

Investigating the relationship between Process Oriented management Applying and improving the performance of school principals High school (first period) in Tehran

Hamid Aliakbari (MA)¹, Amirhossien Mehdizadeh (PhD)², Alireza Araghih³ (PhD)

Department of Educational Management, College of Education, Islamshahr Branch, Islamic Azad University, Islamshahr, Iran

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ABSTRACT

The present study has performed with the aim of evaluating the relationship between process oriented management and improving the performance of high school principals (first period) in Tehran. This study is a descriptive – correlation one. The statistical society of this study included all high school principals (first period) in Tehran that this number has been estimated to be 1028, and the sample size of 280 has been calculated using Cochran formula. In order to collect data, two questionnaires of process-oriented management in the form of 37 questions and 8 components, as well as a questionnaire of 20 questions of managers performances were used that is adapted from Patterson's performance questionnaire [1]. The collected data have been studied using Pearson correlation coefficient and multiple regression. According to the results, the relationship between process oriented management and job performance of managers is 0.72 that this relationship is significant at $P \leq 0.01$. The assessment of multiple regression results indicate the significant influence of the two evaluation components of processes performances and strategic thinking in predicting the performances scores of executives.

KEYWORDS: Management, Process Oriented, Job Performance

1. INTRODUCTION

In the present era, institutions, organizations and executive agencies are operating in a national and international territory with any mission, goals and prospects, and are supposed to respond to customers, clients and stakeholders. Therefore, the assessment of performances results is considered as an important and strategic process. The quality and effectiveness of the management and its performance is a decisive and critical factor to achieve the development programs and welfare of the community [2]. Among different organizations, educational management is a social process that has organized human resources who are employed in teaching, using scientific and technical skills. And it facilitates achieving the sublime goals of education by providing motivation and growth and individual or group needs of teachers and other staff of the education system [3]. Today teachers who are expert in teaching and also have the required skills in understanding and diagnosing organizational problems related to all aspects of staff are needed in education system. Managers' Performance is a means of judging the manager and the organization under his management [4]. With regard to such a definition, we can say that one of the essential tasks of educational managers is to pay attention to opportunities and take advantage from them in order to improve the quality of all aspects of the organization.

Problem Expression

In all models of management in organizations, permanent modification and taking advantage of opportunities in order to improve the quality is emphasized and all their aims is to increase the quality of service or production [5]. In order to increase the quality of the Organizations, it has referred to the key role of managers and acknowledges that "manager's full and decisive support and the emphasis on managers' full awareness of systems of quality increment, strengthening, and appropriate culture promotion in this context, continuous and sustained implementation of quality management models, preparing implementation instructions, assessment check lists, and audit and conducting periodic evaluations to improve methods of implementation are essential in achieving the implementation of quality management system" [6]. Respond to the needs of the students is one of the major concepts which should be considered in the management of the school, because one of the best ways for stable success in education is to respond to the needs and expectations of the students. Therefore, School principals constantly need the information feedback of student's demands to be able to make an effort to improve constantly the teaching process and its methods. The concept of process oriented management reinforces this idea which the results based on the received feedbacks from the students changes constantly. Total quality management (TQM) could be considered as a process oriented management system in order to encounter the changes. The concept of process oriented management means each part of the

*Corresponding Author: Dr. Amirhossien Mehdizadeh (PhD), Department of Educational Management, College of Education, Islamshahr Branch, Islamic Azad University, Islamshahr, Iran. E-mail: Amir.mehdizadeh@yahoo.com

management influences students and satisfying them and deepen the learning is his duty. Manage the process and focus on it, is crucial and decisive. Although the attention to available sources and expectations in system inputs are important and has a great effect, you can fix and improve a lot of obvious and hidden gaps even in school system inputs with the attention to the process of school system and the constant and direct improvement and promotion of processes by determining relevant strategies and solutions [7]. The desired result will not be achieved in any organization unless serious efforts have been done toward the processes. And it can be said that the result, is the crop of the process. Therefore, for a better crop, we should improve the processes and promote them [8].

