Structural Relationship between Authentic Leadership, Organizational Communication, Organizational Effectiveness, and Psychological Capital of Office Workers

Yeoun Kyoung Hwang[1] and Chang Seek Lee[2*]

[1]Department of Lifelong Education, Hanseo University, Korea; 01020707980@hanmail.net
[2]Department of Child and Adolescent Welfare, Hanseo University, Korea; lee1246@hanmail.net

Abstract

This study was conducted to identify the structural relationship of authentic leadership, organizational communication, organizational effectiveness, and psychological capital among "520" office workers at the government offices, public enterprises, and companies in D metropolitan city. First, as the result of analysis, there was a significant positive correlation between the sub-regions of organizational effectiveness, authentic leadership, psychological capital, and organizational communication. Second, it was found that authentic leadership influenced on the organizational effectiveness, and organizational communication had a significant influence on the psychological capital and organizational effectiveness. Then, psychological capital affected the organizational effectiveness.

Keywords: Authentic Leadership, Office Worker, Organizational Communication, Organizational Effectiveness, Psychological Capital

1. Introduction

In rapidly changing social environment, an organization not only tries to maintain the existence and to strengthen the competence of organizational members for growth, but it also puts efforts into various aspects for the management and development of human resources. In terms of organizational behavior, such efforts can be largely divided into three[1]. At the organizational level, organizational effectiveness refers to the efforts for improving the job satisfaction and organizational commitment for achieving the goals of the organization. In terms of the group, efforts for managing the communication and conflict are needed, and at the individual level, efforts and attempts for improving the personal habits, education, and ability for the employees are needed. First, organizational effectiveness at the level of organization is a measure for the performances of organization, and it is a concept that indicates the effectiveness of the organization[2]. A typical indicator that measures the organizational effectiveness is a pleasant, enjoyable, positive emotional job satisfaction[3] gained from the experience through their jobs according to individual attitudes, values, and beliefs. The organizational commitment[4], which can be called as a tendency to work continuously in the current organization, as well as willingness and affection[5] for providing energy and loyalty to the organization by the organizational members. Such organizational effectiveness is widely utilized as a variable for predicting the performance of the organization. Therefore, organizational effectiveness shows different performances according to the degree of willingness, efforts, and unity of organization's management and members. Especially, an emotional state and mutual harmony of leaders and

members can be described as a prerequisite for effective organizational management. In recently years, as one of the methods for improving the performance and competitiveness of organization, an authentic leadership that emphasized the moral aspect is being spotlighted[6]. Such authentic leadership is recognized as goodwill and trust in the members, and it promotes strengthening of the positive mental competence and self-development of the members[7]. As a result, in conjunction with psychological capital, it is a new approach that is closely related to the job satisfaction and organizational commitment.

Furthermore, an importance of communication has been intensified, which has become a popular topic during the recent years, due to a complex structure of organization. Organizational communication is an interaction between the members of the organization within the various levels for achieving the goals of the organization while performing a joint project. It is defined as the process of meeting the individual needs[8]. As such, the organization is always exposed to the communication environment[9], and smooth organizational communication lies at the center of ongoing efforts for sustainable development and growth of organization. Cognitive and emotional satisfaction of members on the organizational communication is emerging as a major factor for having a positive effect on job satisfaction[10] and organizational commitment[11]. However, due to the changes in the communication environment and considering that all members are the subject of communication, a realistic approach considering their thoughts and emotional state is needed. In other words, for the development of the organization, not just a communication for improving the performance but a positive emotional communication between members must be balanced and harmonized[12].

In addition, psychological capital can be seen as efforts and attempts of organizational members in individual aspect. Psychological capital, which is drawing attention as a new paradigm in the recent human resource development, has been identified not just as a variety of complex and positive mental state of individuals[13] which improves the physical and mental health but also as a factor that helps the performance of the group[14]. Thus, active studies are being conducted in academia and in the field. Such psychological capital can be seen as a top concept which integrates the four individual competencies such as hope, optimism, self-efficacy, and resiliency. It is known through many studies that humans perceive the given

situation and problems differently according to the past experience and emotional state. If a person has positive mental state, he or she tends to think optimistically about the future when facing a negative situation and tries to find a better way. Such positive psychological competencies have shown to directly influence the job satisfaction and organizational commitment, in association with the attitude and behavior of organizational members. But, it also has shown to cause indirect influences[15].

