data. Leading such reviews can be considered as a successful stride in getting initial data, so that administrative choices can be made and connected accurately (Table.1 to Table. 7).

This research deals with distinguishing proof of some individual and hierarchical variables affecting job satisfaction rate. It can be trusted, that utilizing aftereffects of this review will bring about generation increment and will prepare for acknowledgment of long haul destinations of HR improvement in an association.

Table 1: Coworkers

Subscale	No	Question	Satisfaction Level	Mean Satisfaction Level in Subscale
	1	In my work environment, there is a good understanding between my colleagues and me.	78.34	
	2	There is a favorable working relationship between my colleagues and me.	73.34	
	3	When I face a problem, my colleagues have sympathy.	72.34	
	4	My colleagues assist me in solving work problems, if necessary.	70.67	68.04
	5	My colleagues transfer their experiences to me.	68.34	
	6	My colleagues have a sense of responsibility for each other.	65.34	
	7	My colleagues are happy and motivated people.	64	
rkers	8	My colleagues are interested in my progress in my job.	60.67	
Coworkers	9	My colleagues are confident.	59.34	

Table 2: Supervision

Subscale	No	Question	Satisfaction Level	Mean Satisfaction Level in Subscale
	10	There is a respectful relationship between my supervisor and me.	81	
	11	My supervisor is accountable for his/her duties	73.67	
	12	My supervisor has a specialty in the field of work.	69.67	
	13	My supervisor supports me, where necessary.	68.34	
	14	My superior is well acquainted to my job's duties and responsibilities.	67.34	
	15	My supervisor is efficient in my performance improvement.	66.34	
	16	My superior clarifies how to do works.	66.00	
	17	My supervisor addresses my problems.	65.67	64.73
	18	My supervisor accepts criticism.	65.34	04.73
	19	My supervisor welcomes my suggestions.	64.00	
	20	During the year, my supervisor continuously informs me of my pros and cons.	62.67	
	21	My supervisor encourages me.	62.34	
Supervision	22	In the organization, no useless and futile tasks are allocated to me.	61.67	
Super	23	My superior is interested in an increase in my knowledge and specialized capability.	61.66	

	Table.2: Condt.,		
24	In the organization, my work experience is used well.	53.34	
25	My efforts and struggles for work are appreciated.	46.67	

Table 3: Job

Subscale	No	Question	Satisfaction Level	Mean Satisfaction Level in Subscale
	26	I perform my duties by desire.	83.34	
	27	I am informed of my responsibilities in the organization.	71.34	
	28	My job's nature is in conformity with my feelings and personality.	69.34	
	29	I am satisfied with my job's social status and rank.	65.34	64.50
	30	My workload is proportionate to my physical and psychological capabilities.	61.67	
	31	In my job, I can easily realize my talents and creativity.	59.66	
	32	My job has an appropriately diversified. (My job is not tiresome and repeated)	54.34	
Job	33	In my job, there is an opportunity to progress.	51.00	

In the above table, questions marked in *Italics* are those having a mean satisfaction score lower than total mean.

Table 4: Work Condition

Subscale	No	Question	Satisfaction Level	Mean Satisfaction Level in Subscale
	34	Appropriate tools and instruments required for my job has been provided.	64.67	
	35	Lighting of my work environment is appropriate.	64.33	
	36	My work environment is clean.	56.00	
	37	In my work environment, safety principles are observed.	55.00	
_	38	My work environment has appropriate space.	53.34	51.07
tio	39	There is no chemical pollution in my work environment.	50.67	
Work condition	40	Temperature is appropriate in my work environment.	46.00	
	41	In my work environment, there are no occupational stress and psychological pressure.	38.00	
×	42	There is no sound pollution in my work environment.	31.67	

In the above table, questions marked in *Italics* are those having a mean satisfaction score lower than total mean.

Table 5: Procedure

Subscale	No	Question	Satisfaction Level	Mean Satisfaction Level in Subscale
	43	My work starting and ending hours is appropriate.	61.34	
	44	Administrative and employment affairs are performed as appropriate rate in the company.	59.67	
	45	Procedures and regulations are timely declared to all employees.	55.67	
	46	I am well informed of objectives and policies of the organization.	55.68	
	47	Information resources required for my job are easily provided for me.	54.33	
	48	There are a few rigid regulations.	54.34	
	49	Provision of on-the-job training is proportionate to my job.	52.67	
	50	In the organization, information is effectively used.	51.67	49.79
	51	Gender equality is observed in giving occupational opportunities.	47.67	
	52	Personnel is appointed at the company, according to regulations.	48.00	
	53	Personnel training is continuous.	46.34	
sə.	54	Organizational rules are performed equally for all employees.	44.67	
	55	There is job security in the company.	43.00	
	56	Competency principle is observed in paying bonuses and benefits.	42.67	
Procédures	57	Encouragement and punishment system of the organization is appropriate.	42.34	
Prc	58	My comment is asked in organizational decisions.	36.67	

In the above table, questions marked in *Italics* are those having a mean satisfaction score lower than total mean.

