The Relationship between Information Technology and Organizational Structure with Staff Empowerment in the General Department Of Sports and Youth in Bushehr Province

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Abstract
Aim of the present study was to explore how information technology (IT) and organizational structure are related to employee empowerment in the General Department of Sports and Youth in Bushehr Province. The population under study included all 97 staffs working in the General Department of Sports and Youth in Bushehr Province in 2015 who were selected as the respondents in the research sample. Fathi’s (2010) Standard IT Questionnaire, Robbins’ (1987) Organizational Structure Questionnaire and Spreitzer’s (1995) Standard Employee Empowerment Questionnaire were used as instruments to collect the data. The reliability coefficients for these three questionnaires were 0.83, 0.81, and 0.82, respectively. Descriptive and inferential statistics (Pearson correlation, multiple regressions) were used to analyze the data. The results showed that there is a significant positive correlation between IT and employee empowerment. In addition, a positive significant correlation was found between organizational structure and employee empowerment and also between IT and employee empowerment with respect to organizational structure as the control variable. The results of regression analysis showed that of IT components, hardware and software use and of the components of organizational structure only integration and focus were significant predictors of employee empowerment.

Key Words:
Employee empowerment, information technology, organizational structure

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Introduction

The international community has been evolved and changed in recent years by rapid changes in science and technology, passage of them needs to find and employ innovative approaches and methods. And because, one of the most important aspects of the Information Age is ambiguity and lack of visibility of affairs trend and future developments, the role of information technology is necessary. And in such circumstances, the information technology can make opportunities by uncertainties and complexities and guide organizations to success (Nematollahi, 2010). The most important phenomenon which was developed in the late twentieth century and early twenty-first century is communicational and informational instruments. Castells argues that a new stage of industrial revolution has been made by the spread of the Internet and other communicational instruments in the 1990s which have changed everything. Therefore, it can be said that today the information is considered as national reserves for each country and any its related activities are regarded as a support for the planning, making policy, management and essential condition for economic, social and cultural growth and development. The role and position of management in the acquisition, organization and dissemination and the use of phenomenon such as information is very important (Basirian Jahromi et al, 2009). Now, information technology is accounted as the most basic foundations of civilization in the third millennium (Taghizadeh, 2006). Today, discussion about acceptance and use of information technology is proposed in every organization and everywhere is the talk of the usefulness or necessity of using the Internet and Intranet, because use of information technology has led to an extensive development in facilitating administrative affairs trend, increasing the efficiency of human resources and management, increasing variety of products or services and improve quality and customer satisfaction in organizations. Therefore, planners constantly involve making-decision about investigation in the field of adoption and use of information technology in their organizations (Ardalan, 2012). In recent years, information technologies have been accepted so that now it seems necessary for every aspect of public and private life. Products and systems within the information technology sector are changing rapidly. Speed and power of computers become double every year. Costs are reduced and new features that had not been thought last year, now generally are used (Andalib, 2014). In this context, certain claim about the exact details of the trends which will remain over the next decade is difficult. But exploration of the topics of the effects that information technology will probably has, prepares us to meet the challenges and opportunities that information technology will bring. These macro trends are:

Information technology will be the dominant forces in the culture.

Paces of change will accelerate more (Nagpur, 2002).

