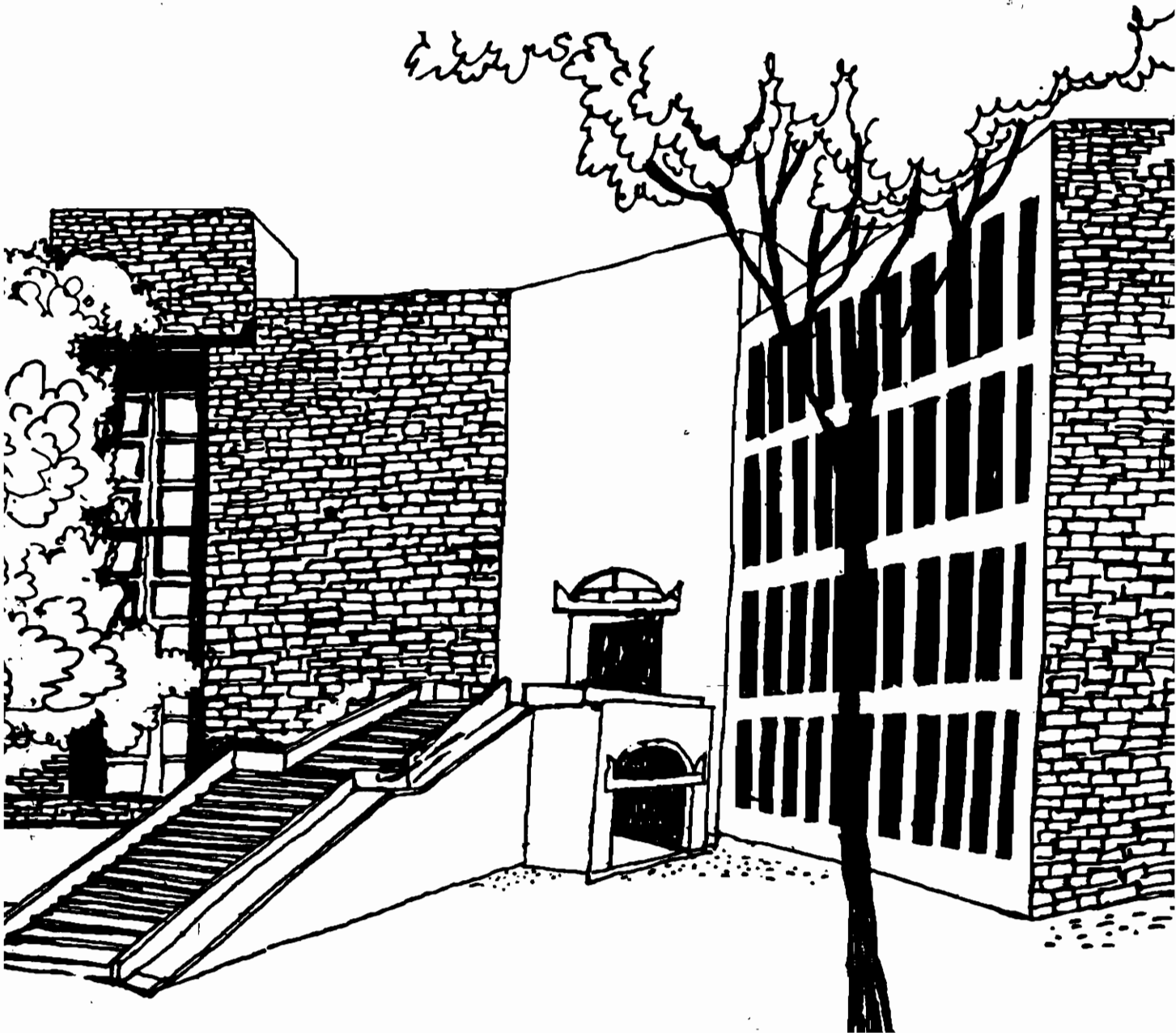




# Working Paper



ORGANIZATIONAL CHANGE AND PERCEIVED ROLE  
EFFICACY

By

D. Mukherjee  
D.M. Pestonjee  
&  
Sayeed-uz-Zafar

W.P.No.99-08-04 /1538  
August 1999

WP1538

WP

99-08-04  
(1538)

The main objective of the working paper series of the IIMA is to help faculty members to test out their research findings at the pre-publication stage.

