Organizational Formality and Its Relation with Empowerment, Innovation and Creativity of the Employees of Education Organization: A Case Study

Vali Samarghani Motlagh[1] and Mohammad Hassani[2]

[1] (Corresponding Author), M.Sc of Educational Administration, Head of Education in Western Azerbaijan, Urmia, Iran.
E-mail: samarghandimotlagh@gmail.com.
[2] Associate Professor of Educational Administration, Department of Education, Faculty of Literature and Humanities, University of Urmia, Iran.

Abstract: The main purpose of this research is to evaluate the relation between organizational formality and employees' empowerment, innovation and creativity and to investigate the mediator role of empowerment in the relation between organizational formality and innovation and creativity. The statistical population of this research consisted of 186 employees who were selected in random. Some descriptive statistical techniques including Mean, Standard Deviation and Percentage as well as some inferential statistics including Pearson Correlation Coefficient, Multivariate Regression and Partial Correlation were used for data analysis purposes. The obtained results revealed that there is a positive significant relation between organizational formality and employees' empowerment ($r=0.28$ and $p<0.01$) as well as employees' creativity and innovation ($r=0.18$ and $p<0.05$). Also, there is a positive significant relation between empowerment and employees' innovation and creativity ($r=0.59$ and $p<0.01$). The results of multivariate regression showed that organizational formality could predict empowerment, innovation and creativity and empowerment itself could predict innovation and creativity. It was also revealed that empowerment and its components play a mediator role in the relation between organizational formality and employees' innovation and creativity. [Vali Samarghani Motlagh and Mohammad Hassani. **Organizational Formality and Its Relation with Empowerment, Innovation and Creativity of the Employees of Education Organization: A Case Study**. *Life Sci J* 2013;10(7s):43-49] (ISSN: 1097-8135). http://www.lifesciencesite.com. 8

Keywords: Organizational Formality, Empowerment, Innovation and Creativity, Education Organization Employees

Introduction

In the early of the new century, in which organizations especially educational units have encountered with a global competition atmosphere, radical changes and work innovations have been always demanded. The pressure of global competition has forced today's organizations to change their fixed methods and procedures after decades and employ new ones so that organization has no fixed job sustainability and rather they work in a relative sustainable atmosphere (Geijsealnd et al, 2003). Situational variables determine plenty of favorable and proper structures so that with respect to their interactions with each other simultaneous investigation of them is almost impossible. Regarding the importance and the role of the structure on the efficient performance of organizations, determination of the manner by which organizations are structured seems a need. Organizational formality is one of the important dimensions of organizational structure as well. Formality means an extent to which regulations and procedures are available and they are employed for conducting organizational operations and duties (Wang, 2001) representing the presence of written regulations and procedures within an organization (Claycomb et al., 2008). Also, the word of *formality*

refers the formality level of orders, policies and standard procedures, which are present in the relation between employees and higher rank decisions (Ortega et al, 2010). Formality represents the informal form of control and it depends on written procedures and rules. Naturally, organizations are different in their formality level. Most of researchers in this field distinguish maximum formality from minimum one. Formality is high when the amount of formal procedures is high and the procedures are definitely determined. On the other hand in the event of low formal procedures in an organization where employees have more freedom of action, it is said that the formality level of that organization is low (Auh & Menguc, 2007).

With respect to the mentioned issues, it could be said that there are two theories about organizational formality. Formalization is considered as the ability of a series of procedures which help employees to effectively deal with inevitable problems. Rules and procedures should not essentially be designed for error proofing purposes. Indeed, they could not be available. Force formalization is a series of procedures attempting to force.

Insufficient use of intellectual resources, mental capabilities and potential capacities of human resources are form challenges of today's managers. In most organizations, employees' abilities are not optimally used and managers are unable to use their potential capacities. In other words, individuals could show more innovations and creativities in organizational environments but the capabilities are not used for some reasons (Beiginia et al., 2009). Formal rules and laws make decision cohesive which could avoid the erosion of empowerment process (Hempel et al., 2012).

Empowerment is a modern and effective technique for promoting organizational productivity through employees' abilities. Thanks to their knowledge, experience and motive, employees own a covered up power. Empowerment indeed is to release the power. The technique provides us with the potential capacities which are not used for benefiting from human's ability source and in a pure organization environment it suggest a balanced way between being perfectly controlled by managers and employees' full freedom of action (Denis, 2005).

