

**UNIVERSITY OF TURKISH AERONAUTICAL ASSOCIATION
GRADUATE SCHOOL OF SOCIAL SCIENCES**

**IMPACT OF TOTAL QUALITY MANAGEMENT PRACTICES ON
ORGINAZTIONAL PERFORMANCE IN PRIVATE HIGHER EDUCATIONAL
ORGINATIONS: A CASE STUDY ON IRAQI ORGANIZATIONS**



MASTER THESIS

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Graduate School Of Social Sciences

Department of Management

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**UNIVERSITY OF TURKISH AERONAUTICAL ASSOCIATION
GRADUATE SCHOOL OF SOCIAL SCIENCES**

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28. 5 .2018

Adel AL-DULIMY



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ABSTRACT

THE IMPACT OF TOTAL QUALITY MANAGEMENT PRACTICES ON ORGANIZATIONAL PERFORMANCE IN IRAQI PRIVATE HIGHER EDUCATIONAL ORGANIZATIONS: A CASE STUDY ON IRAQI ORGANIZATIONS

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Total quality management has gained increasing attention over the last few decades due to the success achieved by applying its practices in both production and service organizations. The results from many studies in the literature have provided empirical evidence that total quality management is the best method to improve quality and organizational performance since it considers the human factor as the most important dimension in achieving success in an organization. Higher educational organizations have not been unaware of the fact that total quality management practices play a vital role in improving their educational programs and to meet customer needs and expectations better. In this sense, current research has sought to examine the relationship between the elements of total quality management and organizational performance in the private higher educational in the Iraqi context. Isra'a University, one of the private higher educational organizations in the Iraqi context, was the target population of this research. A Descriptive analytical research design method was used to collect data from a purposive sample of the research. A total of 500 managers and a faculty member from Isra'a University and headquarters of the Ministry of Higher Education and Scientific Research were surveyed

The results from the study revealed a high number of statistically significant correlations between total quality management practices and organizational

performance in the surveyed organization. Correlation and regression analysis showed that the three elements of top management, employee involvement, and customer focus correlated significantly with organizational performance.

Key words: Total quality management, organizational performance.



ÖZET

IRAK ÖZEL YÜKSEK ÖĞRETİM ORGANİZASYONLARINDA TOPLAM KALİTE YÖNETİM UYGULAMALARININ ÖRGÜTSEL PERFORMANS ÜZERİNDEKİ ETKİLERİ: IRAK ORGANİZASYONLARINA İLİŞKİN BİR VAKA ÇALIŞMASI

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Toplam kalite yönetimi, uygulamalarını hem üretim hem de hizmet örgüteir uygulayarak elde edilen başarı nedeniyle son birkaç on yılda giderek artan bir dikkat gösterdi. Literatürdeki pek çok çalışmadan elde edilen sonuçlar, bir organizasyonda başarıya ulaşmada insan faktörünü en önemli boyut olarak gördüğü için toplam kalite yönetiminin kalite ve örgütsel performansı iyileştirmek için en iyi yöntem olduğuna dair ampirik kanıt sağlamıştır. Yüksek öğretim kuruluşları, toplam kalite yönetimi uygulamalarının eğitim programlarının geliştirilmesinde hayati bir rol oynadığı ve müşteri ihtiyaç ve beklentilerini daha iyi karşılayabildiğinden habersizdir. Bu anlamda, mevcut araştırmalar Irak bağlamında özel yüksek eğitimde toplam kalite yönetimi unsurları ile örgütsel performans arasındaki ilişkiyi incelemeye çalışmıştır. Irak bağlamında özel yüksek eğitim kurumlarından biri olan İsa Üniversitesi bu araştırmanın hedef nüfusuydu. Araştırmanın bir örneklemeden veri toplamak için tanımlayıcıiksel bir araştırma tasarımı yöntemi kullanılmıştır. İsa'a Üniversitesi'nden ve Yüksek Öğretim ve Bilimsel Araştırma Bakanlığı karargahlarından toplam 500 yönetici ve bir öğretim üyesi araştırıldı. Ana araştırma soruları test edildi ve sonuçlar tarafından desteklendi. Çalışmadan elde edilen sonuçlar, anket yapılan organizasyonda toplam kalite yönetimi uygulamaları

ile organizasyon performansı arasında istatistiksel olarak anlamlı bir çok korelasyon olduğunu ortaya koymuştur. Korelasyon ve regresyon analizi, üst yönetim, çalışanların katılımı ve müşteri odaklarının üç unsurunun örgütsel performans ile önemli derecede korelasyona girdiğini ortaya koymuştur

Anahtar Kelimeler: Toplam kalite yönetimi, organizasyonel performans



CHAPTER ONE

1. INTRODUCTION

1.1 Problem Statement

Understanding the impact of total quality management is an important factor for developing a creative organization. The correlation between total quality management and organizational performance has been discussed in different areas. Findings from the many studies have shown total quality management as having significant influences on organizational performance. Achieving remarkable performance requires the focus of top management on continuous quality improvement by providing adequate resources for the successful implementation of total quality management, which is considered to be a managerial approach that needs to be supported by the participation of all organization members (Talib, F., Rahman, Z., 2010).

Many organizations have implemented total quality management practices successfully and have gained advantages in several aspects, such as process improvement, meeting customer needs, market shares, and sustainability of competition management within the business environment. Most organizations that have successfully implemented total quality management describe it as an integrated organizational strategy that plays a key role in improving organizational outcomes.

Total quality management is considered to be a consolidated strategy adopted by an organization to develop its operations to produce and provide services and goods to meet client needs in the better way and with greater ease than competitors through the active participation of organization members and with the support of top management (Manizu Musran, 2013). Total quality management as an administrative philosophy includes many practices and elements and the success of its application

depends on the values that all organization members share and the extent to which they are working well for the first time (Davood Gharakhani, Hossein Rahmati, Mohammad Farrokhi, Arshad Farahmandian, 2013)

Total quality management refers to an integrated action plan aimed at high quality goods and services through the cooperation of all management levels of an organization (Norah Dhafer Al-Qahtani, Sabah Alshehri, Azrilah Abd. Aziz, 2015). Organizations employ the impact of total quality management practices to achieve different organizational outcomes, such as profitability, market share, quality of the process, customer satisfaction, and organizational performance improvement (C Zehir, Ö G Ertosun, S Zehir, B Muceldilli, 2012). Over the last few decades, many studies have been conducted to examine the impact of total quality management on organizational performance. However, the results of these studies were inconsistent with the impact of total quality management on organizational performance.

Total quality management practices attracted the attention of many researchers because of its effectiveness in achieving organizational outcomes (Das, A., Handfield, R. B., Calantone, R. J. and Ghosh, S. 2000). Numerous of studies have been conducted in different settings to examine the impact of total quality management practices on organizational performance (Douglas, T. J. & Judge, W. Q. 2001). These studies showed different results on the impact total quality practices in achieving organizational performance (Danny Samson, Mile Terziovski, 1999).

Despite the lack of consistency in the results of these studies, the majority of scholars agree that the important aspects of organizational outcomes respond to the impact of total quality management practices. An extensive study was conducted to examine the impact of total quality management elements on organizational performance of 1200 industrial companies in Australia and New Zealand. The results of the study showed a positive relationship between total quality management and organizational performance. The findings also revealed that all elements of total quality management have a strong influence on the activation of the performance of the companies surveyed (Munizu, Musran, 2013).

Numerous studies conducted in different environments have examined the relationship between total quality management and organizational performance. The results that had ensued show total quality management as having significant

correlations with organizational performance (Barbara B. Flynn, Roger G. Schroeder, Sadao Sakakibara (1994, 2001); Sila, I. and Ebrahimpour, M., 2002). Early applications of total quality management began in the industrial organizations and after the successes of total quality management in improving performance, their application moved to service-providing organizations such as banking, airlines, health care, and educational organizations.

It can be argued that organizations that produce services are not very different from industrial organizations in terms of their objectives of profitability, meeting client needs, improving the performance of individuals, and obtaining market share in the business environment. The difference between service organizations and industrial organizations may be that service organizations have characteristics, which are intangible, distinguishing them from a product which is tangible. Similarly, educational organizations, such as other service organizations, are founded to provide educational services to their customers and achieve profitability and competitive advantages in the business market. Educational organizations may differ from other service organizations in that the education service is intangible and quality assessment depends on the clients (students) satisfaction and mutual dialogue between the instructor and students, in addition to the appropriate curriculum used for education system outputs.

Furthermore, education as a service differs from other types of service in terms of the relationship between the service provider and the end user. Regarding the education service, the student is not the ultimate user even though he is an elementary user. There are other customers in educational organizations, such as government, stakeholders, parents, potential employers, and society as a whole, which has an interest in the success or suitability of the curriculum to provide high quality education meeting the needs of students (Shelley R. Paewai, 2011).

Several studies have examined the impact of total quality management practices on quality improvement in higher education organizations and the enhancement of their performance. A study was aimed at examining the effect of total quality management elements on faculty satisfaction at higher educational institutions in Pakistan conducted by (Quraishi Uzma & Rehman Farhad, 2010). The findings from the research demonstrated the importance of surveys as empirical evidence for educational organizations in the public and private sectors. The results

also revealed significant correlations between total quality management elements and career satisfaction among faculty members of the universities researched.

An empirical study of Chinese universities conducted by Shuiyun Liu (2011) was performed to determine the expected effects of total quality management in making changes at Chinese universities. The results revealed that the implementation of the elements of total quality management led to a number of changes. However, not all the changes were expected. On the other hand, one study examined the impact of total quality management practices on organizational performance of higher educational organizations in Kenya conducted by Chepkech Wilson (2014). The results indicated that the total quality management elements of leadership, customer focus, and employee involvement were found to explain significantly the organizational outcomes of the educational organizations surveyed.

The majority of scholars believe that total quality management to be the best approach to improve organizational outcomes. Numerous studies have been conducted in different sectors and environments on the impact of total quality management practices on organizational performance. However, the results in some environments have demonstrated that the elements of leadership, scientific methods, and customer focus had significant impacts on organizational performance, while in others the results showed the elements of employee involvement, quality improvement, teaching, training, and team groups had a significant impact on organizational performance.

For the Iraqi context, especially in private higher educational organizations, extensive research efforts regarding the total quality management practices and organizational performance are still an urgent need. Total quality management has not yet been researched as an antecedent of the context of private higher educational organizations due to private universities in the Iraqi context having been founded recently. Therefore, the current research is an attempt to respond to the lack of previous studies by demonstrating the importance of total quality management in the Iraqi context.