INDIAN INSTITUTE OF MANAGEMENT  
AHMEDABAD - 380 015  
INDIA

250016

**PURCHASED**  
**APPROVAL**  
**GRATIS/EXCHANGE**  
**PRICE**  
**ACC NO.**  
**VIKRAM SARABHAI LJP**  
**E. L. M. AHMEDABAD**

**ORGANIZATIONAL CHANGE  
AND PERCEIVED ROLE EFFICACY**

by

**Maj. D. Mukherjee  
Dr. D.M. Pestonjee  
and  
Sayeed-uz-Zafar**

**Organizational Behaviour Area  
Indian Institute of Management,  
Ahmedabad**

# **ORGANIZATIONAL CHANGE AND PERCEIVED ROLE EFFICACY**

*Maj. D. Mukherjee, Dr. D.M. Pestonjee  
and  
Sayeed-uz-zafar*

## **ABSTRACT**

A number of studies have been carried out in the recent past on change management. The authors and scholars have made in-depth studies of the inner dynamics of the organizational structure, organizational culture, organizational learning, managerial behaviour and resistance to change and suggested various measures in negotiating the complex facets that change is likely to bring in the organization.

With this in view, a study on Role Efficacy was carried out on an organization from banking industry which had undergone restructuring. It was primarily affected on the senior management level while the structure of the middle and junior management levels remained unaltered. A comparison was thus made using the instrument developed by Pareek (1980). A total of 125 questionnaires were administered to these officers and 89 responses were received of which only 71 were complete. Out of the 71 responses chosen for evaluation, 27 belonged to the senior management level while 44 belonged to the middle and junior levels.

# ORGANIZATIONAL CHANGE AND PERCEIVED ROLE EFFICACY

*Maj. D. Mukherjee, Dr. D.M. Pestonjee  
and  
Sayeed-uz-Zafar*

A number of studies have been carried out in the recent past on change management. The authors and scholars have made in-depth studies of the inner dynamics of the organizational structure, organizational culture, organizational learning, managerial behaviour and resistance to change and suggested various active as well as passive measures in negotiating the complex facets that change is likely to bring in the organization.

To cope with this complexity, Pettigrew and Whipp (1993) proposed a model of strategic and operational change which involves five interrelated activities : environmental assessment, leading change, coherence, linking strategic and operational change and developing human resources. However, Benjamin and Mabey (1993) pointed out ".....while the primary stimulus for change remains those forces in the external environment, the primary motivator for how change is accomplished resides with the people in the organization."

Hence, it is important to understand about how has the change been perceived by the individuals who form an inherent part of the organization, and based on this inference whether or not the change is likely to last or succeed. It is needless to mention that the success or the failure of the change would be largely guided by its impact on the performance of the individuals and thus the organization.

With this in view, a study on Role Efficacy was carried out on an organization from banking industry which had undergone restructuring. It was primarily affected on the senior management level while the structure of the middle and junior management levels remained unaltered. A comparison was thus made using the instrument developed by Pareek (1980). A total of 125 questionnaires were administered to these two levels of officers and 89 responses were received. On scrutiny 18 of them had to be rejected due to faulty filling up or various other reasons. Out of the 71 responses chosen for evaluation, 27 belonged to the senior management level while 44 belonged to the middle and junior management levels.

The responses were then scored as per the guidelines. Mean, median, mode, standard deviation and 't' values were calculated separately for each of the 10 variables and the two groups. Inter-correlation was run and exploratory factor analysis performed for both the groups separately for all the 10 variables.

## THE CONCEPT OF EFFICACY

The performance of a person working in an organization depends on his own potential effectiveness, technical competence, managerial experience, etc., as well as the design of the role that he performs in the organization. Unless a person has the requisite knowledge, technical competence and the skills required for the role, he cannot be effective. Equally important is how the role which he occupies in the organization is designed. If the role does not allow the person to use his competence, and if he constantly feels frustrated in the role, his effectiveness is likely to be low.

