

Effects of Leader's Cooperative Behaviors on Understanding of Workers' Efficacy and Performance

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ABSTRACT

The current research aims at studying the effects of leader's cooperative behaviors on the understanding of workers' efficacy and performance. Research variables include the leader's cooperative behaviors considered as cooperative management, workers' performance and understanding of efficacy which has three dimensions involving leader, collective and self-efficacies. The research is methodically a descriptive correlation survey and purposely an applied type. Statistical population includes 105 workers of Municipality Organization in Koohdasht. According to Morgan table, 83 individuals were selected out of 105 workers to determine the sample size. To examine the hypotheses, required data were collected by the means of questionnaires with 36 questions subjectively separated into cooperative behaviors, workers' performance and leader, collective and self-efficacies using five-option Likert scale. Tools' reliability coefficient was computed as 0.91 on the basis of Cronbach's Alpha method. Content validity and the views of scholars and professors have been applied to confirm the questionnaires. To analyze data, statistical regression tests, analysis of variance, determination and correlation coefficients and Durbin-Watson test were utilized. Based on the results, three relationships of workers' performance with leader's cooperative behaviors and the understandings of leader, collective and self-efficacies are meaningful. According to the research results, some recommendations have been suggested to the managers and scholars for further investigations.

KEY WORDS: Cooperative Management, Self-Efficacy, Collective Efficacy, Leader Efficacy and Performance.

INTRODUCTION

Considering the organization's outlook to reach an evolution, leader's behaviors are accurately reviewed at all levels of an organization to determine how leaders achieve the organizational goals. Leaders should admit their mutual dependence and influence the workers in a manner that workers accept the cooperation in the response to be familiar with the performance expectations (Chen&Bliese, 2002). How a leader affects the views on leader, collective and self-efficacies of workers regarded as a part of interaction between leaders and followers which may have an impact on total performance (Chen&Bliese, 2002; Hoyt et al., 2003).

Bandura (1997) has defined self-efficacy as a set of beliefs in individual abilities in order to organize and implement an operational course which requires the presented successes. At individual analysis level, self-efficacy reinforces the individual motivation and performance through affecting the activities which are performed by the individuals to achieve the purposes (Chambers et al., 2000). The advantages of above-mentioned efficacy are as follows: learning the improved performance, opportunities followed by workers to expand job skills (Hill, Smith & Mann, 1987) and increasing the workers' satisfaction to help them do difficult tasks (Goldstein& Ford, 2002).

In addition, the research finds that the perspectives of efficacy positively predict the job outlook (Saks, 1995) and performance (Stajkovic&Luthans, 1998). With regard to the findings of self-efficacy, collective efficacy has a positive impact on motivation and performance at collective analysis level (Bandura, 1997). Collective efficacy is defined as a concept of common collective competence among the individuals when their resources are coordinated and allocated to specific organizational demands in a corrected successful manner (Zaccaro et al., 1995, p309). Individual and collective understandings of competence in the organizational workplace influence a variety of factors. An individual's leadership behavior as a major element obtains the effective understanding of trust in the workplace.

RESEARCH BACKGROUND

Cooperation theory: This theory was first introduced by Vroom and Yetton in 1973 and then, by the help of Jago has been presented as the model of Vroom, Yetton and Jago in 1988 for the managers to suggest the strategies

for the limits of workers' cooperation. Cooperation means the conscious and voluntarily participation of people in their interested affairs; therefore, it cannot be compulsory. On the other hand, it refers to an individual's emotional and mental engagements which encourage the person to help them achieve the goals and divide their responsibilities (Hamedani, 2000).

Cooperative management: it indicates the workers' involvement at various organization levels in the processes of clarifying the problems, analyzing the situation and presenting new solutions so that workers are highly able to create solutions and consult with their managers (2001, p21).

It is considerably tried to clarify the roles of leading players in the grouping conditions. When the role clarification is done, the rest of individuals take the roles of group members. They are not aware of responsibilities and behaviors they are expected to show. Following features have been demonstrated by our client companies regardless of their priorities (Plunkett&Forni, 1999, p. 193):

- 1-(S)he should give an explicit feedback.
- 2-(S)he should take over the responsibilities of his/her own behaviors.
- 3-(S)he should provide the other members with appropriate feedback.
- 4-(S)he should be concerned about the group progress and success.
- 5-(S)he should be ready to accept the inaccuracy of his/her ideas on controversial issues.
- 6-(S)he should be ready to encounter the controversial issues and take his/ her own stance.

Self-efficacy: it has been defined as a set of beliefs in the individual capabilities to organize and implement a course of operations required to create the presented successes (Bandura, 1997, p. 3).

