

## **PERFORMANCE EVALUATION OF PHYSICAL EDUCATION DEPARTMENTS OF FIFTH REGION ISLAMIC AZAD UNIVERSITIES USING BSC**

**\*Mohammad Nikravan<sup>1</sup> and Ahmad Charmian<sup>2</sup>**

<sup>1</sup>*Department of Physical Education, Boroujerd Branch, Islamic Azad University, Boroujerd, Iran*

<sup>2</sup>*Department of Management, Boroujerd Branch, Islamic Azad University, Boroujerd, Iran*

*\*Author for Correspondence*

### **ABSTRACT**

The aim of the present research is to evaluate the performance of the fifth region Physical Education departments of Islamic Azad University using BSC (The business process perspective, the learning and growth perspective, the customer perspective, the financial perspective). The research will present the statistical population in terms of some characteristics and variables such as gender, education level, and field of study. The statistical population includes Islamic Azad University Branches in the fifth region and especially physical education staffs, students and professors. The researchers use questionnaire and interviews to collect information. The validity and reliability are tested and confirmed. In this research, the analysis of statistical data and the main questions of the research were done using SPSS statistical software and LISREL and the researcher used the descriptive statistical and inferential tests depending on the type of data and variables. Then the normality for each variable is tested using the Kolmogorov-Smirnov test. Finally, according to the results of the study, it can be deduced that there is a significant and positive relationship between using BSC and evaluating the performance of the fifth region Physical Education departments of Islamic Azad University.

**Keywords:** *BSC, Performance, the Business Process Perspective, the Learning and Growth Perspective, the Customer Perspective, the Financial Perspective.*

### **INTRODUCTION**

The developments of organizations are in accordance with the evolving demands, needs and interests of human. It is in a way that from the distant past philosophy to create organizations was based on the reduction of transaction costs. But now, there exists a completely different concept for the philosophy of organizations and the functions are quite large and there are constantly rising expectations of society towards them.

Today, paying attention to norms and expectations of society is an objective which is expected to be fulfilled in addition to the technical and economic objectives of the organization's managers. So, managers become successful, if they have close and continues ties to the community to gather feedback on the work they have undertaken.

Each organization, to determine the suitability and quality of its activities and move from the current situation to the desired situation, especially in complex and dynamic environments, requires the evaluation. Thus this because of the reason that the lack of the evaluation of the system is considered as the lack of suitable interaction between the environment and outside of the company and the aging, decline and death of the organization are the outcomes (Institute for Productivity and Human Resource Development, 2010). For this reason, organizations should consider the application of appropriate knowledge and evaluation plans and analyze their strengths and weaknesses in order to grow, flourish and take steps to improve.

### **Literature Review**

#### *Statement of the Problem*

The experts of management science researchers believe that something that cannot be measured is not manageable and in the rapid world, for the management of organizations we need to know how is the management of organizations and to what extent we were able to achieve our goals and programs? This aim is achievable only by establishing a comprehensive assessment system that is able to evaluate and analyze the organization in all its dimensions. Performance measurements one of the best ways to obtain information for decision making in organizations. Between 1850 and 1975, some organizations could be successful according to the financial assessments. Today, organizations to

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maintain and enhance the competitive advantage use a wide range of performance standards for evaluation, control and improvement of their works (Ghalayini and Noble, 1996).

However, there are traditional measures that are based on the financial systems of management but they are not adequate. This is because of the reason that they are only relying on financial organization that does not a sustainable competitive advantage for organizations throughout the world. Therefore, organizations should seek to further assessment of the various parts of a system which help them to go further.

**BSC:** One of the most comprehensive frameworks is *Balanced Scorecard*. Balanced Scorecard method was first introduced by Kaplan and David Norton in 1992, two professors at Harvard University, and then welcomed by many organizations. Balanced Scorecard (BSC) approach is a developing and implementing strategy that during the last decade has come into management. BSC is described in its related books by the founders. In short, BSC is a multidimensional approach to measure the performance evaluation and control, and a tool to implement the strategy and framework for balancing human resources, information and organizational capital. Different aspects of the organization that BSC focuses on include: financial, customer, internal business processes, learning and growth. On the other words, The **balanced Scorecard (BSC)** is “a strategy performance management tool—a semi-standard structured report, supported by design methods and automation tools, that can be used by managers to keep track of the execution of activities by the staff within their control and to monitor the consequences arising from these actions” (2GC Active Management, 2014).