The integration of the person and the role comes about when the role is able to fulfill the needs of the individual, and when the individual in turn is able to contribute to the evolution of the role. The more we move from **role taking** (responding to the expectations of the other persons) to **role making** (taking initiative in designing the role more creatively in a way such that the expectations of the others as well as of the role occupant are integrated), the more the role is likely to be effective. Effectiveness of a person-in-a-role-in-an-organization will depend on his own potential effectiveness, the potential effectiveness of the role and the organizational climate. Personal efficacy would mean potential effectiveness of a person in personal and interpersonal situations. Role efficacy would mean the



potential effectiveness of an of an individual occupying a particular role in an organization.

## **ROLE EFFICACY**

Role efficacy can be seen as the psychological factor underlying role effectiveness. In short, role efficacy is the potential effectiveness of a role.

Pareek (1980) has divided the role efficacy in to several aspects. The more these aspects are present in a role, the higher the efficacy of that role is likely to be. These aspects can be classified into three groups or dimensions, namely, role making, role centering, and role linking.

## **ROLE MAKING**

\* **Self-Role Integration:** Every person has his strengths, experience, technical training, special skills, and some unique contribution that he may be able to make. The more the role a person occupies provides an opportunity for the use of such special strengths, the higher the efficacy is likely to be. This is called self-role integration. The self or the person and the role get integrated through the possibility of a person's use of his special strengths in the role. In one organization a person was promoted to a responsible position. This was seen as a coveted reward and it made the person very happy. However, he soon discovered that in the new.

position he was not able to use his special skills of training, counseling and organizational diagnosis. In spite of his working very well in the new role, his efficacy was not as high as it was in the previous one. Later when the role was redesigned to enable him to use his rare skills, his efficacy went up. All of us want that our special strengths are used in the role so that it may be possible for us to demonstrate how effective we can be. As such, integration contributes to high role efficacy. On the other hand, if there is distance between the self and the role, role efficacy is likely to be low.

\* **Proactivity:** A person who occupies a role, responds to the various expectations that people in the organization have from that role. While this certainly gives him satisfaction, it also satisfies others in the organization. However, if he is also expected to take initiative in starting some activity, the efficacy will be higher. Reactive behaviour (responding to the expectations of others) helps a person in being effective to some extent, but proactivity (taking initiative rather than only responding to others' expectations) contributes much more to efficacy. If a person feels that he would like to take initiative but has no opportunity to do so in the role that he occupies in the organization, the efficacy will be low.

\* **Creativity:** It is not only initiative which is important for efficacy. An opportunity to try new and unconventional ways of solving problems or an opportunity to be creative is equally important. In one state government department people performing clerical roles met as a part of reorganization experiment to discuss how each individual could experiment with a system of cutting delays in processing papers. The results were amazing. Not only did the satisfaction of the people in that department go up, but delays were considerably reduced and some innovative systems emerged. Certainly, these were further discussed and modified, but the opportunity people got in being creative and in trying out innovative ideas increased their role efficacy and their performance markedly improved. If a person perceives that he has to perform only routine tasks, it is detrimental towards a high role efficacy. If he feels that the role does not allow any time or opportunity to be creative, the efficacy is bound to be low.

\* **Confrontation:** In general, if people in an organization avoid problems, or shift the problems to others, their role efficacy will be low. The tendency to confront problems and find relevant solutions contributes to efficacy. When people facing interpersonal problems sit down, and talk about these problems, and search out solutions, their efficacy is likely to be higher when compared with situations in which they either deny such problems or refer them to their higher officers.

## **ROLE CENTERING**

\* **Centrality:** If a person occupying a particular role in an organization feels that the role he occupies is central in the organization, his role efficacy is likely to be high. Every employee would like to feel that his role is important to the organization. If persons occupying various roles feel that their roles are peripheral i.e. not very important to the organization, their potential effectiveness will be low. This is true for all persons and not only for those at the lowest level.

\* **Influence:** A related concept is that of influence or power. The more influence a person is able to exercise in the role, the higher the role efficacy is likely to be. One factor which may make roles in the public-sector or civil service more efficacious is the opportunity to influence a larger section of the society. On the other hand, if a person feels that he has no power in the role he occupies in the organization, the efficacy is likely to be low.

