IJBPAS, January, 2016, 5(1), Special Issue: 56-66

ISSN: 2277–4998

International Journal of Biology, Pharmacy and Allied Sciences (IJBPAS)

'A Bridge Between Laboratory and Reader'

www.ijbpas.com

INVESTIGATING THE CORRELATION OF ORGANIZATIONAL COMMUNICATIONS AND CRISIS MANAGEMENT

REZA KASAEIYAN[1*], FATTAH NAZEM [2]

1:PhD student ,Department of Education, College of Education and Counselling, Roudehen Branch, Islamic Azad University, Roudehen, Iran

2: Associate Professor, Department of Education, College of Education and Counselling, Roudehen Branch, Islamic Azad University, Roudehen, Iran

***Corresponding Author: E Mail: Gaj9091@gmail.com**

ABSTRACT

This study aims at investigating the correlation between the organizational communications and crisis management in Gaj Company of Iran in 2014. The statistical population of this research consists of 800 representatives, managers and experts in Gaj Company". The research has "correlative type". The sample size is selected equal to 260 according to Cochran formula and by "random" sampling. Two standard questionnaires namely the organizational communications by Abbaspour and Baroutian (2010) based on six components of "Robbins model" and the crisis management questionnaire by Tavvasoli (2013) are utilized for data collection; their validity is reapproved by several supervisor professors and administration professors at universities and the reliability is obtained equal to 0.81 by Cronbach's alpha test for organizational communications questionnaire and 0.89 for crisis management questionnaire. "Kolmogorov-Smirnov" test is utilized for investigating the "data normality", and the "linear regression" used for testing the hypotheses. The research results indicate that there is a significant positive correlation between dimensions of organizational communications including the "active listening, feedback, use of multiple communication channels, simplification, and control of emotions" with "crisis management", but there is an inverse correlation between "the use of informal communication networks" with "crisis management".

Keywords: Crisis, crisis management, organizational communications

INTRODUCTION

Since every organization is facing with various crises during its operation, the major managers and decision-makers need to take measures to make the organization always ready to cope with potential crises. The use of "crisis management" is the best measure. The "crisis management" includes all measures which are necessary for fast and effective dealing with potential crises and control their destructive effects (Yaghinlou and Khalili-Araghi, 2004).

The "crisis management" is associated with several topics such as the "organizational culture, complexity, size of organization, hierarchy of authority, rate of formalization, environment, communicational models, and delegation of authority" (Nasehifar, 2010).

In this regard, the "communication" is one of the key elements of crisis management. During the onset of crisis, the "information" and "communication" are the bases of any "decision" and "action". Under such these intimidating circumstances, most of the communications are inconsistent and some of the organizations and people hide the relevant information due to the fear, and this in turn will reduce the organizational communications. Furthermore, in such these circumstances, the "inappropriate and wrong information" often worsen the situation. Therefore, the importance of "organizational communications" becomes obvious since most of the "effective organizational communications" lead to the "relevant, appropriate, timely, and accurate" information of operating process and also the appropriate decisions by managers (Nazari, 2007).

Unfortunately, only a few organizations have understood "the necessity of self-preparation to deal with a wide range of crises" so far. Therefore, numerous organizations have not provided the "appropriate and necessary mechanisms to identify the signs of organizational crises". Furthermore, only a small number of organizations have identified the "necessity for regular and continuous review and analysis of their communicational system" and have constantly analyzed them; hence, it seems that the issues, associated with the "crisis management" and "crisis communication management", need further improvements (Yazdanpanah, 2002).

MATERIALS AND METHODS

Data analysis for "main research questions":

Main question: Is there a correlation between the "organizational communications" and "crisis management" in Gaj Company?

RESULTS

The results of table 1 indicate that the "multiple correlation coefficient" is equal to 0.65 and the "coefficient of determination" equal to 0.43, and also the "adjusted coefficient of determination" 0.42. According to the "coefficient of determination", it can be suggested that the "organizational communications" variable explains about 43% of variance in "crisis management" variable in Gaj Company.

R = 0.65; R Square = 0.43; R* = 0.42

p = 0.05; F = 194.715

According to the F-value of 194.715, the significance level presented in table 2 is less than 0.05 which confirms the regression model, and thus the independent variable is able to predict the variance in dependent variable.

