Relationship between components (control and leadership) cybernetic model of the organization creative physical education department of Isfahan

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ABSTRACT

The main purpose of this study investigated the relationship between the components (control and leadership) and it was practical and unity study and included 300 staffs in the department of physical education department of Isfahan in 2011. 150 persons using stratified random sampling method was selected proportional to size. Collection data’s tools, cybernetic model questionnaires which its perpetuity index by calculating Cronbach’s alpha test and its value is 88% and the creative questionnaire which its perpetuity index by calculating Cronbach’s alpha test and its value is 90%. Analysing data were performed by inferential statistics (Pearson) correlation index (Coefficient). Significant levels were considered in this study about $P \leq 0.05$. Findings indicated:

There is creative and significant relationship between control and leadership components of cybernetic models at physical education office. The number of employees will be more in the creative organization by using control and leadership components and control element, that led by people, and their goals will be increased to enforcement it.

Keywords: Cybernetics pattern, control, leadership, creativity, organization, Physical Education department of Isfahan.
INTRODUCTION

In the recent decades, many advances have been made in the organization and environment caused to managers faced with many process and organized changes. Present period is entitled rapid period. Various organizations which place in the hurricane of changes and were forced to accept this rapid and unprecedented changes to survive and endure and force to update their hardware and software knowledge. Changes of control and leadership method is inevitable why traditional method do not have sufficient effects at new transition. The organizations whether they want or not must be done more flexible against these changes for providing necessities of the human society, In order to avoid chaos.

Exercise(sport) is one of the subdivision of the physical education if the physical education department is successful at the macro level of social organization, exercise will be progressed (developed) in the country, it is necessary for achieving a proper perspective of the situation and issues that face with them at physical education in the country we must identify particular component, factors and effective factors and contribute of them for achieving better results and best efficient need to the optimal management. If the management is update and scientific, we will see efficiency and successful result in the exercise (sport) why we need different management’s sciences by enforcing it to update ourselves and we are able to compete with the other industrial countries.

There area number of management theories, one of them is cybernetic model that has been purposed by Baoumand provide the methods communication and guidance and supervision of the organization that based on appropriate feedback and loose hard graft of development, interaction, leadership. By this definition, cybernetic management means organized and efficient knowledge (Stanford Beer 2002) and means how to guide or conduct managing (Row 2).

In this study, cybernetic science emphasize on the control and related issues by using contemplative system (Bazr Afshan Moghadamm and Partners,2007)

Supervision or control (Thermostat and feedback loops):
Cybernetic systems, are embed basically in the concept of feedback control loops (Kasperska 2002,Glanvil 2004)they can just act against motivations that is sensitive. For example thermostat is sensitive to changes of temperature and is less sensitive to the other environmental changes. Control or supervision pointed to the electing actions and reactions that have been done on one or several phenomena, these reactions and actions are based on the information to improve the operation or development of phenomena (Khaki2005)(Keeney 2005) known feedback as methods that a system find past functions, by this way, they are trying to overcome their disorders.

Supervision of large and complex social cybernetic systems help such organizations, their activities that members give this means that members are self-correcting mechanisms and the occurrence of events that will eadtoun desirable direction,

Negative feedback systems, identifyerrorsandeventsthattheorganizationreturnstoitsoriginalpath and automatically begins activity.
Leadership:
Some features of leadership include awareness of the importance of change and dynamic organized identifying (cognition) and supporting the activities of organization, supporting of all of activities, participating of other member of management and leadership, intelligent intervention instead of participation in the efforts for changes into the organizational function, avoid basic changes, confirm the righteousness of management and institute of connection systems.

Cybernetics are willing to continue (go), while high-level members are interested in the problems of current activities or improved activities through smart interventions, so they can make changes in organization. It does not mean that do not need to leaders rather than effectiveness of systems depend on the basic certain principle of cybernetic function.

Cybernetics’s good leaders are not extremist, they accept that they have responsibility to serve the black box which it’s way of working that is not complete and understandable. According to what Baoum used at 1988 three Medical law: If the department is continuing; they release if they do not know what, do nothing.

Cybernetic leaders are due to errors. They have endeavored to identify and eliminate weaknesses and spend a lot of time to response to the disorders in the structure. Complete word of Cybernetics is “The wheel that cheep and need to lubricate” «Gerger» (cheep) is the exclamation mark (wonderful sign).

Finding the cause of the squeak and the decisions it is important to note that the duty of the leader. A leader, analyst, or breeding program designed to respond to the shortcomings, although he/she knows that there are automatically reactions in this system (BeernBaoum2003).