\* **Personal Growth:** One factor which contributes effectively to role efficacy is the perception that the role provides the individual with an opportunity to grow and develop. There are several examples of people leaving one role and becoming very effective in another primarily because they had more opportunity to grow in the latter. A head of a training institute accepted the position, taking a big financial cut in his salary because he

felt that he had nothing more to learn in the previous position, and in the new position he had opportunities to grow further. If a person feels that he is stagnating in a role without any opportunity to grow he is likely to have a low role efficacy. Institutions which are able to plan growth of such people in the roles will have higher efficacy and obtain a great deal of contribution from them.

### **ROLE LINKING**

\* **Inter-role Linkage:** Linkages of one's role with other roles in the organization increases efficacy. If there is a joint effort in understanding problems, finding solutions, etc., the efficacy of the various roles involved is likely to be high. Of course, the presumption is that people know how to work effectively. Similarly, if a person is a member of a task group set up for a specific purpose, his efficacy, other factors being common, is likely to be high. The feeling of isolation of a role (that person works without any linkage with other roles) reduces role efficacy.

\* **Helping Relationship:** In addition to inter-role linkage, the opportunity for people to receive and give help also increases role efficacy. If persons performing a particular role feel that they can get help from some source in the organization whenever the need arises, they are likely to have higher role efficacy. On the other hand, if there is a feeling that no help is

forthcoming when asked for, or that the respondents are hostile, role efficacy will be low. A helping relationship is of two kinds-- feeling free to ask for help and expecting that help would be available when it is needed, as well as the willingness to give help and respond to the needs of others.

\* **Superordination:** A role may have linkages with systems, groups and entities beyond the organization. When a person performing a particular role feels that what he does is likely to be of value to a larger group, his efficacy is likely to be high. The roles which give opportunities to the role occupants to work for superordinate goals have the highest role efficacy. Superordinate goals are goals which serve large groups, and those which cannot be achieved without some collaborative effort. One major motivation for people at the top, to move to public sector undertaking is to have an opportunity to work for larger goals which are likely to help larger sections of the society. Many people have voluntarily accepted cuts in their salary to move from the private sector to the public sector at the top level, mainly because the new role would give them an opportunity to serve a larger interest. Roles in which people feel that what they are doing is helpful to the organization in which they work, result in role efficacy. But if a person feels that he does not get an opportunity to be of help to a larger group or society, the role efficacy is likely to be low.

## MEASUREMENT OF ROLE EFFICACY

In order to measure how much role efficacy a person has, the strengths of the 10 aspects of role efficacy need to be measured. These aspects are reflected in the way that the individuals in an organization perceive their roles. By analyzing the perceptions of various individuals occupying a particular role, we can arrive at the level of role efficacy, as far as that role is concerned. However, for the measurement of role efficacy the person is the basic unit.

Role Efficacy Scale is a structured instrument consisting of 20 triads of statements. A respondent marks one statement in each triad which describes his role most accurately. These three alternatives are pre-weighted. There are two statements for each dimension of role efficacy and the same scoring pattern is followed (+2, +1, or -1).

The total score arrived at by each individual is then added to 20 (total number of triads) and divided by 60 (total number of alternatives, each triad having 3 alternatives), the whole is multiplied by 100 to give the role efficacy index for the individual. Thus the formula to calculate the role efficacy index maybe given as:

$$\frac{\text{TOTALSCORE} \times 20}{60} \times 100$$

**TABLE 1**

**ROLE EFFICACY ACROSS THE TWO GROUPS**

Var.	Scale IV and V n = 27				Scale III and below n = 44				't' Value
	Mean	Med.	Mode	S.D.	Mean	Med.	Mode	S.D.	
Cent.	2.11	2	2	1.59	1	2	2	1.73	1.52
Integ.	2.81	3	3	1.33	2	3	3	1.84	1.36
Proac.	3	3	3	1.45	1	2	2	1.47	3.34*
Creat.	2.96	3	3	1.20	2	3	3	1.57	2.31***
Link	2.81	3	3	1.36	2	3	3	1.71	1.54
Help	3.59	4	4	0.78	2.84	4	3	1.46	2.43**
SupO	1.48	2	2	1.73	1.18	2	2	2.13	.61
Infl.	2.52	3	3	1.13	1.48	2	2	1.82	2.64**
Growth	2.66	3	3	1.19	1.66	2	2	1.87	2.47**
Conf.	3.74	4	4	1.14	3.52	4	4	1.22	.74
TOTAL	27.37	27	26	8.11	20.14	24	25	11.50	2.81*
INDEX	79	78	76	13.42	66.86	73	75	19.25	2.83*