As shown in table 3 and according to the multiple-correlation between the "organizational communications" and "crisis management", it is concluded that the "organizational communications" with beta of 0.65 is able to explain the dependent variable. In other words, for one unit increase in standard deviation of "organizational communications", an increase of 0.65 will be made in standard deviation of crisis management.

According to the coefficients of table 3, the "regression line equation" is as follows:

Crisis management = 69.380 + (0.898) organizational communications

2-3-4- Data analysis for sub-questions of research

First sub-question: Is there a correlation between "active listening" and "crisis management" in Gaj Company?

The results of table 4 indicate that the "multiple correlation coefficient" is equal to 0.72 and the "coefficient of determination" equal to 0.52, and also the "adjusted coefficient of determination" 0.52. According to the "coefficient of determination", it can be suggested that "active listening" variable explains about 52% of variance in "crisis management" variable in Gaj Company.

R = 0.72 R Square = 0.52 R* = 0.52 p = 0.05 F = 282.981

According to the F-value of 282.981, the significance level presented in table 5 is less than 0.05 which confirms the regression model, and thus the independent variable is able to predict the variance in dependent variable.

As shown in table 6 and according to the multiple-correlation between "active listening" and "crisis management", it is concluded that "active listening" with beta of 0.72 is able to explain the dependent variable. In other words, for one unit increase in standard deviation of "active listening", an increase of 0.72 will be made in standard deviation of crisis management.

According to the coefficients of table 6, the "regression line equation" is as follows:

Crisis management = 89.424 + (2.84) active listening

Second sub-question: Is there a correlation between "the use of multiple communication channels" and "crisis management" in Gaj Company?

The results of table 7 indicate that the "multiple correlation coefficient" is equal to 0.12 and the "coefficient of determination" equal to 0.01, and also the "adjusted coefficient of determination" 0.01. According to the "coefficient of determination", it can be suggested that "the use of multiple communication channels" variable explains about 1% of variance in "crisis management" variable in Gaj Company.

R = 0.12 R Square = 0.01 R* = 0.01 ; p = 0.05 F = 4.195

According to the F-value of 4.195, the significance level presented in table is less than 0.05 which confirms the regression model, and thus the "independent variable" has a significant correlation with "dependent variable" (Table 8).

Table 1: Summary of regression results about the correlation between "organizational communications" and "crisis management"

Multiple correlation coefficient	Coefficient of determination	Adjusted coefficient of determination	Standard error of approximation
0.656	**0.430**	**0.428**	**11.786**

Table 2: ANOVA

	Sum of squares	Degree of freedom	Mean square	F	Significance level
Regression	**27049.222**	**1**	**27049.222**	**194.715**	**0.000**
Residual	**35840.513**	**258**	**138.917**		
Total	**62889.735**	**259**			

Table 3: Coefficients of variables in regression equation

Independent variable	Non-standardized coefficients	standardized coefficients		t	Significance level
	Beta	Standard error	B		
Constant value	**69.380**	**7.515**		**9.233**	**0.000**
Organizational communications	**0.898**	**0.064**	**0.656**	**13.954**	**0.000**

Table 4: Summary of regression results about the correlation between "active listening" and "crisis management"

Multiple correlation coefficient	Coefficient of determination	Adjusted coefficient of determination	Standard error of approximation
0.723	0.523	0.521	10.782

. Table 5: ANOVA

	Sum of squares	Degree of freedom	Mean square	F	Significance level
Regression	**32896.890**	**1**	**32896.890**	**282.981**	**0.000**
Residual	**29992.844**	**258**	**116.251**		
Total	**62889.735**	**259**			

Table 6: Coefficients of variables in regression equation

Independent variable	Non-standardized coefficients	standardized coefficients		t	Significance level
	Beta	Standard error	B		
Constant value	89.424	5.057		17.684	0.000
Active listening	2.845	0.169	0.723	16.822	0.000

Table 7: Summary of regression results about the correlation between "the use of multiple communication channels" and "crisis management"

Multiple correlation coefficient	Coefficient of determination	Adjusted coefficient of determination	Standard error of approximation
0.126	0.016	0.012	15.487

Table 8: ANOVA

	Sum of squares	Degree of freedom	Mean square	F	Significance level
Regression	1006.244	1	1006.244	4.195	0.042
Residual	61883.491	258			
Total	62889.735	259			

