

# Mapping the Relationship among Quality Management Practices, Organizational Learning, Organizational Culture, and Organizational Performance in Higher Education: A Proposed Framework

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## Abstract

The challenges in higher education and global competition encouraged performance excellence and the pursuit towards providing educational services characterized by high quality. To ensure performance excellence, quality management practices are considered as one of the variables that affect the organizational performance. On the other hand, organizational learning is a method that facilitates the process of improving the organizational performance. The results of organizational performance vary according to environmental conditions, especially an organizational culture that is one of the important indicators that are characterized by organizations. This encourages choosing the organizational culture as a moderating variable. However, this paper highlights organizational performance through a proposed conceptual framework to be considered in higher education institutes.

## Keywords

Organizational Performance, Quality Management Practices, Organizational Learning, Organizational Culture, Higher Education Institutes

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## 1. Introduction

The concept of the performance in higher education is one of the most important issues in the last decade for

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many countries in the world for various reasons are different from one country to other [1]. At the same time, there are important factors led to an interest in the performance in higher education due to the massive expansion of higher education according to institutions or customers.

The development of economic and international society has resulted in both an expansion and the growth of new types of higher educational institutions. There was an increase in communication among these institutions and the adoption of the new rules that governed their work. The challenges of social and current reforms and economic development urge to increase research in higher education in conjunction with the effectiveness of international finance [2].

Organizational performance shows ambiguity in the findings concerning the relationship between quality management practices (QMPs) and organizational learning (OL), and several studies have investigated the relationship between QMPs and performance [3] [4]. Furthermore, other studies investigated the relationship between OL-organizational performance [5] [6]. Due to the lack of studies concerning the relationship between quality management and organizational learning and their relationship to organizational performance [7], prior surveys in literature showed several gaps that needed addressing.

Similarly, the literature dedicated to quality management revealed that the findings reported concerning the relationship between QMPs and organizational performance were obtained from a large expanse of the topic that required researching [8] [9]. While some other studies confirmed the inconsistent relationship between quality management and performance [10]. There are few studies reported failure in organizations to improve their performance. In spite of the success of quality management practices application [11], some others reported the lack of relationship between QMPs and OP [12] [13].

More importantly, organizational learning has a significant role in transforming prior experiments into novel ideas as advocated by Bapuji and Crossan [14] to transform ideas into actions and policies, with the ultimate aim of enhancing the performance of the organization [15] [16]. This boosted authors to maximize their examination and confirmation of a direct positive relationship between OL and organizational performance [17]-[22]. On the other hand, there is doubted appropriate relationship between OL and organizational performance or there is indirect relationship [7] [23]-[25].

As mentioned, researchers' findings are inconsistent to the relationship between QMPs and OL with organizational performance, this matter urged other researchers to further examine the variables and observe their impacts. In regards to this, Sharma and Gadenne [4] and Qunxiang *et al.* [26] stressed the importance of focusing on some organizational variables to examine the QMPs-organizational performance relationship. This has also been advocated by Wang *et al.* [7].

Hence, in the present study, the effect of organizational culture (OC) on the above variables' relationship is suggested in terms of achieving the optimum organizational performance. In other words, this study primarily aims to fill the gap found in the literature by suggesting the relationship between QMPs, OL and OC, and organizational performance in the context of Iraqi higher educational institutions, to examine it in future.

The remainder of this paper is structured as follows. Section 2 provides an overview of organizational performance and reviews the factors that influence organizational performance while Section 3 discusses research hypotheses. Research framework will be provided in Section 4; finally, Section 5 presents the conclusions.

## 2. Overview of Organizational Performance

Organizational performance (OP) defined by Harbour [27] through the implementation of a raft of measures that represent the final result of the activity of the organization. Due to the importance of OP and its relationship to the development of any organization, the literature showed a great deal of attention to OP and the implications of organizational effectiveness. Whereas the global competition increases the level of quality as well as quantity, this competition led to devise strategies to meet the changing needs of the customers by maintaining a high level of quality standards with seeking to reach the advanced levels in the world market. Therefore, the organizational performance depends on the quality management, through their practices, in addition to learning from leading organizations.