It seems that use of information technology in Youth and Sports offices increases the ability of these organizations in order to increase more and more productivity of activities to achieve the macro and micro goals and objectives and it can thereby improve their productivity. Information technology has this ability that can improve providing appropriate services by these offices with better informing in Youth and Sports offices and their flexibility increases against changing and diverse needs of various social groups about sports topics. Also, information technology can support making decision of managements of these offices by higher and faster of informational scope and thereby it assists them against management challenges. On the other hand, The globalization of markets, development of
information technology, computer networks and etc make fundamental changes in the public and professional environment of organizations and cause to create new ways for economic, social competitiveness and management of emerging organizations (Sharifi and Zhang, 2001). The desire of sports managers to have a dynamic and flexible organization is discordant and inharmonious, because of accelerating changes in the market on the one hand and the other with dry, swollen, lazy, incapable structures in innovation and inattentive to the needs and demands of customers, it means past approaches and solutions have lost their ability to meet the organizational challenges and external environment; that it is better they are replaced by new solutions. Therefore it can be said that information technology can play a major role in the creation of a proper and correct organizational structure. Therefore, use of information technology in the organization makes a kind of changes that have various effects on the organization, including organizational structure (Andalib, 2014). The organizational structure is the relationships governing businesses, systems and operational processes, and individuals and groups who are trying to achieve a common goal (Barney & Griffin, 1992). The structure represents those who are supervisors and introduce managers to employees to whom must give orders (Farashi & Reshadatjo, 2014). Appropriate organizational structure makes the ability of facilitating and accelerating in decision-making and appropriate response to the environment and its challenges (Daft, 1991). On the other hand, it seems that creation of a proper organizational structure due to information technology increases significantly empowerment of employees, too. All organizations seek to try for their survival by use of the most human, the most efficient and the most flexible methods. Among them, one of the most valuable assets of any organization is skilled, trained and enable human resources. Empowerment provides potential capacities to exploit the source of human capability (Scott, 1996). Empowerment is the distribution of decision-making power to the people who has not this ability in the organization. Empowerment of human sources has impact on organizational and managerial effectiveness and organizational creativity (Conger and Kananko, 1988). Creativity of public sector organizations and its trend to corporatization and decentralization because of the lack of flexibility in the traditional structures has created a movement that the role of staff and the need of their empowerment are approved as gravity center of any attempt to reduce the size of the organization and improve services to customers and peoples. Empowerment is a movement from a hierarchical decision-making system by managers to a system to reduce the hierarchy control and decision-making by low ranks (Abdollahi and Nave Ebrahim, 2006). But what can be discussed and the question is that information technology, in turn, makes staff empowerment in the sport and youth offices? Is this question also true about the organizational structure, it means whether organizational structure, in turn, makes empowerment the staff of sport and youth offices? And finally, whether information technology can make empowerment the staff of sport and youth offices by creating a suitable organizational structure? According to above, and since sports and youth offices have a key role in the development of sports in the country, this study aims to investigate the relationship between information technology and organizational structure with the staff's empowerment in the Administration of Sport and Youth in Bushehr province.

Methodology
This study was a descriptive study of correlational type that collected data was performed in the survey method. Population includes all employees of Administration of Sport and Youth General Directorate of Youth and Sports in Bushehr province in 2015. According to inquiries of the staffing of this Administration, the number of population was N=97 who 60 persons are males and 37 persons are females. Because, the size of population was limited, the statistical sample was taken in accordance with population. So, 97 questionnaires were distributed of which 81 questionnaires were returned to the researcher (returning rate 84%). Fathi’s standard questionnaire of information technology (2010), Robbins’s standard questionnaire of the organizational structure (1987), and Spreitzer’s standard questionnaire of empowerment (1995) were used to collect data. The face and content validity were used to assess the questionnaire validity; equivalent coefficient of internal reliability was 0.83 for information technology questionnaire, 0.83 for organizational structure questionnaire and 0.82 for staff empowerment questionnaire, which shows the desired reliability of questionnaires.

Results

Table 1 shows the results of Pearson correlation coefficient of information technology total scores with staff empowerment of the Administration of Sport and Youth in Bushehr Province. According to the results of table (1), observed r shows positive and significant correlation between total score of information technology and staff empowerment of the Administration of Sport and Youth in Bushehr Province.

Table 1. The results of Pearson correlation coefficient between information technology and staff empowerment.

<table>
<thead>
<tr>
<th>independent variable</th>
<th>dependent variable</th>
<th>Frequency</th>
<th>r</th>
<th>r2</th>
<th>level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information technology</td>
<td>empowerment</td>
<td>81</td>
<td>0.42</td>
<td>0.18</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Table 2 shows the results of Pearson correlation coefficient of organizational structure total scores with staff empowerment of the Administration of Sport and Youth in Bushehr Province. According to the results of table (2), observed r shows positive and significant correlation between total score of organizational structure and staff empowerment of the Administration of Sport and Youth in Bushehr Province.
Table 2. The results of Pearson correlation coefficient between organizational structure and staff empowerment.