Collective efficacy: it refers to a combination of common group beliefs in their united abilities to organize and implement the required operations for development levels (Bandura, 1997, p. 477).

Leader efficacy: Fiedler specifies three dimensions of it as the manager and workers' relationships, predetermined work extent and power extent the manager gets at work (1993, p17). Leaders are called for developing the organization, facilitating the group decision making and stimulating the workers' progress (Sundstrom, 1999). Leader's behaviors have an effect on the team confidence in their abilities to achieve the goals (Kipnis&Lane, 1962; Thomas &Velthouse, 1990).

Performance: Cann (1996) argues that performance is a process to which the individual does not pay attention and is defined as the work consequences (SiahMansori, 2011, p. 28).

Organizational performance: it is interpreted as an organization's ability to utilize the resources effectively and create the permanent headquarters with regard to the goals related to the beneficiaries (Rafi Zade&BagherAbadi, 2009, p. 14).

Mohammad Goudarzi studied the relationship of manager's management style and performance of guidance school teachers in Boroujerd and concluded that a relationship exists between management style and teachers' performance and the mean score of teachers' performance for the relationship-oriented managers is higher than task-oriented ones.

SedigheHeydarPanah (2005) investigated the effects of cooperative management on workers' efficacy in the hospitals of Social Security Organization in Khoramabad and reported that cooperative management practices lead to the workers' efficacy and finally, organization productivity.

Through studying the organizational culture and its effects on efficacy in Social Security Organization of Ilam province, AsadolahKarimian (2006)states that a significant relationship is observed between organizational culture and efficacy; in other words, organizational culture results in the organization efficacy.

RESEARCH METHODOLOGY

Current research is an applied study and of descriptive correlation type. Statistical population involves 105 workers of Municipality in Koohdasht. To determine the sample size, 83 individuals were selected using Kerjesy-Morgan table. The questionnaires with 36 questions have been designed by scholars. Five-option Likert scale (very low to very high) was used to analyze the questionnaire. To measure the questionnaire reliability, 25 questionnaires were first distributed among the sample members and after collecting them, their reliability was computed as 0.91 by the means of Cronbach's Alpha test using Spss software. Statistical regressiontests, analysisof variance, determination and correlation coefficients and Durbin-Watson test have been applied in order to analyze data.

DATA ANALYSIS

H₀: leader's cooperative behaviors have no impact on the understanding of leader efficacy.

H₁: leader's cooperative behaviors have effects on the understanding of leader efficacy.

Table1: Regression model of H₁

Correlation coefficient	Determination of coefficient	Standard determination of coefficient		f coefficient	significance level
0.329	0.108	0.097	2.211	9.812	0.002

As table 1 has shown already, correlation and determination coefficients of 0.329 and 0.108 were given by 9% independent variable. Also, Durbin-Watson coefficient of 2.21 is placed in the interval of 1.5-2.5. Therefore, the hypothesis of error independence is confirmed; on the other hand, f significance level is lower than 1% indicating the linear relationship between these two variables.

Table 2: Regression coefficients of H₁

significance level	t	Standard coefficients		model		
		Beta	Non-standard error	B	Independent variable	Dependent variable
0.001	3.414		0.474	1.619	constant	Understanding of leader efficacy
0.002	3.132	0.329	0.152	0.477	behaviors	

According to table 2, the constant of significance level is lower than 1% that affects the dependent variable. Also, significance level of t-test is lower than 1% for leader’s cooperative behaviors influencing the dependent variable.

$$Y=a+(b_1x_1)$$

$$\text{Efficacy understanding} = 1.61+0.477 (\text{leader’s cooperative behaviors})$$

Presented tables have shown that the relationship between dependent and independent variables has been designed as an equation in which the changes of leader’s cooperative behaviors result in the changes of efficacy understanding. As a result, leader’s cooperative behaviors affect the efficacy understanding.

H₂: leader’s cooperative behaviors affect the collective efficacy.

H₀: leader’s cooperative behaviors have no impacts on the collective efficacy.

Table 3: Regression model of H₂

Correlation coefficient	Determination of coefficient	Standard determination of coefficient		f coefficient	significance level
0.109	0.12	0.000	1.902	0.982	0.325

Correlation and determination coefficients of 0.109 and 0.012 were computed by the independent variable of 0%. Therefore, independent variable cannot interpret the model. Though Durbin-Watson coefficient was 1.9 placed in the interval of 1.5-2.5. Hypothesis of error independence is accepted. On the other hand, f significance level is bigger than 5% indicating that there is no linear relationship between these two variables.