In general, different words that begins with “cyber” derived from Greek and means leader. Stanford (1926-2002) is one of the founder and teacher and best theorist, his theory is derived from science, neurophysiology and relations between logic and philosophy, because this reason he is famous, Baoum (1988). At first time, he introduces university and the leadership of the scientific organization and one later, he offers a new approach to the control and leadership that base on kind of cybernetic model in the organization.

Cybernetic models, existing models integrated with each other through explaining how the minister system and political and Borockeratic In all of organization in order to create the integrated reformer. Baoum’research about Cybernetic model is claimed that Control systems of organization can be as Sensitive and negative feedback loops that on the whole it is supervisor on the acceptable levels of functional factors, and it is the factor and power that returns to the past positions of institutions. The manager can effect on their functions by adopting their balanced system to the organization.

These things can be created and emphasized on the selected elements of organized life by a gradual stage and practical management and limited purposes.
The necessity of creative organization:
Effectiveness of organization principally depends on creation and innovation in the twenty-first century. Imagine of creativeness is particular series (complex) of skills, specially, transformation that occurred in the past decade included particular person, in small group of elite workers who have been different behavioral compare with another persons also we have creativity and imagination with each other. The ability to form a mass organization that can be enjoyed (Amirhoseini, 2005). The concept of joint capabilities, "the first time, used at famous book that name was Gary and Hamel from London Business school and his partner C.K. Prahall from Michigan university.

According to the incomes of Hamel, Collective property, and the organizational culture, how organizations are rooted in communication, not the creative skills of a handful of senior staff. Companies that their staffs companies that for example they use “so-called fundamental equation of value” trying to get individually or “enhance access and understand “shared competence” what these new approaches toward the emergence of strategy, the cases(ideas) that can be provided creativity and innovation areas includes: structural, cultural and management factors, and human resources.

1. Organizational factors: Organic or natural relations which lowest regulations and their division based on specialization and highest decentralization provides areas that are ready creative fields. Abundance of resources allows managers to purchase costs of institutional innovation and creativity and also see tolerate failure. Open and easy communication between the units caused to remove probable barriers by reactions.

2. Cultural factors: Cultural factors affecting on creativity are:
   a. Accept uncertainties (ambiguity): Much focus on the creative limitations for raises. Thus the ambiguity is little ground for creativity.
   b. Reward: Some researchers and scholars, The system of rewards creativity aspect of the reward system are affecting creativity flourish.
   c. Low external control: Less use of instructions and regulations and policies are given greater creativity.
   d. Risk tolerance: People must be encouraged or experimented (tested) without any fear and then mistakes and how to reach successes must be taught.
   e. Focus on results: The objectives must be clearly and explained that the goals can be reached in different ways.
   f. Imagine a system like as open system: Imagine organizations as open systems cause to make tracing the changes in the environment carefully and respond with appropriate answers are given.

3. Management factors: The features of these factors include: manager’s characteristics and attitudes and styles. The Managers features are innovative and have positive attitude towards staff, Employee participation indecision-making organization and their work and creativity are enhanced.
4. Human Resources: If human resources of organizations have the necessary training and job security, organizations will be creation and innovation. The other variables that caused to increase creative organization is, existing of creative people (Sam Khani, 2008).

BazrAfshan Moghadam (2007) has examined the application of cybernetic at universities that findings of research indicate that universities in Iran (especially Ferdowsi University in Mashhad) the position of using of the cybernetic model is good in organizing activities. This model is true in the filed components. In other words, Mashhad University of manager’s view on the average is more than higher average level of the erotically description of the date collection instrument. The result indicate that Iranian universities also tend to organize their activities in four wood pattern and Cybernetics Most trends in the components associated with leadership, with a mean of 4/76.

Arasteh (2007) titled in a paper “The necessity of using new methods of leadership and the in Heads of state universities in country”. He examines the methods of leadership among public university presidents to Ministry of Science. The leadership styles of management as key elements that is very particular interest thing in the research. Effective leadership in universities requires the use of appropriate methods of surveillance. Disregard to this situation could undermine the president of the university and Builds as had own their performance. It is including: choosing probable wrong methods and repeating weakness activities and do mistake in management, failure in the leadership, academic and social isolation will reduce the quality of the university. The results of his studies, saying that ultimately, there is no magic formula for improving leadership in Iran and the leadership of university presidents is under the monitoring methods for the intended administration.