Generally, empowerment could be considered a management style in which managers and employees are invited to have more deal with work procedures by participating them in decision making process. Indeed, they could be associated with famous movements like "human relations" and "the Y theory" of Mac Gerikore. But the concept was engaged in the organizational literature mainly by the efforts of intellectuals like Conger & Kanungo, Thomas & Welthouse and especially Spreitzer.

Most of connoisseurs believe that the concept of empowerment is a product of the concept of participative management as well as the participation of employees in decision making process for performance improvement purposes (Edwards, P., Collinson, 2002). On this basis, concentration on inferiors' role and increment of their participation backs to the "human relations" movement as well as Hasorn studies (Herrencohl et al, 1999). Relying on the concept of power, some others define empowerment as the process of the transmission of power from organizations' higher levels towards lower levels. Some others however, believe that concepts like self-motivation, targeting, delegation of power and synergy between higher rank and inferiors introduce the empowerment.

According to Spriterz suggestion, for a sufficient performance of empowerment, an individual should sense it himself before one delegate it to him. In his view, replacement of having a software-based vision to empowerment with hardware one could help on this. He believes that psychological empowerment contains the important mental states of an individual about his/her work environment which is summarized within four senses: a) Meaning, b) Competency, c) Impact and d) Self-determining (Spreitzer, 1995).

Meaning: is an opportunity in which people feel that they follow valuable and important job objectives. This means that they feel that they work in a circumstance in which their time and power are valuable. (Appelbaum & Hongger, 1995). Competency: competency makes people to feel a kind of self-efficacy or they may feel that they are equipped with necessary capabilities and skills required for doing a work successfully. To feel competency, three conditions should be satisfied: a) they should believe that they have the ability of doing the considered work; b) they should believe that they have the capacity to do necessary efforts and c) they should believe that no external obstacle could inhibit them from doing the considered work (Nixon, 2002). Impact: Spreitzer (1995) believes that impact is a degree at which an individual could affect the strategic, official and operational results and outcomes of the considered work. This is an unwavering belief of an individual who senses that he could affect whatever is happened through his activities (Beiginia et al, 2009). Self-determining: means the sense of having the right of selection in executing and organizing one's activities (Spereitzer, 1995). Such individuals deal with their duties voluntary rather to be forced to do so and their activities are considered as the outcomes of freedom and personal independency (Nixon, 2002).

Psychological empowerment is a main source for creativity. Empowered people are more likely to show innovative behaviors. Personal independency is the main characteristic of creative people and if organizations support personal independency, organizational renovation would be more achievable (gumusluoglu & Ilsev, 2009). Today's world is changing with an incredible speed. The domain of cognition and technology is being spread quickly and recreation is one of the essential components of different cultural, political, social and economical systems. Education organization is one of the organizations which have higher responsibility in upbringing creativity and innovation than other ones because it is the fundamental entity forming people personality and visions and growing different intrinsic aspects of human (Safi, 2000). Creativity has been always a mysterious, wide and sophisticated concept. Studies on the creativity and its components have been started by social science Scientifics more than a century ago but the main motivation to search on this filed was created by Guilford in 1950. Guilford believed that the creativity with divergent though (obtaining new ways for solving problems) is

equal with convergent thoughts (obtaining the right answer).

Some authors believe that creativity and innovation should be studied separately because they have different definitions and meanings especially within organizations (Mohr, 1969). The creativity indicates to bring a thing to its existence state while the innovation indicates to bring a thing to the ready for use state (Rosenfeld & Servo, 1990). According to the definitions, the creativity is the prerequisite of innovation and the realization of renovation depends on the creativity. Although, the concepts could not be practically separated but it could be supposed that the creativity is an infrastructure for the growth and creation of innovations. The creativity is the emergence and formation of a noble new thought while innovation is putting the thought into practice.

By reviewing previous studies it could be found that researches have not directly studied the relation between organizational formality and empowerment, creativity and innovation. DeGroot & Brownlee (2006) showed that organizational structure is a good predictor of organizational citizenship behavior. In their study they also showed that the organizational citizenship behavior acts as a mediator in the relation between organizational structure and efficacy.

In a research by the title of "backstage management", Ongorib (2008) states that those organizations which demand quick response to environmental changes need to implement employees' empowerment policies to decrease staff leave rate. Ratmawati (2007), states that managers' competency as well as the commitment of managers to employees' empowerment has a positive significant relation with organization efficiency. The findings of Chang et al (2009) indicated that psychological empowerment could not play a definite mediator role in the relation between organizational commitment and job satisfaction because organizational empowerment has a direct and strong impact on job satisfaction. In their research however, they indicated that job satisfaction could affect the relation between empowerment and organizational commitment. They also stated that empowerment of the employees with higher levels of job satisfaction results in a strong organizational commitment between employees.