Focusing on school process and paying attention to the quality assurance and taking advantage of process strategies and teaching more skills to teachers and students has a great importance and necessity in the improvement of principals performance [9]. Process oriented management is an organizational approach which improves the performance of school with the aim of improving the total quality, improving methods, optimal use of limited facilities and taking advantage of process strategies [10].

Process oriented manager could be one of the effective factors in promoting performance inside an organization. Since in every organization, manager's role as one of the major factors of leadership and steering of the organization is non-negligible so the evaluation of process oriented management and its relationship with the performance of managers seems necessary. If we provide the requirements to implement process oriented management methods in schools, our schools will accelerate and facilitate goals achievements with fewer energy and resources expenditure but with smart moves. Thus, considering prominent key role of institutions, the research findings will help them to come up with a picture of the process oriented management status and by comparing it with the performance of school principals, they will find their strength and weakness points in every dimensions and they will plan to improve their quality. With regard to the above and the important role of process oriented management in schools and with regard that the process oriented management and the performance assessment of the managers has been recognized as a need and is a new subject and also due to insufficient researches that have been done on the subject of process oriented management in schools of Iran, it is essential that the managers and those who are involved in education become familiar with the concept of process oriented management and its dimensions in order to improve their performance according to the dimensions of process oriented management. Therefore, considering the two variables of process oriented management and managers' performance, the relationship between these two variables is the base of the current study.

Research questions

- Is there a significant relationship between the improvement of the performance of Tehran high school (first period) principals and the process oriented management?
- Is it possible to predict the performance of managers based on variables of the process oriented management including the understanding the need to change, considering the process, evaluating the processes performance, managers' attention to the continuous improvement of the education, restrain the resistance, managers' attention to the quality improvement opportunities and strategic thinking?

Research Background

Process oriented management is one of the new concepts in management and organization that has been taken into consideration recently. Thus, the existing literature on the theoretical and organizational models is relatively weak. It seems that the reason for this is that the discussion is new and yet it is multifaceted. Even the articles that have the related title to the topic, discuss the aspects of the problem and the benefits of considering it more than research analysis or the scientific design of dependent issues. Therefore, conducted researches in this regard are limited. But the existing theoretical and literature indicate the increasing attention of experts to the issue. The conducted researches in this area are assessed into two categories: internal and external researches.

A) There has not been done any research that is exactly the same as the position inside the country and generally it can be said that very few research and studies in the field of Total Quality Management (TQM) and Process Oriented Management (POM) has been done into the country but we can mention two cases about the relationship between process oriented management with the performance of managers.

1. The Book of applying the Process Oriented management in School [11].
2. A fundamental evolution was conducted in ministerial plan of educational quality improvement and improvement strategies of institutional management entitled to "The Program of School Management Excellence" in order to the objectives of the document [12].

B) External Researches:

Overseas researches that have been done related to the issue have variety in terms of the evaluation of reciprocal effects of different variables.

1. The process oriented quality management article [13].
2. Deming's theory
3. Kaizen theory

2. MATERIALS AND METHODS

The objectives, usage and data collection of this study is descriptive – correlation

The sample of this study:

It includes all the high school (first period) principals (1028 people) of Tehran which 280 were selected from, using the Cochran formula and random sampling method (The number of female managers: 517 and the number of male managers: 511). The sample size was calculated as follows using the Cochran formula.

$$\frac{Nt^2pq}{Nd^2 + t^2pq} = n$$

N: Total, P: The proportion of women, q: The proportion of men, t=1.96, d: error probability of 0.05
After conducting the required statistical calculations, the sample was determined 280.

Data and information collecting tool:

Data and information collecting tool: The first questionnaire is the process oriented management questionnaire that is a researcher made questionnaire and deals with the way of applying process oriented management in schools to improve the quality. The mentioned questionnaire is in the form of 37 questions and 8 components that the stability of this research was calculated 0.73 using the Cronbach's alpha coefficients.