To measure the organizational performance in Iraqi private higher educational organizations, the research identified three key elements of total quality management, namely Top Management, Customer Focus, and Employee involvement. This research comes as an attempt to look at the most influential

elements of total quality management that affect performance in the Iraqi context and explore barriers for the successful implementation of total quality management and exploration of the most appropriate practices of total quality management for private higher education organizations in the Iraqi context

1.2 Research Questions

The questions that are asked in this research are:

RQ1: What is the relationship between total quality management practices and organizational performance in private higher education organizations?

This question is divided into a three of sub-questions:

1.2.1 Sub-Question

What is the relationship between top management and organizational performance?

1.2.2 Sub-Question

What is the relationship between employee involvement and organizational performance?

1.2.3 Sub-Question

What is the relationship between customer focus and organizational performance?

RQ2: To what extent do total quality management practices explain organizational performance of private higher educational organizations?

RQ3: Is there a significant and positive correlation between total quality management practices and organizational performance?

RQ4: Is there a significant and positive correlation between total quality management practices (Top Management) and organizational performance?

RQ5: Is there a significant and positive correlation between total quality management practices (Employee Involvement) and organizational performance?

RQ6: Is there a significant and positive correlation between total quality management practices (Customer Focus) and organizational performance?

RQ7: Is there a significant moderating impact of demographic factors (gender, age, qualification level, job experience, and quality training) on the relationship between total quality management and organizational performance?

1.3 Research Objectives

The main objectives of this research are:

- 1- To provide an enhanced understanding of total quality management practices in private higher educational organizations in Iraq;
- 2- To examine the relationships between the elements of total quality management and organizational performance in private education sector in Iraq;
- 3- To explore the effect of the elements of total quality management on organizational performance; and
- 4- To analyze the approaches and strategies that should be adopted by leaders in Iraqi private education sectors that recognize the environment and purposes of universities.

1.4 Importance of the Research

The research is considered important for the following reasons:

- 1- It provides deeper Knowledge about the importance of total quality management elements in improving quality and consolidating organizational performance in higher educational organizations.
- 2- It examines the importance of the implementations of total quality management by analyzing the impact of its elements on organizational outcomes.
- 2- It demonstrates the approaches and strategies adopted by educational organizations and it selects the most influential elements of total quality management that are considered the most appropriate for the attainment of their goals.

- 4- Results from this research may help to develop an approach and clear a path for the implementation of total quality management practices which appropriate the prevailing situation in the educational environment in the Iraqi context.



CHAPTER TWO

LITERATURE REVIEW

This chapter presents a review of the previous studies in the literature related to total quality management practices and organizational performance. The chapter also provides concepts of quality and total quality management and discusses the results of studies that examined the relationship between total quality management and organizational performance.

2.1 Definition of Quality

Quality is a term that expresses the status of something as to whether it is a product, service, enterprise, study program, training or work performance level. A good product is one that achieves and exceeds the expectations of the consumer. It also means the ability of the product to meet the requirements of its function and the conformity of the product to its specifications during the design and the degree to which the requirements are expected by the beneficiary to be met or agreed upon. In university education, the product is the graduate student (graduate).

As for the definition of TQM, there are several definitions:

TQM: Work being carried out correctly the first time with dependence on the evaluation of the beneficiary;

TQM: A collaborative form of business based on the common capabilities of both management and employees to improve quality and productivity continuously through teams; and

TQM: Doing the right thing the right way on the first attempt.

These are divided into:

Total: Applying the principle of quality research in any aspect of the work from the beginning to identify the needs of the beneficiary and to assess whether the

beneficiary is satisfied with the services or products provided

Quality: Meeting the requirements of the beneficiary

Management: The development and maintenance of an organization's ability to improve quality continuously

2.2 Total Quality Management: Concepts and Definitions

The concept of quality originated in the beginning of the 1920s with concentration by factories on the development of production processes through regulation and control. At this stage, factories were keen to ensure the outputs that conformed to the standards through the inspection groups created for this purpose (Juran & Gryna, 1988). A significant development of product quality occurred at the end of the 1930s by using quantitative methods developed by Stewart that contributed to reducing deviations from production standards (Tuckman, A., 1995).

However, scholars have presented different definitions of quality in different ways. Early pioneers of quality (Gurus of Quality) such as Feigenbaum A. V. (1986), Juran & Gryna (1988), Crosby (1979), Deming, W. Edward (1985), Garvin, D. A. (1991) and Ishikawa, K. (1985) introduced different definitions of quality and total quality management in various ways. Edward Deming introduced a definition of quality by describing quality as appropriateness with the consumer (fitness with the user). He looked at quality through a trilogy of quality that he proposed: quality control, quality planning, and quality improvement (Garvin, D. A. 1991).

Crosby (1979) introduced a different definition of quality, describing it as conforming to requirements or specifications. Crosby's definition indicates that requirements depend on consumer needs. He also proposed 14 steps, called Zero Defect Theory, as a plan that can be followed by organizations to improve product quality and performance.

Deming defined quality as the ability of an organization to deliver a product that predicted conformity, low cost and suitability for the end consumer in the market. Deming also proposed 14 principles representing an important strategy adopted by the organization for quality management to improve productivity and to achieve a high level of performance (David Kruger & Roy Ramphal, 2009).

Ishikawa. K. (1985) has defined quality from another perspective, demonstrating the importance of total quality management practices in improving

organizational performance. He provides an effective contribution to the development of the quality knowledge field by diagnosing quality problems. His philosophy of quality was based on that of Deming, Edwards (1985), Juran & Gryna (1988) and Feigenbaum, A V (1986). He suggested the idea of quality circles and noted that workers do not like quality control measures because of the complexity and difficulty of statistical methods. He also confirmed that the participation of employees contributes to the successful implementation of total quality management. Ishikawa encouraged the organization to adopt quality circles as important factors contributing to continuous improvement (Foster, 2007).

Total quality management has been defined by a large number of scholars with different views; however, most agree that total quality is an administrative philosophy that is designed to improve the organizational performance and provide products (goods and services) that meet customer needs and expectations (Slack, Chambers & Johnston, 2010). Other researchers believe that total quality management is not only a philosophy but also a way of working that illustrates a new way of life and that quality management is the best approach to do so (Satish Mehra, Sampath Ranganathan, 2008).

Total quality management is defined as a comprehensive management philosophy that responds to all functions of an institution to achieve continuous improvement of quality leading to the provision of products (goods and services) to meet customer needs better than competitors. Other researchers define total quality management as an integrated strategy aimed at providing high quality products through the participation of all members of an organization and with the support of the top management (Norah Al-Qahtani, Sabah Alshehri, Azrilah Abd, Aziz, 2015).

Other researchers have described total quality management as a cooperative approach to performance based on the abilities and skills of both staff and managers to improve quality and productivity continuously through teamwork. They also stressed that the adoption of total quality management in various organizations has achieved positive results in improving organizational performance (K. Subrahmanya Bhat, Jagadeesh Rajashekhar, 2009). The previous definitions of total quality management confirm the fact that total quality management is the commitment of both management and staff to perform work that meets customer requirements and expectations or even exceed those expectations. This means that the idea of total

quality management is based on following facts:

First, total quality management refers to the top management commitment to involve all organization members in improving quality.

Second, the major objective of total quality management is to meet customer needs and expectations.

Third, total quality management is a method of doing work well more than it is an approach.

Lastly, total quality management is an integrated strategy based on teamwork and the empowerment of employees.

2.3 The Total Quality Management Elements

Previous studies in the literature have indicated that total quality management is described as an integrated strategy aimed to improve the products (services and goods) provided by organizations. Leaders of organizations in various sectors are convinced that total quality management is the best way to diagnose quality problems and increase an organization's ability to meet customer needs and market requirements. Successful application of total quality management in many organizations indicated that all organizations' functions respond to the elements of total quality management and have an important impact on improving the quality of operations and organizational performance (Daniel I. Prajogo, Damien J. Power, Amrik S. Sohal, 2004).

The majority of studies in the literature agree that total quality management is considered to be the best method to carry out work activities and achieve competitive advantages by focusing on continuous improvement of the organizational process, the products (good and services) provided, and the development of employees ability to participate actively in achieving high organizational performance. The studies that examined the relationship between total quality management and organizational performance pointed to basic elements of total quality management and their effective practices leading to desired changes in the organization.

An empirical study (Goetsch, David L. & Stanly B. Davis, 2002) identifies nine key elements of total quality management, namely customer focus, top management, teamwork, scientific method, teaching and training, quality assurance, follower involvement, continuous improvement, and unity of objective. However, the

current research focuses on three major elements of total quality management to examine their impact on the organizational performance, namely Top Management, Customer Focus, and Employee Involvement.

2.3.1 Top Management

Top management, or leadership, is an important factor in achieving an organization's success. Although successful leadership is not the only element of high performance, it is an important element that contributes to enhancing it. Successful leadership can transform the organization from disintegration into a strong and successful organization through effective guidance and supervision of the functioning of the organization. Therefore, leadership is one of the topics receiving the increasing attention of scholars due to the significant impact of leadership on influencing an individual's attitudes and mobilizing their potential to achieve organizational outcomes (Day & Zaccaro, S. J, 2007).

The literature on total quality management demonstrates that all the proposals of quality "gurus" such as Deming, W. Edwards (1985) and Juran & Gryna (1988) emphasized that leadership is the most important element of total quality management that influences all the functions and activities of an organization (Kaynak, Hale, 2003). Reflecting the commitment of top management to organizational strategy has a very important impact on changing an organization's culture in order to enhance total quality management practices (Ho, D.C.K., Duffy, V.G., and Shih, H.M., 1999). Successful leadership is that which makes total quality management a part of its strategy and focuses on the organization's long-term policies being consistent with any established goals. The efficiency of the leader is enhanced when he is able to direct unity of purpose and guidance in an organization. Moreover, top management should work to create an environment that allows the participation of all employees to apply elements of total quality management in a collective form to achieve quality goals.

The success of top management in leading quality policies requires the establishment of standards that define responsibilities and enables organization members to participate in quality plans. In this regard, an empirical study conducted by Jay Heizer and Barry Render (2006) designed an action plan to explain the roles of top management in leading quality activities in an organization. The plan

suggested that top management develop a range of activities that have an important impact on quality enhancement, followed by adequate explanation of the basic practices underlying quality management, which was then followed by encouraging employees to participate in activities required by the application of total quality management elements. They suggested that the adoption of the plan may enable an organization to improve performance, meet customer needs, and achieve advantages better than its competitors.

Many studies in quality literature show top management as having a significant impact on improving organizational performance. In this sense, the researchers identified three significant indicators relating to the commitment of top management to quality:

- (1) Top management leaders should have a long-term perspective of any change that is taking place in customer needs.
- (2) Top management leaders should have the capacity to reflect the common values and the organization members.
- (3) Top management must demonstrate its commitment to allocate adequate resources that support the quality of higher education (Kristal, M, Huang & Schroeder, 2010).