Definitively, an organization would be more successful which benefits from empowered and innovative employees because empowerment is considered as one of the newest techniques for increasing efficacy and efficiency through increasing employees' innovation and creativity.

Research Questions

1. Is there a relation between organizational formality and employees' empowerment, creativity and innovation?
2. Is there a relation between organizational formality and empowerment components?
3. Is there a relation between empowerment components and employees' creativity and innovation?
4. Do empowerment and its components play a mediator role in the relation between organizational formality and employees' innovation and creativity?

Research Method

The research method is descriptive-correlation. The statistical population of this study consists of all 386 employees of the education organization of West Azerbaijan Province in the school year of 2009-2010. Among them 186 employees were selected as the statistical sample using Morgan random sampling table. In current research, four questionnaires were used in the form of one questionnaire for data collection purposes. Heig & Ayken (1969) questionnaire was used to assess organizational formality. The questionnaire consists of 15 items which has been arranged as Likert scale from point 1 (absolutely true) to point 4 (absolutely wrong). Spreitzer questionnaire was used for measuring empowerment containing four components: meaning, self-determination, competency and impact.

The questionnaire has 12 items which is arranged as Likert scale from point 1 (absolutely disagree) to point 5 (absolutely agree). To measure creativity and innovation, the questionnaire of Otlay and Akief (1982) was used. It has 10 items which have been arranged as Likert scale from point 1 (absolutely disagree) to point 5 (absolutely agree). The questionnaires have good reliability and validity and they have been used in different researches. The questionnaire of measuring personal characteristics was used as well.

To make sure about the validity and reliability of the questionnaires and to define that to which extent they fit with Iranian employees' understandings, and more importantly to determine that whether the words, terms and phrases employed in them are proportional with Iranian culture, they were primarily applied on a group with 50 members which has been selected among the statistical population. The scales were implemented within a two-page questionnaire accompanied with an introduction to explain and guide the tests as well as requested demographic information of tests.

The opinions of the professors of Urmia University were used to evaluate the validity of the questionnaires. To estimate their reliability, Cronbach's alpha was used. The reliability factors of

organizational formality and empowerment questionnaires were 0.75 and 0.82, respectively. Also, the reliability factors of meaning, competency, self-determining and impact were obtained 0.71, 0.80, 0.77 and 0.84, respectively. For creativity and innovation it was derived 0.76. Descriptive statistics including mean, standard deviation and percentage as well as inferential statistics including Kolmogorov-Smirnov test, Pearson correlation factor, multivariate regression and partial correlation were used for data analysis purposes. All statistical operations were carried out by SPSS.

Results

The statistical sample of the research consisted of the 186 employees who fulfilled the questionnaires with an average of 40 years old. 82.2% of participants were male and 17.8% were female. 90.6% were married and 4.4% were single. In the evaluated statistical sample, 32.8% of participants had a 21-25 year record and 17.7% had B.S degree. Before correlation test, non parametric test of Kolmogorov-Smirnov was conducted to determine that whether data are normal. The results showed that the data was normal in the under evaluation variables.

Table 1. Kolmogrov-Smirnov test for the variables of the study

Group	Test value	P-value
Organizational formality	0.85	0.46
Empowerment	0.85	0.46
Creativity and innovation	1.1	0.18

Correlation relations between the research variables were assessed by the evaluation of correlation matrix. Table 2 shows the results of this analysis.

Table 2. Matrix of correlation between organizational formality, empowerment, creativity and innovation

Variable	Mean	SD	1	2	3	4	5	6	7
1-Meaning	8.3	1.3	1						
2-Competency	12.6	1.8	0.53[**]	1					
3-Self-determining	10.3	2.6	0.22[**]	0.34[**]	1				
4-Impact	10.4	2.6	0.30[**]	0.35[**]	0.38[**]	1			
5-Empowerment	41.6	6	0.60[**]	0.71[**]	0.77[**]	0.77[**]	1		
6-Formality	35.2	4.3	0.14	0.10	0.18[*]	0.16[*]	0.28[**]	1	
7-Creativity	35.1	4.6	0.34[**]	0.48[**]	0.30[**]	0.59[**]	0.59[**]	0.18[*]	1

$**<0/01, *<0/05$

According to the information of the table 2:
 a. There is a significant positive correlation between organizational formality and empowerment (p<0.01) and between self-determining components and impact (p<0.05) while it was seen no significant relation between organizational formality and self-determining components and competency due to high level of significance (p>0.01).
 b. There is a significant positive relation between organizational formality and employees' creativity and innovation (p<0.05).
 c. There is a significant positive relation between empowerment & all of its components and employees' creativity and innovation at the 0.05 level of significance.

