



## **Investigating the relationship between leadership style (transformational and pragmatic) and employees' job involvement at Islamic Azad University of Roudehen, Damavand, Pardis, Boomehen and Firuzkuh to provide an appropriate model**

**Fattah Nazem<sup>1</sup>, Mina Mozaiini<sup>2</sup>**

<sup>1,2</sup>Department of Education, College of Education and Counseling, Roudehen Branch, Islamic Azad University, Roudehen, Iran

### **ABSTRACT**

The aim of this study is to investigate the relationship between leadership style (transformational and pragmatic) and job involvement in employees at Islamic Azad University of Roudehen, Damavand, Pardis, Boomehen and Firuzkuh in order to provide an appropriate model. The statistical population of study consists of the staff in administrative, financial, research and educational and training units and centers of Roudehen, Damavand, Pardis, Boomehen and Firuzkuh and they were working in respective University branches in 2013. 468 employees are selected by probable random stratified sampling proportional to the sample size. Bass & Avolio leadership style questionnaire (1999) including the dimensions of leadership style and Cronbach's alpha as well as Kanungo Job Involvement (1982). The obtained results of multivariate linear regression indicate that there is a relationship between the leadership style and its dimensions with employees' job involvement at Islamic Azad University of Roudehen, Damavand, Pardis, Boomehen and Firuzkuh.

**Keywords:** Leadership style (transformational and pragmatic), job involvement, Islamic Azad University

### **INTRODUCTION**

The concept of job involvement as an attitude is an important variable which helps to enhance the effectiveness of organization. The more the employees' levels of job involvement are increased in the organization, the more its effectiveness is increased. In order to increase the level of job involvement, its determinant should be put under the fact-based and comprehensive look. (Elankumaran, 2004) The high job involvement is a desirable feature. In fact, people with high job involvement are apparently satisfied with their jobs, show positive job attitude, and express high commitment towards organization and colleagues [5], Such these employees rarely think about quitting the job and it is expected that they will work for relevant organization for several years [3], The employees' jobs with high job involvement are closely tied to the identities, interests and goals of life. The employees may involve with their jobs in workplace in response to the specific characteristics of environment or job situations [15], or they may have a set of needs, values or characteristics which provide the infrastructure for job involvement [16]. The concept of job involvement has attracted wide theoretical and empirical attention in recent decades and the interest in the study of job involvement has mainly focused on the identification of its determinants (Hollenbeck, Connolly, Rabinowitz, 1982; [16]; [9]. The relationship of this variable with organizational performance such as turnover, job satisfaction, and productivity has led to numerous conducted studies on its antecedents and consequences. The relative importance of these two sets of personal and situational variables in explaining the concept of job involvement has been the basis of numerous studies [15]. The concept of job involvement was more accurately defined when it was considered as a set of attitudes with emotional and behavioral components that can be influenced by environment. This orientation shows the influence of organizational characteristics on the level of job involvement. Lodhal and Kejner's study [14], became the main source of job involvement for a long time based on the set of their wide studies.

Lodhal [14], ultimately determined the job involvement as one of five components associated with job. The components provided by Lodhal are as follows:

Job diversity which leads to the greater job satisfaction and, in turn, the employee retention in the organization;

The affective component of attitudes such as stress, satisfaction with working conditions, satisfaction with organization, conflict and satisfaction with supervisor;

Instrumental component of job attitudes which refers to the employees' relationships with each other, job and their feelings about doing their tasks. This factor focuses on the tasks that if done well, they are inherently rewarding.

