The place or position of cybernetic model of the creative physical education department of Isfahan

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ABSTRACT

The main purpose of this study was the place or position of cybernetic model in managing of the physical education of Isfahan. This research was the kind of padding methods and the statistical society included 221 persons of staffs of physical educational education department of Isfahan in 2011. This research was used sampling methods by 132 persons. The tool’s collections of data were: questioner of cybernetic model with 88%, the analyzing of data was included: realistic statistics (“t” test, analysis, variance, average) Meaningful level is considered p ≤ 0.05. The findings of research is represented that the cybernetic model has suitable level in physical education department of Isfahan.

Key words: Cybernetics model, Physical Education department of Isfahan.

Introduction

There are various paradigms for managing organizations and researchers have noted that the offices with relying on special paradigms, organize their activities. These paradigms according to Biren Bahom's theory (1988) are 5 classes: 1. Cooperative 2) Bureaucratic 3) political 4)anarchy 5) cybernetics 

Biren Bahom with regard to specifications and differences of every paradigm believes that. Effective organizing of large organizations activities with complex order is possible with relying on cybernetic controls. The cybernetic paradigm as the instruction science and the control of organization, with relying on proper feedback and weak and strong bond, prepare the ground for improving relations and communications with inter organizational units for self ordering (self regulatory) Bazr Afshan Mocsadam [1]. According to this definition, cybernetic managerial paradigm have six items as in section and control, weak and strong bond control, communications, hierarchy and leadership. Totally, the various words that start with cyber, has been derived from Greek word means helms man, instructor, and leader.

Heyligon and Jozlin [8] in their definitions state that, they declare cybernetic as relation and control in complex systems via concentration on their feedback or cyclic mechanisms cybernetic is a popular name (term) for studying control and relation of organization and thereby put forward the eternity topic of cybernetic. In fact, cybernetic frame work provides the back ground for merging and consolidation of multiple conceptions and constituental domains which relates to management. In addition, in comparison with systemic view, the gives the more complete view of management view.

Booy and Arkooby [5] with use of bakhtin Theory and then with referring to Bertalnfi and Boolding theory, recall the new approach as cybernetic and especial emphasize to en and the necessity of the system communication environment and feed back for adaptation to the environment and the other specification, as the third cybernetic revolution superior that open systems theory there are different definition for cybernetic that include:

The useful science of organization [20] of cybernetic is the ability of helming and conducting or the ability of managing (Ru2010) in this research, cybernetic science emphasizes the communication and control with using systemic thinking in such a
system, the communication and control necessitate the maintaining the balance of system. The communication and control necessitate the balance of system. It should be noted that communication and control performance is done with the system and without interference of external features. In cybernetic in contrast with some sciences that infer the world as mere material and energy, notice to the other important and non breaching feature that named communication and the exchange of information [1].

In table (1-2) we have different definitions of authors and scientists of cybernetic that are related to research subject;

<table>
<thead>
<tr>
<th>Author</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samoski</td>
<td>organizational limitation science</td>
</tr>
<tr>
<td>Roodal and man</td>
<td>regulator of information process in management (2009)</td>
</tr>
<tr>
<td>Staford Bear</td>
<td>useful science of organization (Roodan, monp 2009)</td>
</tr>
<tr>
<td>Norbert winer</td>
<td>the science of control and communication in machine and animal (Neehanski 2010)</td>
</tr>
</tbody>
</table>

With comparison of the given definitions in table (1-2) it could be inferred that conscious management and leadership very intricate systems, communications, monitoring and control makes the central part of cybernetic Monitoring and control (there most at and feedback rings) cybernetic systems are on the basis of the feedback rings control [9] and only reacts kinetic that is sensitive. For example there most at is sensitive. For example there most at is sensitive to temperature changing and is not sensitive to other environmental changes. Control or monitoring shows preferred actions or reactions in different phenomenals these reaction are based on the information that used to improving utility or developing the utilized phenomena.

Khaki [11]. Keeney [10] knows the feedback as away that a system gain information of the past performance and in this way, tries to abate its disorders. Cybernetical monitoring help the social complex systems as organization to regulate It's activities. It gives auto revision mechanism to it's member (parts) and in the occasion of bad events that directs the organization toward un proper direction, negative feedback systems identify the risks and the other directive event, automatically. Restart the organization in the right way.

Weak and strong bonds:

Strong bond relates to common elements and components in subsystems, in a way that changing in one system, makes the changes in other systems. While the central part of weak bond shows that the more stable organizational unit and expert core, the more weak the relationship between managerial sob systems and the more stronger the relationship with environment.

