

Proposal for Improving Measurement of Performance in Yemeni Higher Education Institutions: Issues and Challenges

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Abstract

Improving performance measurement of Higher Education Institutions (HEIs) has now become one of the most important global challenges and a mechanism for competitive advantage among the developed and developing countries. A volatile operating environment, too many institutional players or stakeholders and challenges to adopt new ways and strategies for survival, are some of the issues that necessitate the review of the performance measures in HEIs to improve the quality of service. The objective of this study is therefore to present a conceptual literature review on HEIs' organizational performance measures and highlight the issues and challenges associated with HEIs' organizational performance from the Yemeni perspective. Yemen is one of the third world nations whose educational system operates in a volatile and highly competitive environment. The study also reviews the organizational performance concept and different indicators of organizational performance in the field of management as well as in HEIs. The findings of the study show that various measures have been used to determine the organizational performance in HEIs which are often in line with the objectives of the organization. The study suggests some measures, particularly for developing nations, such as Yemen, to adopt to improve the performance of its HEIs to yield more quality and higher productivity.

Keywords: Organizational performance, Measures, HEIs, Yemen.

1. Introduction

Organizational performance of the Higher Education Institutions (HEIs) is a global issue in various countries in the world and merits consideration. Many countries around the globe are confronted with the increasing demand for knowledge, which as a result, has increased the pressure on knowledge-oriented institutions, like HEIs (Ali, 2012). This situation makes the HEIs to strive hard consistently to enhance their operational capabilities as well as performance to meet their stakeholders' demands (Meek, Teichler and Kearney, 2009).

These demands are universal; nonetheless, the demands are higher particularly in developing countries where educational infrastructures are inadequate and the operating environment is volatile (Ponnuswamy and Manohar, 2014). One way therefore to improve the performance of the HEIs is to develop and adapt strategies that would curb the evolving challenges that the institutions face. The survival of HEIs in a developing country and adapting new strategies totally depend on that country's inclination to accept changes and mechanisms to be used to improve practices that can boost performance efficiently and effectively (Ali, 2012).

Yemen is one of the countries where the HEI sector is operating in a volatile environment. This is due to the fact that Yemen is listed among the third world countries where educational facilities are not adequately available to cater to the demand of the populace (World Bank, 2010). In addition, the country is embroiled in civil crises, conflicts and political turmoil for several decades now (Muthanna and Karaman, 2014). Therefore, there is a strong need to set the strategies that can assist HEIs to confront the challenges and improve performance in the country. This is very fundamental to meet the increasing demand for knowledge production in the HEIs. From the literature review perspective, there is a scarcity of studies in this area, especially in Yemen. Similarly, there is a lack of studies on how to measure the organizational performance of HEIs in view of the situation in Yemen.

Improving the performance of HEIs is a universal concern. The higher education sector in Yemen is one of the sectors that operates in a volatile environment; Yemen needs to firmly face the challenges, adopt new ways to survive and cope with changes (Habtoor, Arshad and Hassan, 2017). It should be highlighted that a literature review has shown a scarcity of studies on HEIs in the developing countries' context as well as a lack of studies on measurement of organizational performance of HEIs in Yemen, in particular.

Therefore, the objective of this study is to review the literature on HEIs' organizational performance measures and highlight the issues and challenges associated with HEIs' organizational performance from the Yemeni perspective. The study also reviews the organizational performance concept and different indicators of organizational performance in the area of management studies as well as in HEIs globally. Finally, the study suggests some ways to improve the HIEs in Yemen and other developing nations around the world. This would be the contribution of this study to the existing body of knowledge in the area of HEIs.

2. Background of the Higher Education in Yemen

The history of higher education in Yemen dates back to the seventh decade of the last century. During that time, the first public Universities emerged in Aden and Sana'a. The higher education sector was limited to these two

cities under the watch of the Ministry of Education, and it remained so until 1990 when the Ministry of Higher Education and Scientific Research (MHESR) was established. The MHESR was charged with the responsibility of overseeing the affairs of the Universities until it was abolished in 1994, when the Ministry of Education was restored to manage the Universities again.