A positive emotional state of the members is utilized as the source of specific energy of the organization, in order to maintain and secure the competitiveness. A smooth communication culture within the organization contributes to creating a healthy organization by improving the effectiveness of the organization. It is considered that such factors are gripped like a gear enabling a virtuous cycle of affecting one another, and as a result, it improves the job satisfaction and organizational commitment. However, although studies on the relationship between psychological capital, authentic leadership, job satisfaction, and organizational commitment[16] are taking place, sophisticated results which can be applied to various organizations were not drawn. The studies dealing with the comprehensive relationship on the authentic leadership, organizational communication, psychological capital, and organizational effectiveness in terms of organizational behavior is still inadequate.

Therefore, this study was conducted to provide a policy materials required for achieving effective organizational goals by improving the job satisfaction and organizational commitment. Furthermore, it aimed to provide strategies for developing the human resources through communication management, by identifying the structural relationship between authentic leadership, organizational communication, organizational effectiveness, and psychological capital perceived by the workers.

2. Methods

2.1 Research Model

Study results indicated that authentic leadership has a positive effect on organizational effectiveness[17], organizational communication have a significant positive effect on organizational effectiveness[18], and psychological capital have a statistically significant relationship with organizational effectiveness[19].

Such results have continuously been reported domestically and in overseas. Meanwhile, organization having a smooth communication has higher organizational effectiveness, and reasonable and open communication has significant and positive effect on self-efficacy[20]. Based on these previous studies, a research model was set as shown in Figure 1.
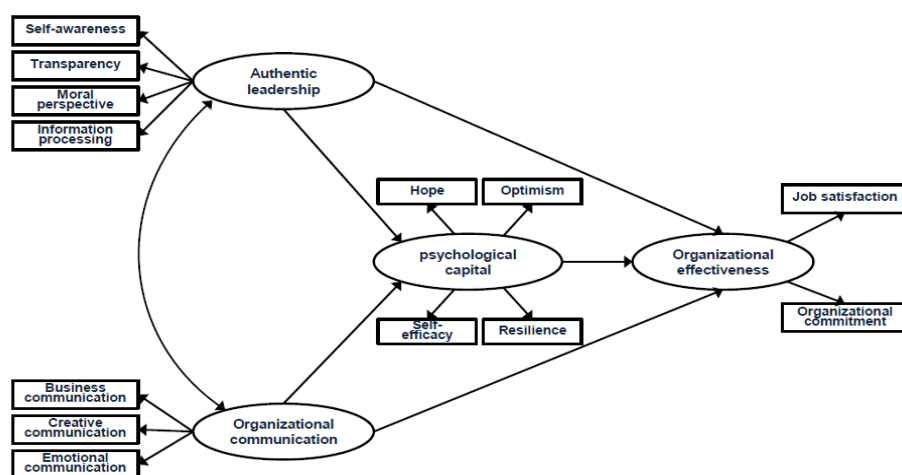

Figure 1. Research model.

2.2 Participants and Data Collection

This study has performed with the purposive sampling targeting "520" workers working at government offices, public enterprises, and companies in D Metropolitan city. The individual characteristics of the surveyed participants are as follows. For gender, females accounted for 50.8% and males accounted for 49.2%. For age, 50.2% were in their 30s, which was the highest. For the level of education, college graduates accounted for 49.8%, graduate school graduates accounted for 22.5%, junior college graduates accounted for 16.5%, and the high school graduates or below accounted for 11.2%.

This study has collected its data using a questionnaire targeting the workers working at the government offices, public enterprises, and companies of D Metropolitan City; the participants approved the survey cooperation. The purpose of the study was explained to the participants, and the questionnaire was directly completed by the participants and collected by the researchers. The data was collect from July 1, 2014 to July 31, 2014 over a period of one month.