Additionally, the previous research focus on the important of Organizational Performance concept, through top management's success of the performance in the long term [28] [29]. The concept of OP is complex and multi-dimensional [30]. Which includes quantitative, and qualitative criteria (financial and non-financial), these standards are different according to the point view of stakeholders [31] [32], where investors assess performance in terms of returns (profits, return on investment, confidence in the capacity of management) [33].

Therefore, Peterson, Gijssbers [34] defined OP as “the ability of an organization to use its resources efficiently and to produce outputs that are consistent with its objectives and relevant for its users”. Consistency with Antony and Bhattacharyya [35] defined OP as the measure that was used to assess and evaluate the organization success to prepare and deliver the value to its external and internal customers. In another study, de Waal and Sultan [36] determines the success of the organization’s performance through the achievement of some of the financial criteria and other non-financial, during a specific period of time (e.g. five years) and this is done by focusing on the things that really interest to the organization.

The increasing competitive on organizations resulted in a greater effort to defining and measured performance, thus, ensuring that the performance concept is expanded beyond a short-term evaluation of the financial perspective and through a focus on creating value activities in a long-term (e.g. quality of internal processes, customer service, and organizational learning) [37]. That most of the studies that have been conducted to measure the performance in education sector showed the need to measure service performance, which has seen large growth and increasing global competition, where the scholars use many methods to measure the performance in higher education. Where Alexander [38] confirmed in his study that the US put an increasing burden on higher education, to increase learning skills and improve the ability of workers to the development and use of technology, thus increasing productivity. The study concluded that the perspective of economic and utilitarian values is the basis of performance measurement process because the university administration is not able to identify and demonstrate the educational goals and achievements in terms of benefit. For this noted to find ways to monitor and evaluate educational institutions scientific ways to increase the value of the resources and determine the benefit of the educational process.

Depending on OP measurements addressed by the literature, the differences in setting performance standards where some emphasized use of financial standards (e.g. return on investment, profitability), others stressed the non-financial criteria. At the same time, some others stressed combination of financial and non-financial. Many emphasized to use Balanced Scorecard (BSc), because of its comprehensive approach. In addition to benefiting from the advantages of the application of BSc in HEIs as a communication to clarify the strategic vision of the organization (including educational institutions) and teamwork, the organization's commitment to its stakeholders (beneficiaries of educational services) and their reaction to the development of performance, in addition to the learning process [39].

Since the public educational institutions are non-profit, therefore financial indicators cannot give a clear perception of real performance, considering that Not-Financial Performance Measurements (NFPMs) new global phenomenon to improve business operations and achieve long-term goals [40] [41]. In order to assess the performance and depending on the financial and non-financial perspective together, been relying on Balance scorecard (BSc) to measure internal performance in an integrated manner and for any organization. Added to this, the BCs has been extensively used in all organizations, whether profit or non-profit government [42]. For the purpose of dependence on BSc for performance measurement must identify the four perspectives of the BSc (financial, customer, internal processes, learning and growth), these perspectives work together, within the balance combination. In general, organizations depend on the financial, and customers perspective to enhancing the perspective of internal processes, and learning and growth.

However, literature supported the application of BSc in Higher Education to evaluate and plan educational programs and take advantage and the benefits of educational programs evaluation [43]–[46]. In addition to suggesting several models for the application of BSc in educational institutions such as the Umashankar and Dutta’s model [44] in India and Binden, Mziu, and Suhaimi’s [47] model in Malaysian HEIs.

This study highlighted the variables that effect in organizational performance, the first one is quality management practices(QMPs) that Malcolm Baldrige National Quality Award (MBNQA) was selected as the gold standard for understanding the quality management [48], this standard content six practices [49]: Leadership, Strategic planning, Workforce, Customer focus, Information and Analysis, process management. As well as determine the effect of organizational learning [22], in addition to the role of organizational culture as a variable moderating [50].

