

An investigation on different factors influencing perceived organizational change

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ABSTRACT

This paper studies the impacts of different factors influencing on perceived organization change in municipality organization in city of Tehran, Iran. The proposed study uses two questionnaires, one for measuring the effects of five factors including partnership, communication, training, believe in change and organization commitment and the other for organizational change in Likert scale. The study has been implemented among 147 regular employees of municipality organization in city of Tehran, Iran. Using simple regression analysis, the study has detected that all mentioned factors influence organizational change, positively. In addition, Freedman test indicates that partnership maintains the highest impact followed by believe in change, communication, organizational commitment and training.

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1. Introduction

Organizational change plays essential role on the success of organizations and building continuous improvement and there are various studies to find important factors such as environmental issues (Armenakis & Bedeian, 1999; Keats & Hitt, 1988) influencing on organizational change. Burke and Litwin (1992, 2009) presented a model of organizational performance and change and provided causal linkages that hypothesize how performance was influenced and how effective change happened. Change was described in terms of both process and content, with specific focus on transformational as compared with transactional factors. Transformational change seemed to appear as a response to the external environment and directly influenced organizational mission and strategy, the organization's leadership, and culture. Byrd and Marshall (1997) considered the effect of the implementation of information technology on making organizational change. Kotter and Cohen (2002) presented a comprehensive discussion on how people could make change within organizations.

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Hoag et al. (2002) stated that making change within organization depends solely on organizations' people and their structure. Longenecker and Fink (2001) reported the results of a study on management development practices in US service and manufacturing organizations and reported that focus, feedback, and learning play essential role on organizational change. They also reported that there were startling differences between the management development experiences they want and what they were actually getting from their organizations. Schalk et al. (1988) concentrated on change on organization and the effects on employee reaction. Bovey and Hede (2001) discussed resistance to organizational change by investigating the role of cognitive and affective processes.

2. The proposed study

This paper studies the impacts of different factors influencing on perceived organization change in municipality organization in city of Tehran, Iran. The proposed study uses two questionnaires, one for measuring the effects of five factors including partnership, communication training, believe in change and organization commitment and the other for organizational change in Likert scale. Fig. 1 shows details of the survey,

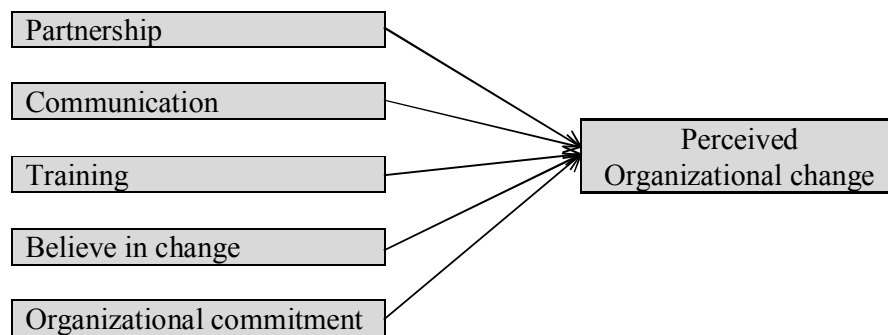


Fig. 1. The proposed study

The sample size of the study is calculated as follows,

$$n = \frac{N \times z_{\alpha/2}^2 \times p \times q}{\varepsilon^2 \times (N - 1) + z_{\alpha/2}^2 \times p \times q}, \quad (1)$$

where N is the population size, $p = 1 - q$ represents the yes/no categories, $z_{\alpha/2}$ is CDF of normal distribution and finally ε is the error term. Since we have $p = 0.5$, $z_{\alpha/2} = 1.96$ and $N = 238$, the number of sample size is calculated as $n = 147$. Table 1 shows the frequency of the questions as well as Cronach alpha.

Table 1

Details of the survey along with Cronbach alpha

Row	Item	Number of questions	Questions	Cronbach alpha
1	Partnership	3	1-3	0.746
2	Communication	3	4-6	0.743
3	Training	3	7-9	0.714
4	Believe in change	4	10-13	0.773
5	Organizational commitment	3	14-16	0.818
6	Perceived organizational change	17	17-33	0.910

As we can observe from the results of Table 1, all components of the survey have maintained reasonable Cronbach alpha, which are within acceptable limit. In addition, Table 2 shows details of our survey on mean, standard deviation and median of the scores given to different questions of the survey.

Table 2

The summary of some basic statistics

Row	Item	Mean	Standard deviation	Median
1	Partnership	3.741	0.666	3.666
2	Communication	3.816	0.683	4.000
3	Training	2.743	0.632	2.666
4	Believe in change	3.721	0.631	3.750
5	Organizational commitment	3.365	0.735	3.333
6	Perceived organizational change	3.464	0.589	3.470

As we can observe from the results of Table 2, communication maintains the highest mean and median and organizational commitment receives the minimum mean and standard deviation. Next, we need to make sure the data are normally distributed and this is accomplished through the implementation of Kolmogorov-Simirnov test summarized in Table 3 as follow,

Table 3

The summary of Kolmogorov-Simirnov test

Row	Item	KZ	Sig.	Result
1	Partnership	0.726	0.505	Normally distributed
2	Communication	1.165	0.127	Normally distributed
3	Training	1.288	0.073	Normally distributed
4	Believe in change	1.335	0.057	Normally distributed
5	Organizational commitment	1.152	0.141	Normally distributed
6	Perceived organizational change	0.650	0.792	Normally distributed

As we can observe from the results of Table 3, all components of the survey are normally distributed when the level of significance is one percent.