The essential standards of Kaplan and Norton's unique balanced scorecard model have demonstrated massively powerful on subsequent thinking the issue. While singular associations tailor the quadrant of viewpoints to outfit their own conditions, the wide-ranging extend of perspectives has altered minute - and merits inspecting.

*The Business Process Perspective:* Balanced scorecard measures according to this viewpoint assist managers perceive how well their industry is operating and whether its everyday exercises help the association's key objectives. There are two sorts of business methodologies in balanced scorecard patterns including mission processes—those that empower the conveyance of the organization's general assignment (making them more basic, and regularly special, in a non-benefit association); and help forms, which are the redundant errands individuals complete in the process of their occupation and can go from the specific to the nonexclusive.

*The Learning and Growth Perspective:* This edge takes a gander at the preparation of an organization's people, and its imparted corporate disposition to modify toward self-improvement. Measuring improvement around this subject permits administrators to utilize BSCs to recognize where to focus on training funds to make them best. Notwithstanding preparing, an organization can utilize ideas like mentoring in order to impart learning and most excellent perform and promote the extend of imparted corporate social qualities.

*The Customer Perspective:* Measuring performance of an organization adjacent to the requirements of its clients appears to be so undeniable today that it is tricky to fathom how progressive they thought was the point at which the balanced scorecard notion was presented in 1991. Anyhow it was Mobil Corp's idea that drove them to the concept, helping it get to be built as a legitimate administration device. Dissimilar to budgetary reporting, consumer satisfaction measurements can indicate future execution—so a decent set of consequences from this point of view can propose future monetary profits, while the opposite could show the onset of a money related decay (The Advanced Performance Institute, 2015).

*The Financial Perspective:* Timely and exact budgetary information is constantly required by an association (separated, obviously, from being a legitimate necessity for an exchanging organization). Anyway an excessive amount must not be perused into budgetary information alone; its role is as a major aspect of a balanced viewpoint - consequently the balanced scorecard (Simons, 1994).

Due to the fact that the fifth region of Islamic Azad University consists of 3 provinces including Markazi, Lorestan and Hamedan, which have more than 19 branches, with more than 50,000 students, it is normal that the range of educational, research and cultural and sporting activities is very broad. Naturally, Islamic Azad University's physical education departments in the fifth region have got diverse range of activities which covers intramural sports to the country's championship. Existing

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methods of evaluating the performance of the fifth region Physical Education departments of Islamic Azad University is based on the number of championship titles among all other units. Naturally, given the breadth and diversity of the activities listed, the index is not enough; so, there springs up the need for systematic evaluation of new features based on the demands. Due to the fact that BSC is multidimensional model for performance evaluation and controlling organizations, in this research, it is used to assess the performance of the fifth region Physical Education departments of Islamic Azad University.

Consequently, the main question in this research is based on the BSC model of the fifth region Physical Education departments of Islamic Azad University and whether a significant difference exists between the results of this assessment and other current assessment methods or not?

As a result, the following questions are in line with the general question of this research:

- 1) What is the performance of the fifth region Physical Education departments of Islamic Azad University in terms of learning and growth?
- 2) What is the performance of the fifth region Physical Education departments of Islamic Azad University in terms of financial aspects?
- 3) What is the performance of the fifth region Physical Education departments of Islamic Azad University in terms of internal process?
- 4) What is the performance of the fifth region Physical Education departments of Islamic Azad University in terms of costumer?
- 5) What is the difference between BSC and other models in evaluating the performance of the fifth region Physical Education departments of Islamic Azad University?
- 6) Is there any difference between the performances of the fifth region Physical Education departments of Islamic Azad University based on the rank of branch?