Results of Multivariate Regression on Research Variables

The statistical method of multivariate regression was employed to determine the role and importance of the organizational formality variable in explicating empowerment. Table 1 shows the results.
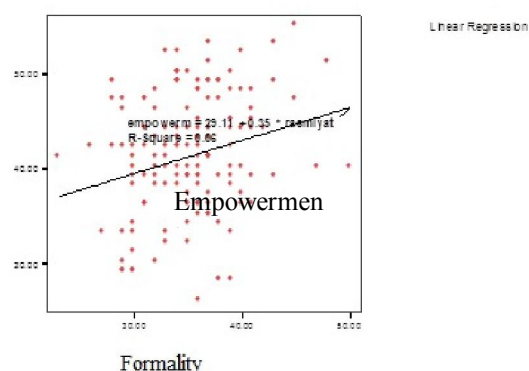

Figure 1. Results of multivariate regression analysis between organizational formality and empowerment

Figure 1 indicates that in this study in a confidence level of 99%, there is a significant

positive relation between organizational formality and employees' empowerment (p=0.000<0.05, r=0.25). As it is shown in the linear regression equation, the level of employees' empowerment could be raised by increasing their organizational formality.

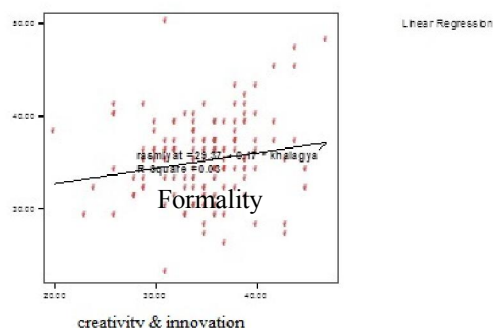Organizational formality Y=29/11+0.35**

Figure 2. Results of multivariate regression analysis between organizational formality and creativity & innovation

Figure 2 indicates that in this study in a confidence level of 95%, there is a significant positive relation between organizational formality and employees' creativity and innovation (p=0.000<0.05, r=0.18). As it is shown in the linear regression equation, the level of employees' creativity could be raised by increasing their organizational formality.

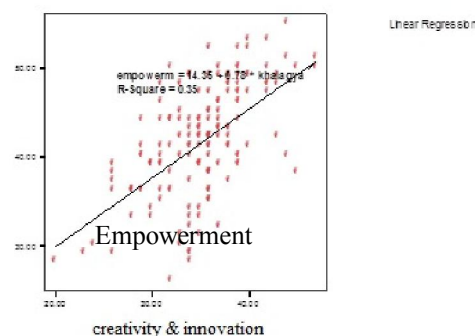Organizational formality Y=23/37+0.17*

Figure 3. Results of multivariate regression analysis between empowerment and creativity & innovation

Figure 3 indicates that in this study in a confidence level of 99%, there is a significant positive relation between organizational formality and employees' creativity and innovation (p=0.000</01, r=0.59). As it is shown in the linear regression equation, the level of employees' creativity could be raised by increasing their organizational formality.

Creativity and innovation Y=14/36+8.7**

Partial Correlation Coefficient Significance Test for the Study Variables

Partial correlation coefficient test shows the degree of linear relation between two variables of a sample by eliminating the impacts of one or more controlling variables. Table 6 shows the results of partial correlation between the variables of the study.

