The impact of organizational culture, structure and strategy on organizational efficacy with intermediary role of knowledge management in Dezful University of Medical Sciences

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ABSTRACT: The knowledge management proceedings which are influenced by organizational factors affect organizational efficacy. In this article the influence of organizational structure, culture and strategy on the organizational efficacy with intermediary role of knowledge management in Health and Care Services Department of Dezful University of Medical Sciences is studied. The statistical population of this investigation were the staff members of the university HQ with number of 236 people where 143 of them were sampled randomly and a descriptive-causal method was applied for the research. The questionnaire of Zhang et al (2010) was used for data collection. Descriptive and inferential statistics (structural equations model) were used to analyse the obtained data. It was proved that variables i.e. knowledge management, organizational structure, culture and strategy have a positive and significant influence on the organizational efficacy. The presented paper provides new findings to knowledge management literature and impresses the cooperative role of the organizational structure, culture and strategy in the organizational efficacy.

Keywords: Organizational efficacy, Knowledge management, Organizational structure, Organizational culture, Organizational strategy.

INTRODUCTION

Knowledge management potentially plays an intermediary role in associating organizational factors with organizational efficacy. It is believed that knowledge management is able to expand competitive advantage of the organization, client concentration, relations and progression of staff, innovation and low costs. Knowledge management not only precedes organizational efficacy but also acts as a mediator between organizational factors and efficacy. Knowledge resource is considered as an output of culture, structure and strategy; since it is defined on basis of a set of cultural norms and values, structural relations and strategic priorities. For instance, knowledge sharing proceedings are affected by cultural anticipations of type of the shared knowledge, associated people and release speed of knowledge through official channels of organization. When it comes to create new products and services, efficiency enhancement and efficacy increase, knowledge management which reflects cultural, structural and strategic features of the organization is beneficially used (Nonaka et al, 2000:6).

In fact, internal features of the organization provide significant resources for prosperity. Organizations should pay attention to the matter that what the vital features of success are and how they affect organizational results. The organizational actions occur in the environment which is provided by organizational factors (Zhang et al, 2009: 763).

University of Medical Sciences has tried to benefit modern science in a way to improve its position. According to previous proceedings it is clear that authorities have spent so much money and time on improving the three factors (culture, structure and strategy); and considering importance of organizational factors in efficacy of organizational performance and with perception of current conditions of traditional structure and disrupted
organizational strategies and culture and their derived problems and the fact that modern organizations have to be competitive which is possible with modern knowledge led the authors to discuss influences of organizational culture, structural and strategy on the organizational efficacy with intermediary role of knowledge management.

Increasing demand for quality and innovative goods and services has put companies under pressure. This fact in companion with global competition, has changed market rules and forced companies to rapidly adapt themselves with alterations. Prosperity requires that organizational factors in a company like organizational culture, structure and strategy consist of special features and be coherent and coordinated; in other words, inconsistency and gap are obstacles which limit success and organizational efficacy. On the other hand, knowledge is regarded as a key resource in modern knowledge-based economies which has to be managed like cash flow, human resource and raw materials. In such situations, companies those have the capability to use knowledge as a competitive advantage are the only ones with successful performance. In order to use knowledge management effectively, coordination among organizational culture, structure and strategy is necessary; since these factors are unique in any organization. Poor organizational culture hinders people to share their knowledge to maintain their personal power base and efficiency. Therefore, enhancing and creating anappropriate and flexibleorganizational culture is the only way to gradually change interaction manners in an organization and benefit knowledge management as a competitive advantage. Organizational structure and strategy also play an important role in knowledge management process. In conclusion, it is very important and necessary to investigate the influence of organizational culture, structure and strategy on the organizational efficacy with intermediary role of knowledge management in Dezfool University of Medical Sciences HQ staff members. Thus, foresaid issues and other issues which will be discussed express the significance of this research.

Research literature

Organizational culture

Culture consists of all intellectual and value contents which distinguish human life from animal life; and it involves family, economy, technology, government, defence system and suchlike (Martin, 1963: 482). Culture is a pattern of values, beliefs, traditions, customs, knowledge, language, worldview, attitudes, views and lifestyle in a community (Alvani, 1383: 47). Taylor defines culture as a phenomenon including knowledge, beliefs, traditions, rules and other potential features which is described by community members (Douglas, 2008:25). Organizational culture is defined as a set of common rules and norms which provides eligible solutions to problems and situations in an organization. It is a pattern of values and beliefs which help people to comprehend organizational duties and adapt their behaviours with norms (Beugel s.dijk and Kean, 2009: 312).