The application of total quality management practices may vary from one organization to another. However, most scholars agree on the importance of top management in achieving its success. The successful use of total quality management practices motivates all staff not only to solve quality problems but also to participate in performance improvement and to focus on continuous improvement to achieve the planned objectives of the organization. Therefore, top management has the ability to lead all functional activities and enhance the organizational culture that supports the total quality management practices by encouraging all employees to contribute to its successful implementation.

The embodiment of organizational culture among employees may be easy with visionary leadership. The top management should have its activities directed from inside to outside of the organization because only an effective manager can reflect success in the business environment. However, these objectives are achieved only when top management is able to employ the full potential of the organization to achieve its goals (Kumar, S., 2006). The role of top management in improving

quality and performance is highlighted through the development of quality goals and policies, allocating the necessary resources, and creating an environment that supports organizational efforts to improve performance quality and evaluate the implementation of total quality practices.

The results of the many studies in the literature mostly agree on the effectiveness of the role of top management in the application of total quality management. The commitment of top management to quality improvement is a key indicator of the application of total quality management practices to performance improvement in an organization. The application of total quality management practices may not be successful without the strong commitment of top management. Therefore, the most influential factor in the success of total quality management practices is top management and its continued support for all organizational efforts directed towards high performance (Mustafa Esam & Talib Bon Abdul, 2012). However, the leadership qualities of top management in the organization contribute to the promotion of total quality management practices and the charismatic and strategic characteristics of leadership play a key role in the successful implementation of total quality management practices in an organization (Ng, P. K., and Jee, K. S., 2012b).

2.3.2 Customer Focus

Customer focus is an important element of total quality management due to the fact that customer satisfaction has a significant influence on organizational decisions. Satisfaction refers to the satisfaction of individuals with the benefits they receive from the services and goods provided by the organization or the products provided by organization in response to their expectations. Customer satisfaction is achieved only by providing high-quality products (services and goods). Service quality is mostly evaluated immediately by the customer, which causes the service provider to increase efforts to raise the quality level that responds to customer satisfaction (Kotler, Philip, 2006).

The importance of focusing on customer satisfaction as a key factor of continuous quality and organizational performance was found in the proposals of early quality “gurus” such as Deming, Juran, and Crosby. Customer satisfaction is the outcome of the response to all efforts of the organization to meet customer needs

and matches expectations about the benefits provided by the organization. Organizations should be aware that the ability to achieve customer satisfaction will lead to building a broad-base of loyal customers that may positively reflect on organizational performance and profitability.

Researchers have argued that customer focus is the supportive element for successful application of total quality management methods (Danny Samson, Mile Terziovski, 1999). In different perspectives, some researchers have argued that the organization that adopts a customer focus as a unique factor of improving performance may lead the organization to falling into the trap of meeting the existing customer needs in the specific market, which leads to seeing the organization activities through customer opinions only.

However, organizations that adopt customer elements and direct their activities to meet customer needs and expectations provide the organization with an opportunity to retain existing customers and gain more customers in the future (Jablonski, Robert, 1992). In order to ensure the effectiveness of a customer focus policy, organizations should survey customers opinions in the target market, collect information about their needs constantly and then analyze this information to identify their desires and needs and use the results of analysis as feedback to achieve effective customer relationship by reorienting organizational activities leading to customer satisfaction of the products presented to them. This will generate positive effects on organizational performance (Muia Faith, Mukonyo, 2014).

Consequently, customer focus necessarily leads to understanding customer needs and it indicates that organizational objectives are linked to respond to customer requirements. It indicates an organization's ability to structure customer relationships by using methods that balance the interests of customers and other parties with an interest in the improvement of organizational performance (Muia Faith, and Mukonyo, 2014). Results from an empirical study indicate that customer focus is a critical factor in assessing the current and future needs of customers, which allows the organization to improve operations, increase levels of quality, and enhance employee performance.

The results also suggested that customer focus is the cornerstone of operation policies development and quality objectives. In other words, the organization's plans and policies to adopt total quality management practices begin with customer focus,

understanding their needs and meeting customer expectations (Chin S. Ou, Fang C. Liu, Yu C. Hung, David C. Yen, 2010). These results were supported by other researchers who explained that an organization's dedication activates focus on customers achieving benefits for both the organization and the customer. They also noted that mobilizing the organization's capacity, with a focus on customer needs, will lead to improving organizational performance (Stefan Lagrosen, 2001). Therefore, organizations should be aware that customer focus is a fundamental principle of total quality management. Successful organizations are able to meet customer needs first time and every time. Organizations that consider the customer focus as a final goal understand how to meet customer needs by training employees to focus on customer requirements. All organizations have two types of customer or consumer for their products and services: employees as internal customers, and the end user who is the external customer. Many scholars believe that total quality management is not a philosophy that places customer satisfaction before profit. They believe it is an integrated strategy used by the organization to improve quality and performance to achieve its objectives by achieving satisfaction and happiness of both customers and employees.

The employee as an internal customer is an essential element of total quality management; and he is able to provide the competitive advantage of the organization. Moreover, a satisfied employee understands the needs of the external customer and satisfies them with quality products and services provided by the organization. The results of market studies indicate that a slight increase in customer loyalty will positively affect the profitability of an organization (Elvis Attakora-Amaniampong, Andrews Salakpi, Freda Bonye, 2014). The element of customer focus is an important practice of total quality management. It contributes with other total quality management practices (top management commitment, employee involvement, teamwork, continuous improvement) to bringing significant benefits to the organization.

The importance of customer focus practices as a key principle of total quality management has been confirmed by empirical evidence in many fields, whether in production or service. Although the ultimate goal of customer focus is to achieve customer satisfaction and gain customer loyalty, it has an impact on other aspects of organizational outcomes, such as profitability and employee satisfaction.

Organizations that reflect the practice of customer focus as an essential element of total quality management can exceed the goal of meeting customer needs and expectations (Zulnaldi Yaacob, 2014).

2.3.3 Employee Involvement

Human resource studies indicate that an important factor contributing to the achievement of organizational goals is the human factor. The participation of the employee in the implementation of quality activities is a significant factor that contributes to the success of any organization adopting total quality management practices. Total quality management has long-term impacts on managing a workforce because total quality management includes effective practices of developing employee skills and abilities, involving the employee in decision-making, empowering them to implement work tasks and encouraging collective work and training employees to take the responsibility of continuous improvement of quality.

Employee involvement refers to an organization's policies to empower employees with the necessary powers to perform the work and involve them in any decision-making related to organizational activities as well as training them to solve problems commensurate with their administrative levels. The applications of total quality management require the allocation sufficient resources to develop employees' capabilities through the establishment of training programs that enable employees to use quality data efficiently and perform tasks that contribute to continuous quality improvement (Ahire, S., Dreyfus, P., 2000).

The participation of the employee in activities related to the continuous quality improvement of the organization indicates the commitment of top management to implement the basic principles of total quality management. This reflects the continuous improvement as a part of an organizational strategy to achieve organizational goals. It shows that the organization management has directed the full capabilities of the organization to improve quality by engaging all workers to provide quality products that meet customer needs (Edosomwan, J. A., 1992).

Many researchers believe that the successful implementation of total quality management depends largely on the participation of the employee in the continuous improvement of quality and level of cooperation among them in the work environment (Ho, D.C.K., Duffy, V.G., Shih, H.M, 2001). Therefore, an effective

implementation of total quality management can be deduced from the extent of the opportunities available to the employee to participate in improving quality as well as from their understanding of the methods of applying total quality management practices (Muia Faith, Mukonyo, 2010). This means that employee involvement requires employee authorization through adequate powers, knowledge of quality culture, training to solve problems, education in using Descriptive analytical methods and the ability to use data quality effectively. The majority of studies conducted in the field of human resources have confirmed that employee involvement in an organization's activities is one of the decisive factors in the success of applying total quality management practices in an organization. These studies also indicate that total quality management has added new elements to the field of quality management. The positive change required by the application of total quality management practices cannot succeed without employee participation and commitment to quality improvement.

Total quality management, as an administrative approach and integrated strategy, and based on employees with strong emphasis on continuous improvement, seeks to achieve high-level performance by involving all organizational members, be they managers or employees. Many researchers emphasize that the participation of employees in decision making is a fundamental principle of total quality management. They also added that employee involvement supports organizational development and performance improvement and indicates that all organization members contribute to the desired change achieved by the implementation of total quality management (Welikala, D., Sohal, A., 2008).

Several studies have suggested that most of the reasons for total quality management failure are attributable to the human factor. Results from these studies indicate that organizations that focus on employee involvement will gain significant benefits in terms of profitability and competitive advantage. The quality of the human factor may contribute to the achievement of different organizational outcomes between organizations despite their equal potential. Accordingly, the empirical findings of several studies suggest a positive and significant relationship between employee involvement and organizational performance (Luis Mendes, 2012).

2.4 Organizational Performance

This is the concept of performance that refers to the outputs and objectives that the organization seeks to achieve through its employees. Therefore, it is a concept that reflects both the objectives and the means to achieve them, that is, a concept that links the aspects of activity with the goals that organizations seek to achieve through the tasks and duties of the employees within those organizations.

Organizational performance is the result of a combination of different elements of physical, human and productive relations in an organization to achieve common goals (I Putu Miartana, Djumilah Hadiwijoyo, Fatchur Rohman, Solimun, 2014). Organizational performance describes an organization's ability to use its full potential to achieve its objectives of profitability and sustainability in the business market. Organizational performance also refers to measuring the efficiency of production processes and the effectiveness of organizational activities (Kathaara, 2014). An important element of the effectiveness of an organizational management activity is performance measurement.

The performance of an organization can be assessed by measuring its capabilities in achieving objectives of competitiveness or in measuring its efficiency of achieving profitability objectives. Researchers argue that organizational performance assesses both financial objectives which involve the outcomes of investments from market shares and other financial activities, and overall performance of the organization, which refers to the quality of products, employee performance, and meeting customer needs (Norah Al-Qahtani, Sabah Alshehri, Azrilah Abd, Aziz, 2015).

Findings from several studies indicate that total quality management practices that are applied successfully by organizations have contributed to their achieving high performance and competitive advantages (I Putu Miartana, Djumilah Hadiwijoyo, Fatchur Rohman, and Solimun, 2014). The literature also shows that the researchers used various methods to measure organizational performance. Some researchers suggested that effective application of the elements of total quality management may result in various advantages, such as improving employee performance, production processes and cost reductions; whereas others have noted that the elements of total quality management of top management and employee involvement were correlated significantly with high performance (Sharma, B &

Gadenne, D., 2010). According to an empirical study conducted by Eugene W. Anderson, Claes Fornell, & Donald R. Lehmann (1994) that researched organizational performance in Australia, important aspects of organizational performance were found to be correlated significantly with total quality management practices. The research identified aspects such as market share, financial objectives, competitiveness, and customer satisfaction.