Table 9: Coefficients of variables in regression equation

Independent variable	Non-standardized coefficients	standardized coefficients		t	Significance level
	Beta	Standard error	B		
Constant value	187.578	6.823		27.493	0.000
Use of multiple communication channels	-0.886	0.432	-0.126	-2.048	0.042

As shown in table 9 and according to the multiple-correlation between "the use of multiple communication channels" and "crisis management", it is concluded that "the use of multiple communication channels" with beta of -0.12 is able to explain the dependent variable. In other words, for one unit decrease in standard deviation of "the use of multiple communication channels", an increase of 0.12 of will be made in standard deviation of crisis management and there is an inverse significant correlation between these two variables.

According to the coefficients of table, the "regression line equation" is as follows:

Crisis management = 187.578 - (0.886) the use of multiple communication channels

Third sub-question: Is there a correlation between "the use of informal communication networks" and "crisis management" in Gaj Company?

The results of table 10 indicate that the "multiple correlation coefficient" is equal to 0.47 and the "coefficient of determination" equal to 0.47, and also the "adjusted coefficient of determination" 0.68. According to the "coefficient of determination", it can be suggested that

"the use of informal communication networks" variable explains about 47% of variance in "crisis management" variable in Gaj Company.

R = 0.47 R Square = 0.47 R* = 0.68

p = 0.05 F = 233.519

According to the F-value of 233.519, the significance level presented in table 11 is less than 0.05 which confirms the regression model, and thus the independent variable is able to predict the variance in dependent variable.

As shown in table 12 and according to the multiple-correlation between "the use of informal communication networks" and "crisis management", it is concluded that "the use of informal communication networks" with beta of 0.68 is able to explain the dependent variable. In other words, for one unit increase in standard deviation of "the use of informal communication networks", an increase of 0.68 will be made in standard deviation of crisis management.

According to the coefficients of table, the "regression line equation" is as follows:

Crisis management = 113.850 + (4.226) the use of informal communication networks

Fourth sub-question: Is there a correlation between the "simplification" and "crisis management" in Gaj Company?

The results of table 13 indicate that the "multiple correlation coefficient" is equal to 0.65 and the "coefficient of determination" equal to 0.42, and also the "adjusted coefficient of determination" 0.42. According to the "coefficient of determination", it can be suggested that the "simplification" variable explains about 42% of variance in "crisis management" variable in Gaj Company.

R = 0.65 R Square = 0.42 R* = 0.42; p = 0.05; F = 189.696

According to the F-value of 189.696, the significance level presented in table 14 is less than 0.05 which confirms the regression model, and thus the independent variable is able to predict the variance in dependent variable.

As shown in table 15 and according to the multiple-correlation between the "**s**implification" and "crisis management", it is concluded that "**s**implification" with beta of 0.65 is able to explain the dependent variable. In other words, for one unit increase in standard deviation of "**s**implification", an increase of 0.65 will be made in standard deviation of crisis management.

According to the coefficients of table, the "regression line equation" is as follows:

Crisis management = 102.348 + (4.884) **s**implification.

Fifth sub-question: Is there a correlation between the "use of feedback" and "crisis management" in Gaj Company?

The results of table 16 indicate that the "multiple correlation coefficient" is equal to 0.37 and the "coefficient of determination" equal to 0.14, and also the "adjusted coefficient of determination" 0.14. According to the "coefficient of determination", it can be suggested that the "use of feedback" variable explains about 14% of variance in "crisis management" variable in Gaj Company.

R = 0.37 R Square = 0.14 R* = 0.14; p = 0.05 F = 451.14

According to the F-value of 43.151, the significance level presented in table 17 is less than 0.05 which confirms the regression model, and thus the "independent variable" is able to predict the variance in "dependent variable".

As shown in table 18 and according to the multiple-correlation between the "use of feedback" and "crisis management", it is concluded that the "use of feedback" with beta of 0.37 is able to explain the dependent variable. In other words, for one unit increase in standard deviation of "use of feedback", an increase of 0.37 will be made in standard deviation of crisis management.

According to the coefficients of table, the "regression line equation" is as follows:

Crisis management = 126.009 + (1.697) Use of feedback

Sixth sub-question: Is there a correlation between "control of emotions" and "crisis management" in Gaj Company?