Organizational Structure

Robins (1386) defines structure as a component of the organization which involves complexity, formality and concentration. John Child (1984) pointed out three columns for definition of organizational structure: structure of the organization determines official and reporting relations in the company and demonstrates available levels of hierarchy and also control scope of management and supervisors; organizational structure assigns people who work together in circles or determines segmentations in the entire company. Organizational structure involves system designs with which actions of all circles are coordinated and thus system of effective communication in the organization is guaranteed (Arabi, 1376: 75). Deghat (1377) expressed that organizational structure is presented in chart of the organization; organizational chart is a visible symbol of all actions and processes of the organization. Richard H. Hall declared: “organizational structure is the distribution and assignment of people in different social positions which affect role relations of them”.

Organizational strategy

There are different points of view about strategy. Some researchers such as Hoffer and Schandel (1978) consider strategy as means of achieving a goal; while others like Andrews (1978) point that as the goal itself. Some others also take a broader concept into account which includes goals and achievement methods and express that in general administration perspective, formulation and application of strategy are related to each other and should not be necessarily separated (Von cat Romem, 1989: 942). Strategy is a response which is made by senior managers to limitations and opportunities they face (Miles and Snow, 1978: 25).

Concept of strategy has been applied in business studies since 1960 and despite being widely accepted it is still a vague and specific concept in management. Description of strategy conceptdiffers from one researcher to another; however, in basis of most definitions the concept is expressed as: it is a pattern of decisions and actions of which main specification is the interaction of organization with its surroundings and also a decisive factor in achieving goals. In fact, strategy may be defined as a determinative procedure for long-term and fundamental goals,
adoption of working method and appropriation of required resources for achieving these goals. Organizational structure implies a plan for interaction in a competitive environment in order to achieve competitive goals (Hakansson & Shehota, 2006: 256).

**Knowledge management**

Consisting of group of actions, knowledge management helps the company to obtain knowledge from inside and outside. Knowledge management implies a process to capture collective specialties and intelligent application in the company and to use them in order to train innovation by durable organizational learning. Knowledge management may be simply defined as: “motivating people to share their knowledge” (Alipour, 1388: 16). Malhotra (2000: 37) says “Knowledge management is a process in which companies acquire skills in learning (knowledge internalization), knowledge encoding (knowledge externalization) and distribution and transmission of knowledge.

Knowledge management potentially plays an intermediary role in associating organizational factors with organizational efficacy. It is believed that knowledge management is able to expand competitive advantage of the organization, client concentration, relations and progression of staff, innovation and low costs. Knowledge management is not only preceded organizational efficacy but also acts as a mediator between organizational factors and efficacy. Knowledge resource is considered as an output of culture, structure and strategy; since it is defined on basis of a set of cultural norms and values, structural relations and strategic priorities. For instance, knowledge sharing proceedings are affected by cultural anticipations of sort of the shared knowledge, associated people and release speed of knowledge through official channels of organization. When it comes to create new products and services, efficiency enhancement and efficacy increase, knowledge management which reflects cultural, structural and strategic features of the organization is beneficially used (Nonaka et al, 2000:6).

Organizational efficacy: efficacy means attainment level for the determined goals. In other words efficacy shows that how efforts led to the desired results; whereas, usage and productivity are associated with efficiency (Mougheli & Azizi, 1388: 60). Toto describes efficacy as “a rotary and durable process that begins from planning sector and includes all actions which are directed to achieve goals and also determines eligibility and excellency of their performance (Qorbani, 1379: 64). In fact, efficacy is related to operation and satisfactory of attempts and efficiency is related to correct utilisation of resources. Thus, it may be observed that efficiency is a quantitative aspect while efficacy is a qualitative one. It is necessary to note that these variables do not have to act in the same direction and move together; since, efficiency involves a level or amount of results which may be totally non-ideal and ineligible (Mougheli and Azizi, 1388: 60).