### 3. Research Hypotheses Development

#### 3.1. The Relationship between Quality Management Practices and Organizational Performance

Many studies have focused on quality management practices [51] [52]. As well as, the literature has produced a

lot of studies that have examined the relationship between quality management practices, and organizational performance. These studies conflicted results. Some studies have a direct relationship between the two variables [3] [4], and other indirect [53] [54], as well as, few studies reject the relationship [12] [13]. According to the previous literature, the hypothesis is:

H1: Quality management practices have a significant effect on the organizational performance.

### 3.2. Relationship between Organizational Learning and Organizational Performance

Organizations seeking to excellence, especially with the intense competition, for that confirmed the organizations to look for the factors affecting the organizational performance. One factor that affects performance is organizational learning, through increased productivity and experience [5] [55] [56]. According to the study Lopez, Peón [22], which explained that some evidence supporting the relationship between organizational learning and performance, due to the lack of quantitative studies and reliance on case studies could not be generalized results, and others need to test empirically [57].

Previous studies that examined the relationship between organizational learning and performance many relationships indicated. Including direct relationship [19]-[21] [58]-[60], others indirect or not significant direct relationship [6] [7] [23] [24]. From another side, there are some studies proposed the relationship between organizational learning and performance without proving it empirically [61]-[63]. Base of previous literature the hypothesis as following:

H2: There are positive direct effects of organizational learning on organizational performance.

### 3.3. Moderating Effect of Organizational Culture between Quality Management Practices and Organizational Performance

Organizational culture (OC) has been studied as an important determinant in the organizational performance field [50] [64]-[66]. For focus to the relation between organizational culture and organizational performance, there are many studies related to this relation such as Imam, Abbasi [67] study that examines the OC effect with organizational performance in higher education institutes (HEIs), and the relation is significant. In a similar study, the relationship between OC and performance has examined in industrial organizations this study has been proven the strength and significant relation between the variables [68]. In addition to many other studies that described the relationship between OC and performance of “significant relationship” such as [69] [70], and some other study proposed theory link [65] [71]-[73]. Although there are some studies which finding lack relationship (not significant) between culture and performance or indirectly relationship such as [74] [75], However, most studies tend toward the positive relationship, and this sense the study is based on using OC as a moderating variable, which is expressed by Baron and Kenny [76] through the definition of a moderator variable as “a qualitative or quantitative variable that affects the direction and/or strength of the relation between an independent and dependent or criterion variable”.

From another side, literature showed the importance of organizational culture in quality management practices, and it seems clear, according to Detert *et al.*'s [77] study, negligence of culture causes failure of previous efforts of quality, as a result, there are difficulties to accept changes within the organization, to compatible with the environment through quality management practices. However, there are studies focus on the relation between Quality practices and OC such as [78] [79], In order to point out the importance of OC as an influence on the relationship between QMPs and organizational performance, Zhang and Wu [80] has tested the effect of national culture on the relationship between QMPs and performance, in eight countries around the world, the study proved that there is a positive relationship between the practices and culture that are influencing factor in raising performance. Which were in line with a previous study has adopted the role of culture and its impact on practices to get higher performance compared with other organizations [81]. Moreover, Karimi and Kadir [82] examine the effect of OC with soft and hard TQM, this study find a significant relation between some OC dimensions and no significant with others dimensions. Based on the previous studies, the hypothesis is:

H3: Organizational culture moderates the relationship between quality management practices and organizational performance.

### 3.4. Moderating Effect of Organizational Culture between Organizational Learning and Organizational Performance

The literature indicated the existence of a relationship between organizational performance and OC, and to de-

termine the role of OC in organizational learning should be reviewed studies, which focused on testing the relationship between them. Therefore notice Doktor, Bangert [83] to the importance of attention to the culture when determining organizational learning processes at the global level. In line with the literature, which addressed examined the relationship between OC and organizational learning, Pool [84] concluded in his study, the relationship between OC and organizational learning directly and significant, and agreed with other studies such as [85] [86]. On the other hand, Zhang *et al.* [86] studied the relationship between OC and organizational learning on teamwork level.