Table 6: Welfare Services

Subscale	No	Question	Satisfaction Level	Mean Satisfaction Level in Subscale
	59	Health services are provided appropriately.	57.67	
	60	Travel and recreational-pilgrimage services of the company are favorable.	55.67	
	61	The consumer's cooperative services of the company meet the needs of the personnel.	52.67	47.28
Services	62	Transportation services of the company are satisfactory.	51.00	
	63	Meal services of the company are appropriate.	37.33	
Welfare	64	The company provided me with appropriate sport facilities.	31.00	

In the above table, questions marked in *Italics* are those having a mean satisfaction score lower than total mean.

Table 7: Payment

Subscale	No	Question	Satisfaction Level	Mean Satisfaction Level in Subscale
	65	My payment is equal to the value of the work I do.	54.34	
	66	Rate of production increase bonuses and efficacy increase is proportionate to my effort.	49.34	
	67	I am satisfied with the amount and type of non-financial assistance.	40.34	41.45
	68	Amount of vital loan is appropriate for specified cases.	37.00	
ent	69	My salary and fringe benefits are proportionate to the inflation rate.	34.00	
Payment	70	Providing housing loan services is desirable.	33.67	

In the above table, questions marked in *Italics are* those having a mean satisfaction score lower than total mean.

DISCUSSION AND CONCLUSIONS

One measurement index for evaluation of a person's relationship with his/her work environment is job satisfaction. Job satisfaction is a person's positive or negative feeling about his/her job. Organizational commitment and job involvement are two issues relating to job satisfaction. Organizational commitment relates to how much interest the person has in his/her organization or emotional dependence on being a component of the organization, while job involvement refers to a person's tendency toward extraordinary hard-working and due diligence. Someone who has great organizational commitment is actually loyal to his/her organization. Someone who is greatly involved in his / her job is organizationally a good employee. Basis of the present study is identical to Herzberg's theory with respect to job satisfaction, and motivational factors are emphasized in satisfaction. Frederick Herzberg set forth his satisfaction theory based on factors resulting in job satisfaction or dissatisfaction. In his theory, the main factors contributing in motivation and satisfaction include: obtaining success, fame, nature of work, responsibility, and progress. These factors are called motivators, and their presence increases motivation and job satisfaction, but lack of them results in dissatisfaction. A second group of factors, so called hygiene factors or preservative factors include company's policy making strategy and administration, supervision, salary, interpersonal communication with supervisors and work conditions. Herzberg claimed that dissatisfaction occurs when these factors are weak or absent, although the presence of hygiene factors does not simply result in satisfaction and motivation. Herzberg's theory is valuable for managers and human resources specialists because it covers many factors influencing motivation and satisfaction. In many organizations, this Theory has had a significant effect on job satisfaction because it has further informed managers of the importance of such issues as job challenge and responsibility in motivation. However, although present study was titled Job Satisfaction based on Herzberg's Theory, job satisfaction is an emotional reaction to work, physical and social conditions. This is because organizational behavior researchers are interested in proper measurement of job satisfaction and understanding their effects in the workplace. Good managers are able to consider and detect other people's job satisfaction by observing, accurately interpreting their words, and evaluating how they perform their job. It is useful to formally measure and compare job satisfaction rate in different groups of

personnel in different occasions. Some criteria for measurement of job satisfaction include:

- Nature of work, responsibility, interest and growth
- Quality of supervision and social support
- Communicate with coworkers, respect and social adaptation
- Payment, adequacy of salary and fringe benefits compared to other people
- Welfare services and extra benefits
- Procedures and regulations and emphasize on organizational structure
- Physical condition of workplace (lighting, noise, and ergonomic facilities)

Therefore, considering many studies conducted in human resource management level (Hardman, 1996; Venus, 1973), it has been found that proper management of human resources can increase personnel's job satisfaction. Many factors have been identified as factors influencing job satisfaction and various researches have been conducted on this issue. Some of these factors include overall organizational factors (salary and fringe benefits system, promotion opportunities, organizational procedures and policies, organizational structure), immediate factors of the work environment (supervision pattern, participation in decision-making, size of the work group, coworker relationships, work condition), job content factors (work scope, clarity of role and conflict), personal factors (age, work experience, personality). In this study, satisfaction rate was investigated in the study population (three companies) and it was attempted to determine their satisfaction condition in the subscales of supervision, coworkers, job, procedures and regulations, payment and fringe benefits, work conditions, and welfare services. The relationship between demographic and organizational variables has been also investigated.