Later in 2001, the MHESR was reintroduced after the government realized the need for having an autonomous ministry that could handle higher education as well as oversee the operations of the universities in the country (Ministry of Higher Education and Scientific Research, 2005). Earlier in 1993, Yemen witnessed the establishment of three private universities in the country. In Yemen, the public higher education sector is funded by four major sources, namely the government, tuition fees, loans and foreign grants, all of which are marginal, except for the funding from the government.

The government remains the major funder of university education in the country which amounts to about 90% while the other three sources may contribute the 10% of the total budget of the universities. From 2007 to 2013, government spending on the public universities increased from 43.1 billion Yemeni Riyals to 68.7 billion with an annual growth of 8.6% (Supreme Council for Educational Planning, 2014). In addition, the SCEP (2014) stated that Yemen's expenditure on higher education from 2007-2013 increased by 15.75% of the overall expenditure on the education and training sector, which was equivalent to 2.32% of the total government spending in the country.

However, because of the increasing demand and thirst for higher education in the country from the secondary school candidates, the current public universities are incapable of accommodating them and catering to their needs. This then requires establishing new universities and expanding the existing universities and colleges across the country. In 2013 for instance, the SCEP stated that there was an increase in the number of public universities from two to 10 and 120 colleges. In the private sector, the number of higher education institutions also increased to 24 universities with 92 colleges. Three public institutes and three national colleges have also been established to complement the existing ones (SCEP, 2014). According to the records of the MHESR in 2017, the number of HEIs registered with the Ministry has increased. The number of public universities has reached 10 public universities, while the number of private universities has reached 41, while the number of public institutes is three institutes and the number of private institutes under the MHESR is two. It should be noted that there are colleges and other institutes not under the MHESR, but answerable to ministries and other bodies, such as the Ministry of Technical Education and Technical Training and the Ministry of Education.

As of 2014, in the public and private universities, 64,542 and 24,910 students, respectively, were admitted; whereas public institutes and national colleges absorbed 873 and 781 students, respectively (SCEP, 2014). From the perspective of staff resources, the total teaching staff in the HEIs in Yemen is 10,460 faculty members, out of which 8,032 and 2,018 are in public and private universities, while 203 and 207 are with the public institutes and national colleges (SCEP, 2014). The statistical average of the students per faculty staff is 27 and 37 in the public and private universities, respectively. Below is the summary of the number of admitted, enrolled, and graduate students in the Yemeni public and private universities over the years, starting from 2007 to 2013 as depicted in Table 1.

Table 1. Growth in the number of enrolled, admitted and graduate students in Yemeni universities for the period 2007- 2013.

Type of Institution	Number of Admitted Students		Number of Enrolled Students		Number of Graduates	
	2007/ 2008	2012/ 2013	2007/ 2008	2012/ 2013	2007/ 2008	2012/ 2013
Public Universities	56284	64542	199268	222966	21697	27198
Private Universities	16720	24910	51919	73693	5460	6023
Total	73004	89452	251187	296659	27157	33221

Source: SCEP (2014).

From the analysis and available statistical data of HEIs in Yemen, it is clear that the country is lacking in terms of number of HEIs, faculty staff and the enrolment of students, to meet the demand of the increasing young population of the country. Therefore, it is high time for the HEIs in Yemen to develop and adapt new strategies that would assist in improving the situation in terms of faculty resources and student absorption capacity to cater for the needs of their stakeholders at large.

3. Issues and Challenges of HEIs' Performance in Yemen

Being a third world country, HEIs' performance in Yemen is associated with many issues and challenges, ranging from inadequate universities, colleges and institutes as well as resources and funding of the institutions.

According to Muthanna and Karaman (2014), the Yemeni constitution guarantees its citizens access to education. But the citizens and the government are seriously faced with challenges, such as poverty, lack of educational infrastructure and increasing population growth rate, among others. These problems have led to poor HEI performance and hindered the achievement and productivity of the HEIs in the country.