The job aspects which lead to job dissatisfaction. These aspects include the physical fatigue, time pressure, repetitive tasks, and inconsistent quality/quantity. Involvement with production, job and organization: This factor also includes social contact with job, and gaining the identity based on the organization and job and it can be a part of more general process of social communication among employees in an organization. Lodhal and Kejner [14], designed a 20-item questionnaire for measurement of job involvement based on their definition of it. They have stated that this scale covers their definitions of job involvement as the "internalization of values associated with the good work and its importance from the individual viewpoint" (p. 24). This definition seeks to connect the initial definition of job involvement regarding that it is a stable attitude for person with this argument under which this concept can be affected by changes in workplace due to its importance for person as an objective in life. This definition approves this point that this value orientation of job is learned from the beginning of socialization process. Despite the efforts by Lodhal and Kejner [14], some of researchers (for instance, [18]) believe that this authors have defined the job involvement as (a) the concept under which the person makes a job-related psychological identity or considers the job as an important factor in providing the overall self-image, (b) the internalization of values associated with its appropriateness or importance in terms of individual value, and (c) the impact of individual performance on the self-esteem; thus it is not possible to achieve a single definition. Furthermore, serious criticisms are drawn against the 20-item scale by Lodhal and Kejner [14], For instance, Rabinowitz and Hall [16], have pointed out that different dimensions are not clearly defined in this questionnaire. Ultimately, Reeve and Smith [18], argue that the use of a single composite score derived from a multidimensional scale can lead to the inconsistent and inconclusive results. They even believe that some of the items in this scale are inappropriate. Lawler and Hall [13], obtained interesting results by study and implementation of survey on 291 professors and researchers at universities. According to their survey, they investigated the indices, namely, the job satisfaction, job involvement, intrinsic motivation, and job-related characteristics such as level of job control, job consistency with studied subjects' skills, their influence on the workplace, job challenges, and receiving the feedback on the performance. The results indicated that the job satisfaction, job involvement, and intrinsic motivation were independent of each other in terms of factors and were the distinct variables. They found that the creativity, influence, freedom of action, and the consistence of skills with job were related to the job involvement. These authors have concluded that these job characteristics may lead to more job involvement in employees. According to the results of this study, these authors have amended their definition of job involvement as follows: "The job involvement may be considered as the individual's perception of the overall work status as an important part of his life" [13]. They have defined the intrinsic motivation as a degree to which the individual self-esteem needs depend on the job performance. Lawler and Hall have suggested that since there is a significant relationship between job characteristics and involvement, the level of job involvement may be the result of interaction between the features which the person bring to the organization and the job characteristics. By literature review of job involvement, Rabinowitz and Hall [16], have concluded that: "The highest amount of job involvement variance has remained without explanation" (p. 258). The important problem associated with Rabinowitz and Hall's views is that there is no constant conceptualization of job involvement.

Pragmatic leaders have contingent power. These leaders simply exchange rewards for good performance and determine the achievement of objectives. Transactional leaders guide or motivate their subordinates by explaining the requirements of role and work in order to achieve the goals [20]. Pragmatic leaders do not make drastic changes, but often do apparent and current measures [11]. This concept is originally introduced by Burns [4], He believed that these leaders motivate their subordinates to attempt to achieve the objectives of organization [4]. Afterwards, Bass [3], borrowed this concept and manipulated it and generalized to a variety of organizational environments. In other words, the transformational and transactional leadership is obtained according to charismatic leadership. He states that the pragmatic leaders are those who trade with their subordinates and give symbolic and material rewards for their work and loyalty [1]. The transactional leadership focuses on a communicational exchange between leaders and subordinates. The leader and subordinates discuss about the way of working. The leader specifies the requirements of role and task and provides the sufficient trust for subordinate in doing the work. The leader may help the subordinate to achieve the agreed objectives. The transactional leadership will show the subordinates the way of fulfilling their needs if they do what is essential. If the subordinates achieve the

desired goals, the leader gives positive feedback and other benefits of career success. If the subordinates do not reach the goals, the leader punishes them.

The transactional leaders focus on preservation, protection and management of an organization. The transactional leadership includes:

- Conditional strengthening: It refers to the leader's utilization of positive and negative consequences. The selection of consequences depends on whether the subordinate has been successful in doing what is considered or not.
- Leadership based on exception (active): The leader reacts to what the subordinate performs if only the subordinate's performance does not meet the expectations. In other words, the leader checks if the tasks are done in accordance with regulations and in the case of deviations, he performs the corrective actions. The leadership based on exemption (passive) intervenes only when the standards are not met.
- Chaos-based leadership: They abdicate the responsibilities and take no decisions.

### **Transformational leadership**

Bass [2], introduced the transformational leadership under which the transformational leaders inspire the subordinates and improve their morale, and thus the followers obey the leader unconditionally and enthusiastically and have a feeling of emotional attachment to the organization and their missions; hence, the transformational leadership experts are more efficient than the transactional leadership [2]. Insight, inspiration, courage, etc., define the transformational leadership. These leaders flourish the bankrupt organizations. The transformational leaders have high levels of goals and ideas. They lead the organizations to the future which will be very different from their past. These people can make the subordinates so motivated and make the profound effects on the organizations [19].