Accordingly, it may be argued that the evaluation of an organization's performance refers to an assessment system which uses different criteria to measure the efficiency of an organization and its operational capabilities in achieving the strategic objectives in a certain period. This explains the fact that scholars have adopted different criteria to measure organizational performance taking into account the various interrelated factors that influence the performance of the organization.

A study was conducted by Ali Uyar (2009) (cited in Inderlal Ashwin, 2013) to assess the efficiency of financial and non-financial quality standards in a number of Turkish organizations. The financial standards were determined as the cost of quality, whereas non-financial standards were identified as the percentage of defects in production processes, delivery of the products to customers in a timely manner, and the number of customer complaints. The results of the study suggested that non-financial criteria were found to be more effective in measuring the performance of Turkish organizations.

Based on the above literature review, it is clear that the evaluation of organizational performance varies from one organization to another, using different criteria. Some organizations adopt financial goals, such as profitability and market shares as indicators of performance, while other organizations tend to use non-financial goals, such as customer satisfaction, employee involvement, improvement of product quality, and reduction of customer complaints as important indicators of organizational effectiveness.

2.5 The Relationship between Total Quality Management Elements and Organizational Performance

2.5.1 Top Management and Organizational Performance

Top management, or leadership, is an important factor that has a significant impact on the success of an organization. There are a large number of studies in total quality management in the literature examining the relationship between leadership and organizational performance. Leadership is considered to be one of the most important drivers of total quality management. Leadership plays a key role in influencing an individual's attitudes and selecting methods and setting objectives to apply total quality management elements efficiently (Hongyi Sun, 2000). In addition, the leadership has a great responsibility to allocate adequate resources to train individuals and develop their skills to meet the changes that may arise with the application of total quality management.

Creating the appropriate conditions for a workplace is a key component of the commitment of top management to improving the quality of performance and organizational outcomes (Kaynak, Hale, 2003). Leadership also plays a key role in recruiting qualified service providers and selecting reliable suppliers to provide the organization with high-quality materials and equipment that contribute to improving production and process quality (Danny Samson, Mile Terziovski, 1999).

There are numerous studies in the total quality management literature that research the correlations between leadership and organizational performance, and consider leadership as a vital factor to achieve the success of an organization. A study was conducted by Sila and Ebrahimpour (2005) to research the impact of different elements of total quality management on organizational outcomes. Their findings showed that top management was an important element having a significant influence on organizational performance. On the other hand, a study highlighted three major areas related to the impact of leadership on organizational performance. First, a leader should formulate a clear vision for all employees regarding organizational policies related to improving performance. Second, leadership should demonstrate the commitment to improving performance quality through building teamwork and directly supervising workshops and allocating resources to support quality efforts. Lastly, leaders should make more efforts to focus on continuous

improvement and development of working methods in order better to meet customer needs and expectations.

Similarly, other researchers have suggested that managers should develop the capabilities of staff in line with continuous improvement and educate them on how to solve problems during performing tasks (F. Vouzas, A.G. Psychogios, 2007). An empirical study of Turkish companies conducted by Cetindere, Aysel, Duran, Cengiz and Yetisen, Makbule (2015) demonstrated the vital role of leadership in the focus on development of working methods and employee education having a positive correlation with organizational performance.

2.5.2 Customer Focus and Organizational Performance

The literature on total quality management indicates that customer focus is an important element in enhancing organizational performance. Deming, Edwards (1985) pointed to the key role played by the customer in influencing organizational performance, and describing the customer as a major part of the production line. All efforts of the organization to improve the quality of goods and services should target the needs of current and future customers. Focusing on the customer is emphasized by most scholars of total quality management to be an influential element of total quality management that correlates with organizational performance.

Researchers have stressed that an organization's ability to meet customer needs is the key to achieving the basic objectives of the organization. They also note that customer focus requires the maintenance of customer communication and the gathering of information about their attitudes and desires so that the organization can direct its objectives to meet customer needs and expectations. Customer relationship practices achieve several benefits for the organization, the most prominent of which is to retain customers and achieve their satisfaction, which in turn significantly affects organizational performance (Shaohan Cai, 2009).

A study has examined the impact of customer focus on organizational performance in Nigeria conducted by Nwokah, N.G & Maclayton, D. W, (2006), who found that there is a positive relationship between customer focus and several organizational outcomes. The sales growth of the organization was one of the organizational outcomes correlated positively with the customer focus. The results

also reported an indirect effect of customer focus on organizational performance and its impact that was moderating with other factors.

The above literature review demonstrated that the majority of researchers have suggested that through the ability of the organization to direct its objectives to focus on customers by meeting their needs and expectations, the organization will achieve many advantages that contribute to enhancing organizational performance. The success of customer focus depends on the availability of information about customer proposals and complaints to leaders as well as the uses of this information as feedback to modify policies and improve the quality of goods and services, thereby benefiting in terms of profitability and organizational performance. Given on customer views are dynamic factors that influence the organization activities, leaders require to conduct a systematic survey to explore customer views and expectations and use the results to modify operations and improve quality (Ali Bakhit Jaafreh, Abedalfattah Z. Al-Abedallat, 2013).

2.5.3 Employee Involvement and Organizational Performance

An employee is an influential element to achieve organizational objectives. The participation of the employee in an organization's activities allows managers to adopt the best methods that are suitable for the employee and to motivate them to accomplish the tasks assigned to them efficiently. Results from numerous studies have provided empirical evidence on the importance of employee involvement in strengthening organizational performance. The effective participation of the employee requires the development of their abilities and skills with systematic training programs and empowering them with the necessary abilities and skills to accomplish tasks as well as to have them participate in decision-making regarding the activities of the organization. Researchers have noted that staff empowerment is a significant factor that plays a major role in the enhancement of organizational performance.

An experimental study was conducted by Mohammadbagher Gorji and Sahar Siami (2011) to evaluate the impact of empowerment on organizational performance. The findings from the study revealed that employee performance correlated positively with empowerment. The results also showed that the working groups that were delegated sufficient powers had higher-level performance than those who were

not authorized. The study concluded that delegation was the component of empowerment that most affected performance improvement.

A study conducted on direct participation and work planning showed that employee participation provides positive indicators on many organizational outcomes, including operations quality, decreases of absenteeism, and minimized time estimations for job completion. The research suggested these indicators have a direct impact on organizational performance (E. Sofijanov & V. Zabijakin Chatleska, 2013). Numerous studies in the total quality management literature have emphasized the importance of employee involvement in supporting organizational performance.

Some researchers have suggested that motivating the employee to participate in organizational activities through training, education, and empowerment enables them to make an effective contribution to improving organizational performance (Arif Hassan, 2010). Other researchers believe that developing staff skills and training them in new ways of doing work is an important incentive to encourage staff to become more involved with the organizational activities. They also argued that training and education programs for developing employee experience gained the organization competitive advantages, in addition to the potential impact of new expertise of an employee on organizational performance (Montes, F., Jover & Fernandez, 2003). An empirical study of manufacturing companies in Spain conducted by Daniel Jiménez-Jiménez, Micaela Martínez-Costa (2009) considered employee participation as a substantial element in the application of total quality management in an organization. The factors that were utilized in their survey to assess staff participation were group work, coaching, recruitment, delegation, performance rating, and repayment. Their findings reported that there was a significant relationship between an element of staff participation and organizational performance.

2.6 Research Studies on the Relationship between Elements of Total Quality Management and Organizational Performance

Over the past few decades, universities and educational organizations have not been enthusiastic about competing for market share in the business environment. However, increased competition and the rapid changes in the global economy have

forced both private and governmental educational organizations to support their survival by focusing on providing high quality services. After widespread implementation of total quality management practices in industrial and service organizations, the application of total quality management practices has become possible and desired by the majority of higher educational organizations.

Mohammed Hakr and Olgun Çiçek (2014) studied the impact of total quality management practices on organizational performance at Grin American University in Turkey-North Cyprus. The study presented an examination of the relationship between the elements of total quality management and performance by the determinants of the five elements of total quality management, including customer focus, leadership, strategic planning, employee involvement, and training. The survey used a sample of 118 students from Grin University. Descriptive correlation analysis for the relationship between total quality management practices and performance showed a positive relationship between total quality management and university performance level. The survey suggested that there is a discrepancy in the results when total quality management practices were adopted at the university. The results of the study indicated that there is a statistically significant relationship between all elements of total quality management collectively and university performance. The result also reported that the highest correlation coefficient was for customer focus, with the lowest coefficient for leadership, which was in the slight rank.

An empirical study conducted by Chepkech Wilson (2014) examined the relationship between total quality management practices and organizational performance at Kisi University in Kenya. The data collected from a sample of 264 respondents comprised the head of departments and teachers in the tertiary institutions in Uasin Gishu County. To measure the impact of total quality management on organizational performance, the study determined three key elements namely, leadership (Top Management), customer focus, and employee involvement. Descriptive correlation analysis for the relationships between total quality management elements and organizational performance reported that leadership plays an important role in enhancing organizational outcomes and ranked the highest correlation coefficient among the overall total quality management elements in terms of impact on performance, while the impact of customer focus and

employee involvement ranked second and third respectively in terms of impact on performance.

Abdullah Al-Nasser, Rushami Z Yusoff and Rabiul Islam (2013) studied the moderate effect of the relationship between soft total quality management practices and performance in municipalities. The study was conducted to correlate total quality management practices and organizational performance as reflected in five developing countries (Egypt, Jordan, Qatar, Saudi Arabia, and Turkey). Five key elements were identified to examine the impact of soft total quality management practices on organizational performance, namely leadership, supplier relations, employee involvement, customer focus, and education and training. The result of regression analysis showed that all soft total quality management practices were significant and positively correlated with organizational performance. The standardized beta for the soft total quality management practices reported that leadership has the strongest impact on organizational performance, followed by employee involvement, supplier relationship and finally education and training. The study concluded that there is a significance difference between these countries in terms of the mean of organizational performance. However, the results of the study did not indicate which of these countries were different and to which extent. The results showed, however, the significant mean difference between these countries, and reported that Saudi Arabia has a higher and more significant mean than Egypt and Jordan, but not Turkey. On the other hand, Egypt has a significantly higher mean than Turkey, but a significantly lower mean than Qatar. Lastly, Turkey's organizational performance was shown to be significantly higher than Jordan's.

An empirical study of the Vietnamese SME Company conducted by Giang Nguyen & Duong Ninh (2017) examined the impact of total quality management practices on organizational performance. The survey used a sample of 46 employees working at the SME Company. It presented an examination of the relationship between total quality management practices identifying five elements of total quality management, which comprised leadership, strategic planning, process management, human resource management, and customer satisfaction. Exploratory factor analysis reported that there is a relationship between total quality management practices and organizational performance. The results indicated that the three elements of total quality management namely, strategic planning, human resource management, and

customer satisfaction, had the highest impact on organizational performance, while the other two elements, leadership and process management, have no impact on organizational performance in this specific case.