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>dependent variable</th>
<th>Frequency</th>
<th>r</th>
<th>r²</th>
<th>level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational structure</td>
<td>Staff empowerment</td>
<td>81</td>
<td>0.63</td>
<td>0.40</td>
<td>0.001</td>
</tr>
</tbody>
</table>

The results of Pearson correlation coefficient between total scores of information technology with staff empowerment, according to control variable of organizational structure are provided in table (3). According to the results of table (3), observed r (r=0.37) shows the positive and significant relationship between information technology and organizational structure with staff empowerment of the Administration of Sport and Youth in Bushehr Province. Therefore, the null hypothesis is rejected and alternative hypothesis is supported.

Table 3. The correlation between variable of information technology with staff empowerment, according to control variable of organizational structure

<table>
<thead>
<tr>
<th>predictive variable</th>
<th>criterion variable</th>
<th>control variable</th>
<th>r</th>
<th>r²</th>
<th>level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information technology</td>
<td>Staff empowerment</td>
<td>Organizational structure</td>
<td>0.37</td>
<td>0.14</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Table 4 shows the final result of regression analysis which predicts the staff empowerment based on information technology variable components. According to the results of table 4, only component of hardware and software use among information technology components is recognized as a significant predictive variable for staff empowerment.
Table 4. The beta test (line slope)

<table>
<thead>
<tr>
<th>model</th>
<th>non-standard coefficient</th>
<th>standard coefficient</th>
<th>level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>standard error</td>
<td>beta (β)</td>
</tr>
<tr>
<td>use of virtual space</td>
<td>0.02</td>
<td>0.08</td>
<td>0.02</td>
</tr>
<tr>
<td>hardware and software use</td>
<td>0.24</td>
<td>0.08</td>
<td>0.29</td>
</tr>
<tr>
<td>instructional use</td>
<td>0.07</td>
<td>0.05</td>
<td>0.11</td>
</tr>
<tr>
<td>the level of computer skills</td>
<td>0.03</td>
<td>0.07</td>
<td>0.04</td>
</tr>
</tbody>
</table>

Table 5 shows the final result of regression analysis which predicts the staff empowerment based on organizational structure variable components. According to the regression results of table 5, components of focus and complexity among organizational structure components are recognized as a significant predictive variable for staff empowerment of the Administration of Sport and Youth in Bushehr Province. Among them, complexity component is a stronger variable than focus for predicting staff empowerment of the Administration of Sport and Youth in Bushehr Province.

Table 5. The beta test (line slope)

<table>
<thead>
<tr>
<th>model</th>
<th>non-standard coefficient</th>
<th>standard coefficient</th>
<th>level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>standard error</td>
<td>beta (β)</td>
</tr>
<tr>
<td>formalization</td>
<td>-0.04</td>
<td>0.04</td>
<td>-0.08</td>
</tr>
<tr>
<td>focus</td>
<td>0.11</td>
<td>0.04</td>
<td>0.20</td>
</tr>
<tr>
<td>complexity</td>
<td>0.10</td>
<td>0.04</td>
<td>0.21</td>
</tr>
</tbody>
</table>

Conclusion

The results reveal that form the view point of the staff of the General Directorate of Youth and Sports of Bushehr, the average of the empowerment variable of staffs (93/3) is above the average. These
findings are in line with those of Ramazani (2010), (The statistical population was the staff of Physical Education and Sports Bureau of Kohgilouye), Yazdankhah (2010), (The statistical population was the staff of Physical Education and Sports administration Bureau of Khorasan-Razavi province) and Nematollahi (2010), (The statistical population was the PE teachers of Shiraz), since in all cases the average of empowerment was higher than the average. Considering the obtained results it can be concluded that the empowerment of staffs in the Administration of Sport and Youth in Bushehr Province is suitable, however, by strengthening the effective variables, this variable can be improved.