**Research hypotheses**

Knowledge management affects organizational efficacy positively and significantly.
Organizational culture affects organizational efficacy positively and significantly.
Organizational culture affects knowledge management positively and significantly.
Knowledge management plays an intermediary role in influence of organizational culture on the organizational efficacy.
Organizational structure affects knowledge management positively and significantly.
Organizational structure affects organizational efficacy positively and significantly.
Knowledge management plays an intermediary role in influence of organizational structure on the organizational efficacy.
Organizational strategy affects organizational efficacy positively and significantly.
Organizational strategy affects knowledge management positively and significantly.
Knowledge management plays an intermediary role in influence of organizational strategy on the organizational efficacy.
RESEARCH METHODOLOGY

Goal of this research was to investigate influence of organizational culture, organizational structure and organizational strategy on the organizational efficacy with intermediary role of knowledge management; thus, it may be called a descriptive research which is in type of casual. The statistical population of this investigation was the staff members of Dezful University of Medical Sciences HQ with number of 236 people where 143 of them were sampled simple-randomly using Morgan table. Measurements were done with questionnaires and to check the reliability in questionnaires, method of face validity was used which was approved by advisors. In order to assess reliability, Cronbach’s alpha test was used which results were above 0.7 for all of the questionnaires.

<table>
<thead>
<tr>
<th>variable</th>
<th>Cronbach's alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational efficacy</td>
<td>0.781</td>
</tr>
<tr>
<td>Knowledge management</td>
<td>0.946</td>
</tr>
<tr>
<td>Organizational culture</td>
<td>0.944</td>
</tr>
<tr>
<td>Organizational structure</td>
<td>0.705</td>
</tr>
<tr>
<td>Organizational strategy</td>
<td>0.892</td>
</tr>
</tbody>
</table>

**Findings of research**

Most of individuals in research sample had a degree of bachelor and staff members were mostly consisted of officials. The obtained model of LISREL structural equations is followed.
Table 2. Ultimate model values

<table>
<thead>
<tr>
<th>Research Hypotheses</th>
<th>Level of Significance Normalized value</th>
<th>Obtained Variance (R²) Normalized Value</th>
<th>T Value</th>
<th>Standard Error</th>
<th>Direct route</th>
<th>Indirect Route</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge management plays an intermediary role in influence of organizational culture on the organizational efficacy.</td>
<td>0.64</td>
<td>0.0576</td>
<td>0.031</td>
<td>6.21</td>
<td>0.7</td>
<td></td>
<td>P&lt;0.01 Index confirmed</td>
</tr>
<tr>
<td>Knowledge management plays an intermediary role in influence of organizational structure on the organizational efficacy.</td>
<td>0.45</td>
<td>0.0405</td>
<td>0.034</td>
<td>6.9</td>
<td>0.41</td>
<td></td>
<td>P&lt;0.01 Index confirmed</td>
</tr>
<tr>
<td>Knowledge management plays an intermediary role in influence of organizational strategy on the organizational efficacy.</td>
<td>0.41</td>
<td>0.0387</td>
<td>0.047</td>
<td>5.6</td>
<td>0.35</td>
<td></td>
<td>P&lt;0.01 Index confirmed</td>
</tr>
</tbody>
</table>

Most of individuals in research sample had a degree of bachelorship and staff members were mostly consisted of officials. The obtained model of LISREL structural equations is followed. It was proved that all elements had significant relations among main variable of the research.

![Figure 2. Research Model](image)

*(Other values of ultimate model may be observed in table below! no table is seen)*

The estimated values for standard factor loadings were calculated by maximum likelihood method are presented in fig.1. These so-called λ values are used to estimate normalized grades of latent variables which are comparable in SEM analysis. Moreover, the error values of estimation standard show error rate in raw estimation of factor loadings where the lower values (approximately zero) show more exact estimations and smaller confidence interval.
T values which are obtained from dividing factor loading estimation by standard error, demonstrate significance of factor loading estimation (significant difference of factor loading with zero). If range of T was between -1.96 and 1.96; then, no significant effect may be seen among indices and associated latent variable. A range of (1.96-3) presents a significant effect among indices and associated latent variable with confidence percentage of 95 and if T was more than 3, it may be concluded that a significant effect exists which is 99% confident. As it may be seen in table 1, T values prove confidence percentages of all variables effects are above 99%. Moreover, columns of significance level and result comment are also expressed.