Considering job satisfaction condition, it was found that in the subscales of procedures and regulations, payment and fringe benefits, work condition, and welfare services, low satisfaction (lower than total satisfaction mean) was observed. But in the subscales of coworkers, supervision, and job, rather high satisfaction (higher than total satisfaction mean) was observed. Thus, company's personnel are highly satisfied with their communication to other coworkers and vice versa, the nature of their work, as well as their communication with supervisors. But, in sum, there are 4 out of 7 subscales that don't have desirable satisfaction. So, we can say briefly in a sentence: "Company's personnel don't have desirable satisfaction".

We verified 35 factors had satisfaction scores lower than mean score. Note that these factors are listed based on the satisfaction score in a descending manner.

- Dissatisfaction with no provision of appropriate sport facilities.
- Dissatisfaction with inappropriate housing load services.
- Dissatisfaction with salary and fringe benefits being disproportionate to the inflation rate
- Dissatisfaction with sound pollution in a work environment.
- Dissatisfaction with inappropriate meal services in the company.

- Dissatisfaction with inappropriate amount of vital loan for specified items.
- Dissatisfaction with not considering personnel's comments in organizational decision-making.
- Personnel's dissatisfaction with occupational stress and psychological pressure in work environment.
- Personnel's dissatisfaction with the amount and type of non-financial assists.
- Personnel's dissatisfaction with inappropriate encouragement and punishment system in organization.
- Personnel's dissatisfaction with not observing competency principle of paying bonus and benefits.
- Personnel's dissatisfaction with lack of job security in company.
- Personnel's dissatisfaction with lack of equality in performing organizational rules.
- Personnel's dissatisfaction with inappropriate temperature in work environment.
- Personnel's dissatisfaction with non-continuous personnel training.
- Personnel's dissatisfaction with not being appreciated for their efforts and struggles.
- Personnel's dissatisfaction with appointments not being in conformity with regulations.
- Personnel's dissatisfaction with not observing gender equality in giving occupational opportunities.
- Personnel's dissatisfaction with the amount of production increase bonuses not being proportionate to the
 personnel's efforts.
- Personnel's dissatisfaction with the lack of an opportunity to progress in the organization.
- Personnel's dissatisfaction with insufficiency of transportation services of the company.
- Personnel's dissatisfaction with chemical pollution in a work environment.
- Personnel's dissatisfaction with not effectively using information in an organization.
- Personnel's dissatisfaction with inappropriate on-the-job training provided for the job.
- Personnel's dissatisfaction with inadequacy of Consumer's cooperative services for personnel's needs.
- Personnel's dissatisfaction with not using their experiences.
- Personnel's dissatisfaction with lack of appropriate space in work environment.
- Personnel's dissatisfaction with the inadequacy of payments with regard to the work they do.
- Personnel's dissatisfaction with existence of a lot of rigid regulations on work environment.
- Personnel's dissatisfaction with not providing job-related information resources.
- Personnel's dissatisfaction with lack of appropriate diversity in work.
- Personnel's dissatisfaction with not observing the safety principle in the work environment.

• Personnel's dissatisfaction with recreational-pilgrimage travel services of the company not being desirable.

- Personnel's dissatisfaction with lack of knowledge about objectives and policies of organization.
- Personnel's dissatisfaction with not having clean work environment.

REFERENCES

- 1- A Koustelios, K. Bagiatis (1997). The employee satisfaction inventory (ESI): development of a scale to measure satisfaction of Greek employees. Educ. Psychol. Meas. 57(3): 469-476
- 2- Palumbo, (1999). Annual job satisfaction & salary survey—we're in the money. Food Engineering. 71(12). 67-70.
- 3- E. A., Locke, (1976). "The Nature and Cause of Job Satisfaction." Dunette, M. D. (Ed.), Handbook of industrial and Organizational Psychology. Chicago: Rand McNally
- 4- G. Robert (1999), Predictors of Job satisfaction Journal of Industrial & organizational Psychology
- 5- J. B. Herman, and C.L Hulin,. (1972), "Studying Organizational Attitudes from Individual and Organizational Frames of Reference", Organizational Behavior and Human Performance, 8, 84-108.
- 6- L.W. Porter, E.E. Lawler, (1968), Managerial Attitudes & Performance Homewood
- 7- T. R. Hardman, (1996). "A Study of Job Satisfaction and Organizational Factors for Differential Environmental Context and Career Stages. "Unpublished PhD Thesis, Dissertations, Abstract International. Vol.57, No.12
- 8- W. G., Scott, and T. R. Mitchell, (1976), Organization Theory: A Structural and Behavioral Analysis (3rd Ed.): Homewood, IL: Richard D. Irwin, Inc.