Fakhrrian (2009) examined the study about the relationship between creativity and innovation experts with the headquarters of the organization, his study is sample, that include (comprise) 677 cases of Mellat Bank experts. During this research the following findings were obtained: He stated that the study of organizational factors associated with creativity and it will affect. Also showed that most of the structural factors that are in conflict with the creativity and innovation, Recognize the organizational and Thought that Recognize the important part of reducing structural barriers against creativity and innovation that eradicate creativity and innovations.

Masoumeh Hosseini and her partners (2010) did research and creative solutions to enhances as factors affecting faculty. The results of this study showed that organizational factors have greater impact on the creative faculty. There are significant difference between creativity and organizational factors of the university.

Cultural and Hosseini (2010) In a paper titled "The leadership and management in universities ", they have drawn short space of governing institutions and practices of leadership and guidance. So after a brief mention of the nature and role of higher education, were referred dimensions of leadership and management While discussing the negative effects of power in universities and management the mass Bureaucratic organizations and scholars and theologians in the bureaucratic environment can not be creative and innovative, has developed the benefits of participation and participatory culture. Results indicate this point now, the structure of university is more bureaucratic and not responsive to the needs of the community. While in this way it can
be better respond to needs of being participatory. To deploy the operating system or component should dominate the political organization of universities, more confidence in the board and faculty members will be drawn and the necessary of making modifications.

In “the result of cybernetic model on enrichment” research, Schwaninger (2003) delaminated Cybernetic approach to organizational analysis, and deal with monitoring science and relationship between groups of management and synergy, in his study, he tried to provide (present) systematic and organized structure for the planned process and making the innovation in the organized places. This study showed that how self-regulatory processes are more effective with a cybernetic orientation.

Glanville (2004) During his research in Cybernetics, Supervision (control) and non-essential for all living systems as and Cybernetics Systems concluded that requires communication positive and negative feedback for corrective actions are monitored.

Zamenopoulos & Alexiou (2007), In their study of Cybernetics in the fields and the monitoring and feedback and also to clarify the relationship between the two paid. Their findings showed Cybernetics tool for the systematic study of organizational targeted behaviors, Application of concepts such as feedback, supervision and care. He received word that the concepts of organizational control (Supervision), Inevitable part of the organization and the most important and influential in terms of engineering and management.

Rowe (2007) in their study, "Cultural Cybernetics "considered organized supervision and control as integral parts of cybernetic. He received personal relations between private individual and organizations are monitoring the effected component, under this circumstance. People are automated, self-command and other superficial or formal monitoring don’t need. These findings indicate that if the optimal management and healthy work environment is maintained, the effectiveness of cybernetic will enhance.

Jalan, R. Cliner, D (2008). during the study showed the new developments in developing creativity More options for people with a higher risk than others (In other organizations or other units of the organization) are analyzed and the fact that they allow creative ideas to be expressed at higher risk.

Scott (2009) in his study, examined the effects of social cybernetic component on the understanding the world that is coming. The main subject in his study is “supervision and governance” that is part of his art (science and knowledge) and steering control and handling. He distinguished between the first and second degrees of cybernetic and believed that this distinction is visible at the organized level. Results showed that knowledge of Cybernetics is, facilitation of relationships with other knowledge (natural sciences, communication sciences).

Rowe (2010) The research entitled "Cybernetics organizer: The interaction "to investigate the interactions of organizational and strategic Cybernetics While the circumstances that led to a lack of compatibility will be described with its surroundings. His studies suggest that key processes in the organizational environment and organizational interactions This requires consistency between the two organizations are to survive. Also, organizations need to develop
organizational interactions are in equilibrium. He knows Interactions, the heart of the cybernetic organization.

Methodology
In order to describe the relationship between the two components of the control and leadership, organized and creative cybernetic at the Department Of Physical Education is used research methods, descriptive and correlation methods. The statistical study of all the staff physical education was the province of According to statistics provided by the personnel office Department of Physical Education of isfahan in 2011 was 221 people. Due to the statistical community and all employees are managers, Hence a stratified random sampling method is used.

According to Table morgan 221 of 132 people to the sample size is considered.

To assess the normal distribution of data was used Kolmogorouf Smirnouf and Homogeneity of variance of Levin test. It was used inferential statistics such as person correlation test for analyzing the data which used at software SPSS 18. (Significant level $p \leq 0.05$ was considered).