Table 3. Results of partial correlation analysis of the variables of the study

Independent variables(IV)	Mediator(MV)	Dependent variables(DV)	Presence of MV	Absence of MV	MV is a mediator
organizational formality	empowerment	creativity and innovation	0.177**	0.039**	yes
organizational formality	right of selection	creativity and innovation	0.177**	0.130**	yes
organizational formality	impact	creativity and innovation	0.177**	0.111**	yes
organizational formality	competency	creativity and innovation	0.177**	0.127**	yes
organizational formality	meaning	creativity and innovation	0.177**	0.139**	yes

To determine the role of empowerment in the relation between organizational formality and innovation & creativity, the empowerment variable was controlled in the relation between the mentioned variables. The correlation coefficient between organizational formality and creativity & innovation was compared in two states: in the presence of the empowerment variable and by controlling this variable. Table 3 shows the results. Since the relation between organizational formality and creativity & innovation is significant at the p<0.05 level of significance and after controlling the impact of the empowerment variable and its components the

relation between organizational formality and employees' creativity and innovation becomes insignificant at the p<0.05 level of significance, then it could be argued that the variable of empowerment and its components play a mediator role in the relation between organizational formality and employees' creativity and innovation.

Conclusion and Suggestion

The purpose of this study is to evaluate the relation between organizational formality and employees' empowerment, creativity and innovation as well as to assess the mediator role of empowerment in the relation between organizational

formality and creativity & innovation. The study findings showed that there is a significant positive relation between organizational formality and employees' creativity and innovation as well as between empowerment and employees' creativity and innovation. Also, there is a significant positive correlation between organizational formality and the self-determining and impact components of empowerment while it was seen no significant relation between the two other components of the empowerment variable i.e. meaning and competency, and organizational formality due to high levels of significance level. There is a significant positive relation between empowerment and all of its component and employees' creativity and innovation. The results of multivariate regression however, showed that organizational formality could predict employees' empowerment, creativity and innovation and empowerment itself could predict innovation and creativity. The findings agree with the findings of Gumusluoglu and Ilsev (2009), which investigated the relation between transformational leadership and organizational innovation and creativity and found that there is a positive relation between transformational leadership, intrinsic motivation and psychological empowerment and employees' creativity. Also, they agree with the results of Hempel et al. (2012) who evaluated the relation between team empowerment, concentration and formality and showed that a) team empowerment has relation with organizational structure and b) the positive relation between formalization and team empowerment depends directly on the formalization level implementing in an organization. Gumusluoglu and Ilsev (2009) showed however, that the transformational leadership is a good predictor of organizational innovation. It was found no other research on the relation between the three mentioned variable but the researches of Conger & Canungo (1988) know empowerment as the process of promoting the sense of self-efficacy of individuals through recognizing and elimination of conditions disabling employees. Some authors believe that in the relation between organizational formality and creativity, orders and official rules inhibits people from creating new knowledge. Therefore, they may limit the opportunity of having interaction with other members of an organization. On the other hand, some studies consider formalization as a resource for creating new knowledge and use of it (Ortega et al., 2010). The results of partial correlation between the variables of this study revealed that empowerment and its components play a mediator role in the relation between organizational formality and innovation & creativity. Zhong et al. (2011) states that empowerment plays a mediator role in the

relation between leadership-follower interaction and organizational citizenship behavior. Harris (Harris t al, 2009) states that empowerment has a significant relation with job satisfaction. He says that it plays a mediator role in the relation between leadership-follower interaction and job satisfaction. Also, in their studies Gumusluoglu and Ilsev (2009) concluded that intrinsic motivation plays a definite mediator role in the relation between transformational leadership and organizational innovation but empowerment acts a mediator in the relation between transformational leadership and organizational creativity. Through another research Hempel et al. (2012) showed that empowerment plays a mediator role in the relation between organizational structure and team performance. Thus, if an organization is structured and formalized in a right way, doing tasks not only would not be an awkward situation but also would result in their success in empowerment programs and would increase their creativity and innovation. Therefore, the formalization of empowerment will increase employees' creativity and innovation through increasing their success in empowerment programs. If the managers of organizations wish to have creative employees they should equip them with freedom of action through empowerment techniques and should participate them in organizational decision making process so that all employees be participated in decision making processes, work groups be formed and more power and authority be delegated to inferiors in order to let employees be more flexible, self-order, entrepreneur, responsible and be very desirous of having freedom and innovation. The results of this study indicate however, the importance and role of empowerment as an important motivation tool of employees. With respect to the positive relation between empowerment and creativity and innovation it is recommended to pay more attention to the variable of empowerment in order to increase employees' creativity. It is also suggested to study the impacts of other important prerequisites of creativity and innovation like concentration and complexity, emotional intelligence and transformational leadership in educational environments.