\* Significant at .01 level of significance

\*\* Significant at .02 level of significance

\*\*\* Significant at .05 level of significance

**TABLE 2**

**RANK ORDER  
ROLE EFFICACY**

	Scale IV and V	Scale III and below
Centrality	10	9
Integration	5	3
Proactivity	3	9
Creativity	4	3
Linkage	5	3
Help Relationship	2	2
Superordination	9	8
Influence	8	7
Growth	7	6
Confrontation	1	1



**TABLE 3**

**INTER-CORRELATION OF EFFICACY FACTORS  
SCALE FOUR AND FIVE**

	Cent	Integ	Proa	Crea	Link	Help	Sup-o	Infl	Grow
Intg	0.65*								
Proa	0.18	0.44*							
Crea	0.27	0.47*	0.72*						
Link	0.29*	0.11	0.02	0.002					
Help	0.30*	0.64*	0.23	0.36*	0.09				
Sup-o	0.56*	0.53*	0.29*	0.53*	0.14	0.06			
Infl	0.72*	0.70*	0.27	0.44*	0.30*	0.41*	0.52*		
Grow	0.65*	0.52*	0.59*	0.52*	0.20	0.14	0.63*	0.56*	
Confr	0.006	0.16	0.21	0.14	-0.09	0.21	-0.09	0.02	-0.09

**TABLE 4**

**INTER-CORRELATION OF EFFICACY FACTORS  
SCALE THREE AND BELOW**

	Cent	Integ	Proa	Crea	Link	Help	Sup-o	Infl	Grow
Intg	0.45*								
Proa	0.55*	0.54*							
Crea	0.45*	0.30*	0.59*						
Link	0.52*	0.29*	0.44*	0.32*					
Help	0.10	0.24	0.28	0.16	0.12				
Sup-o	0.37*	0.49*	0.28	0.33*	0.34*	0.24			
Infl	0.51*	0.40*	0.47*	0.47*	0.42*	0.20	0.43*		
Grow	0.52*	0.47*	0.57*	0.53*	0.45*	0.47*	0.45*	0.53*	
Confr	0.12	-0.09	0.19	-0.02	0.11	0.08	-0.00	0.21	0.03

**TABLE 5**  
**INTERNAL STRUCTURE OF ROLE EFFICACY FACTORS**  
**SCALE IV AND V**

ITEMS	F A C T O R S		
	1	2	3
1. Centrality	.750	.318	.318
2. Integration	.839	.370	-.046
3. Proactivity	.013	.87	.164
4. Creativity	.193	.839	.144
5. Linkage	.075	.025	.842
6. Help Relationship	.817	-.095	.172
7. Superordination	.453	.651	.179
8. Influence	.712	.358	.339
9. Growth	.345	.726	.302
10. Confrontation	-.002	.056	-.526
VARIANCE	2.807	2.796	1.403
PERCENTAGE	28.07	27.96	14.03

**TABLE 6**  
**INTERNAL STRUCTURE OF ROLE EFFICACY FACTORS**  
**SCALE III AND BELOW**

ITEMS	F A C T O R S	
	1	2
1. Centrality	.571	.579
2. Integration	.723	.133
3. Proactivity	.566	.559
4. Creativity	.616	.327
5. Linkage	.397	.560
6. Help Relationship	.673	-.069
7. Superordination	.632	.122
8. Influence	.595	.504
9. Growth	.826	.250
10. Confrontation	-.242	.828
VARIANCE	3.653	2.108
PERCENTAGE	36.531	21.079

## **ROLE EFFICACY ACROSS THE TWO GROUPS**

A comparative and descriptive statistics of role efficacy variables for both the groups have been given in tables 1 and 2

Mean, Median, Mode and Standard Deviation were calculated for both the groups separately and 't' values obtained to arrive at the significance of difference between both the groups. Simultaneously rank order, based on the means for each of the items was calculated.

Table 1 gives overall mean, median, mode, standard deviation and the 't' values for a total sample of 71 managers, out of which 27 belong to Scale IV and V while 44 belong to Scale III and below, while Table 2 gives the Rank Order for both the groups.