2.3 Survey Tools

2.3.1 Authentic Leadership

To measure the authentic leadership 'The Authentic Leadership Inventory (ALI)' scale was used, which was developed by Linda and Chester[21] and modified by Ku[22]. The questionnaire was composed of 16 questions to fit the subjects. This scale measures the degree of leadership of the direct superior, perceived by the staff. It was measured based on the 4 sub-regions as follows: self-awareness, relational transparency, internalized moral perspective, and balanced information processing. For the measurement, 5-point Likert scale (1=not at all, 5 = strongly agree) was used and the higher score indicated higher perceived leadership of their direct superior. The followings are the reliability of each sub-region found by using Cronbach's α: self-awareness "0.850", relational transparency"0.860", internalized moral perspective"0.865", and balanced information processing"0.897".

2.3.2 Organizational Communication

Organizational communication scale combined 9 questions for organizational communicationand 5 questions for organizational culture at Samsung Economic Research Institute[12]. The scale consists of 10 questions and 3 sub-regions as follows: 3 questions for business communication, 3 questions for creative communication, and 4 questions for emotional communication. For measurement, 5-point Likert scale (1=not at all, 5=strongly agree) was used. For reliability, business communication had Cronbach's α="0.721", creative communication had "0.692", and emotional communication had "0.818".

2.3.3 Organizational Effectiveness

Organizational effectiveness scale consists of 9 questions on the job satisfaction and 8 questions on the organizational commitment. The scales used for job satisfaction were developed by Cook and Wall[23] and revised by Na[24], and developed by Warr and Routledge[25] and revised by Han[26]. It was partially modified and supplemented.

The scale on organizational commitment used 8 questions related to psychological immersion, by Jung[27], among the 24 questions of Allen and Meyer[28]. All questions regarding organizational effectiveness were measured by 5-point Likert scale (1=not at all, 5=strongly agree). The reliability of job satisfaction was Cronbach's α="0.868" and the organizational commitment was Cronbach's α="0.899".

2.3.4 Psychological Capital

The scale of psychological capital consists of 24 questions from 'Psychological Capital Questionnaire: PCQ' used in the study of Lee and Choi[29], which was developed by Luthans[30]. The scale consists of 4 sub-regions such as hope, optimism, self-efficacy, and resiliency. Each question used 5-point Likert scale from 1=not at all to 5=strongly agree. Reliability for each region was measured by Cronbach's α as follows: hope "0.803", optimism "0.606", self-efficacy "0.810", and resiliency "0.715".

2.4　Data Analysis

Data were analyzed by using SPSS PC+ Win. 21.0 and Amos 21.0. For the statistical analysis, descriptive statistics, reliability analysis, correlation analysis, mean comparison analysis, and structural equation modeling were applied.

3.　Results

3.1　Correlation Analysis and Descriptive Statistics

Pearson's correlation analysis was conducted to identify the correlation between variables, and the results are shown in Table 1. There was a significant positive correlation between sub-regions of organizational effectiveness, authentic leadership, psychological capital, and organizational communication.

3.2　Validating Test of Modified Model

After validating the research model, the goodness of fit index was found which indicates the overall fitness of the model. It was determined that $\chi2$ value was "375.936" (df=59), TLI= "0.916", CIF="0.936", and RMSEA="0.102"; and it was found to be dissatisfying. Thus, the model was partially modified through MI modification indices. Among the error variance, that exceeds modified index value of "10"[31], it was modified by connecting with the covariance path between the error terms which can be explained theoretically.

As a result of modifying the model, the $\chi2$ value in the goodness of fit index was "240.716" (df=56), TLI="0.948", CIF="0.963", and RMSEA="0.080" as seen in Table 2. It was confirmed that the modified model was much improved than the previous research model, in all goodness of fit indices. Therefore, this study has selected the modified model as the final research model. Verification results of modified model and each path coefficient are proposed in Figure 2 and Table 3. Verification results for each path are as follows.