In other words, weak bond means that the changes in a unit or program possibly don’t affect the other units or programs. The opposite point is strong bond that changes in one unit or program, influence the other units and programs additionally, this organization based cybernetic paradigm is so complex that possibly, some parts of this organization [2].

We can consider the whole organization as the compound of subsystem blocks, that we can add or isolate more of them without any effect on the other subsystems. The existing bonds between majority of subsystem in organization, have small effect on what is happened on the other subsystem in the short time.

Cooperations:

In cybernetic paradigm, instead of director the emphasize is on the cooperation of different organizational systems with the aim of maintaining use full utility of every organization, the harmony among subunits via existing limitation in the higher level of organization, becomes institutional. If these harmonies are not proper, we need the mediation of higher level of higher level of hierarchy. This mediation is for solving the subunit problem. The cybernetic process is shown in figure (1-2)

![Fig. 2-1: In cybernetic circuit (source: [3]).](image-url)
This process starts when some changes in external and internal environment cause organizational reaction. If the formal and informal groups monitor these changes and the change causes the variable depart from the accepted limitations, the group tries to force the management to react as the changing of organizational reaction until the variable returns to accepted spectrum.

Decision making:

Decision making features in cybernetic paradigm in the view of Biren Bahom [3] is the existence of resources and references of decision making, gradual or phased decision making, identifying the limit or special spectrum as the criteria for activities validity and avoiding prompt action.

Some cybernetic institutions, at first simulate as it use as the real one and introduce the ways for a problem and investigate the results carefully.

And investigate the results carefully. Stafford bear called the place of doing this process as decision room [12].

The prompt and transitional solution for organizational problems has limited utilities and possibly has no utility organization. As the managers experience the skeet full environment and are in the affection of the limitations that oblige them to judge under uncertainty conditions.

And couldn’t measure the usefulness and success of their organization directly, so small numbers of decisions are unusual that they can predict their results reliably senior directors in organization solve the problems of subunits successively, not in the united form, without understanding the effect of their solution on performance of other subunits. They divide the organization structure in to small units and grant apart of these issues to these units and decide in such away that these division be stayed safe. [1].

Hierarchical system:

Cybernetic system can be considered as the divided and hierarchical system, knowing the way that an organization works, depends on visiting it's sob system and the way of forming larger systems or their compositions cybernetic organization divides into different components that gets multiple and opposite aims and being hierarchical. And senior directors monitor their sub components and as certain the organizational aims [2].

Leadership:

Some leadership features in cybernetic organization relate to the awareness of the importance of change and modifications and dynamic in organization, knowing the organizational activities, participating the other members in management and leader ship of organization, conscious interferes instead of cooperation in trying to making the change in organizational performances avoiding the basic and institutional changes, emphasizing the management and making the communicative systems cybernetic organizations tend to progress themselves, whereas The high level members tend to react for making the changes in the organizational performances against the current activities disorders or improving the activities via intelligent interferes. This subject doesn’t mean that the leaders existence is not a necessity for system, or the leaders have not any effect on the system, but it means that their effects depend on the performances according to special principles of cybernetics.

The good leaders of cybernetic are not radical. They know that they are responsible for the black box that it's function is not completely comprehensible. Cybernetic leaders pay attention to the errors. They try to identify and omit the weaknesses and spend most of their time replying to disorders in structure. Brief writing of the cybernetic organization director is that, we should lubricate the wheel that squeaks. Squeak is the sign of attention, evaluation of squeak cause and deciding about the importance of that topic, is the responsibility of the leader. Analysist leader may answer to deficits with planning corrective program, but cybernetic leader knows that possibly the proper corrective reactions exist in current systems of organization and activate automatically [3].

The main part of leader ship in cybernetic systems includes implementation of daily duties in the time that the performances progress well and small corrections and intelligent changes in occasion of happening disorders are done. But at least there are two situations that the leaders in cybernetic systems should act more as in strive and aggressive.

One of this situation is in the occasion of confronting the organization with external shock as sudden losing of resource that has a following crisis such a phenomena can activate the enforcing cycles that the system has no response for them. This action may eliminate the stable trends of system and influence the organizational survival. This situation needs direct endeavor of leadership for making big changes:

The other situation happens when the leader believes that the system acts in unacceptable level and there are no organizational processes that changes this situation. In this situation, the leader can enter a shock to system and his flowing processes with big corrections. The result may be the organizational innovations or organizational disorders or leader substitution. This situation is the
most dangerous status in leadership behavior in cybernetic systems, because it follows the
detections of organizational members.