The study results show that based on the mean of 3.40, the variable of IT is suitable, and is significantly higher than the mean. In addition, the averages of the all components of IT variable are higher than the mean 3. It is also revealed that the amount of staff’s use of cyberspace and its features (googling, e-mailing, downloading and uploading files, etc.) is acceptable as well as their hardware skills (like working with printers, scanners, etc), software skills (like running WINDOWS, using different programs and managing files, etc), their attitude towards using information and technology related to their organization and their ability towards important computer operations for job development. This result is in line with Andalib (2014) but on the contrary with Sobhani et al. (2013) and Mohamadi et al. (2013).

Sobhani et al (2013) in their study aiming at investigating the relation of IT and knowledge management of Sports Federations, found the attitude towards using IT in their statistical population to be positive, though, they reported the level of applying IT to be lower than the average. However, Andalib’s study (2014) reported the level of applying IT in Administration of Sport and Youth in Isfahan to be higher than the mean. Although the average of IT variable and all its components in Administration of Sport and Youth in Bushehr Province are in an acceptable level, the high rank managers of this organization can play an effective role in improvement of familiarity and application of IT among the staffs by training them in cases like software and hardware use of computers (like installing and running windows, running spare parts of computer, instructions of using scanners and printers, guidelines of key soft-wares like Word and Excel and encouraging staffs to use guide books of computers).

The results showed a significant positive correlation between total scores of IT with empowering of staff in the association of Youth and Sports in the province of Bushehr. Based on the researches done, it seems that the only study which directly focuses on the relationship between information technology and staff’s empowerment is the one by Ardalan (2011). The results of this study are consistent with Ardalan (2011). Aiming at investigating the impact of IT on the job’s empowerment of employees, and considering the staffs of Kermanshah’s West Regional Power Co. as the statistical population, Ardalan (2011) concluded that there is a significant positive relationship between the application of information technology and the quality of performance, knowledge, job opportunities, independence and freedom of action, responsible decision-making, self-control, and the staffs’ professional development.

There are some other researches that can be compared with the present study. Andalib (2014), Abdgah and Safary (2014), and Ravichandran (2012) are among the studies which investigated the impact of IT on Organizational Agility, in addition Chang (2009) and Bani Najarian (2011) proved that the organizational agility is strongly effective in improving the staffs’ performance. Therefore, it can be concluded that information technology can improve the performance of employees. On the other hand, Chang et al (2009) in their study suggests that the performance of the employees is an essential part of empowering them and empowering has a mutual and complementary relationship with the
performance. So based on the findings, it can be cited development of IT applications in all domains, including infrastructure development, training and software can greatly enhance the empowerment of staffs in General Administration of Sport and Youth of Bushehr province.

The results showed a significant positive correlation between organizational structure’s scores and staffs’ empowerment in the General Administration of Sport and Youth of Bushehr province. Thus, the better the status of organizational structure in General Administration of Sport and Youth of Bushehr becomes, the better the staff empowerment is. Considering the average of 3.19, the organizational structure is suitable; however, it is not efficient. This low average is due to the inappropriate average of the formalization component and the rather unsuitable average of complexity component. There is no research to compare its results with the present study.

The results of the study shows that there is a significant positive correlation between IT and organizational structure with the staff empowerment at the level of significance 0.05 ($r= 0.37$). However, there is no study to compare its results directly with the present one. This finding shows that IT regarding the moderator variable of organizational structure is significantly related to staff empowerment, though this moderating variable reduced the amount of correlation between IT and staff empowerment variables.

The results revealed that among the components of IT, just the components of hardware and software use are significant predictor’s staff empowerment. The results of this section are in line with the results of Hejazi (2005) and Simsek et al. (2009). Simsek et al in his study believe that the effect of IT and information structures in successful innovative entrepreneurship organizations are dependent to three factors:

1) Strategic use of information systems. The extent to which the organization uses technologies and information systems in strategic decision-making.

2) Suitable observation and estimation of the market. The quality of market information that technology and information systems by relaying on them is processing.

3) The seriousness of the users of technology and information systems. The extent to which the organization’s staffs consider the information systems and market-related information important.