(i) An overall analysis of the table indicates a higher Role Efficacy in scale IV and V in all the items and the difference between the two groups in the overall Role Efficacy is also significant at .01 level of significance.

(ii) The items that have significant difference at .02 level of significance of difference are help relationship, growth and influence.

(iii) There is a significant difference in the proactivity item at .01 level of significance.

(iv) There is also an overall significant difference in Role Efficacy between the two groups at .05 level of significance.

## **INTER-CORRELATION OF ROLE EFFICACY FACTORS IN SCALE IV & V**

In table 3 the coefficients of correlation are recorded for inter factor correlation.

(i) The inter correlation of the role efficacy items show Influence and Integration to have a moderate to high positive correlation with almost all other items, in case of scale IV and V. Confrontation has negligible or almost no correlation with any other item.

## **INTER-CORRELATION OF ROLE EFFICACY FACTORS IN SCALE III & BELOW**

In table 4, the coefficients of correlation are recorded for inter factor correlation.

(i) In case of scale III and below almost all items show a positive correlation from low to moderate degree with each other except for confrontation as in the earlier case.

In order to further understand the factors attributing towards Role Efficacy, Factor Analysis was carried out.

## **INTERNAL STRUCTURE OF ROLE EFFICACY FOR SCALE IV & V**

The scores for all the 71 cases on Role Efficacy were factor analyzed separately for each group by Principal Component Method. These were rotated by varimax method. Software package SYSTAT was used for this purpose. Only those factors with eigen value of 1 or above were taken in to account.

In all three factors were obtained as shown in Table 5. The total variance explained by these three factors is 70%.

(i) Factor 1 explains 28% variance. This factor has high loading's on items 1, 2, 6 and 8 pertaining to Centrality, Self-Role Integration. Helping Relationship and Influence, and thus can be termed as "Self-esteem" factor.

(ii) Factor 2 explaining another about 28% variance, is high on items 3, 4, 7 and 9 which relate to Proactivity, Creativity, Superordination and Growth respectively and may be called "Maturity" factor.

(iii) Factor 3 is high on item 5 concerning Linkage and can be termed as "Linkage" factor. This factor has high negative loading's on Confrontation indicating an avoidance. It explains 14% variance.

### **INTERNAL STRUCTURE OF ROLE EFFICACY FOR SCALE III & BELOW**

In all two factors were obtained as shown in Table 6. The total variance explained by these two factors is about 58%.

(i) Factor 1 which explains about 37% variance has high loading's on almost all items. We may hence call this as a "General Efficacy" factor.

(ii) Factor 2 with 21% variance has high loading's on items 1, 3, 4, 5, 8 and 10, pertaining to Centrality, Proactivity, Creativity, Linkage, Influence and Confrontation. Since most of these variables are linked with the self esteem, influence or the power that one has, this factor can be called "Importance" factor.

### **ROLE EFFICACY IN SCALE IV & V**

(i) It is apparent that the main contributory factors for increased role efficacy in scale IV and V are proactivity, help relationship, influence and growth.

(ii) While higher scores of scale IV and V in proactivity and help relationship can be attributed towards their higher age, maturity and a feeling of greater responsibility leading to sacrificing several conveniences in order to help others in the interest of the organization, the differences in the items of influence and growth may pertain to the recent organizational restructuring.

(iii) Role Efficacy in Scale IV & V is guided by three factors, namely "self-esteem", "maturity" and "linkage". This would mean that they enjoy the

position and authority they hold, along with its inherent links and also understand their responsibility to that position.

(iv) However, high negative loading on the variable of Confrontation indicates that they tend to shy away from any kind of confrontation. This at times may prove to be detrimental to the interests of the organization.

### **ROLE EFFICACY IN SCALE III & BELOW**

(i) It is possible that scale III and below in their present roles feel unable to influence people any more with changed structural hierarchy, more so since their own roles remain unchanged giving them a feeling of ineffectiveness or perhaps of having been "left out".

(ii) They also feel that their growth in the organization is at stake due to the steeper hierarchy. This may however be a subject of further research before a convincing conclusion is drawn.