3. The results

In this section, we present details of our findings on examining the effects of various factors on organizational change based on linear regression technique.

3.1. The effect of communication

We first consider the effect of communication on perceived organizational change. Table 4 shows details of our findings.

Table 4

The summary of regression model between perceived organizational change and communication

Variable	β	Standard error	Standard β	t-student	Sig.
Intercept	1.083	0.194		5.593	p<0.001
Communication	0.636	0.051	0.72	12.488	p<0.001

F-value = 155.957 Sig. = 0.000, Durbin-Watson = 2.162, $R^2 = 0.518$

As we can observe from the results of Table 4, there is a positive and meaningful relationship between perceived organizational change and communication. The value of R-Square is equal to 0.518, which means communication describes approximately 52% of the changes on organizational change. Finally, Durbin-Watson is within an acceptable limit, which means there is no correlation among residuals. Based on the results of Table 4, an increase of one unit in communication, we could expect an increase of 0.636 on perceived organizational change.

3.2. The effect of partnership

Next, we consider the impact of partnership on perceived organizational change. Table 5 shows details of our findings.

Table 5

The summary of regression model between perceived organizational change and partnership

Variable	β	Standard error	Standard β	t-student	Sig.
Intercept	1.007	0.184		5.464	p<0.001
Partnership	0.644	0.048	0.747	13.54	p<0.001

F-value = 183.213 Sig. = 0.000, Durbin-Watson = 2.014, $R^2 = 0.747$

As we can observe from the results of Table 5, there is a positive and meaningful relationship between perceived organizational change and partnership. The value of R-Square is equal to 0.747, which means partnership describes approximately 75% of the changes on organizational change. Finally, Durbin-Watson is within an acceptable limit, which means there is no correlation among residuals. Based on the results of Table 5, an increase of one unit in partnership, we may expect an increase of 0.644 on perceived organizational change.

3.3. The effect of training

Training is another component of the survey and we consider the impact of this variable on organizational change. Table 6 shows details of our findings.

Table 6

The summary of regression model between perceived organizational change and training

Variable	β	Standard error	Standard β	t-student	Sig.
Intercept	1.545	0.144		10.75	p<0.001
Training	0.7	0.051	0.751	13.71	p<0.001

F-value = 187.966 Sig. = 0.000, Durbin-Watson = 2.084, $R^2 = 0.565$

Based on the results of Table 6, we consider a positive and meaningful relationship between perceived organizational change and training. The value of R-Square is equal to 0.565, which means training explains approximately 57% of the changes on organizational change. Finally, Durbin-Watson is within an acceptable limit, which means there is no correlation among residuals. According to the results of Table 6, an increase of one unit in partnership, we may expect an increase of 1.545 on perceived organizational change.

3.4. The effect of believe in change

Believe in change is the other component of the survey and we investigate the effect of this variable on organizational change. Table 7 shows details of our findings.

Table 7

The summary of regression model between perceived organizational change and believe in change

Variable	β	Standard error	Standard β	t-student	Sig.
Intercept	0.888	0.196		4.528	p<0.001
Believe in change	0.692	0.052	0.742	13.32	p<0.001

F-value = 177.382 Sig. = 0.000, Durbin-Watson = 1.995, $R^2 = 0.550$

The result of Table 7 shows a positive and meaningful relationship between perceived organizational change and believe in change. The value of R-Square is equal to 0.550, which means believe in change explains approximately 55% of the changes on organizational change. Finally, Durbin-Watson is within an acceptable limit, which means there is no correlation among residuals. Based on the results of Table 7, an increase of one unit in believe-in-change, we may expect an increase of 0.888 on perceived organizational change.

3.4. The effect of organizational commitment

Finally, organizational commitment is the last component of the survey and we survey the effect of this variable on organizational change. Table 8 shows details of our findings.

Table 8

The summary of regression model between perceived organizational change and organizational commitment

Variable	β	Standard error	Standard β	t-student	Sig.
Intercept	1.3	0.141		9.499	p<0.001
Organizational commitment	0.6	0.041	0.79	15.5	p<0.001

F-value = 240.137 Sig. = 0.000, Durbin-Watson = 2.019, $R^2 = 0.624$

We also observe from the result of Table 8 that there was a positive and meaningful relationship between organizational change and organizational commitment. The value of R-Square is equal to 0.624, which means organizational commitment describes nearly 62% of the changes on organizational change. Finally, Durbin-Watson is within an acceptable limit, which means there is no correlation among residuals. Based on the results of Table 8, an increase of one unit in organizational commitment, we may expect an increase of 1.3 on perceived organizational change.

3.6. Ranking the effects of various factors based on Freedman test

We now consider the effects of Freedman test on ranking various factors on organizational change. Table 9 demonstrates the summary of our results.

Table 9

The summary of Freedman test on factors influencing on perceived organizational change

Row	Item	Mean Rank	Rank
1	Partnership	3.82	1
2	Communication	3.62	3
3	Training	1.31	5
4	Believe in change	3.65	2
5	Organizational commitment	2.60	4

As we can observe from the results of Table 9, partnership is number one priority followed by believe in change, communication, organizational commitment and training.

4. Conclusion

Organizational change has been considered as one of the necessities to make continuous improvement on organizations. There are literally various factors influencing on perceived organizational change and in this paper, we have considered the impacts of partnership, communication, training, believe-in-change and organizational commitment on organizational change in one of municipality units located in city of Tehran, Iran. The proposed model of this paper has applied two questionnaires for measuring independent variables of this survey as well as organizational change and through applying linear regression test, we have detected that all components of the survey have influenced positively on organizational change, significantly.

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