The column of variance shows the obtained variance for each index by latent variable. Higher values up to one, present more appropriateness of an index to measure the latent variable. It is notable that this value is directly related with other values. In table below, values of fitting indices for ultimate modelling of structural equations are presented.

**Model fitting**

Fitting means an observed matrix of variance-covariance has near values to a modelled matrix of variance-covariance or be so-called fitted. More alternative values in a matrix leads to more fitting in model. Model estimations in structural equations modelling may be trusted if sufficient fitting is provided.

<table>
<thead>
<tr>
<th>Index</th>
<th>Acceptable Range</th>
<th>Value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>X²/df</td>
<td>≤ 3 X²/df</td>
<td>2.96</td>
<td>Confirmed</td>
</tr>
<tr>
<td>RMSEA</td>
<td>RMSEA &lt; 0.09</td>
<td>0.000</td>
<td>Confirmed</td>
</tr>
<tr>
<td>GFI</td>
<td>GFI &gt; 0.9</td>
<td>0.91</td>
<td>Confirmed</td>
</tr>
<tr>
<td>AGFI</td>
<td>AGFI &gt; 0.85</td>
<td>0.89</td>
<td>Confirmed</td>
</tr>
<tr>
<td>CFI</td>
<td>CFI &gt; 0.90</td>
<td>0.91</td>
<td>Confirmed</td>
</tr>
<tr>
<td>IFI</td>
<td>IFI &gt; 0.90</td>
<td>0.9</td>
<td>Confirmed</td>
</tr>
</tbody>
</table>

Since, all fitting indices of model were confirmed, it may be concluded that fitting is normal and acceptable and calculating negative covariance among elements of research model is not necessary.

**Other hypotheses of research**

In order to study other hypotheses, Pearson correlation test was applied:

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Correlation</th>
<th>Number of Samples</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>H₁</td>
<td>Knowledge management affects organizational efficacy positively and significantly.</td>
<td>0.427</td>
<td>143</td>
</tr>
<tr>
<td>H₂</td>
<td>Organizational culture affects organizational efficacy positively and significantly.</td>
<td>0.189</td>
<td>143</td>
</tr>
<tr>
<td>H₃</td>
<td>Organizational culture affects knowledge management positively and significantly.</td>
<td>0.835</td>
<td>143</td>
</tr>
<tr>
<td>H₄</td>
<td>Organizational structure affects knowledge management positively and significantly.</td>
<td>0.278</td>
<td>143</td>
</tr>
<tr>
<td>H₅</td>
<td>Organizational structure affects organizational efficacy positively and significantly.</td>
<td>0.431</td>
<td>143</td>
</tr>
<tr>
<td>H₆</td>
<td>Organizational strategy affects organizational efficacy positively and significantly.</td>
<td>0.247</td>
<td>143</td>
</tr>
<tr>
<td>H₇</td>
<td>Organizational strategy affects knowledge management positively and significantly.</td>
<td>0.786</td>
<td>143</td>
</tr>
</tbody>
</table>

According to P-values, it may be concluded that all of the mentioned hypotheses were confirmed. Description of each hypothesis is followed:

P-values of knowledge management and organizational efficacy which are less than 0.05 prove the positive and significant influence of knowledge management on the organizational efficacy. Therefore, it may be
mentioned that improvement of knowledge management amongst staff members of DUMC headquarters leads to increase of the organizational efficacy.

P-values of organizational culture and organizational efficacy which are less than 0.05 prove the positive and significant influence of organizational culture on the organizational efficacy. Therefore, it may be mentioned that improvement of organizational culture amongst staff members of DUMC headquarters leads to increase of the organizational efficacy.

P-values of organizational culture and knowledge management which are less than 0.05 prove the positive and significant influence of organizational culture on knowledge management. Therefore, it may be mentioned that improvement of organizational culture amongst staff members of DUMC headquarters leads to enhancement of knowledge management.

P-values of organizational structure and knowledge management which are less than 0.05 prove the positive and significant influence of organizational structure on knowledge management. Therefore, it may be mentioned that improvement of organizational structure amongst staff members of DUMC headquarters leads to enhancement of knowledge management.