Table 4: Regression coefficients of H₂

significance level	t	Standard coefficients		model		
		Beta	Non-standard error	B	Independent variable	Dependent variable
0.000	8.458		0.415	3.513	constant	Understanding of collective efficacy
0.325	0.991	0.109	0.133	0.132	Cooperative behaviors	

Based on the regression model, dependent variable cannot interpret the model and no linear relationship exists between dependent and independent variables. Consequently, regression model cannot be created and leader’s cooperative behaviors have no impacts on the efficacy understanding.

H₃: leader’s cooperative behaviors have impacts on the understanding of self-efficacy.

H₀: leader’s cooperative behaviors have no effects on the understanding of self-efficacy.

Table 5: Regression model of H₃

Correlation coefficient	Determination of coefficient	Standard determination of coefficient		f coefficient	significance level
0.189	0.036	0.024	1.730	3.017	0.086

As table 5 has demonstrated already, correlation and determination coefficients of 0.189 and 0.036 have been calculated by the independent variable of 2% showing that the model interpretation is very weak. But Durbin-Watson coefficient of 1.73 is placed in the interval of 1.5-2.5 so that hypothesis of error independence is accepted. Since f significance level is bigger than 5%, there is no linear relationship between these two variables.

Table 6: Regression coefficients of H₃

significance level	t	Standard coefficients	Non-standard coefficients	model		
		Beta	error	B	Independent variable	Dependent variable
0.000	8.171		0.384	3.135	constant	Understanding of self-efficacy
0.086	1.737	0.189	0.123	0.214	behaviors	

Regression model shows that the model interpretation is very weak by the independent variable while no linear relationship is made between these independent and dependent variables. Regression equation cannot be formulated and consequently, leader’s cooperative behaviors do not influence the understanding of self-efficacy.

H₄: a relationship is seen between leader’s cooperative behaviors and workers’ performance.

H₀: leader’s cooperative behaviors have no relationship with the workers’ performance.

Table 7: Regression model of H₄

Correlation coefficient	Determination of coefficient	Standard determination of coefficient		f coefficient	significance level
0.232	0.054	0.042	2.332	4.592	0.035

According to table7, correlation and determination coefficients of 0.232 and 0.054 have been calculated by the independent variable of 4%. Also, Durbin-Watson coefficient of 2.33 was placed in the interval of 1.5-2.5 demonstrating that hypothesis of error independence is confirmed. On the other hand, f significance level is lower than 5% suggesting the linear relationship of these two variables.

Table 8: Regression coefficients of H₄

significance level	t	Standard coefficients	Non-standard coefficients	model		
		Beta	error	B	Independent variable	Dependent variable
0.000	8.152		0.389	1.619	constant	Workers’ performance
0.035	2.143	0.232	0.125	0.477	behaviors	

As table8 has shown already, the constant of significance level is lower than 5% suggesting that the constant has an impact on dependent variable. Also, significance level of t-test is lower than 1% for leader’s cooperative behaviors which can be entered into the equation. In other words, it affects the dependent variable.

$$Y = a + (b_1x_1)$$

$$\text{Workers' performance} = 3.16 + 0.267(\text{leader's cooperative behaviors})$$

Above tables have shown that the relationship of independent and dependent variables has been designed as an equation so that the changes of leader’s cooperative behaviors can change the workers’ performance. As a result, a relationship exists between leader’s cooperative behaviors and workers’ performance.

H₅: there is a relationship between workers’ performance and understanding of collective efficacy.

H₀: there is no relationship between workers’ performance and understanding of collective efficacy.

Table 9: Regression model of H₅

Correlation coefficient	Determination of coefficient	Standard determination of coefficient		f coefficient	significance level
0.418	0.175	0.165	2.314	17.178	0.000

Correlation and determination coefficients of 0.109 and 0.012 were computed by the independent variable of 16%. Also, Durbin-Watson coefficient of 2.31 in the interval of 1.5-2.5 confirms the hypothesis of error independence. On the other hand, f significance level is lower than 5% stating the linear relationship of these two variables.

Table 10: Regression coefficients of H₅

significance level	t	Standard coefficients	Non-standard coefficients		model	
		Beta	error	B	Independent variable	Dependent variable
0.000	6.270		0.385	2.416	constant	Workers' performance
0.000	4.145	0.418	0.096	0.400	Collective efficacy	

According to table10, the constant of significance level is lower than 1% so that the constant has an impact on dependent variable. Also, significance level of t-test is lower than 1% for the understanding of collective efficacy which can be written in the equation; in other words, it affects the dependent variable.

$$Y = a + (b_1x_1)$$

$$\text{Workers' performance} = 2.14 + 0.400 (\text{understanding of collective efficacy})$$

The relationship of dependent and independent variables was designed as an equation. So, the changes in the understanding of collective efficacy lead to the changes of workers' performance. Consequently, a relationship is found between these two variables.