A study conducted by Inderlal Ashwin (2013) examined the role of total quality management in improving quality and organizational performance of footwear manufacturing organizations in Kwazulu-Natal. Empirical data were collected from a survey of 32 footwear manufacturing organizations. The study presented an examination of the relationship between total quality management elements and organizational performance as well as quality improvement by four determinants of total quality management elements, which include leadership, employee involvement, customer focus, and quality improvement. The regression analysis showed that leadership and customer focus were statistically significant in explaining the variability in quality improvement. The results also indicated that only the leadership was statistically significant in exploring the variability in organizational performance. On the other hand, the results of the Descriptive correlation analysis reported that quality improvement had a moderate positive impact on organizational performance. The study concluded that the only element positively associated with organizational performance was leadership, while customer focus had no significant positive correlation with organizational performance. Although the results of the study reported that leadership and employee involvement were positively correlated with quality improvement, the positive correlation between employee involvement and organizational performance was slight.

Shehzad Akhtar, Hashim Zameer & Rashid Saeed (2014) evaluated the impact of total quality management elements on organizational performance in the service sector of Pakistan. The study used a sample of 32 managers taken from 15 service organizations in the private and public sectors, including the telecommunication, hospitality, banking, and aviation sector in Pakistan. To examine the relationship between total quality management elements and organizational performance, five basic elements were identified, namely leadership, employee involvement, continuous process improvement, quality management system, and training and education. The results showed that all managers being interviewed agreed on the importance of adopting total quality management practices and emphasized the

strong positive relationship between total quality management elements and organizational outcomes. The results of the study also indicated that more than 90% of respondents believed that leadership plays a vital role in improving performance, which is the most influential element of total quality management for achieving work with maximum efficiency. The study concluded that despite of the demographic differences of the managers interviewed, their responses were similar. This indicates that the implementation of total quality management practices does not require specialization in specific education for managers or in a specific sector. Total quality management practices are applicable to both manufacturing organizations and service organizations.



CHAPTER THREE

METHODOLOGY AND RESEARCH DESIGN

The previous two chapters of the research introduced the research and reviewed the previous research in the literature related to total quality management practices and organizational performance in order to develop the basis of the research study. This chapter explains the essential features of the methods utilized in this research and the reasons for their use. The chapter also outlines the research design, sample procedures, questionnaire administration, reliability of research instruments, and the methods used for data analysis.

3.1 Research Design

The current research adopted a descriptive analytical method that sought to develop the structure of knowledge on the impact of total quality management practices on organizational performance, especially to determine the extent to which total quality management elements explain organizational performance in the private higher educational organizations in the Iraqi context. Descriptive studies are used to gather information about the current features and trends of phenomenon. The steps of the analytical descriptive studies begin with the formulation of the research problem, determining the data of the study, selection the method of data collection, determining the population to be studied, identifying the sample involved in the study, and identifying procedures for data collection and analysis. The descriptive analytical approach is suitable for the current study because it is a common approach in the study of social and administrative problems. Descriptive analytical approach also provides many facilities for the researcher in answering the research questions and achieves its objectives. The function of descriptive analytical method is not limited to describing the phenomenon under study. It goes beyond analyzing the

phenomenon, interpreting the relationship between its variables, generalizing its results, and predicting its future directions.

The research questions were based realistic perceptions of the research population and that the participants in the research study were purposive sample. Therefore, this approach will be more suitable for the research sample. It is hoped that the results may be benefit to decisions makers in the context of the surveyed organization.

3.2. Research model

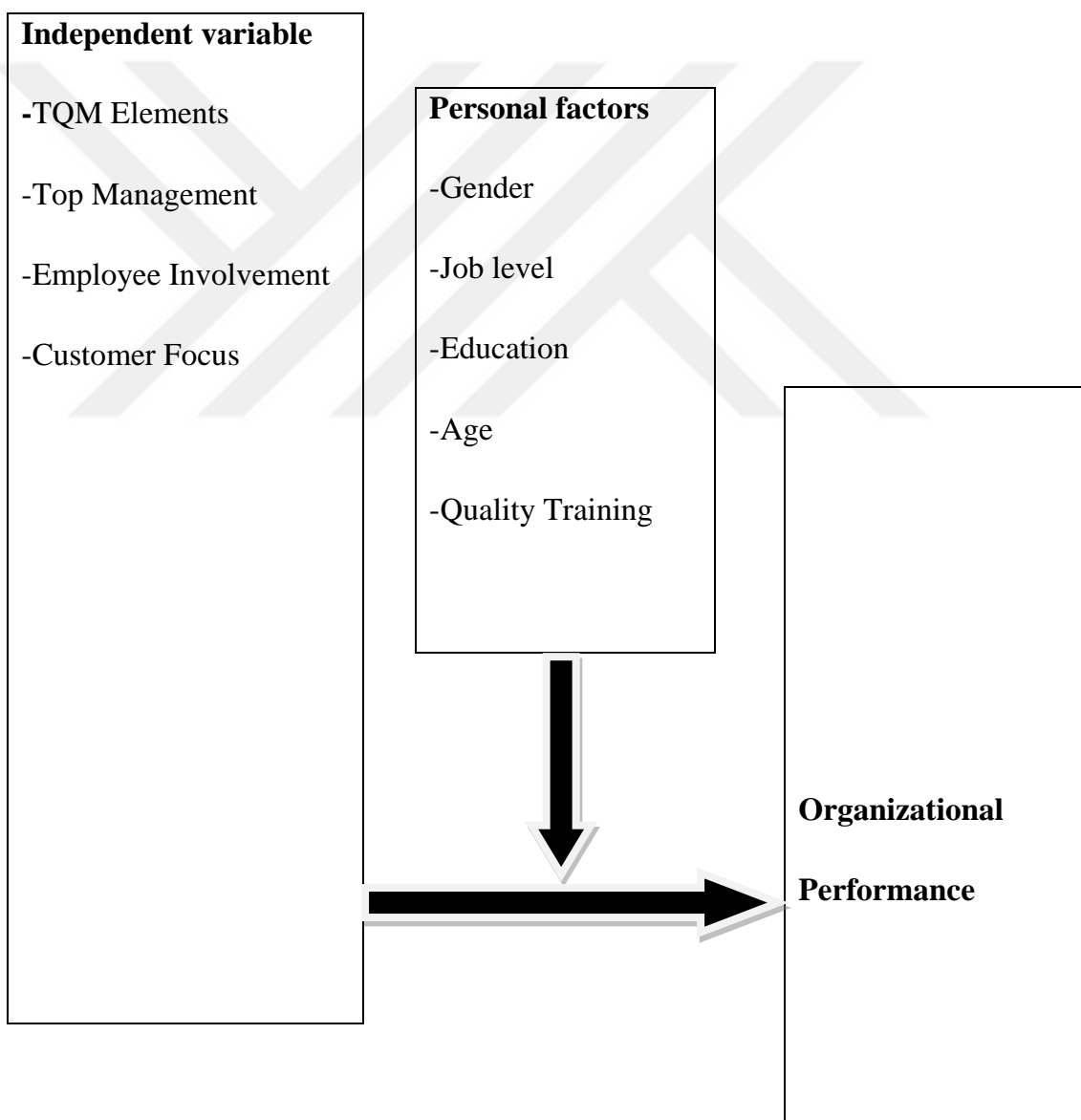


Figure 1: Model Of The Research.

Figure (1) indicates that the research variables are divided into two basic variables. Total quality management was considered as independent variable and included three basic practices of total quality management, namely, Top Management, Employee Involvement, and Customer focus. While, organizational performance was considered as a dependent variable.

The current research uses a descriptive analytical research design to examine the effects of total quality management practices on organizational performance to assess the nature and quality of the correlations between the two competent variables. A survey-based study was more appropriate to fulfill the purpose of a Descriptive research project. Correlation and regression analysis methodologies were used with the criteria identified and the predictive values of research variables were taken into consideration. These statistical techniques would contribute to explaining the characteristics of the research variables and provide interpretations of the possible effects of total quality management practices on organizational performance of private higher educational organizations in the research populations.

All procedures related to the completion of this research passed through three basic stages. The first stage focused on the concepts of total quality management through a revision of the basic literature related to total quality management elements in order to develop the basis of the research study. In the second stage, the research study was developed, the questionnaires were distributed and data were collected from the participants of Isra'a University. In the third stage, the data were collected and analyzed.

3.2.1 Area of Study

All employees working at Isra'a University were the target population of this research in addition to the managers and staff responsible for the private higher educational at the headquarters of the Ministry of Higher Education and Scientific Research in Iraq. The University was founded in 2011 as the first private university adopting quality standards to provide higher education in the Iraqi context. The University has 18 departments divided into four colleges: Medicine, Engineering, Information Technology, Administrative and Human Sciences. The University is staffed by high-quality people, especially scientific research and technology majors.

The purpose of establishing of the University was to contribute to the

development of higher education through the adoption of new methods of education to provide educational opportunities to the largest segment of society.

3.2.2 Population and Sample Techniques

The majority of researchers agree that a population is a group of individuals, events, and objects used in a study through which the researcher identifies a number of characteristics (Loraine Blaxter, Christina Hughes & Malcolm Tight, 2006). They also suggest that data collected from a large population takes a long time and is costly, and that a selected sample should be taken from the population to collect data for the research study. Other scholars defined the sample as a ratio taken to serve research purposes. They also affirmed that the outcomes attained by the researcher from the participants can be popularized to the population and then called a statistical conclusion (James T. McClave, P. George Benson, Terry Sincich, 2004).

The range of methods used in selecting a sample depends on the nature of the study and the quality of data that serve the purposes of the study as well as the time available to the researcher (Blumberg, B., Cooper, D. C., & Schindler, P. S, 2005). The researcher selects the research sample involved in the research study either with probability sampling or with non-probability sampling. The probability sample references that each individual has a zero probability of participating in the research study sample. The researcher suggested that a random sample that is a type of probability sample may allow each individual to have an equal probability of being included in the research sample, whereas in the non-probability sampling, non-zero opportunities for each individual to participate in the research sample do not appear (Inderlal Ashwin, 2013). They also suggested that a non-probability sample would be more suitable for exploratory studies when the study aims to collect information from specific individuals.