The results of table 19 indicate that the "multiple correlation coefficient" is equal to 0.04 and the "coefficient of determination" equal to 0.04, and also the "adjusted coefficient of determination" 0.21. According to the "coefficient of determination", it can be suggested that the "control of emotions" variable explains about 4% of variance in "crisis management" variable in Gaj Company.

R = 0.04 R Square = 0.04 R* = 0.21; p = 0.05 F = 12.815

According to the F-value of 12.815, the significance level presented in table 20 is less than 0.05 which confirms the regression model, and thus the "independent variable" is able to predict the variance in "dependent variable".

As shown in table 21 and according to the multiple-correlation between the "control of emotions" and "crisis management", it is concluded that the "control of emotions" with beta of 0.21 is able to explain the dependent variable. In other words, for one unit increase in standard deviation of "control of emotions", an increase of 0.21 will be made in standard deviation of crisis management.

According to the coefficients of table, the "regression line equation" is as follows:

Crisis management = 151.219 + (1.607) control of emotions

Table 10: Summary of regression results about the correlation between "the use of informal communication networks" and "crisis management"

Multiple correlation coefficient	Coefficient of determination	Adjusted coefficient of determination	Standard error of approximation
0.689	0.475	0.473	11.311

Table 11: ANOVA

	Sum of squares	Degree of freedom	Mean square	F	Significance level
Regression	29878.667	1	29878.667	233.519	0.000
Residual	33011.068	258			
Total	62889.735	259			

Table 12: Coefficients of variables in regression equation

Independent variable	Non-standardized coefficients	standardized coefficients		t	Significance level
	Beta	Standard error	B		
Constant value	113.850	3.982		28.594	0.000
Use of informal communication networks	4.226	0.277	0.689	15.281	0.000

Table 13: Summary of regression results about the correlation between the "simplification" and "crisis management"

Multiple correlation coefficient	Coefficient of determination	Adjusted coefficient of determination	Standard error of approximation
0.651	0.424	0.421	11.852

Table 14: ANOVA

	Sum of squares	Degree of freedom	Mean square	F	Significance level
Regression	26647.421	1	26647.421	189.696	0.000
Residual	36242.313	258			
Total	62889.735	259			

Table 15: Coefficients of variables in regression equation

Independent variable	Non-standardized coefficients	standardized coefficients		t	Significance level
	Beta	Standard error	B		
Constant value	102.348	5.236		19.549	0.000
Simplification	4.884	0.355	0.651	13.773	0.000

Table 16: Summary of regression results about the correlation between the "use of feedback" and "crisis management"

Multiple correlation coefficient	Coefficient of determination	Adjusted coefficient of determination	Standard error of approximation
0.379	0.143	0.140	14.451

Table 17: ANOVA

	Sum of squares	Degree of freedom	Mean square	F	Significance level
Regression	9011.362	1	9011.362	43.151	0.000
Residual	53878.373	258	208.831		
Total	62889.735	259			

Table 18: Coefficients of variables in regression equation

Independent variable	Non-standardized coefficients	standardized coefficients		t	Significance level
	Beta	Standard error	B		

Constant value	**126.009**	**7.322**		**17.211**	**0.000**
Use of feedback	**1.697**	**0.258**	**0.379**	**6.569**	**0.000**

Table 19: Summary of regression results about the correlation between "control of emotions" and "crisis management"

Multiple correlation coefficient	Coefficient of determination	Adjusted coefficient of determination	Standard error of approximation
0.218	**0.047**	**0.044**	**15.239**

Table 20: ANOVA

	Sum of squares	Degree of freedom	Mean square	F	Significance level
Regression	**2975.940**	**1**	**2975.940**	**12.815**	**0.000**
Residual	**59913.795**	**258**	**232.224**		
Total	**62889.735**	**259**			

Table 21: Coefficients of variables in regression equation

Independent variable	Non-standardized coefficients	standardized coefficients		t	Significance level
	Beta	Standard error	B		
Constant value	**151.219**	**6.362**		**23.797**	**0.000**
Control of emotions	**1.607**	**0.449**	**0.218**	**3.580**	**0.000**

DISCUSSION

According to the first finding of this research, there is a significant positive correlation between the "crisis management" and "organizational communications" in Gaj Company; in other words, the more the use of "organizational communications" in Gaj international company, the more the crisis management. This finding is consistent with the results of research by Safavi (2005), Foyouzi (2013), Nazari (2007), and Ghoreyshitabar (2005).