The authentic leadership of the superior had a significant influence on organizational effectiveness, which was found to be statistically significant (β=0.238, p<0.001). The organizational communication was found to have a significant influence on each of psychological capital (β=0.300, p<0.001) and organizational effectiveness (β=0.442, p<0.001). The psychological capital was found to have a significant influence on organizational effectiveness (β=0.464, p<0.001); but unlike the research model, authentic leadership did not have a significant influence on psychological capital.

4.　Discussion and Conclusion

First, between the sub-regions of organizational effectiveness, authentic leadership, psychological capital, and organizational communication all had a significant positive correlation. Along with the study[32] indicating that higher satisfaction of organizational communication leads to higher organizational commitment, our results are in the same context as the previous study[33]. The results indicate that communication and organizational communication had a significant positive correlation between job satisfactions. Our results are also within the same flow as the previous study results, which indicated

Table 1. Correlation analysis

	1	2	3	4	5	6	7	8	9	10	11	12	13
1	1												
2	0.719**	1											
3	0.714**	0.828**	1										
4	0.702**	0.783**	0.802**	1									
5	0.548**	0.613**	0.623**	0.600**	1								
6	0.397**	0.370**	0.396**	0.447**	0.689**	1							
7	0.274**	0.265**	0.295**	0.202**	0.477**	0.380**	1						
8	0.139**	0.116**	0.125**	0.148**	0.348**	0.394**	0.579**	1					
9	0.231**	0.251**	0.264**	0.266**	0.560**	0.515**	0.636**	0.649**	1				
10	0.234**	0.292**	0.334**	0.267**	0.501**	0.383**	0.670**	0.635**	0.704**	1			
11	0.473**	0.563**	0.519**	0.527**	0.665**	0.486**	0.367**	0.270**	0.413**	0.408**	1		
12	0.291**	0.318**	0.260**	0.402**	0.507**	0.513**	0.189**	0.347**	0.432**	0.258**	0.577**	1	
13	0.518**	0.549**	0.545**	0.599**	0.665**	0.553**	0.293**	0.227**	0.393**	0.360**	0.707**	0.644**	1

1. Self-awareness 2. Transparency 3. Moral perspective 4. Information processing 5. Job satisfaction 6. Organizational commitment 7. Hope 8. Optimism 9. Self-efficacy 10. Resiliency 11. Business communication 12. Creative communication 13. Emotional communication

$*P<0.05, **P<0.01$

Table 2. Goodness of fit test results of the research model and modified model

	χ^2	df	TLI	CFI	RMSEA
Research model	375.936	59	0.916	0.936	0.102
Modified model	240.716	56	0.948	0.963	0.080

Table 3. Path of modified model

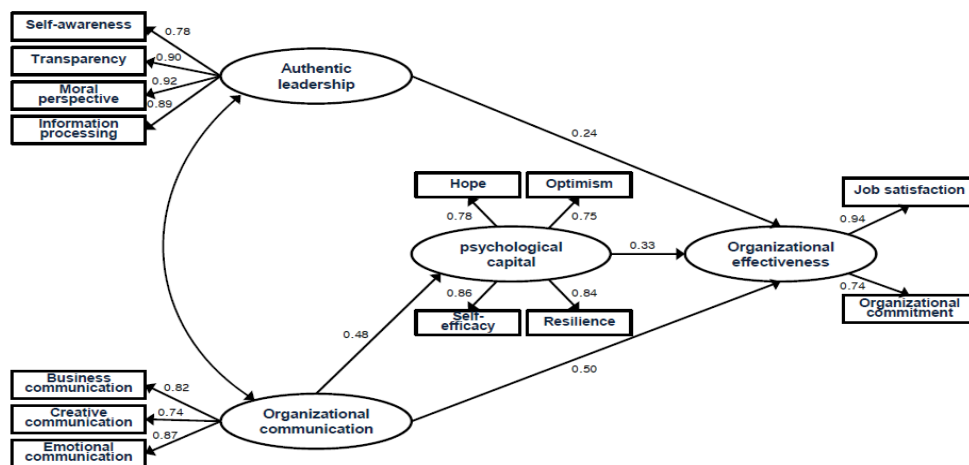| Path between variables			β	S.E.	t
Authentic leadership	**Organizational effectiveness**	0.171	0.238	0.033	5.167***
Organizational communication	**Organizational effectiveness**	0.442	0.500	0.046	9.608***
	Psychological capital	0.300	0.482	0.030	10.150***
Psychological capital	**Organizational effectiveness**	0.464	0.326	0.049	9.534***