(iii) The significant difference in the item of Influence of Role Efficacy underlines the fact that Scale III & Below (at least in the Local Head Office where the study was conducted), feel without much power and influence in their roles. This also held good during discussions that were held with some of them.

(iv) The inter-correlation matrix also indicates a moderate to high degree of correlation for the items of centrality, proactivity, Influence and

Growth with most of the other variables. Three of these variables have a significant difference with Scale IV & V.

(v) Factor Analysis of Role Efficacy factors in Scale III & Below produced two factors. The first factor which has a high loading on almost all the variables may be termed as the "General Efficacy" factor while the second factor has high positive loadings on the items of Centrality, Proactivity, Linkage, Influence and Confrontation. Since most of these factors attribute towards the power, influence or importance an individual can command in an organization, it can be called the "importance" factor. Thus the discussion as in para (iii) and (iv) above is reiterated.

(vi) Confrontation having a high positive loading in the second factor is a deviation from the factor loading of the same variable in Scale IV & V. This indicates that because of their lower hierarchical place in the organization they have to deal with problems of confrontation with subordinate and award staff as a matter of routine. Thus they perceive that finding a solution to the confrontation enhances efficacy.

### **ROLE EFFICACY : CONCLUSION**

(i) It may be observed from table 1 and 2 that Role Efficacy is higher in Scale IV & V.

(ii) The main contributory factors for higher Role Efficacy in Scale IV & V are proactivity, help relationship, Influence and Growth.



(iii) There is not much difference in the rank orders of each item for both the groups except for Proactivity, which ranks much higher in scale IV and V. This may be attributable to their wider experience and higher age to an extent.

(iv) In both the groups confrontation is weakly correlated with other variables.

(v) In Scale IV & V linkage is another variable which is weakly correlated with others while in the case of Scale III & Below it is the variable of Help relationship which is weakly correlated with other variables.

(vi) It is essential to entrust Scale III and below with more autonomy in their style of functioning, more so after the structural change. Delegating more authority and powers at these lower levels of managerial hierarchy and to avoid by passing them would not only make them feel more influential but also central in their roles.

(vii) Superordination holds the lowest ranking in both the groups. Thus an introduction of a system of team work and a criteria for its evaluation needs to be developed. The members of both the groups should be made to understand the new mission and objectives of the organization. Although the organization does hold social welfare programs and activities at various levels, an endeavor should be made to involve the maximum number of staff and ensure their voluntary participation on such occasions.

(viii) For Scale III & Below an effective appraisal system is recommended, besides an objective system for promotion, introduction of career planning and career development and recognition and reward for good work. All these measures together are likely to reduce the apprehensions of this group regarding their growth in the organization, resulting in to higher Role Efficacy.

(ix) To increase proactivity in Scale III & Below initiative should be included in the performance appraisal form. Furthermore certain schemes should be designed to recognize and reward initiative.

(x) In the lower echelons of the managerial hierarchy there seems to exist a well defined segmentation of departments. Thus the significant difference in help relationship between the two groups. This would mean that they zealously try and guard against any informal communication or exchange of information with other departments. In other words horizontal flow of information between two departments is prevented. They should be encouraged to respond promptly to the requests by other departments, as well as seek help from them. A more cordial, helping and cooperating attitude towards each other individually and also with other departments will have to be inculcated.

# REFERENCES

Benjamin, G. and Mabey, C. (1993). "**Facilitating Radical Change**." In Mabey, C. and Mayon - White, B. (Ed): *Managing Change* (2nd Edition). London: Open University / Paul Chapman Publishing.

Pareek, U.(1974). "**Measuring and Managing Role Efficacy**."New Delhi: Learning Systems, C.R.Readings, 9.

Pareek, U.(1993). "**Making Organisational Roles Effective**." New Delhi: Tata McGraw-Hill Publishing Company Limited, pp. 3-15 105-137.

Pestonjee, D.M. and Pandey, A. (1996). "Enhancing Role Efficacy: An OD Intervention" **Vikalpa, Vol 21, No.2, April - June**, IIM Ahmedabad.

Pettigrew, A. and Whipp, R. (1993). "**Understanding the Environment**." In Mabey, C. and Mayon - White, B. (Ed): *Managing Change* (2nd Edition). London: Open University / Paul Chapman Publishing.