According to the second finding of this research, there is a significant positive correlation between the "active listening" and "crisis management". The findings of regression indicate a positive correlation between the "crisis management" and "managers and experts' active listening" in Gaj Company. These findings are consistent with the results of study by Momeni (2006), and Akhlaghi (2004).

According to the third finding of this research there is an inverse correlation between the "the use of multiple communication channels" and the crisis management probably because the employees have used the technologies such as the computers and the Internet for current and routine affairs of organization and less in the field of "crisis management", and thus it has made an inverse correlation. These findings are consistent with the results of research by Eshghi (2013).

According to the fourth research finding, there is a significant positive correlation between the "use of informal communication networks" and the "crisis management" at the error level of 11.311% in Gaj international company; in other

words, the more the use of informal communication network in Gaj Company, the more the "crisis management". These findings are consistent with the research by Hadi (2013).

According to the fifth research finding, there is a significant positive correlation between the "simplification" and "crisis management" in Gaj Company.

According to the sixth research finding, there is a significant positive correlation between the "use of feedback" and "crisis management" and this finding is consistent with the results of research by Jahangiri (2009) and Soleimani-nik (2007).

According to the seventh research finding, there is a significant positive correlation between the "control of emotions" and "crisis management". This finding is consistent with the results of research by Nezamsarmadi (2005).

REFERENCES

[1] Akhlaghi, Simin (2008). Investigating the communicational factors affecting the managers' performance in Iran Insurance Joint-stock Company. Master's thesis, Islamic Azad University, Central Tehran Branch, Tehran.

[2] Jahangiri, Katayoun (2008). Designing a community-based model of crisis management for Iran. PhD Dissertation, Iran University of Medical Sciences and Health Services, Tehran.

[3] Soleimani-nik, Maria (2007). The impact of managers' thinking styles on crisis management at the Institute of Standards and Industrial Research of Iran (ISIRI). Master's thesis, Islamic Azad University of Roudehen, Roudehen.

[4] Safavi, Parisa (2005). The role of crisis management on high school managers' decisions in District 5 of education in Tehran City. Master's thesis, Islamic Azad University of Roudehen, Roudehen.

[5] Eshghi, Soheila (2013). Investigating the role of ICT in crisis management in Health Network of East Azerbaijan province. Master's thesis, Islamic Azad University of Bonab, Bonab.

[6] Foyouzi, Saeid (2013). The impact of organizational communications on crisis management in Ilam Gas Refining Company (IGRC) Master's thesis, Islamic Azad University of Malayer, Malayer.

[7] Ghoreyshitabar, Ahmad (2005). Investigating the factors affecting the effectiveness of crisis management in Bam earthquake. Master's thesis, Islamic Azad University of Dehaghan, Dehaghan.

[8] Momeni, Abdollah (2006). Investigating the role of inter-organizational communications in efficiency of Tehran Water and Wastewater Organization. Master's thesis, Islamic Azad University of Roudehen, Roudehen.

[9] Nasehifar, Vahid (2010). Guerrilla management (pp. 114-121). Tehran: Commerce Printing & Publishing Company (C.P.P.C), first edition.

[10] Nezamsarmadi-Shirdel, Sedigheh (2005). Investigating the rates of managers' knowledge, attitude and performance in selected hospitals of Tehran Social Security Organization in the field of crisis management. Master's thesis, Islamic Azad University, Science and Research Branch, Tehran.

[11] Nazari, Gholamreza (2007). The impact of organizational communications on the crisis management in National Oil Products Distribution Company of Tehran. Master's thesis, Allameh Tabatabaei University, Tehran.

[12] Hadi, Aaliyeh (2013). Investigating the role of Information systems in crisis management in Rescue group of Tabriz City. Master's thesis, Islamic Azad University of Tabriz, Tabriz.

[13] Yazdanpanah, Mahshid (2002). Planning and crisis management. Monthly journal of Tadbir, 12 (127), 51-56.

[14] Yaghinlou, Mehrangiz; and Khalili-Araghi, Maryam (2004). Investigating the positive and negative effects of crisis in organizations. Monthly journal of Tadbir, 14 (145), 62-72.