Bass [1], argues that the transformational leadership occurs when the leaders broaden and develop their employees' interests. This leadership is achieved when they create understanding and acceptance of goals and mission of group and persuade the employees to their personal interest to be good in group. In fact, the transformational leadership is a process of creating the commitment to organizational objectives and then empowering the subordinates to meet those objectives [22].

Bass believes that the transformational leaders change the world. According to Bay (1985) and Bass and Avolio's viewpoints [1], the transformational leaders take three measures: They notify their subordinates of the important impact of their work consequences and continuously encourage their subordinates to promote their personal interests for the sake of organization. They help to meet the subordinates' great and inspiring needs through creating the vision and building the appropriate behavioral models. The transformational leaders such as the coaches, teachers and mentors empower the subordinates to make their individual abilities and commitment close to ideals. They affect the subordinates through arousing their strong feelings and promoting their identities. Avolio et al introduced four types of basic behavior which constitute the transformational leadership.

Favorable influence (charismatic): It is a charismatic component of transformational leadership in which the leaders become the models which are admired and respected by subordinates and emulated by others, thus the subordinates have a high degree of reliability in these leaders [1]. The charismatic impact in leadership also includes the integration of ethical and moral behavior (Tracy and Hinkin, 1998). The transformational leaders take efforts for increasing the performance beyond what is necessary to achieve the direct objectives of organization. They bring the excitement to the workplace and make the emotional links between themselves and their subordinates. Transformational leaders take efforts for what they believe is right for organization not for the status quo of organization. The organizations require the transformational leaders in crisis. The external environment requires the induction and problem solving by a creative transformational leader. In summary, the transformational leaders can be the key to survival of organization during the periods of rapid change and uncertainty. (Champks, 1996)

Cheng, and Lung (2012) found a relationship between charismatic leadership and job involvement in their study. Khalesi et al (2010) found a relationship between servant leadership and job involvement in employees at teaching hospitals affiliated with *Kurdistan University of Medical Sciences*. Motlagh (2012) has concluded in his study that the organizational justice can be predicted by organizational climate and this organizational justice is enhanced by job involvement. Bandar and Manar (2012) also have found in their studies that applying the management in different areas affects the job involvement. Furthermore, Rasool [17], found a relationship between the transformational leadership style and job involvement. Colquitt and Piccolo (2006) found a relationship between transformational leadership style and job performance in their study. Chenget al [6], found a correlation between transformational leadership and job involvement. Cohen [7], has concluded in his study that there is a correlation between leadership style and job involvement. Furthermore, Fang [8], has concluded that the transformational leadership styles and pragmatic impact affect the job involvement.

The aim of this study is to provide a regression model for employees' job involvement based on leadership style at Islamic Azad University.

## MATERIALS AND METHODS

This study is applied in terms of objective and correlative according to the method and investigates the correlation between the variables of leadership style (transformational and pragmatic) and organizational commitment with job involvement.

### Statistical population, sample and sampling method

The statistical population in this study covers all non-faculty official and contract employees at different sectors of Islamic Azad University and Training Centers of Roudehen, Damavand, Pardis, Boomehen and Firuzkuh in 2013, and the required sample is selected based on stratified random sampling. Cochran formula is utilized to estimate the minimum sample size. Given the minimum number of samples equal to 468, the leadership style questionnaires (transformational and pragmatic) and organizational commitment is implemented on employees' job involvement. The stratified random sampling is applied to select the required sample.

### Research Tools

1) Job involvement questionnaire: It is applied to measure the level of job involvement (Kanungo, 1982a). This questionnaire includes 10 articles and this test is based on a 7-point scale to overcome the cultural biases (Western) in traditional definitions of job involvement and enhanced generalizability of job involvement among cultures. Kanungo (1982) has reported the internal consistency coefficient and test-retest of this scale equal to 0.87 and 0.85, respectively. In this study,  $\alpha = 0.78$ . 2) Leadership style questionnaire: Bass & Avolio 41-item questionnaire (1999) is utilized to measure the leadership style; it has the charismatic behavioral dimensions (questions 1-5), perfectionist behavior (questions 6-9), inspirational motivation (questions 10-11), intellectual encouragement (questions 12-15), attention to individual differences (questions 16-19), leadership based on contingent reward (questions 20-24), active leadership based on exceptions (questions 25-30), and passive leadership based on exceptions (questions 31-36). In this study,  $\alpha = 0.92$  for leadership style,  $\alpha = 0.91$  for transformational leadership style and  $\alpha = 0.83$  for pragmatic leadership style.