$***P<0.001$

Figure 2. Modified model.

that communication in the organization showed statistically significant correlation with job satisfaction[33] and had a positive correlation with the organizational commitment[11].

Second, authentic leadership was found to cause a significant influence on the organizational effectiveness. Due to the study results that authentic leadership affects the organizational effectiveness[7], it can be seen that job satisfaction and organizational commitment can change according to the degree of workers' perception on the authentic leadership of the superior.

Third, organizational communication was found to cause a significant influence on the psychological capital and organizational effectiveness. It indicates that smoother communication within the organization increases hope, optimism, resiliency, and self-efficacy. This can be interpreted as having higher job satisfaction and organizational commitment, and there are studies where such sub-region of psychological capital was used for result variables. It was found that communication ability had a positive significant relationship with self-efficacy[34], and the non-verbal communication of superiors was found to cause a significant and positive influence on the self-efficacy of the members[35]. Based on these studies, organizational communication can be interpreted to cause a positive influence on the psychological capital of an individual.

Fourth, psychological capital was shown to cause a significant influence on the organizational effectiveness. Thus, it can be seen that the higher level of psychological capital leads to the higher level of organizational effectiveness.

Such results coincide with the previous studies36 which indicated that positive psychological capital of organizational members has a significant influence on job satisfaction. It also coincided with the study dealing with hotel employees that confidence, hope, and resiliency among psychological capital had a causal relationship with the job satisfaction[37]. It can be interpreted that positive psychological competence of hope, optimism, self-efficacy, and resiliency of organizational members can improve not only their work attitude but also the job satisfaction and organizational commitment, and it can contribute to effectively achieve the goals of the organization.

5. References

1. Lim CH. Organization behavior. Seoul:Hakhyunsa; 2004.
2. Shin YG. Organizational behavior. Seoul:Hankyoung; 1991.
3. Locke EA. The nature and causes of job satisfaction. In: Dunnette MD, editor. Handbook of industrial and organizational psychology. Chicago:Rand McNally; 1976.
4. Porter L, Lyman W, William J, Crampon, Frank JS. Organizational commitment and managerial turnover: a longitudinal study. Organizational Behavior and Human Performance. 1976; 15(1):87–98.
5. Kanter RM. Commitment and social organization: a study of commitment mechanisms in utopian communities. American Sociological Review. 1968; 33(4):499–517.
6. Hong SH. An analysis of the structural relationships between authentic leadership of the CEO of small and medium business, learning organization, positive psychological capital of the employees and organizational effectiveness. [Unpublished doctoral dissertation]. Soongsil University; 2011.