H₆: the understanding of self-efficacy and workers' performance are related.

H₀: there is no relationship between the understanding of self-efficacy and workers' performance.

Table 11: Regression model of H₆

Correlation coefficient	Determination of coefficient	Standard determination of coefficient		f coefficient	significance level
0.676	0.457	0.450	1.916	68.210	0.000

Based on above table, correlation and determination coefficients of 0.676 and 0.457 were computed by the independent variable of 45%. Also, Durbin-Watson coefficient of 1.91 in the interval of 1.5-2.5 confirms the hypothesis of error independence. On the other hand, f significance level is lower than 1% presenting a linear relationship of these two variables.

Table 12: Regression coefficients of H₆

significance level	t	Standard coefficients	Non-standard coefficients		model	
		Beta	error	B	Independent variable	Dependent variable
0.000	4.227		0.323	1.365	constant	Workers' performance
0.000	8.259	0.676	0.084	0.691	Self-efficacy	

The constant of significance level is lower than 1% which affects the dependent variable. Also, significance level of t- test is lower than 1% for the understanding of self-efficacy which can be entered into the equation; in other words, it affects the dependent variable.

$$Y = a + (b_1x_1)$$

$$\text{Workers' performance} = 1.36 + 0.691 (\text{understanding of self-efficacy})$$

As above tables have shown, the relationship of independent and dependent variables has been designed as an equation so that the changes in the understanding of self-efficacy result in the changes of workers' performance. Consequently, a relationship is found between the understanding of self-efficacy and workers' performance.

Question1: Is workers' performance varied because of their sexuality?

Table 13: t-test description of two independent samples

Standard deviation	mean	number	sex
0.74378	3.9983	77	male
0.99666	3.7667	6	female

Table 14: t-test results of two independent samples

Confidence interval of	Difference 95%	Significance level	df	t	Significance level	f
upper	lower					
0.87408	-0.41088	0.475	81	0.717	0.190	1.748
1.27437	-0.81117	0.600	5.443	0.557		

Based on these tables, the mean for men and women is reported as 3.99 and 3.76, respectively. It can be observed that there is no significant difference between the comments of men and women which is not meaningful in t-test of two independent samples. In other words, test error is bigger than 5% (0.475) so that workers' performance has no significant difference with regard to the sexuality factor.

Question2: Is workers' performance varied because of their academic degree?

Table 15: Analysis of variance for comparing workers' performance based on their academic degree

ANOVA	Sum of squares	df	Mean of squares	F	Significance level
Among groups	2.036	3	0.679	1.158	0.331
Inside groups	45.107	77	0.586		
total	47.143	80			

Significance level of ANOVA (analysis of variance) is more than 5% (0.331) so that no significant difference exists for workers' performance regarding their academic degree.

CONCLUSION

To examine the hypothesis that leader's cooperative behaviors have effects on the understanding of efficacy, regression tests were utilized. It can be stated that the changes of leader's cooperative behaviors change the understanding of efficacy. As a result, they affect the understanding of leader's efficacy. To examine the hypothesis that leader's cooperative behaviors influence the understanding of collective efficacy, regression model was applied to demonstrate that independent variable cannot interpret the model and no linear relationship is made between dependent and independent variables so that regression equation is not formed. As a result, leader's cooperative behaviors have no effects on the understanding of collective efficacy.

To examine the hypothesis that leader's cooperative behaviors affect the understanding of self-efficacy, regression tests have been applied. Considering that the model interpretation can be done very weakly by the independent variable and no linear relationship is formed between dependent and independent variables, leader's cooperative behaviors have no impacts on the understanding of self-efficacy. To examine the hypothesis that leader's cooperative behaviors have a relationship with the workers' performance, regression model has been utilized. It can be stated that the changes of leader's cooperative behaviors lead to the changes in the workers' performance so that a significant relationship exists between these two variables.

To examine the hypothesis that workers' performance is related to the understanding of collective efficacy, regression model was applied. It can be suggested that the changes in the understanding of collective efficacy can change the workers' performance so that a significant relationship is found between them. To examine the hypothesis that workers' performance and the understanding of self-efficacy are related, regression test has been used. It can be reported that the changes in the understanding of self-efficacy result in the changes of workers' performance. Consequently, a significant relationship exists between these two variables.

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