## RESULTS

The descriptive and inferential statistics are utilized to respond to the research; the mean, median, mode, etc are applied in descriptive statistics, and the "multiple linear regression" applied in inferential statistics.

Table 1: Frequency percentage of subjects separated by units

Unit	Frequency	Percentage
Roudehen	203	43.4
Firuzkuh	122	26.1
Damavand	98	20.9
Pardis	37	7.9
Boomehen	8	1.7
Sum	468	100

As shown in Table (1), from five studied units, 203 subjects equivalent to 43.4 percent are from Roudehen branch, 122 subjects equivalent to 26.1 percent from Firuzkuh, 98 subjects equivalent to 20.9% from Damavand, 37 subjects equivalent to 7.9%, from Pardis, and 8 subjects equivalent to 1.7 from Boomehen.

Table 2: Distribution of central and dispersion indexes of transformational and pragmatic leadership style variables and dimensions

Index	Transformational Leadership Style	Perfectionist Behavior	Perfectionist Influence	Intellectual effort encouragement	Attention to Individual differences	Pragmatic leadership style	Leadership based on contingent rewards	Active leadership based on exclusions	Passive leadership based on exclusions
Mean	50.7859	13.7323	11.2885	15.5769	10.2158	43.5385	12.9979	16.2372	14.3034
Median	51.0000	14.0000	12.0000	15.0000	10.0000	44.0000	13.0000	16.0000	14.0000
Mode	56.00	14.00	12.00	12.00	8.00	44.00	15.00	17.00	12.00
Change domain	56.00	15.00	12.00	18.00	12.00	51.00	15.00	18.00	18.00
Minimum score	20.00	5.00	4.00	6.00	4.00	17.00	5.00	6.00	6.00
Maximum score	76.00	20.00	16.00	24.00	16.00	68.00	20.00	24.00	24.00
Total score	23717.00	6413.00	5283.00	7290.00	4781.00	20376.00	6083.00	7599.00	6694.00

Table 3: Distribution of central and dispersion indexes of job involvement

Central Indexes	Job Involvement
Mean	23.8932
Median	23.0000
Mode	21.00
Change domain	26.00
Minimum score	13.00
Maximum score	39.00
Total score	11182.00

The central indexes of median, mean, and mode for job involvement are close to normal distribution due to the proximity of their numerical values to each other. As shown, the lowest score of "job involvement" belongs to those who have obtained the score of 13 and the highest score belongs to those with scores of 39 and the total score is 11182. Therefore, the score distribution domain is equal to 26 scores. The job involvement score for most of the individuals is equal to 21. The job involvement score for a half of respondents is equal or less than 23 and the other half have scores over it. The average score of "job involvement" for statistical sample is equal to 23. According to the overall assessment of job involvement variable and its dimensions in studied units, it should be noted that this variable has favorable status at Islamic Azad University due to the proximity of itself and dimensions to normal distribution.

The Regression is applied to answer the research question whether there is a relationship between leadership style (transformational and pragmatic) and job involvement.

Table 5: Summary of regression model for leadership style (transformational and pragmatic) and job involvement

Multiple correlation coefficient	Multiple correlation coefficient Square	Adjusted multiple correlation coefficient square	Standard error of estimate
0.429	0.184	0.181	4.70071

This table shows the multiple correlation coefficient, multiple correlation coefficient square or coefficient of determination, so that the multiple correlation coefficient among the variables above is 0.42 and at the average level. Furthermore, the coefficient of determination suggests that 18% of changes in job involvement as the dependent variable can be explained by leadership style dimensions as the independent variables.

Table (6) ANOVA

Central indexes	Sum of Squares	Degrees of freedom	Mean squares	F	Significance level
Regression	2314.168	2	1157.084	52.365	0.000
Residual	10252.864	464	22.097		
Sum	12567.032	466			

According to F statistic equal to 52 and the significance level less than 0.01, the regression model is confirmed and the independent variables can predict the changes in dependent variable.