The second questionnaire is the questionnaire of the performance of managers that is a researcher made questionnaire and was designed in order to evaluate the performance of Tehran high schools (first period) managers which is adapted from Patterson's performance questionnaire. The mentioned questionnaire consists of 20 questions that its stability was calculated 0.81 using Cronbach's alpha coefficients. Na'ami [14] has reported 0.74, 0.68 as the stability of this questionnaire using Cronbach's alpha coefficients and Bisection. Van Dyne and Graham [15] also have reported the stability of this questionnaire 0.84 using Bisection method.

Table 1. Descriptive Characteristics of Research Variables

Variables	Mean	Standard deviation	ilt	Elongation	The Minimum score	The Maximum score
Process Oriented Management	146.46	15.16	0.35	-0.19	118	178
Job Performance	73.41	7.34	-0.04	-0.66	60	87

Probable range of scores in process oriented management variable is from 37 to 185. The calculated mean in this variable is 146.46 which is at a high level at different levels of this variable. The minimum score that was calculated in this variable in the sample is 118 and the maximum score is 178.

Probable range of scores in job performance variable is from 20 to 100. The calculated mean in this variable is 73.41 which is at a high level at different levels of this variable. The minimum score that was calculated in this variable in the sample is 60 and the maximum score is 87.

The first research question

- Is there a relationship between process oriented management implementation and job performance of managers in the high schools of Tehran?

According to the pasted numbers in the above table, the relationship between Process Oriented Management and Job Performance of managers is 0.72 that is significant at $P \leq 0.01$. Thus, it can be said that there is a positive and significant relationship between Process Oriented Management and Job Performance of managers. And the more they use the process oriented management in schools, the more the job performance of managers will be improved. Coefficient of determination about these two variables is 0.52. Therefore, 52% of the score changes in job performance is predictable based on the performance oriented management.

Table 2. Process Oriented Management and Job Performance Correlation

Coefficient of Correlation (R)	Level of Significance (Sig.)	Coefficient of Determination (R ²)
0.72	0.0001	0.52

The second research question

- Is it possible to predict the performance of managers based on variables of the process oriented management including the understanding the need to change, considering the process, evaluating the processes performance, managers' attention to the continuous improvement of the education, restrain the resistance, managers' attention to the quality improvement opportunities and strategic thinking?

In order to perform multiple regressions in the first step, determining the significance of the relationship between the two variables is essential. In this study the relationship of all the variables of process oriented management and job performance are significant. These relationships are as follows:

Table 3. Correlation Matrix of the Components of Process Oriented Management and Job Performance of Managers

Variables	understanding the need to change	Considering the process	Creating consistency in the target	Evaluating the processes performance	Continuing qualifying	Inhibit the resistance	Considering the opportunities and improving the quality	Strategic thinking
Coefficient of Correlation	0.61	0.58	0.52	0.65	0.57	0.54	0.55	0.71
Level of Significance	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Therefore, the 8 components of understanding the need to change, considering the process, creating consistency in the target, evaluating the processes performance, Continuing qualifying, inhibit the resistance, considering the opportunities and improving the quality and strategic thinking are used in the regression equation as the job performance predictors.