Organizational chefs and other directors may not
able to make wonderful changes in organization, but
they can be leaders by knowing the organizational
features. There are special expectations of leaders of
organizational systems their responsibility is the
proper balance meant of the organization not the
management. Stafford bear believes that the
management in complex system is not got, but the
managers improve the feed backs of organizational
un safe activities via the cyclic process, in a
continuous manner. In different types of effective
organizations, the management should show laxity
against the weak systems and accepts his wrongs
(errors) and supports unusual activities and adapts
himself with unusual changes.

Research question:

1) how much is the utilization of the features of
cybernetic paradigm (monitoring, communication,
bond, leadership, hierarchy, decision making) in the
Isfahan general office of physical education.
2) are there any differences between every features
of cybernetic paradigmatic academic paper variable ?
Are there any differences between cybernetic
paradigm and the gender variable ?

Methodology:

As describing and investing the position of
cybernetic paradigm in Isfahan general office of
physical education the statistical research is survey
type.

Statistical community (population)
The statistical population of this survey are the
personnel of Isfahan physical education that
giving statistics from personnel office of
Isfahan General office of physical education in 2011
were 221.

Because this population involves director and all
personnel, so sampling is randomized categorized.

According to kerysim organ, stable, for the
population of 221, sample volume of 132 was
considered and these sample.

Are allocated proportional to un proper
categorizes of society (community) measuring tools
(instruments)

In behavioral sciences surveys, different
instruments questionnaire, interview, test or check
lists are used.

In this survey, two questionnaire have been
used: one of these questionnaire is the questionnaire
of bazr afshan mogaddam that compiled in 2007 and
the amount of these cybernetic features in Iran
universities has been investigated This questionnaire
has 60 questions.

Durability of questionnaire:

The durability of measuring instrument with
kronbach method has been measured. Questionnaire
derability of cybernetic paradigmis 88.
So the durability of utilized instrument in survey
has great validity.

Questionnaire Validity:

For measuring the validity of the utilized
instruments in this survey, we use content and
nominal Validity.

For this reason, the questionnaire with comment
from distributed be among 15 person of sport
management and the experts were asked to
emphasize the external shape and the amount of
harmony and the extent of every question in terms of
writing, composition (essay) and to accord with
survey objectives in a 5 item spectrum (linkert scale)
from complete fitness to complete unfitness, the
experts confirmed the content validity of these
instruments in the high level and some times their
proposed ideas with the guidance if instructor
professor are implemented.

The method of collecting Data and statistical
analysis with regard to descriptive survey, collecting
data according of their face too ace gaining the
questionnaire is implemented. it should be noted that
during the distribution and completion of
questionnaire, the researcher attends in the place and
provides this chance to give necessary explanations
about the aim of research. its importance and the way
of answering the question. so this questionnaire is
distributed and collected face to face.

The research data are collected as field with
using the questionnaire with reply packet.

At first, at understandable statistic level is used
by kolomogrof –smirnof test for surveying real and
normal distributed situation and for congruence and
variance is used by level test and for surging
demography variable used T test for software
(meaningful level is considered p<=0/05)

How much the measurement of component do in
the physical education of Isfahan used?
(components include supervision cooperation,
relationship,leadership,hierarchy,decision).

Results:

As observed at table 2, t meaningful at all the
studied is 0/05 so the average is 3/5 at control
component 8 it is 2/1 at cooperation component. The
average is 2, leadership average is 2 and can be to the
societies with 95% possibilities.

There is difference between measurement of
component of cybernetic models education variable.
With free degree is 3& it is 128 that critical measure, so zero hypothesis is rejected and can be resulted that there is difference between score measurement of cybernetic model with staffs and education level.

The sixth hypothesis of research: there is meaningful different between test for surving the different between cybernetic model component and gender variable.

### Table 2: Test of cybernetic component model at studied sample.

<table>
<thead>
<tr>
<th>Indexes</th>
<th>t</th>
<th>df</th>
<th>Competion standard</th>
<th>average</th>
<th>Meaningful level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>-12</td>
<td>131</td>
<td>.8</td>
<td>3.5</td>
<td>0.000</td>
</tr>
<tr>
<td>Links</td>
<td>-15.8</td>
<td>131</td>
<td>.6</td>
<td>2</td>
<td>0.000</td>
</tr>
<tr>
<td>Interactions</td>
<td>-13.8</td>
<td>131</td>
<td>.6</td>
<td>2.1</td>
<td>0.000</td>
</tr>
<tr>
<td>Decision</td>
<td>-15.8</td>
<td>131</td>
<td>.7</td>
<td>2</td>
<td>0.000</td>
</tr>
<tr>
<td>Hierarchy</td>
<td>-16</td>
<td>131</td>
<td>2</td>
<td>2</td>
<td>0.000</td>
</tr>
<tr>
<td>Leadership</td>
<td>-15.1</td>
<td>131</td>
<td>2</td>
<td>2</td>
<td>0.000</td>
</tr>
<tr>
<td>Total</td>
<td>83.6</td>
<td>131</td>
<td>40.6</td>
<td>13.6</td>
<td>0.000</td>
</tr>
</tbody>
</table>