Data for this study was a questionnaire consisting of three types: Cybernetic model of control components and questionnaire surveys the components of leadership Cybernetic model in 2007 and was preceded by a jet seed Corporate Creativity by Hassan Beigi has been developed in 2010. Cybernetic model of reliability of 89% and 88% of creativity is achieved.

RESULTS AND DISCUSSION

At first, to determine the normal or non-normal data was used related Cybernetics and creativity of the test pattern Kolmogorouf-Smirnouf, the results in Table 1 are presented.

<table>
<thead>
<tr>
<th>Statical indicators</th>
<th>The amount of</th>
<th>Significant level</th>
</tr>
</thead>
<tbody>
<tr>
<td>control</td>
<td>0.79</td>
<td>0.547</td>
</tr>
<tr>
<td>leadership</td>
<td>1.28</td>
<td>0.075</td>
</tr>
<tr>
<td>creativity</td>
<td>1.79</td>
<td>0.047</td>
</tr>
</tbody>
</table>

*Meaning full level of $p<0.05$

As observed at Table 1, Heteststatistic was found The data relating to the use of control ($p=0.547$) The leading component ($p=0.075$) And creativity ($p=0.047$), follow a normal distribution were used To test the hypothesis parametric statistics.

Based on the results in Table(2) the correlation coefficient between control and organizational creativity was significant the significant level is $p \geq 0.05$, so, there is a significant relationship between control and creativity in the organization of physical education.
Table (3) Correlation coefficient between the components of leadership and creativity in the physical education department of Isfahan.

<table>
<thead>
<tr>
<th>Leadership</th>
<th>Correlation coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>p</td>
</tr>
<tr>
<td>Corporate creativity</td>
<td>150</td>
</tr>
</tbody>
</table>

Based on the results in Table (3) Significant correlation between leadership and creativity, enterprise-level \( p \geq 0.05 \) is meaningful, the interactions between the enterprise and creativity in the physical education, there is a significant relationship.

CONCLUSION

Considering the results of data analysis that can be claimed that improve the performance of the components of leadership which is coincidence with Cybernetic model, most features of this component is to comply with those efforts. The analysis of control components can be inducted the items and can be controlled to improve and strengthen the control element with the aim of creating and reinforcing negative feedback systems that is done requires continuous monitoring and improvement of the system. Cybernetic model of control and interactions between components of creativity and meaningful relationship exists from the perspective of Physical Education Department staff of Isfahan. Considering the results obtained from the analysis of organizational creativity The most important factor in the Department of Physical education managing is creativity in the organizational chart. The results are aligned in the results of Jalan and Cleaner Fakhrian Husseinin 2010 and 2008.

Also according to Baoum’s (1988) theories, an organization of their cybernetic and There is not necessary to define the authority and application of specific regulations that provides more power and is therefore less Creativity will be more likely to occur.

According Schwaninger (2003) cybernetic model of organization that create sand produces knowledge and innovation (Creativity in the corporate environment is an important element) that your organization is in the enrichment Schwaninger consistent with the results of the research

Therefore, it is an important component of innovation is creativity. On the one hand according Glanville (2004) and Zamenopoulos & Alexiou (2007) Cybernetic system requires positive and negative feedback is other hand the creative component of the reward (feedback form) is Research findings are aligned Glanville (2004) and Zamenopoulos & Alexiou (2007). So, existing feedback in cybernetics and creativity are shared components between these two variables.

Seems to use a cybernetic model of organization makes Interactions between staff and managers to be more The cause of the views of managers and employees in their organization's goals and programs Refer to your creative ideas to managers and employees Using this model of an ideal to be converted and the Department of Physical Education in the implementation of this model has its day and can be aligned with the industrial world to compete. Cybernetic model of organization is to increase efficiency Because of less power; your organization can be set to Gary and interactions creativity and enterprise organizations to increase efficiency.

Overall, findings
show the utility of the cybernetic model of the mean is conceivable Based on the Physical Education Department staff and managers have been obtained. Sowe can conclude that organizing activities in line with the Department of Cybernetics pattern can be. But the managers of the map given According to Cybernetic model Administration did not attempt to organize activities It is inferred that the model developed for the Office of Management Education Cybernetic model of the framework can be expected that The cybernetic model for application development managers and organizational innovation in the space described , they are ready. It's the people that do not allow themselves to Lead to creative solutions and rapid adaptation to the environment are And even when such organizations developing term strategy and objectives Decision-making power to people with high risk relies Delegated authority and decentralization in the organization to enhance creativity among the people.

REFERENCES