For the current research, all staff at Isra'a University and the headquarters of the Ministry of Higher Education were identified as a target population of the research. The sample of the research study included the directors responsible for private higher education at the Ministry of Higher Education as well as the administrative and faculty members of Isra'a University. Accordingly, the staff members mentioned above, with a total of 500 participants, was surveyed as a purposive sample for this study. The participants represented different management

and academic positions at the University and the headquarters of the Ministry: managers at the University (25), managers in the Ministry (15), and faculty members (368). The reason for selecting all employees as a sample was that they are responsible for the application of total quality management practices in the organizations.

A total of 500 questionnaires were distributed and 408 (81.6%) were retrieved and analyzed. 32 questionnaires were disregarded due to lack of data and 60 were not collected as the time limit for the collection of data had passed.

3.4 Data Collection Method and Instrumentation

In order to achieve the objectives of this research, both types of primary and secondary data sources were used.

3.4.1 Primary Data Collection

The concept of primary data refers to the type of data collected for the first time and declared by an individual or organization responsible for its collection (John S. Croucher, 2012). One of the most important benefits of using primary data is to enable the researcher to identify the variables used in the study as well as methods and tools that require the adoption of measurement of those variables to obtain a validate and credible results (Sanders, D. H., Eng, R. J. and Murph, A. F. 1985). In other words, the primary data can be described as data to be collected by the researcher for statistical analysis to objective answers to the research questions. Accordingly, the primary data of this study were collected by using two questionnaires: Total Quality Management Questionnaire developed by Chepkech Wilson (2014) and Organizational Performance Questionnaire developed by Ambrose Kimanthi Muthama (2014).The explanation of those two questionnaires presented in following:

3.4.1.1 Questionnaire (1): total quality management elements

For the purpose of this research, total quality management elements of top management, employee involvement, and customer focus considered as independent variables and evaluated by the total quality management questionnaire developed by

Chepkech Wilson (2014).The total quality management questionnaire of 19 items highlights the characteristics of three elements of total quality management; 6 items for top management, 5 items for employee involvement, and 8 items for customer focus. The questionnaire used a five-point Likert type:

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neutral
- 4 = Agree
- 5 = Strongly Agree

3.4.1.2 Questionnaire (2): Organizational performance

As noted earlier in the research model, organizational performance considered as dependent variable measured by the using an organizational questionnaire developed by Ambrose Kimanthi Muthama (2014).The questionnaire includes 9 items described the organizational outcomes that are influenced by the application of total quality management elements. The questionnaire uses a five-point Likert type:

- 1=Strongly Disagree
- 2=Disagree
- 3=Neutral
- 4=Agree
- 5=Strongly Agree

3.4.1.3 Secondary data collection

Secondary data also important to achieving the research objectives because of the complement and enhance the primary data. Secondary data described by (John Croucher, 2012) as data that has already been collected and published by the person or organization not responsible for its collection, and in using this type of data the researcher has little or no control over the data collection method or the limitations that exist on their use. For the current research, the major sources of secondary data were books, academic journals, documents, research articles, and case studies.

3.5 Reliability of Research Instruments

The research is based on two literature reviews. Chepkech Wilson (2014) was the main source to set the items of the independent variables of total quality management, and Ambrose Kimanthi Muthama (2014) was the principal for setting the independent variable, organizational performance. The literature was reviewed to ascertain the appropriateness of the items for a study to determine the correlation between the elements of total quality management and organizational performance in the workplace. Thus, based on the two kinds of literature, the study sets the following variables: total quality management with three elements of top management, namely employee involvement, customer focus and organizational performance.

The reliability of the questionnaire was determined by testing the questionnaire on 51 individuals outside the study population to be certain that the items are appropriate for analysis. The Cronbach Alpha instrument was used to test research reliability. The purpose of the instrument is to show the correlation between the research variables, which should be >0.70 statistically, in order to be accepted to conduct any analysis for social sciences (Mohsen Tavakol & Reg Dennick, 2011). The coefficients for the Cronbach Alpha of this study are shown below in the table.

Table 1: Cronbach's Alpha (Pilot Sample).

Scale and Subscales	Reliability Statistics		
	Cronbach's Alpha	Cronbach's Alpha based on Standardized Items	Number of Items
Total Quality Management	0.922	0.932	19
Top Management	0.828	0.864	6
Employee Involvement	0.737	0.749	5
Customer Focus	0.885	0.899	8
Organizational Performance	0.885	0.886	9

The above table shows that the two research variables are reliable; total quality management is reliable with 0.828 for top management, 0.737 for employee involvement, and 0.885 for customer focus. As a result, the items of the independent

variable are reliable with 0.922, which is above the 0.70 required as stated in the literature to be valid statistically regarding the reliability of items. From the above table, we may also see that the items of the dependent variable, organizational performance, are also reliable. It is reliable with 0.885, which is sufficiently high to validate the reliability of the dependent variable.

Furthermore, a reliability test was performed by applying the research variables of the total quality management scale and organizational performance scale (main sample). Cronbach's Alpha tool was used for the reliability of the research. Table 2 shows Cronbach's Alpha of total quality management and organizational performance (main sample).

Table 2: Cronbach's Alpha (Main Sample).

Scale and subscales	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	Number of Items
Total Quality Management	0.943	0.945	19
Top Management	0.871	0.875	6
Employee Involvement	0.768	0.770	5
Customer Focus	0.886	0.889	8
Organizational Performance	0.824	0.829	9

Table 2 shows that the two research variables are statistically reliable; total quality management is reliable at 0.871 for top management, 0.768 for employee involvement, and 0.886 for customer focus. Briefly, the items of the independent variable were reliable at 0.943, which is above the 0.70 required as stated in the literature to be statistically valid and reliable. The table also shows that the dependent variable, organizational performance, is reliable with 0.824. Accordingly, the research used Cronbach's Alpha to test the reliability of the research variables statistically.

High quality tests are significant to evaluate the reliability of any data supplied in an examination or research study. For the current research study, the alpha coefficients are 0.943 for the independent variable, and 0.824 for the dependent

variable. These are strong values and significant indicators to highlight the extent to which total quality management elements have concrete impacts on the level of organizational performance in the private higher education sector in Iraq.



CHAPTER FOUR

DATA ANALYZING AND DISCUSSION

This chapter presents the findings of the research by analyzing the data collected from the research population to test the research questions. Therefore the chapter aims to analyze the correlations between the research variables to determine how the independent variable explains the organizational outcomes in the research population by using the following analysis techniques:

- A- Descriptive statistical analysis
- B- Cronbach Alpha coefficients to verify the degree of validity and reliability
- C- Means and standard deviations describe the research variables
- D- Correlations, regression analysis and moderating the testing to determine the nature of the relationship between the two variables and identify the internal consistency of the research variables
- E- Statistical Package for Social Sciences SPSS used for those analyses

4.1 Description of Sample Individuals

This study is concerned with analyzing the demographic characteristics of a number of respondents to obtain general information about the personal traits of the respondents to be used in understanding the results. The demographic factors included in the study are gender, age, qualification, career status, job experience, and quality training.

4.1.1 Gender Groups

Table 3 shows frequencies for gender groups and Figure 2 presents these values in a pie chart.

Table 3: Respondents according age group.

Frequencies for gender groups					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MALE	231	56.6	56.6	56.6
	FEMALE	177	43.4	43.4	100.0
	Total	408	100.0	100.0	

Figure 2: Sample Gender Groups.

The table and the graph illustrate that males number 231 out of 408 and represent 56.6% of the respondents. The females number 177 out of 408, which is equivalent to 43.4% of the respondents. This finding indicates the organization's ability to employ near equal proportions of both genders to implement the organization's activities. This also makes it clear that the policies for women's empowerment are well established in the research population.

4.1.2 Age Groups

The study identified four age groups of respondents. Table 4 shows frequencies for the age groups and Figure 3 presents these frequencies in a bar chart.

Table 4: Frequencies For Age Group.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	26-33	52	12.7	12.7	12.7
	34-41	118	28.9	28.9	41.7
	42-49	119	29.2	29.2	70.8
	50 and above	119	29.2	29.2	100.0
	Total	408	100.0	100.0	

The above table and graph below show that the respondents in the 26-33 age group number 52 out of 408, which is 12.7% of the respondents. The respondents aged 34 to 41 number 118 out of 408, which is 28.9% of the respondents. Those between the ages of 42 and 49 number 119 out of 408, which is 29.2% of the respondents. Finally, those aged 50 and over number 119 out of 408, which is 29.2% of the respondents. As a result, the majority of the research individual samples are above 42 years and older, representing 58.4% of the respondents, while the respondents aged between 26 and 41 years are 41.7% of the respondents.

4.1.3 Qualification Groups

Table 5 shows the frequencies for the qualification level groups and Figure 3 represents these frequencies in a bar chart.

Table 5: Respondents According To Qualification Level Group.

Frequencies for qualification level groups					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bachelor	12	2.9	2.9	2.9
	Master	233	57.1	57.1	60.0
	Ph.D.	163	40.0	40.0	100.0
	Total	408	100.0	100.0	

The above table shows that the holders of a bachelor degree number 12 out of 408, which represents 2.9% of the respondents. The holders of a master degree number 233 out of 408 representing 57.1% of the respondents. Finally, PhD holders number 283 out of 408 and represent 40% of the respondents. As a result, 97% of respondents are postgraduates. This is an indication of the high level of qualifications achieved by the organization, which is expected in an institution of higher education.

4.1.4 Career Status Groups

Table 6 shows the frequencies for career status groups.

Table 6: Respondents According To Career Status Group.

Frequencies for career status groups					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Manager at the University	26	6.4	6.4	6.4
	Faculty member	366	89.7	89.7	96.1
	Manager at the Ministry of Higher Education	16	3.9	3.9	100.0
	Total	408	100.0	100.0	

The table illustrates that there are 26 managers out of 408 at the University of Isra'a, who represent 6.4% of the respondents. Faculty members number 366 out of 408 and represent 89.7% of the respondents. Managers at the Ministry of Education number 16 out of 408 and represent 3.9% of the respondents. As a result, 89.7% of the respondents are faculty members. This means that the organization has an obligation to improve the quality of its outputs by concerning itself with accreditation standards and academic quality.

4.1.5 Job Experience Groups

The study identified seven job experience groups. Table 7 shows the frequencies for job groups and Figure 5 presents these frequencies in a bar chart.

Table 7: Frequencies For Job Experience Groups.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-5	95	23.3	23.3	23.3
	6-10	72	17.6	17.6	40.9
	11-15	73	17.9	17.9	58.8
	16-20	62	15.2	15.2	74.0
	21-25	51	12.5	12.5	86.5
	26-30	24	5.9	5.9	92.4
	30+	31	7.6	7.6	100.0
	Total	408	100.0	100.0	

The above table and graph reveal that those with 1-5 years of employee experience number 95 out of 408, which is 23.3% of the respondents. Those with 6-10 years of experience number 72 out of 408, which 17.6% of the respondents. Those respondents with between 11 and 15 years of experience number 73 out of 408, which is 17.9% of the respondents. Respondents with 16-20 years of experience number 62 out of 408, which is 15.2% of the respondents. Those with 21-25 years of experience number 51 out of 408, which is 12.5% of the respondents. The respondents working between 26 and 30 years number 24 out of 408, which is 5.9% of the respondents. Those with over 30 years of experience number 31 out of 408, representing 7.6% of the respondents.