## MATERIALS AND METHODS

### Methodology

Our research on its nature and methods is a scientific research while descriptive research. It is to study the performance of the fifth region Physical Education departments of Islamic Azad University using BSC. The research will present the statistical population in terms of some characteristics and variables such as gender, education level, and field of study. The statistical population includes Islamic Azad University Branches in the fifth region and especially physical education staffs, students and professors. It is in a way that the number of professors in 2012 was 35 persons, the number of staffs in 2012 was 29 persons and the number of the students in 2012 was 1400 persons. The study also is based on questionnaire and interviews to collect information. It is a researcher-made questionnaire designed based on the research questions and objectives. The questionnaire consisted of 19 questions for the financial aspect, 17 questions for learning and growth aspects, 19 questions for the internal processes and 22 questions for students as clients of the university system. This study aims to assess the validity by scattering 20 balanced scorecard questionnaires and reliability by Cronbach's alpha and the data are presented in the table below which confirms both of them.

**Table 1: Cronbach alpha coefficient for questionnaires**

Questionnaire	Number of questions	Cronbach alpha coefficient
Learning and growth	17	0.8960
Financial	19	0.8044
Student	22	0.8744
Internal process	19	0.8172

In this research, the analysis of statistical data and the main questions of the research were done using SPSS statistical software and LISREL and the researcher used the descriptive statistical and inferential tests depending on the type of data and variables consisting of two parts:

- 1) Descriptive statistics including median, mode (cursor), the average rate, the frequency tables and charts.
- 2) Inferential statistics including median test, Mann-Whitney U, Wilcoxon signed-rank test, Kruskal-Wallis, Friedman, regression, analysis of variance and structural equation modeling.

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**RESULTS AND DISCUSSION**

**Findings**

*Inferential Analysis of Data*

The first part is to test the normality for each variable using the Kolmogorov-Smirnov test and by using the results in this test, the following tests are done.

**Testing Hypotheses**

*The Main Hypothesis:* There is a difference between BSC and other models in evaluating the performance of the fifth region Physical Education departments of Islamic Azad University.

**H<sub>0</sub>:** There is not a difference between BSC and other models in evaluating the performance of the fifth region Physical Education departments of Islamic Azad University.

**H<sub>1</sub>:** There is a difference between BSC and other models in evaluating the performance of the fifth region Physical Education departments of Islamic Azad University.

Since the variables used to evaluate the degree of BSC and current methods are of an interval scale, to compare these two variables, the variance are compared, then the mean are compared using the t-test and the results are given below:

**Table 2: Comparison of means using BSC and current methods**

Evaluation type	Number	Mean	Variance	Significance	t-test	Freedom	Significance
Current Method	38	130.78	Statistics	P<0.009*	21.97	37	p<0.000**
BSC	38	1966.98	1.905				

\* Significance 0.05 \*\* Significance 0.01 \*\* NS: No Significance

Based on the information obtained in the above table, because the Significance of variance test (0.009), at  $\alpha=0.01$ , it can be concluded that the variance of two assessment variables of BSC and current method are not homogenous. Since the statistic t-test, with 37 degrees of freedom at  $\alpha=0.01$  is meaningful, it is inferred that there is a significant difference between the average of the results of the BSC and current methods. Thus, H<sub>0</sub> is rejected and H<sub>1</sub> is accepted and the main hypothesis is confirmed.

*The First Alternative Hypothesis:* It seems that the performance of the fifth region Physical Education departments of Islamic Azad University is average in terms of learning and growth.

**H<sub>0</sub>:** It seems that the performance of the fifth region Physical Education departments of Islamic Azad University is not average in terms of learning and growth.

**H<sub>1</sub>:** It seems that the performance of the fifth region Physical Education departments of Islamic Azad is average in terms of learning and growth.

**Table 3: The performance in terms of learning and growth**

Expected average	Mean	St. deviation	t-test	Freedom	Significance
51	41.52	11.22	21.163	37	p<0.000**

\* Significance 0.05 \*\* Significance 0.01 \*\* NS: No Significance

Based on the information obtained in the above table, because the t-test at  $\alpha=0.01$ , it can be concluded that the performance of the fifth region Physical Education departments of Islamic Azad University is average in terms of learning and growth and there is a significant difference between two variables.

*The Second Alternative Hypothesis:* It seems that the performance of the fifth region Physical Education departments of Islamic Azad University is average in terms of finance.

**H<sub>0</sub>:** It seems that the performance of the fifth region Physical Education departments of Islamic Azad University is not average in terms of finance.

**H<sub>1</sub>:** It seems that the performance of the fifth region Physical Education departments of Islamic Azad is average in terms of finance.