Other challenges include decline in institutional performance, poor quality of the educational practices, low level of the output, and graduates and high rate of unemployment among the university graduates (SCEP, 2014; World Bank, 2010). The SCEP (2014) has further shown that there is also curriculum failure, poor teaching methodology, inability to use educational technology, weak administration, dilapidated buildings, lack of laboratory equipment, inadequate library facilities and lack of access to internet resources.

Haidar (2009) stated that these factors require the government, HEIs and the MHESR to review and reexamine the performance issues as well challenges for a better and feasible solution to the problems and to reinforce the performance of HEIs. According to Humaid (2013), the shortcomings of the administrative system in HEIs adversely impact on the research performance of the institutions. This is because of the centralization of the administration of HEIs, which as a result, leads to noncompliance to the laws and regulations, compounded by poor traditional and academic norms. These factors and situation have led to the weak research and academic performance of the HEIs, in general.

Shiryani (2009) studied administrators and instructors as well as students' satisfaction level at Sana'a University and found that majority of the participants are dissatisfied with the performance of the university. The most likely areas of dissatisfaction are with library services, academic staff performance, curriculum and other operational performance. Muthanna and Karaman (2014) viewed that such problems could possibly be found in other HEIs in Yemen.

In addition, the World Bank (2010) revealed that lack of learning outcomes evaluation, weak academic performance, inadequate academic research and teachers' performance, have lowered the HEIs' organizational performance. From the aforementioned issues, problems and challenges, Al-Majeedi (2007) suggested that there is a need for a systematic and sustainable transformation of the Yemenis HEIs and their associate administrative bodies so that all relevant parties work hand-in-hand to improve the performance of HEIs.

Therefore, it is now high time and a matter of necessity for the Yemeni government and regulatory bodies of HEIs to develop and adapt new strategies for the improvement of the HEIs. As mentioned earlier, weak academic performance would lead to problems of unemployed graduates and this would also be the cause of social unrest. Besides, from a broader perspective, it could discourage prospective students from enrolling in HEIs.

4. Concept of Organizational Performance

According to Amah, Nwuche, and Chukuigwe (2013), the concept of organizational performance is one of the most controversial subjects among management scholars as it has various viewpoints and definitions. Richard *et al.* (2009) viewed the concept of organizational performance as a concept that reflects three features of organizational outcomes, namely, financial performance, market product performance and shareholder returns. Liao and Wu (2009) added that traditionally, organizational performance is perceived as financial performance. Although financial status matters in determining the success of an organization, it is still viewed as representing organizational performance from a narrow perspective.

Abu-Jarad, Yusof, and Nikbin (2010) perceived organizational performance as the 3Es concept, i.e., economy, efficiency and effectiveness of a specific activity. Economy refers to the scarce resources of an organization that include both human and material and financial and non-financial; efficiency is the amount of resources required to be used to transform the economy into outputs or useful results in a substantial manner; while effectiveness is a wider expression that means the extent to which organizational objectives have been achieved in a productive manner (Daft, 2013).

Daft (2010) defined organizational performance as the ability of the organizational administration to accomplish its goals using available resources of the organization in a proficient and efficient manner. In any level of an organization, there are interrelations between individual, group and organizational levels that are working towards achieving a certain goal of the organization. Based on this approach, Kirby (2005) that interaction between these three levels (individual, group, organizational) would determine the organizational performance of an organization. In other words, organizational performance is an outcome or impact of all parts of the interrelated components of a given system that work together to achieve a goal.

Barney (2002) viewed organizational performance as an effort of the organizational members to accomplish a shared purpose. In essence, organizational performance is a multifaceted concept that has different viewpoints from the perspective of researchers as well as scholars. For that reason, Carton and Hofer (2006) highlighted that organizational performance would continue to remain a subject of discussion and an area of research among academic and individual researchers in developed and developing countries.

Measuring organizational performance is another problem due to the fact that there is no consistency among

the measurements used in the management literature (Richard *et al.*, 2009). For instance, Carton and Hofer (2006) indicated that organizational performance indicators can be grouped into five measures, namely operational measures, accounting measures, survival measures, market-based measures and economic measures. Richard *et al.* (2009) basically categorized organizational performance measures into two: subjective measures (survey and Likert scale) and objective measures (accounting, financial and survival). In addition, Abu-Jarad *et al.* (2010) stated that there are only two measures of organizational performance, namely financial measures and non-financial measures.