### Table 3: The difference between cybernetic model.

<table>
<thead>
<tr>
<th>Model</th>
<th>Meaningful level</th>
<th>F</th>
<th>Square average</th>
<th>df</th>
<th>Sum of square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iutra group</td>
<td>0.000</td>
<td>8.3</td>
<td>11772</td>
<td>3</td>
<td>35317</td>
</tr>
<tr>
<td>Total</td>
<td>131</td>
<td>216059</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 4: The result of independent test for surveying the difference between men and woman staffs cybernetic model.

As observed at table 4 t statistic measurement is lower -1/05 than this score which is 0/05 at the recognition level and degree freedom is 131 and critical degree is 1/96, so, this hypotheses ad the zero hypothesis is accepted and confirmed it means that there is not any meaningful difference between the score of men and women.

### Table 5: The result of independent test for surveying the difference between cybernetic men and woman staffs of organization.

As observed at table 4 t statistic measurement degree 131 than critical score 1/96 so the zero hypothesis is confirmed and the t I which it is lower with 0/05 freedom s 0/64 hypothesis of research is rejected it mean that there is not meaningful difference between men and women.

### Discussion and conclusion:

By viewing of staffs of physical education of Isfahan, the measurement of cybernetic relationship (p<0/05) Between education and cybernetic (p<0/05) at physical education of Isfahan from staffs views, there is not meaningful relationship Between gender and cybernetic model(p<0/05).

First question research how much the measurement of usage of components (supervision, cooperation, leadership, link, hierarchy, decision) is at the results of staffs viewing and based on analysed finding the score of control consider that leader just as a leader and manager, via versa the management of organization is the plural responsibilities and we cannot limit the leaders university to the academic leaders, points is largest (highest one these finding are difference from Bazrafshan Moghadam finding [2] Bazrafshan Moghadam [1] Considerd the measurament of the usage of leadership components in the universities is the highest ones. The writer, pointed to the baoum viewing. The leaders of universities have limited role toward before. Because the universities are cybernetic system regulate themself to used full methods. In the word they regulatory so they don’t need to meaning and register and confirm activity and use them and he resulted from the tentative study of france universities that the history of department of universities must pay attention to the two problem First we can not consider that just as a leader and manager, via versa the management of organization is the plural.
responsibilities and we cannot limit the leader university to the academic leader.

According to the showanger finding(2004) that named Effective of cybernetic model on the richnesser prise to study the view of cybernetic organization, supervision science and relation in the manager singer group (synergistic), he tries to present regular organized structure and through cybernetic attitude.he want to innovent and mastermind. This research represented that how self supervision process be more effective by a cybernetic organization.

According to the researcher s findings cybernetic model in the physical education of Isfahan is good and the control component is used more than other component which are used in average level ,so we result that the physical education of Isfahan tend to act frame work of (basis of) cybernetic model, it is seems that difference between statistics society come to make different.

So porosed that the leaders and management based on intelligent intervention and supporting staffs activities, avoiding fundamental changes and establish corrective (improved) systems, they must try to make cooperative between different units and present relation and used all the sources and references on his /her decisions and make the good relationship between society and office and feedback loops be active there.

Second question is there correlation between education and cybernetic model in physical education of Isfahan, the result of research whether there are meaningful relationship between education and cybernetic model components or not in the education.

These finding are different from bazrafshan findings, the results present that there is direct relationship between staffs educations and their attitude about the position of cybernetic model and if the person have more knowledge,their information will be updated so new cybernetic model is used more &we can say they have different education diploma, degree BA&MA

Third question is there correlation between gender and cybernetic of physical education development of Isfahan? the results of tables represented that,there is not meaningful relationship between education level and cybernetic model of physical education development of Isfahan and there is not any study about this.

About gender and cybernetic model, it is not any result than there is different between men and woman and they can use one model equally in the organization.

It is seemed that cybernetic model cause to increase efficiency be using by using lower power,self-regulation and cooperation of organization will be high. At all, findings represent that according to the averages of scores which are acception by staffs and manager of physical education the averages are imaginable and it is based on staffs attitudes (viewing) but the managers of organizations work as the plans of cybernetic models.

References