**Table 4: The performance in terms of Finance**

Expected average	Mean	St. deviation	t-test	Freedom	Significance
54	40	15.92	14.319	37	p<0.000**

\* Significance 0.05 \*\* Significance 0.01 \*\* NS: No Significance

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Based on the information obtained in the above table, because the t-test at  $\alpha=0.01$ , it can be concluded that the performance of the fifth region Physical Education departments of Islamic Azad University is average in terms of finance and there is a significant difference between two variables.

*The Third Alternative Hypothesis:* It seems that the performance of the fifth region Physical Education departments of Islamic Azad University is average in terms of internal process.

**H<sub>0</sub>:** It seems that the performance of the fifth region Physical Education departments of Islamic Azad University is not average in terms of internal process.

**H<sub>1</sub>:** It seems that the performance of the fifth region Physical Education departments of Islamic Azad is average in terms of internal process.

**Table 4: The performance in terms of internal process**

Expected average	Mean	St. deviation	t-test	Freedom	Significancy
57	49.26	16.39	17.389	37	p<0.000**

\* Significancy 0.05 \*\* Significancy 0.01 \*\* NS: No Significancy

Based on the information obtained in the above table, because the t-test at  $\alpha=0.01$ , it can be concluded that the performance of the fifth region Physical Education departments of Islamic Azad University is average in terms of internal process and there is a significant difference between two variables.

*The Fourth Alternative Hypothesis:* It seems that the performance of the fifth region Physical Education departments of Islamic Azad University is average in terms of client.

**H<sub>0</sub>:** It seems that the performance of the fifth region Physical Education departments of Islamic Azad University is not average in terms of client.

**H<sub>1</sub>:** It seems that the performance of the fifth region Physical Education departments of Islamic Azad is average in terms of client.

**Table 4: The performance in terms of client**

Expected average	Mean	St. deviation	t-test	Freedom	Significancy
66	68.60	18.76	40.66	133	p<0.000**

\* Significancy 0.05 \*\* Significancy 0.01 \*\* NS: No Significancy

Based on the information obtained in the above table, because the t-test at  $\alpha=0.01$ , it can be concluded that the performance of the fifth region Physical Education departments of Islamic Azad University is average in terms of client and there is a significant difference between two variables.

**Conclusion**

According to the results of the study, there can be such a conclusion that there is a significant and positive relationship between using BSC and evaluating the performance of the fifth region Physical Education departments of Islamic Azad University. The research contains one main hypothesis and four alternative hypotheses including the main hypothesis referring to the point that there is a difference between BSC and other models in evaluating the performance of the fifth region Physical Education departments of Islamic Azad University; the first alternative hypothesis referring to the point that the performance of the fifth region Physical Education departments of Islamic Azad University is average in terms of learning and growth; the second alternative hypothesis referring to the point that it seems that the performance of the fifth region Physical Education departments of Islamic Azad University is average in terms of finance; the third alternative hypothesis referring to the point that it seems that the performance of the fifth region Physical Education departments of Islamic Azad University is average in terms of internal process; the fourth alternative hypothesis referring to the point that there it seems that the performance of the fifth region Physical Education departments of Islamic Azad University is average in terms of client. After full consideration of data and deep analysis it is concluded that all the hypotheses were confirmed and consequently the main hypothesis is accepted.

**REFERENCES**

**2GC Active Management (2014).** 2GC Balanced Scorecard Usage Survey. Available: [http://2gc.eu/resource\\_centre/surveys](http://2gc.eu/resource_centre/surveys).

**Research Article**

**Ghalayini AM and Noble JS (1996).** The Changing Basis of Performance Measurement. *International Journal of Operations & Production Management*, **16** (8) 63-80(18).

**Institute for Productivity and Human Resource Development (2010).** Available at [www.iphrd.org](http://www.iphrd.org).  
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**Simons RL (1994).** *Levers of Control: How Managers Use Innovative Control Systems to Drive Strategic Renewal: How Managers Use Control Systems to Drive Strategic Renewal* (M A.: Harvard Business School Press) Boston.

**The Advanced Performance Institute (2015).** Balanced scorecard: The Four Perspectives. *World's largest study: 20 Years of Enterprise Performance Management*, United Kingdom.