Therefore, the managers of the General Administration of Sport and Youth of Bushehr and other Administration of Sport and Youth can take effective steps for their growth and organizational efficiency by improving software and hardware status, increasing the quantity and quality of information related to the target population in various aspects, creating a unified information system, developing the human capital as a user to use information technology.

Focus and complexity components as the components of the organizational structure consider as a significant predictor for empowerment in the administration of Youth and Sports of Bushehr though the component of formalization does not have this characteristic. The complexity component is a stronger variable to predict empowerment comparing to the focus component in the General Administration of Sport and Youth of Bushehr.
If the issue is considered from a macro perspective, it seems that formalization cannot be so relevant to the staff empowerment, since if the staff’s performance is too influenced by the formalization in the organization their flexibility will decrease and it would lead to the opposite results regarding the empowerment. There was no study to compare its findings with the present one.

According to Farashi and Reshadatjoo (2014), Formalization is the indicator of preserved the written formality, diversity of rules and regulations, procedures and methods of communication in the organization. Therefore, according to this definition it can be stated that the performance of staff in the General administration of Youth and Sports of Bushehr is not mainly subject to the usual rules and normal communication in the organization, and in this regard, organizing and appropriate planning of high rank managers should improve it. In addition, Farashi and Reshadatjoo (2014) recognized organization complex which has lots of different levels of hierarchy, wide monitoring domain and from the geographical perspective has distribution.

However, due to the lack of geographical diversity in the state administrations, which administration of Youth and Sports of Bushehr is not excluded, it is not unusual for the complexity Component of the staff empowerment to be predictive.

The results revealed that the respondents' views on the staff empowerment according to the variables of gender, age, work experience, education was not significant at a significance level 0.05. This finding is exactly in line with the findings of Ramazani (2010) and Nematollahi (2010). Probably the proximity of ideas in this finding is due to the importance and the identical perspectives of respondents which do not differ based on the personal characteristics. However, Yazdankhah (2010) based on his findings stated that there is a significant difference between staff empowerment of males and females which is contrary to the findings of the present study.

The results showed that there was not a significant difference between the respondents' views on IT variable according to gender, age, work experience, education at a significance level 0.05, which is exactly in line with the findings of Andalib (2014), Torkian (2014), Ardalan (2012), Fathi (2010) and Rahmani (2009).

Despite the tremendous progress in the field of technology, human resources in any organization are the most important and most valuable resource and are the main audience of IT. However, it should be noted that, if they resisted technology changes due to habit, there is no hope in achieving the desired results. Therefore, all the human resources of organizations both men and women under any circumstances with different personal characteristics have to harmonize themselves with IT developments to achieve organization’s goals (Torkian, 2014). The results in this section also confirms this, since in applying the variable of information technology in the administration of Youth and Sports of Bushehr, there is no significant difference based on gender, work experience and education level.

As a whole, continuous improvement of staff empowerment in Sport organizations depends on the identifying and recognition of effective factors on it, which in this study, the role and the effect of IT and organization structure on this variable is proven, and doubtlessly is an appropriate ground for future studies and changes in organizations. Therefore, based on the findings of the present study, it is given to high rank managers of the administration of Youth and Sports of Bushehr the following pieces of advice:
Training staffs in cases like using computer hardware and software (like installing and running windows, setting up of Spare parts for computers, Workmanship of scanner and printer, the use of key applications such as Word and Excel), as well as encouraging staff to use computer manuals can be effective in improving component variables of staff empowerment in the administration of Youth and Sports of Bushehr. It seems that setting courses and workshops can lead to more improvement. In addition, encouraging staffs to track the information and goals of the organization is among the ways to strengthen these variables.

Taking advantage of key software applications like Word and Excel, the ability to create and use e-mail, the ability to classify and organize the different files, and the ability to use some security software such as antivirus software, can enable staff in promoting components of staff empowering. The above mentioned as well as Informing people of the organization’s goals to achieve, to updating assessment of people, motivating staff to track information about the organization, and training and emphasizing on the application of copyright law can strengthen the staff empowerment of the administration of Youth and Sports of Bushehr.

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