3. RESULTS

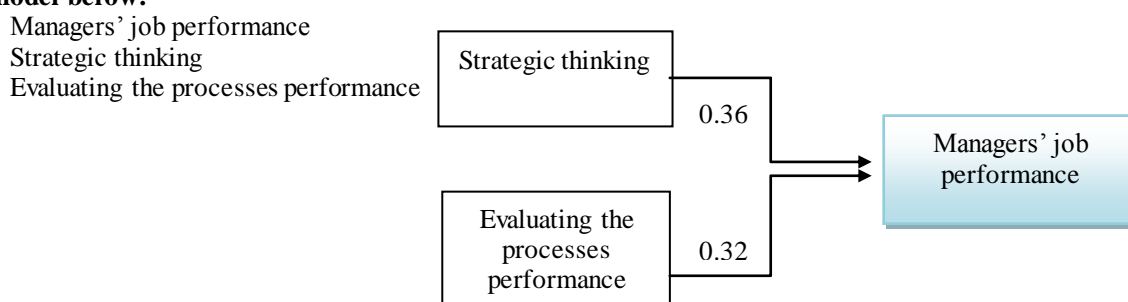
The study results are presented in Table 4 that shows the regression coefficients of understanding the need to change, considering the process, creating consistency in the target, evaluating the processes performance, Continuing qualifying, inhibit the resistance, considering the opportunities and improving the quality and strategic thinking for job performance. The correlation coefficient (R) is reported 0.77 which means that the components of understanding the need to change, considering the process, creating consistency in the target, evaluating the processes performance, Continuing qualifying, inhibit the resistance, considering the opportunities and improving the quality and strategic thinking have a relationship equals to 0.77 interacting with each other with the job performance variable. The value of F for this relationship is significant at $P \leq 0.01$. It means that the predictor variables can predict score changes in the criterion variable interacting with each other. Coefficient of Determination (R^2) is 0.60. It means that 60 percent of the score changes in the score of managers' job performance is predictable using the interaction between the 8 predictor components (understanding the need to change, considering the process, creating consistency in the target, evaluating the processes performance, Continuing qualifying, inhibit the resistance, considering the opportunities and improving the quality and strategic thinking). Denotative check of beta values indicates that the effect of 2 components of evaluating the processes performance and strategic thinking are only significant. The calculated beta value in strategic thinking is 0.36. It means that increasing a standard score in the score of strategic thinking cause an increase of 0.36 in the standard score of managers' job performance.

The calculated beta value in evaluating the processes performance is 0.32. It means that increasing a standard score in the score of evaluating the processes performance cause an increase of 0.32 in the standard score of managers' job performance.

Table 4. Regression coefficients of job performance predictors

The independent variable	B value	Beta	t value	Level of Significance
Understanding the need to change	0.29	0.11	0.92	0.35
Considering the process	0.52	0.12	1.00	0.31
Creating consistency in the target	0.37	0.10	0.83	0.40
Evaluating the processes performance	0.77	0.32	2.77	0.007
Continuing qualifying	0.22	0.05	0.45	0.65
Inhibit the resistance	0.45	0.13	1.49	0.13
Considering the opportunities and improving the quality	0.09	0.03	0.25	0.70
Strategic thinking	1.23	0.36	3.61	0.0001
$R^2 = 0.060$	$R=0.77$	$F=3.79$		F significant 0.0001

Thus, the relationships between predictor variables and the criterion variable have been presented in the model below.

**Figure 1.** The prediction model of job performance based on strategic thinking and assessment processes

4. DISCUSSION AND CONCLUSION

The first part of the study conclusions indicates the existence of a relationship between process - oriented management and managers' job performance (0.72) that is significant at $P \leq 0.01$. Therefore, the more they use the process oriented management in schools, the more the job performance of managers will be improved. Process oriented management is an organizational approach which improves the school performance with the aim of continuous improvement of the total quality, methods improvement, optimal use of limited resources and taking advantage of process strategies. Therefore, focusing on the school processes and paying attention to the quality assurance and taking advantage of process strategies and teaching more skills to the teachers and students have a great importance and necessity in improving managers' performance [16]. The implementation of process oriented management includes a series of activities that have overlaps with the desirable job performance management. Paying attention to the processes and trying to improve them, paying attention to the comprehensive quality and its development, taking advantage of opportunities to increase the quality in the organization are issues that were emphasized in process oriented management and are considered as the skills and qualifications of managers in the area of job performance.