Corresponding Author:
Vali Samarghani Motlagh, M.Sc of Educational Administration, Head of Education in Western Azerbaijan, Urmia, Iran.
E-mail: samarghandimotlagh@gmail.com

References
1. Appelbaum, Steven H.; Hongger, Karen (1998). Empowerment: A Contrasting Overview of

Organizations in General And Nursing in Particular: An Examination of Organizational Factors, Managerial Behaviors, Job Design and Structural Power. Journal of Empowerment in Organization, 6 (2): 29-50.

2. Auh, S., & Menguc, B. (2007). Performance implications of the direct and moderating effects of centralization and formalization on customer orientation. Industrial Marketing Management, 36 1022-1034.

3. Chang, L. C., and Shin, C. H., and Lin, S. M. (2009). The mediating role of psychological empowerment on job Satisfaction and organizational commitment for school health nurses: A cross-sectional questionnaire survey. International Journal of Nursing Studies, 47 (4): 427-433.

4. Germain, R., & Claycomb,C., & Droge. C. (2008). Supply chain variability, organizational structure, and performance: The moderating effect of demand unpredictability. Journal of Operations Management, 26 (5): 557-570.

5. Conger, J. A., & Kanungo, R. N. (1988). The empowerment process: Integrating theory and practice. Academy of Management Review, 13 (3): 471-482.

6. DeGroot, T., & Brownlee, A. L. (2006). Effect of department structure on the organizational citizenship behavior-department effectiveness relationship. Journal of Business Research, 59 (10): 1116-1123.

7. Edwards, P., Collinson, M. (2002). Empowerment and managerial labor strategies, pragmatism regained. Work and Occupations, 29 (3): 272-299.

8. Geijsel, f.; Sleegers, p.; Leithwood, K. and jantzi, D. (2003). Transformational leadership effect on teacher,s Commitment and effort toward school reform. Journal of Educational Administration, 41 (3): 228-256.

9. Gumusluoglu, L., Ilsev, A. (2009). Transformational leadership, creativity, and organizational innovation. Journal of Business Research, 62: 461–473.

10. Harris, K.J., Wheeler, A. R., Kacmar, K. M. (2009). Leader–member exchange and empowerment: Direct and interactive effects on job satisfaction, turnover intentions, and performance. The Leadership Quarterly, 20 (3): 371–382.

11. Hempel, P.S., & Zhang, Z. X., & Han, Y. (2012). Team Empowerment and the Organizational Context: Decentralization and the Contrasting Effects of Formalization. Journal of Management, 38 (2): 475-501.

12. Herrencohl, R. C., Judson, G. T., & Heffner, J. A. (1999). Defining and measuring employee empowerment. Journal of Applied Behavior Science, 35 (3): 373-389.

13. Mohr, L. B. (1969). Determinates of Innovation in Organizations. The American Political Science Review, 63 (1): 111-126.

14. Nixon, B. (2002). Facilitating Empowerment in Organizations. Leadership & Organization Development Journal, 15 (4): 3-11.

15. Ongorib, H and Shunda J. P .W. (2008). Managing behind the scenes: employee empowerment. The International Journal of Applied Economics and Finance, 2 (2): 84-89.

16. Ortega, E. M., Zaragoza, P., & Cortes, E. C. (2010). Can formalization, complexity, and centralization influence knowledge performance? Journal of Business Research, 63 (3): 310-320.

17. Petter, J., Byrnes, P., Choi, D., Fegan, F., & Miller, R. (2002). Dimensions and patterns in employee empowerment: Assessing what matters to street-level bureaucrat. Journal of Public Administration Research and Theory, 12 (3): 377-401.

18. Ratmawati, D. (2007). Managerial competency and management commitment to employee empowerment. Proceedings of the 13th Asia Pacific Management Conference, Melbourne, Australia, 556-562.

19. Rosenfeld, R. & Servo. J. C. (1990). Facilitating Innovation in Larg Organization", IN M. A. West & J. L. Farr (EDS) Innovation and Creativity at Work: Psychological and Organization Strategies, John Wiley & Sons, WestSussen, (251-264).

20. Spreitzer, G.M. (1995). Psychological empowerment in the workplace: dimensions, measurement, and validation. Academy of Management Journal, 38 (5): 1442-1465.

21. Wang, E. T. (2001). Linking organizational context with structure: a preliminary investigation of the information processing view. Omega, 29 (5): 429-443.

22. Zhong, J. A., Lam, W., Chen, Z. (2011). Relationship between leader–member exchange and organizational citizenship behaviors. Asia Pacific Journal of Management, 28 (3): 609-626.

12/2/2012