The total number of individuals with more than 15 years of experience numbers 168 out of 408 and they represent 41.2% of the respondents. This means that an acceptable proportion of the organization's members have accumulated experiences contributing effectively to the application of total quality management practices. It also indicates the fact that the job experience of the organization's members corresponds to their ages and their level of education as well as their career status.

4.1.6 Quality Training Groups

Table 8 shows the frequencies for quality training groups, and Figure 6 presents these frequencies in a pie chart.

Table 8: Frequencies For Quality Training Groups.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	142	34.8	34.8	34.8
	No	266	65.2	65.2	100.0
	Total	408	100.0	100.0	

The above table and graph illustrate the number of respondents that participated in training courses related to total quality management, which is 142 out of 408 and representing 44.2% of all respondents. 65.2% of respondents did not participate in quality training courses. Nowadays, educational organizations are more concerned about improving the capacities of staff and providing them with the new expertise required by the application of total quality management practices to gain the confidence of stakeholders, customers, and members of society. In addition, the distinction among educational organizations is based on the high quality of staff employed by the organization. The University of Isra'a should encourage its staff in this direction.

4.2 Responding to Research Questions

To answer the research questions, a questionnaire was used to collect data about the independent variable, Total Quality Management, and the dependent variable, Organizational performance. Descriptive statistics for the Total Quality Management variable and its sub-variables and questions are listed in Table 9. The general mean and standard deviation for Total Quality Management are 3.75 and 0.474, respectively.

Table 9: Descriptive Statistics For Total Quality Management.

	Items	N	Mean	Std. Deviation
Top Management				
1	Support of Quality policy by top level management	407	3.90	0.744
2	Selection and promotion of staff by top level management	408	3.83	0.672
3	Top level management is committed to quality	408	3.86	0.674
4	Top level management allocates adequate resources to maintain quality of operations	406	3.90	0.608
5	The commitment of top level management is critical for the success of total quality management implementation	407	3.83	0.576
6	Organization processes and operations are standardized	408	3.87	0.587

Table 9 (continued): Descriptive Statistics For Total Quality Management.

Items		N	Mean	Std. Deviation
Sub-General Mean and Standard Deviation of Top Management		404	3.86	.500
Employee Involvement				
7	Employees are given chance to participate in decision making	408	3.60	0.711
8	Employees are provided with enough training and education to adequately perform their tasks	408	3.62	0.722
9	There is clear communication channel between employee and top level managers	408	3.63	0.695
10	Employees opinions are listened by top level managers	408	3.66	0.777
11	Employees are encouraged to work in teams by top level managers	408	3.61	0.801
Sub-General Mean and Standard Deviation of Employee Involvement		408	3.62	.534
Customer Focus				
12	Employees are trained on customer focus	408	3.68	0.740
13	Attention to customer needs is a key to organizational success	408	3.74	0.670
14	The organization always meets customer needs and expectations	408	3.81	0.632
15	Customer complaints are given priority by the organization	408	3.73	0.718
16	The organization performs market research to determine customer needs	408	3.77	0.604
17	Customer have clear channel with the organization	408	3.75	0.602
18	Retaining customers a key factor for the organizations success	408	3.78	0.613
19	Employees derive satisfaction from fulfilling customer expectations	408	3.58	0.686
Sub-General Mean and Standard Deviation of Customer Focus		408	3.73	0.492
General mean and Standard Deviation for "Total Quality Management"		404	3.75	0.474

This table from the data analysis shows significant and strong means and standard deviations of the independent variable of total quality management. The means for the items of top management are 3.90, 3.83, 3.86, 3.90, 3.83, 3.87, respectively, while their standard deviations are 0.744, 0.672, 0.674, 0.608, 0.576, 0.587, correspondingly. It gives 3.60, 3.63, 3.63, 3.66, and 3.61 for the means of employee involvement, and 0.711, 0.722, 0.695, 0.777, and 0.801 for their respective standard deviations. The means of customer focus are 3.68, 3.74, 3.81, 3.73, 3.77, 3.75, 3.78, and 3.58, while their standard deviations are 0.740, 0.670, 0.632, 0.718, 0.604, 0.602, 0.613, and 0.613.

As a result, the general means of total quality management elements in the research population are statistically significant, meaning that the total quality management is well known and realized and illustrated by the staff of the organization. It also indicates that total quality management elements are well established.

As for the case of the independent variable, the research used the means and standard deviations for the dependent variable, organizational performance, in order to assess the importance of its items and its suitability to measure organizational outcomes, as shown in the next table.

Table 10: General Means And Standard Deviations For Organizational Performance.

Descriptive Statistics for Organizational Performance				
Items		N	Mean	Std. Deviation
Organizational Performance				
1	Implementation of quality management has increased organizational profitability.	408	3.57	0.690
2	Quality management practices have enhanced academic excellence which contributed to organizational performance.	408	3.62	0.604
3	Effective implementation of total quality management has increased organizational competitiveness.	408	3.63	0.575
4	Implementation of total quality management resulting in acquisition of larger market share	408	3.66	0.572

Table 10 (Continued): General means and standard deviations for organizational performance.

Descriptive Statistics for Organizational Performance				
Items		N	Mean	Std. Deviation
Organizational Performance				
5	Quality management practices have enhanced service delivery in the organization.	408	3.85	0.531
6	Implementation of total quality management practices has ensured effective waste reduction of operations.	408	3.75	0.549
7	Total quality management practices improve operation efficiency, thus reducing operation costs.	408	3.75	0.533
8	Implementation of total quality management focuses on increased retention as a result of customer satisfaction.	408	3.78	0.560
9	Implementation of total quality management practices has contributed to the increase in the number of students enrolled at the university.	408	3.90	0.467
General mean and Standard Deviation for “Organizational performance”		408	3.72	0.365

The above table illustrates that the means and standard deviations of organizational performance are highly statistically significant in the research population. The general mean in the table is 3.72, while the total average of standard deviation is 0.365. As a result, the general mean of organizational performance of the private education sector is higher and it could be matched with the general mean of total quality management

From the data analysis, we can observe significant correlations between total quality management elements and organizational performance in the private education sector in Iraq.

The findings also suggest a positive and meaningful relationship between the three elements of total quality of management (top management, employee involvement, customer focus) and organizational performance.

4.3 Testing the Relationship Between Total Quality Management and Organizational Performance in the Private Education Sector in Iraq

To test the correlation between the research variables, the research applied correlation techniques to determine how the independent variables of the study are connected to their dependent variable. Therefore, the research proceeded to test the research questions in order to examine any such connections between the research variables and to determine the extent to which total quality management influences organizational performance in the private education sector in Iraq.

The study attempts to test the following research questions:

RQ1: What is the relationship between total quality management practices and organizational performance in private higher education organizations?

This question is divided into a number of sub-questions:

4.3.1 Sub-Question

What is the relationship between top management and organizational performance?

4.3.2 Sub-Question

What is the relationship between employee involvement and organizational performance?

4.3.3 Sub-Question

What is the relationship between customer focus and organizational performance?

RQ2: To what extent do total quality management practices explain organizational performance of private higher educational organizations?

RQ3: Is there a significant and positive correlation between total quality management practices and organizational performance?

RQ4: Is there a significant and positive correlation between total quality management practices (Top Management) and organizational performance?

RQ5: Is there a significant and positive correlation between total quality

management practices (Employee Involvement) and organizational performance?

RQ6: Is there a significant and positive correlation between total quality management practices (Customer Focus) and organizational performance?

RQ7: Is there a significant moderating impact of demographic factors (gender, age, qualification level, job experience, and quality training) on the relationship between total quality management and organizational performance?

Table 11: Presents The Correlations Between The Research Variables.

		Top Management	Employee Involvement	Customer Focus	Total Quality Management
Organizational performance	Pearson Correlation	0.568**	0.552**	0.585**	0.599**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000
	N	404	408	408	404

** Correlation is significant at the 0.01 level (2-tailed).

Table 11 shows that the correlations between the independent variable (Total Quality Management) and the dependent variable (Organizational Performance) is strongly positive (0.599) and it is significant at the 0.01 level. This result supports the third question:

Is there a significant and positive correlation between total quality management practices and organizational performance?

The correlation between the independent variable (Total Quality Management and Top Management) and the dependent variable (Organizational Performance) is strongly positive (0.568) and it is significant at the 0.01 level. This result supports the fourth question: Is there a significant and positive correlation between the elements of Total Quality Management (Top Management) and Organizational Performance.

The correlation between the independent variables (Total Quality Management and Employee Involvement) and the dependent variable (Organizational Performance) is strongly positive (0.552) and it is significant at the 0.01 level. This result supports the fifth question: is there a significant and positive correlation between total quality management elements (Employee Involvement) and organizational performance.

The correlation between the independent variables (Total Quality Management and Customer Focus) and the dependent variable (Organizational Performance) is strongly positive (0.585) and it is significant at the 0.01 level. This result supports the sixth question: Is there a significant and positive correlation between total quality management elements (Customer Focus) and organizational performance.

4.4 Regression Analysis

Regression analysis is used to test Total Quality Management as a predictor of Organizational Performance. Two types of regression analysis are compared. The first regression analysis is a simple linear regression where Total Quality Management is a predictor of Organizational Performance. The second regression is quadratic regression, where Total Quality Management square is used as a predictor of Organizational Performance.

Figure 7 shows a curve estimation plot of both regressions. From the line of best fit, we can conclude that quadratic regression is the better predictor of the relationship between the two variables than linear regression.



Figure 2: Curve Estimation Plot Of Both Regressions.

Table 12 shows a summary of the models where Total Quality Management Square is a better predictor of Organizational Performance than Total Quality Management. The R square of the quadratic model (0.376) is higher than the R square of the leaner model (0.358). This means that the quadratic model explains 37.6% of the variability of the response data around it, while the leaner model only explains 35.8% of the same variability. The conclusion is that the quadratic model is a better predictor of the relationship between the two variables than the leaner model.

Table 12: Summary Of Models.

	R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig.
Model 1: Leaner	0.599	0.358	0.357	0.288	224.366	0.00
Model 2: Quadratic	0.613	0.376	0.373	0.284	120.842	0.00

The independent variable is Total Quality Management.