Table 7: The coefficients of independent variables in terms of standardized and non-standardized values

Independent variables	Non-standardized coefficients		Standardized coefficients	t	Significance level
	B	Standard error	Beta		
Constant value	11.262	1.335		8.437	0.000
Pragmatic leadership	- 0.003	0.026	- 0.006	- 0.126	0.900
Transformational leadership	0.294	0.034	0.433	8.519	0.000

Multiple correlation between leadership styles and job involvement indicate that the transformational leadership style can explain beta of 0.43.

The Regression is applied to answer the research question whether there is a relationship between leadership style dimensions (transformational and pragmatic) and job involvement.

Table 8: Summary of regression model for leadership style dimensions (transformational and pragmatic) and job involvement

Multiple correlation coefficient	Multiple correlation coefficient square	Adjusted multiple correlation coefficient square	Standard error of estimate
0.466	0.217	0.203	4.63586

This table shows the multiple correlation coefficient, multiple correlation coefficient square or coefficient of determination, so that the multiple correlation coefficient among the variables above is 0.46 and at the average level. Furthermore, the coefficient of determination suggests that 21% of changes in job involvement as the dependent variable can be explained by leadership style dimensions as the independent variables.

Table (9): ANOVA

Central indexes	Sum of Squares	Degrees of freedom	Mean squares	F	Significance level
Regression	2724.050	8	340.506	15.844	0.000
Residual	9842.982	458	21.491		
Sum	12567.032	466			

According to F statistic equal to 15 and the significance level less than 0.01, the regression model is confirmed and the independent variables can predict the changes in dependent variable.

Table (10): The coefficients of independent variables in terms of standardized and non-standardized values

Independent variables	Non-standardized coefficients		Standardized coefficients	t	Significance level
	B	Standard error	Beta		
Constant value	11.518	1.449		7.947	0.000
Perfectionist Behavior	0.170	0.104	0.106	1.630	0.104
Perfectionist Influence	- 0.366	0.120	- 0.186	-3.041	0.002
Attitude to motivation	- 0.061	0.263	- 0.018	- 0.232	0.817
Intellectual effort encouragement	0.045	0.124	0.032	0.365	0.715
Attention to individual differences	0.283	0.119	0.146	2.379	0.018
Leadership based on contingent rewards	0.258	0.098	0.171	2.643	0.009
Active leadership based on exceptions	0.163	0.087	0.111	1.876	0.061
Passive leadership based on exceptions	0.340	0.058	0.255	5.896	0.000

Multiple correlation between leadership styles and job involvement indicate that the Perfectionist Influence with beta of -0.18 can inversely explain the dependent variable. The beta of attention to individual differences is 0.14, beta of leadership based on contingent rewards is 0.17, and beta of passive leadership based on exceptions is 0.25.

### Discussion and conclusion

According to the first finding of this study, there is a relationship between leadership style (transformational and pragmatic) and its dimensions with employees' job involvement at Islamic Azad University of Roudehen, Damavand, Pardis, Boomehen and Firuzkuh and this finding is consistent with results of studies by Cheng, and Lung[6], Bandar and Manar (2012), Rasool[17], Colquitt and Piccolo (2006), Cheng et al [6], Cohen[7], and Fang (2011). Khalesi et al (2010) have found that there is a relationship between the servant leadership and employees' job involvement in training hospitals affiliated with Kurdistan University of medical sciences. Furthermore, Rasool[17], found the relationship between transformational leadership style and job involvement in his study. Cheng et al[6], found a correlation between transformational leadership and job involvement. Moreover, Fang [8], found in his study that the transformational and pragmatic leadership styles have impact on job involvement. Higher

education system is certainly considered as the largest and most complex human achievements and industries. The important issue in each system is to employ and appoint the eligible managers and leaders in a way that they are efficient in administration and supervision of higher education institutions. Hersey and Blanchard (1988) believe that the manager or leader's task is important in organization since he is as the fulcrum point with which all environmental variables interact. The today issues of organizations cannot be solved with past solutions and predicting the future does not solve the upcoming problems, but we should take measures for predicting the future. Nowadays, the environmental conditions and competition rules are so cruel, complex and uncertain and thus the other organizations are unable to guarantee their survival and life by superstructure changes. Today, the organizations need the entrepreneurial managers [10]. The leadership and management are the pillars of any organization and community. Among a variety of management, the management of university has a special place. If the higher education is considered as one of the most important issues in every community, the management of university has an important place in the development and prosperity of community by the same logic. On the other hand, if the higher education managers in a community have required knowledge, skills and commitment, the education system will undoubtedly have higher efficiency. The establishment of Islamic Azad University is one of the successful experiences in higher education. This phenomenon is as a successful model for non-organizational higher education and it has surely had the same contribution in a short period as the public higher education institutions with a history of about 3 times longer in the field of training the skilled labor.