Efficient utilization of human, finance and technology resources, in planning, organizing, mobilizing, motivating etc. are the basic activities of managers in order to achieve organizational goals and improve managers' performance based on the value system [17], which is considered in the process oriented management. On the other hand, applying process oriented management can improve managers' performance by affecting on the organizational conditions and their improvement. Re-engineering the processes in the organization as a fast and powerful tool in order to make the efficiency and effectiveness of organizations happen provides the changing conditions in the organization [18]. Methods of process oriented management were being used to increase the relationship between short-term and long-term activities which lead to the flourishing of an organization that is based on the process oriented ideas. In addition, the continuous applying of methods of process oriented management leads to the increase in competitiveness and productivity in the organization [19].

Another part of the results suggests that all the components of process oriented management (including understanding the need to change, considering the process, creating consistency in the target, evaluating the processes performance, Continuing qualifying, inhibit the resistance, considering the opportunities and improving the quality and strategic thinking) have a significant relationship with managers' job performance. And among the 8 components listed above, the two employee performance evaluation and strategic thinking components have a significant effect in the prediction of managers' job performance.

Evaluating and performance cause system intelligence and motivate people to a desired behavior and is the main part of the formulation and implementation of organizational policy [20]. After the precise identification of the processes and understanding the need for change in performing various issues, it is essential to evaluate and review the applied changes or current processes in order that the existing gaps are resolved and it becomes a continuous process improvement. Excelled organizations design, manage and improve their processes in order to achieve full satisfaction of the customers and create increasing value for them and other stakeholders. The systematic implementation of policies, strategies, objectives and plans of the organization through a set of processes is ensured. These processes are effectively implemented and managed and are continually improving. And decisions making are based on real and reliable information on the current and expected performance, capabilities of the processes and systems, demands and the expectations and the experiences of stakeholders and also other organizations performance even the competitors. Therefore, the processes performance evaluation based on specific criteria can affect the performance of all elements of the organization [21].

Although the education system should be able to be coordinated properly with opportunities and threats and perform its mission in different conditions according to the overall strategy of the organization while answering the key question and investigate ways of improving quality performance, we should accept that without implementing appropriate management based on the strategic thinking according to the process oriented management, planning and commitment implementing will not be possible. And obviously those programs which lack this basis will not have the proper effectiveness and accordingly won't be the supplier of the organizations' goals. On the one hand, the uncertainty caused by frequent environmental changes and rapid technological changes and on the other hand, the organization need to recruit powerful and efficient forces have brought the need for consistent and full implementation of the educational system's mission with the strategy of the organization to an inevitable necessity. Creating harmony between the educational system and the overall strategy of the organization and the opportunities and threats and also considering the conditions and effective factors in promoting the quality of the organization can minimize the fallible risk of educational programs, and consider those of methodologies and tools that are likely to be more appropriate to achieve the strategic objectives of the organization. And it's obvious that this will not happen until the organization understand the correct and systematic value of this conformity and arise the required sensitivity to consider the strategic education system and its effect on the organization quality with a correct management implementation to define the required processes and the resulting outcomes [22].

Suggestions for future

According to the results of the study, it is suggested that:

- A model should be provided in order to apply the process oriented management in schools so that there is no confusion in identifying processes and its dimensions.
- The importance of the process oriented management should be taught to the education managers in meetings and solutions for these principles implementation in the schools should be provided.
- The overall principles for identifying the elements and factors related to the processes should be determined so that managers can identify the processes and recognize the required changes for them based on these principles and also according to the specific circumstances of their organization.
- The process oriented management model is designed based on the external sources and the need for its localization based on the particular circumstances prevailing in our educational system is obvious.
- The culture of process thinking is recommended to be held among teachers and staff through classes and training seminars, before taking any action for the implementation of the process oriented management.
- The existing deficiencies in rules and procedures to implement the process oriented management better should be corrected.
- Sufficient resources should be supplied within the organization and in performing of process oriented management.
- Processes selection and classification, policy and resources allocation with regard to the development of management skills should be taken into consideration.
- A set of key performance indicators and measuring changes in the processes should be developed.

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