Finally, Li *et al.* [59] study showed a positive relationship among OC, organizational performance and learning. As well as, Rebelo and Duarte Gomes [88] mention for strengthening organization success is the result of OC orientation towards organizational learning. This result is consistent with a previous study conducted by López *et al.* [89] to measure organizational Performance in Spanish factories, which produced a positive relationship between OC and organizational learning with performance. Depending on the review of relations among OC, organizational learning and performance can be hypothesis as following:

H4: Organizational culture moderates the relationship between organizational learning and organizational performance.

### 3.5. Moderating Effect of Organizational Culture among Quality Management Practice, Organizational Learning and Organizational Performance

Depending on previous studies, the relationships among quality management practices, quality management practices, organizational learning, and organizational culture, with the organizational performance are studied. The study proposed to integrate the relationship between all the variables as follows:

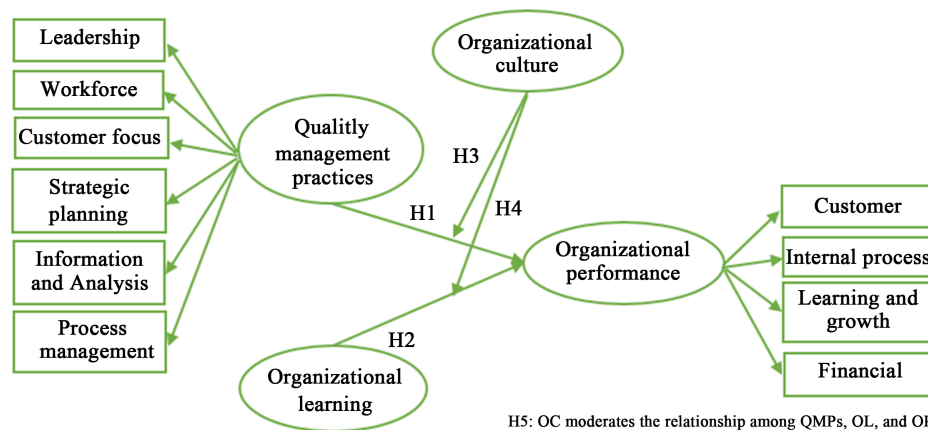
H5: Organizational culture moderates the relationship among quality management practices, organizational learning and organizational performance.

## 4. Research Framework and Methodology

The concept of theoretical framework is that the framework illustrates the relationship between the variables in this study [90]. The development of the theoretical framework is done after reviewing of literature on Quality management practice, organizational learning, organizational culture, and organizational performance.

In order to improve the measurement method the relationship among the variables, since the variables of the study considered an organization variable, the study suggests choosing the “head of departments” in the university as a responder to questionnaire. In addition to using Partial Least Squares -Structural Equation Modeling (PLS-SEM) to measuring the moderator effect to the relation.

Based on the previous discussion in the literature and hypotheses development, there are two independent variables **Table 1**, quality management practice and organizational learning effect to dependent variable that organizational performance, by organizational culture as a moderation variable. As well as, the details of this relation are illustrated in **Figure 1**.



**Figure 1.** Conceptual framework.



**Table 1.** Description of the research variables.

Independent Variables	Moderating Variable	Dependent Variable
Quality management practices Organizational learning	Organizational culture	Organizational performance

Consequently, the idea of this paper does not contradict with the previous literature, however, the proposed conceptual framework of this paper provides an introduction to the different variables which affect the organizational performance in higher education. QMPs which proposed as independent variables (dependent on MBNQA factors) are: Leadership, Workforce, Customer focus, Strategic planning, Information and analysis, and Process management. As well as, the second independent variable is organizational learning. In addition, organizational culture is proposed as a moderator variable.

## 5. Conclusion

The evidence from the previous studies has shown that success of organizational performance is dependent on the extent of its commitment to quality management practices, organizational learning, and organizational culture. **Figure 1** performs theoretical model on the relationship of quality management practices, organizational learning, organizational culture, and organizational performance. The proposed model describes the relationship among the constructs. The model in this study will give a comprehensive understanding of the direct and indirect effects on the relationship among these variables to support this model through testing the hypothesis empirically in the future.

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