7. Walumbwa FO, Avolio BJ, Gardner WL, Wernsing TS, Peterson SJ. Authentic leadership: development and validation of a theory-based measure. J Manag. 2008; 34(1):89–126.
8. Cha BG. Introduction of Communication. Seoul:Seyeoungsa; 1991.
9. Lee SH, Lee HR.The effects of communication style of hotel superiors on organizational commitment: focused on the moderating effect of rapport. Journal of Food Service Management. 2013; 16(5):49–70.
10. De Vries RE, Van Den Hoof B, De Ridder JA. Explaining knowledge sharing:the roles of team communication styles, job satisfaction, and performance beliefs. Communication Research. 2006; 33(2):115–35.
11. Varona F. Relationship between communication satisfaction and organizational commitment in three Guatemalan organizations. The J Bus Comm. 1996; 33(2):111–40.
12. Eum DW. Suggestions for the two-way communication within organization. Samsung Economic Institute's Report; 2011.
13. Luthans F, Youssef CM. Emerging positive organizational behavior. J Manag. 2007; 33:321–49.
14. Seligman MEP. Learned optimism. New York:Pocket Book; 1998.
15. Seligman MEP, Schulman P. Explanatory style as a predictor of productivity and quitting among life insurance sale agents. J Pers Soc Psychol. 1986; 50:832–8.
16. Hong SH, Choi ES. An analysis of the influence of authentic leadership of the ceo of small and medium business on the organizational effectiveness. Korean Society for Learning and Performance. 2011; 13(2):1–29.
17. Avolio BJ, Gardner LG, Walumbwa FO, Luthans F, May DR. Unlocking the mask: A look at the process by which authentic leaders impact follower attitudes and behaviors. The Leadership Quarterly. 2004; 15(6):801–23.\
18. Gray J, Laidlaw H. Improving the measurement of communication satisfaction. Management Communication Quarterly. 2004; 17(3):425–48.
19. Larson M, Luthans F. The potential added value of psychological capital in predicting work attitudes. Journal of Leadership and Organizational Studies. 2006; 13(2):75–92.
20. Rohner RP. Handbook for the study of parental acceptance and rejection. University of Connecticut; 1991.
21. Linda LN, Chester AS. The Authentic Leadership Inventory (ALI): development and empirical tests. The Leadership Quarterly. 2011; 22(6):1146–64.
22. Koo DW. The effects of leader trust and organization trust by general manager's authentic leadership on affective commitment and turnover intention in hotel. [Unpublished doctoral dissertation]. SejongUniversity; 2013.
23. Cook J, Wall T. New work attitude measures of trust, organizational commitment and personal need non-fulfillment. J Occup Psychol. 1980; 53(1):39–52.
24. Na BS.The analysis of relationship among learning organization, organizational culture, organizational learning and organizational effectiveness. [Unpublished doctoral dissertation]. Korea University; 2001.
25. Warr PB, Routledge T. An opinion scale for the study of manager's job satisfaction. Occupational Psychology. 1969; 43:95–109.
26. Han CM. study on career development plan of global enterprise affecting organizational effectiveness and organizational Trust. [Unpublished doctoral dissertation]. Kyunghee University; 2010.
27. Jung KH. The effects of empowering leadership on job satisfaction and organizational commitment. [Unpublished doctoral dissertation]. SungKyunKwan University; 2011.
28. Allen NJ, Meyer JP. The measurement and antecedents of affective, continuance and normative commitment to the organization. J Occup Psychol. 1990; 63(1):1–18.
29. Lee DS, Choi YD. A study on antecedents and consequences of positive psychological capital in organizations. The Korean Academic Society of Business Administration. 2010; 39(1):1–28.
30. Luthans F, Youssef CM, Avolio BJ. Psychological capital: developing the human competitive edge. Oxford, UK:Oxford University Press; 2007.
31. Fassinger RE. Use of structural equation modeling in counseling psychology research. J Counsel Psychol. 1987; 34(4):425.
32. De Ridder J. Organizational communication and supportive employees. Hum Resource Manag J. 2004; 14(3):20–30.
33. Roberts KH, O'Reilly CA. Measuring organizational communication. J Appl Psychol. 1974; 59:321–6.
34. Kim JS. The effects of managers' communication types on Subordinates' self-efficacy. [Unpublished master's dissertation]. Korea University; 2007.
35. Park HY, Kim WS. The effects of non-verbal communication between the supervisor and employee on the employee`s self-efficacy and commitment toward the organization. The Journal of Tourism Studies. 2013; 25(3):3–23.
36. Luthans F, Youssef CM. Emerging positive organizational behavior. J Manag. 2007; 33:321–49.
37. Ahn DH, Park JC, Im MR. Hotel, food service: the effects of the psychological capital on hotel employees empowerment and organizational effectiveness. Journal of Hospitality and Tourism Studies. 2012; 45:172–89.