Therefore, organizational performance is a very multifaceted concept with different viewpoints. Also, it is a concept with inconsistent measures, ranging from subjective, objective, financial and non-financial measures. This makes understanding the nature and measuring the concept very difficult and it would remain an area of study among scholars and stakeholders in both public and private sector organizations.

5. Organizational Performance Indicators in HEIs

There is a scarcity of studies, particularly concerning the HEI performance indicators in developing countries, in particular. It is therefore difficult and very subjective to have consistent measures in all HEIs because of the variation in scope and target of the measurement (Muthanna and Karaman, 2014). Nonetheless, a few studies have been found in the literature that suggest the performance indicators for HEIs. Precisely, some studies have discussed the indicators that include some of the measures employed to determine organizational performance in the HEI setting. On this note, Chen, Wang and Yang (2009) argued that organizational performance indicators in HEIs can be determined using different perspectives, like teaching activities, curriculum and student (graduates) quality, faculty resources, reputation, social activities and other teaching and learning infrastructures.

According to Hussein *et al.* (2016), organizational performance measures in HEIs refer to a set of different outcomes of educational and institutional-related operational processes that would have an impact on as well as improve educational quality and facilitate competitiveness among the HEIs. Having a qualitative HEI outcome requires developing a substantive measure that can enhance the performance of the institutions. Substantive measures cannot be achieved unless new strategies are developed or adapted in an appropriate manner.

Chen, Wang and Yang (2009) further argued that HEIs should enhance their strength by minimizing their weaknesses to ensure their readiness to compete with their counterparts. They further indicated that performance measures in HEIs must aim to achieve three objectives: improve quality of education in HEIs; encourage HEIs to meet their stakeholders' demand; and assist the HEIs to attain their vision and goals.

In Yemen, there are no right and meaningful measures or performance indicators to appraise the teachers' performance and learning outcomes in HEIs (World Bank, 2010). Therefore, it is difficult to determine the measures indicators without considering the previous studies suggestions in the area. For that reason, Klemenčič and Ashwin (2015) posited that teaching and learning activities are the major and most fundamental bases of the educational system of all HEIs. Therefore, achieving this goal is the ultimate priority of any HEI in the developing and developed nations.

6. Conclusion

After discussing the Yemeni educational system and background, issues and challenges of HEIs, as well as organizational performance and performance indicators, we therefore suggest that in the absence of a meaningful evaluation process and performance indicators in Yemen's HEIs, performance indicators developed by Hussein *et al.* (2016) in Malaysia that were derived from Chen, Wang and Yang (2009) be adapted in Yemen. The indicators include measuring student quality, social responsibility, faculty resources, curriculum planning, teaching activities and development target and characteristics (Chen, Wang and Yang, 2009; Hussein *et al.*, 2016). Adapting these measures in line with the Yemeni HEIs' academic environment would beyond doubt, improve performance and facilitate educational development in the country. This is because teaching and learning are the fundamental bases for achieving academic excellence in HEIs (Klemenčič and Ashwin, 2015).

On the other hand, HEI authorities in Yemen, should develop on their own, and adopt more new strategies and performance measures that can improve the HEI system. They also need to take the necessary steps that would ensure increase in funding to enhance infrastructural development substantially. As noted by the World Bank (2010) report, development of educational infrastructure has been and would continue to remain the main developmental priorities of Yemen. This would also support the effort of the MHESR after their adoption of new strategies in 2005 supported by the World Bank as the new national strategy for the development of HEIs in Yemen. The strategy aims to ensure the quality of programs, extensive participation and excellence in research as well as teaching and learning processes (MHESR, 2005).

Finally, we recommend in future having an empirical study that would include variables for different managerial practices, by which the relationship with the performance of HEIs can be tested in terms of the proposed indicators of this study. This would enhance the performance of these institutions, which will ultimately enable them to survive in a highly competitive and volatile environment over the long-term.

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