## REFERENCES

1. Bass, B. M., and Avolio, B.J. (1990), "Developing transformational leadership and beyond," *Journal of European*.
2. Bass, B.M. (1985). "Leadership: good, better, best". *Organizational Dynamics*, 13(3).pp.26-40
3. Brown, S. P. (1996). A meta- analysis and review of organizational research on job involvement. *Psychological Bulletin*, 120, 235- 255.
4. Burns, J.M.(1978), " Leadership", Harper and row publisher, New York
5. Carson, K. D., Carson, P. P., & Bedian, A. G. (1995). Development and construct validation of a career entrenchment measure. *Journal of Occupational and Organizational Psychology*, 68, 301- 320.
6. Cheng, Ying-Ni; Yen, Chih-Long; Chen, Lung Hung (2012) Transformational Leadership and Job Involvement: The Moderation of Emotional Contagion, *Military Psychology* 24( 4) ,382.
7. Cohen, A. (1995) .An examination of the relationships between work commitment and non-work domains. *Human Relations*, Vol. 48 ,239-63.
8. Fang Tzu-hsia (2011) The effect of leadership, work motivation on Job involvement: The moderate effect of organizational justice, Master's Thesis, China, eThesys University.
9. Felstead, A., & Gallie, D. (2004). For better or worse? Nonstandard jobs and high involvement work systems. *The International Journal of Human Resource Management*, 15 (7), 1293- 1316.
10. Heidari Abdi Ahmad, (2004), *Entrepreneurship. Encyclopedia of Higher Education*, Vol. 2, Tehran, The Great Persian Encyclopedia Foundation, 4, No. 15, 235-244.
11. Hersey, P. and Blanchard, K.H., (1988), "Management of organizational behavior, 5<sup>th</sup> ed. Englewood cliffs. ng. prentice-hall.
12. Hollenbeck, J.R., Connolly, T., and Rabinowitz, S. (1982). Job involvement 1977-1981. Beyond the exploratory stage. Working Paper, Michigan State University, Ann Arbor: MI.
13. Lawler, E.E., and Hall, D.T. (1970). Relationship of job characteristics to job involvement, satisfaction, and intrinsic motivation. *Journal of Applied Psychology*, 54, 305-312.
14. Lodahl, T.M. (1965). Patterns of job attitudes in two assembly technologies. *Administrative Science Quarterly*, Vol.8, 482-519.
15. Mirhashemi, Malek. (2007). Developing a model for the relationship between perceived workplace factors (job roles, job characteristics, supervisory style, and organizational structure) with the faculty members' level of organizational commitment and job involvement at Islamic Azad university. Unpublished doctoral dissertation, Faculty of Humanities, Science and Research Branch, Islamic Azad University of Tehran.
16. Rabinowitz, S., and Hall, D.T. (1977). Organizational research on job involvement. *Psychological Bulletin*, 84, 265-288.
17. Rasool Asim (2008) Impact of Transformational Leadership Style on Job Involvement, *International Islamic University*.
18. Reeve, C.L., and Smith, C.S. (2001). Refining Lodahl and Kejner's job involvement scale with a convergent evidence approach: applying multiple methods to multiple samples. *Organization Research Methods*, 4, 2, 91-111.
19. Robbins, Stephen, (1991), "Organizational behavior", prentice Hall press.
20. Robbins, P. Stephen, (1996), "Organizational behavior", 7<sup>th</sup> ed. Engle wood cliffs, prentics - Hall, New Jersey.
21. Vroom, V. (1962). Ego involvement, job satisfaction, and job performance. *Personal Psychology*, 15, 159-177.
22. Yuklg. (2002). "Leadership in organization", 5<sup>th</sup> ed. prentice-Hall, Inc, upper soddr river, ng.