P-values of organizational culture and knowledge management which are less than 0.05 prove the positive and significant influence of organizational culture on knowledge management. Therefore, it may be mentioned that improvement of organizational culture amongst staff members of DUMC headquarters leads to enhancement of knowledge management.

P-values of organizational structure and organizational efficacy which are less than 0.05 prove the positive and significant influence of organizational structure on the organizational efficacy. Therefore, it may be mentioned that improvement of organizational structure amongst staff members of DUMC headquarters leads to increase of the organizational efficacy.

P-values of organizational strategy and organizational efficacy which are less than 0.05 prove the positive and significant influence of organizational strategy on the organizational efficacy. Therefore, it may be mentioned that improvement of organizational strategy amongst staff members of DUMC headquarters leads to increase of the organizational efficacy.

P-values of organizational strategy and knowledge management which are less than 0.05 prove the positive and significant influence of organizational strategy on knowledge management. Therefore, it may be mentioned that improvement of organizational strategy amongst staff members of DUMC headquarters leads to enhancement of knowledge management.

**Recommendations**

Considering relations between organizational culture and organizational efficacy it is suggested in order that problems which are associated with organizational efficacy be resolved, it is helpful to enrich organizational culture and direct it to goals of the company.

Taking organizational culture as an important factor in improving organizational efficacy into consideration, it may be expressed that organizational culture has to be coordinated with other factors such as structure, technology and human resource and any probable alteration needs to be aligned with other factors. Hence, this coordination is recommended to be investigated in future studies.

Concerning organizational structure, formality degree needs to be taken into account. Since, formality includes terms and conditions, instructions, regulations, job descriptions and procedures and these factors especially if they were vague and obscure, poor organizational operation would be probable. Too much instructions, correspondence and lack of clarity in affairs lead to problematic relationships. Excessive strictness and unfamiliarity with regulations make interruptions and cause a sense of despair amongst staff. Job descriptions follow similar conditions so that formality is escalated and organizational efficacy is reduced when duties are unknown to employees.

Considering the essential role organizational structure in developing organizations and their efficacy, further researching in this category is recommended to benefit their findings in order to enhance both efficiency and efficacy.

Support and durable commitment of Khuzestan Bureau of Tax Administration on commence and continue attempts to administrate knowledge management in order that performance of the organization increases.

Seminars and meetings in field of knowledge management and organizational efficacy at Khuzestan Bureau of Tax Administration to acquaint authorities and staff with concepts and help them to apply scientific and research facilities effectively.

Depending on their attitude, people face different situations to share their knowledge with their colleges. Therefore, it is suggested to motivate people to share what they know in order that they become more interested in what they do in the Bureau. In addition, sharing of knowledge may broadly affect real organizational efficacy.

Since, knowledge production is highly influenced by organizational development; then it is recommended to create a considerable relationship between knowledge production actions and organizational efficacy in tax administrations by properly usage of obtained knowledge.
DISCUSSION AND CONCLUSIONS

Investigations using LISREL and SPSS showed the first result which was the positive and significant influence of knowledge management on organizational efficacy. It was also proved that knowledge management may have an intermediary role in affection of organizational structure on organizational efficacy. Thus, it may be summarized that not only being a mere administrative feature, knowledge management may act as lever influencing on relations among organizational variables (culture, structure and strategy) and organizational efficacy. The results were consistent with Penrus (1959) and Zhang et al (2010) who believed in key role of knowledge management in an organization.

Secondly, organizational strategy affects organizational efficacy even more significantly than organizational structure. However, significance decreases when organizational culture and organizational structure are entered into the model. This variable also shares a significant relation with knowledge management.

Thirdly, in this research a combined sight consisting of resource perspective and knowledge perspective was presented. It declared that resources may be hierarchical in an organization and knowledge as a resource may lead other organizational resources to organizational efficacy. This result suggests a method by which cultural values of society may be institutionalized in organizational culture. Moreover, culture possessed more significance in knowledge management compared with other variables. It may be because of influence of culture on beliefs, values and norms of the society and also may determine the production, sharing and usage circumstances of knowledge in an organization. It strongly insists on creation of organizational culture to enhance organizational learning and knowledge management.

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