The coefficients in Table 13 show a significant β value for Total Quality Management Square. This means that one unit change in Total Quality Management Square brings approximately 0.085 units of change in Organizational Performance. When comparing the standardized coefficients of Total Quality Management Square, it can be observed that Total Quality Management Square has a higher beta value (0.715) than the Total Quality Management beta value (-0.104). This result leads again to the same conclusion and it is explained as Total Quality Management practices being applied to Organizational Performance increases in a quadratic mode rather than in a leaner mode. The result answers the second research question: To what extent does TQM explain the Organizational Performance in the research population?

Table 13: Coefficients.

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
Total Quality Management	-0.079	0.160	-0.104	-0.494	0.622
Total Quality Management ** 2	0.085	0.025	0.715	3.387	0.001
(Constant)	2.813	0.257		10.934	0.000

4.5 Testing for Moderation

The relationship between Total Quality Management and Organizational performance was tested further to determine whether demographic variables (gender, age, qualification level, career status, job experience and quality training) moderated this relationship. Multiple regression analysis was used in each case where Total Quality Management Square is used as an indicator of Organizational Performance. The results are documented below.

4.5.1 Gender as a Moderator

Table 14 shows a model summary where gender is tested to determine whether it has a significant moderating impact on the relationship between Total Quality Management and Organizational Performance. The R square change from Model 1 to Model 2 is not significant ($p = 0.166$).

Table 14: Model Summary^c Gender As a Moderator.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.614 ^a	0.378	0.374	0.28907	0.378	121.641	2	401	0.000
2	0.617 ^b	0.381	0.376	0.28873	0.003	1.923	1	400	0.166

a. Predictors: (Constant), Gender Dummy, TQM Square

b. Predictors: (Constant), Gender Dummy, TQM Square, Gender Interaction

c. Dependent Variable: Organizational performance

Table 15 shows the coefficients of the predictors in each model. Reading Model 2, we find that the Gender Interaction term has no significant coefficient ($p = 0.166$); therefore, Model 2 is rejected and we conclude that gender does not have a moderating effect on the relationship between Total Quality Management and Organizational Performance.

Table 15: Coefficients.^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	2.652	0.071		37.528	0.000			
	TQM Square	0.074	0.005	0.611	15.491	0.000	0.613	0.612	0.610
	Gender Dummy	0.032	0.029	0.044	1.114	0.266	0.072	0.056	0.044
2	(Constant)	2.745	0.097		28.240	0.000			
	TQM Square	0.067	0.007	0.557	10.059	0.000	0.613	0.449	0.396
	Gender Dummy	-0.156	0.139	-0.212	-1.124	0.262	0.072	-0.056	-0.044
	Gender Interaction	0.013	0.010	0.270	1.387	0.166	0.202	0.069	0.055

a. Dependent Variable: Organizational performance

4.5.2 Age as a Moderator

Table 16 shows a model summary where age is tested to determine whether it has a significant moderating impact on the relationship between Total Quality Management and Organizational performance. The R Square change from Model 1 to Model 2 is significant, ($p < 0.001$).

Table 16: Model Summary^c Age As a Moderator.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.614 ^a	0.377	0.374	0.28923	0.377	121.265	2	401	0.000
2	0.637 ^b	0.405	0.401	0.28292	0.028	19.108	1	400	0.000

a. Predictors: (Constant), Age Dummy, TQM Square

b. Predictors: (Constant), Age Dummy, TQM Square, Age Interaction

c. Dependent Variable: Organizational performance

Table 17 shows the coefficients of the predictors in each model. Reading Model 2, we find that the Age Interaction term has a significant coefficient ($p < 0.01$); therefore, Model 2 is accepted and we can conclude that age has a moderating effect on the relationship between Total Quality Management and Organizational performance.

Table 17: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	2.638	0.077		34.319	0.000			
	TQM Square	0.074	0.005	0.610	15.449	0.000	0.613	0.611	0.609
	Age Dummy	0.038	0.043	0.035	0.878	0.380	0.077	0.044	0.035
2	(Constant)	3.057	0.122		25.103	0.000			
	TQM Square	0.043	0.008	0.360	5.196	0.000	0.613	0.251	0.200
	Age Dummy	-0.578	0.147	-0.528	-3.928	0.000	0.077	-0.193	-0.151
	Age Interaction	0.044	0.010	0.654	4.371	0.000	0.345	0.214	0.169

a. Dependent Variable: Organizational performance

4.5.3 Qualification Level as a Moderator

Table 18 shows a model summary where Qualification Level is tested to see whether it has a significant moderating impact on the relationship between Total Quality Management and Organizational performance. R square changing from Model 1 to Model 2 is significant at $p = 0.029$.

Table 18: Model Summary^c Qualification Level As a Moderator.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.604 ^a	0.364	0.361	0.29214	0.364	1160.032	2	405	0.000
2	0.610 ^b	0.372	0.367	0.29077	0.007	40.805	1	404	0.029

a. Predictors: (Constant), Qualification Dummy, TQM Square

b. Predictors: (Constant), Qualification Dummy, TQM Square, Qualification Interaction

c. Dependent Variable: Organizational performance

Table 19 shows the coefficients of the predictors in each model. Reading Model 2, we find that the Qualification Level Interaction term has a significant coefficient ($p = 0.029$); therefore, Model 2 is accepted and we can conclude that Qualification Level has a moderating effect on the relationship between Total Quality Management and Organizational performance.

Table 19: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	2.519	0.109		23.014	0.000			
	TQM Square	0.073	0.005	0.599	15.127	0.000	0.598	0.601	0.599
	Qualification Dummy	0.172	0.086	0.079	2.006	0.046	0.071	0.099	0.079
2	(Constant)	1.606	0.430		3.734	0.000			
	TQM Square	0.136	0.029	1.118	4.663	0.000	0.598	0.226	0.184
	Qualification Dummy	1.109	0.436	.513	2.544	0.011	0.071	0.126	0.100
	Qualification Interaction	-0.065	0.029	-0.677	-2.192	0.029	0.493	-0.108	-0.086

a. Dependent Variable: Organizational performance

4.5.4 Career Status as a Moderator

Table 20 shows a model summary where Career Status is tested to determine whether it has a significant moderating impact on the relationship between Total Quality Management and Organizational performance. The R square change from Model 1 to Model 2 is not significant ($p = 0.245$).

Table 20: Model Summary^c: Career Status As a Moderator.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.602 ^a	0.363	0.360	0.29243	0.363	115.389	2	405	0.000
2	0.604 ^b	0.365	0.360	0.29230	0.002	1.354	1	404	0.245

a. Predictors: (Constant), Career Dummy, TQM Square

b. Predictors: (Constant), Career Dummy, TQM Square, Career Interaction

c. Dependent Variable: Organizational performance

Table 21: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	2.695	0.070		38.319	0.000			
	TQM Square	0.073	0.005	0.599	15.096	0.000	0.598	0.600	0.599
	Career Dummy	-0.085	0.048	-0.071	-1.788	0.074	-0.068	-0.089	-0.071
2	(Constant)	2.713	0.072		37.725	0.000			
	TQM Square	0.071	0.005	0.589	14.499	0.000	0.598	0.585	0.575
	Career Dummy	-0.228	0.131	-0.189	-1.733	0.084	-0.068	-0.086	-0.069
	Career Interaction	0.011	0.009	0.128	1.163	0.245	0.002	0.058	0.046

a. Dependent Variable: Organizational performance

Table 21 shows the coefficients of the predictors in each model. Reading Model 2, we find that the Career Status Interaction term has no significant coefficient

($p = 0.245$); therefore, Model 2 is rejected and we conclude that Career Status does not have a moderating effect on the relationship between Total Quality Management and Organizational performance.

4.5.5 Job Experience as a Moderator

Table 22 shows a model summary where Job Experience is tested to determine whether it has a significant moderating impact on the relationship between Total Quality Management and Organizational performance. The R square change from Model 1 to Model 2 is significant ($p < 0.001$).

Table 22: Model Summary^c Job Experience As a Moderator.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.598 ^a	0.358	0.355	0.29358	0.358	112.898	2	405	0.000
2	0.617 ^b	0.381	0.377	0.28858	0.023	15.169	1	404	0.000

a. Predictors: (Constant), Job Experience Dummy, TQM Square

b. Predictors: (Constant), Job Experience Dummy, TQM Square, Job Experience Interaction

c. Dependent Variable: Organizational performance

Table 23 shows the coefficients of the predictors in each model. Reading Model 2, we find that the Job Experience Interaction term has a significant coefficient ($p < 0.01$); therefore, Model 2 is accepted and we conclude that Job Experience has a moderating effect on the relationship between Total Quality Management and Organizational performance.

Table 23: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	2.687	0.071		38.052	0.000			
	TQM Square	0.073	0.005	0.598	14.937	0.000	0.598	0.596	0.595
	Job Experience Dummy	-0.001	0.030	-0.001	-0.017	0.987	0.065	-0.001	-0.001
2	(Constant)	2.793	0.075		37.473	0.000			
	TQM Square	0.065	0.005	0.536	12.616	0.000	0.598	0.532	0.494
	Job Experience Dummy	-0.631	0.164	-0.851	-3.836	0.000	0.065	-0.187	-0.150
	Job Experience Interaction	0.044	0.011	0.872	3.895	0.000	0.133	0.190	0.152

a. Dependent Variable: Organizational performance

4.5.6 Quality Training as a Moderator

Table 24 shows a model summary where Quality Training is tested to determine whether it has a significant moderating impact on the relationship between Total Quality Management and Organizational performance. The R square change from Model 1 to Model 2 is significant ($p < 0.05$).

Table 24: Model Summary^c Quality Training As a Moderator.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.599 ^a	0.359	0.356	0.29336	0.359	113.389	2	405	0.000
2	0.606 ^b	0.367	0.362	0.29194	0.008	4.948	1	404	0.027

a. Predictors: (Constant), Quality Training Dummy, TQM Square

b. Predictors: (Constant), Quality Training Dummy, TQM Square, Quality Training Interaction

c. Dependent Variable: Organizational performance

Table 25 shows the coefficients of the predictors in each model. Reading Model 2, we find that the Quality Training Interaction term has a significant coefficient ($p < 0.05$); therefore, Model 2 is accepted and we conclude that Quality Training has a moderating effect on the relationship between Total Quality Management and Organizational performance.

Table 25: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	2.680	0.071		37.727	0.000			
	TQM Square	0.073	0.005	0.598	15.021	0.000	0.598	0.598	0.598
	Quality Training Dummy	0.024	0.030	0.032	0.794	0.428	0.043	0.039	0.032
2	(Constant)	2.768	0.081		34.205	0.000			
	TQM Square	0.066	0.006	0.547	11.972	0.000	0.598	0.512	0.474
	Quality Training Dummy	-0.330	0.162	-0.430	-2.036	0.042	0.043	-0.101	-0.081
	Quality Training Interaction	0.025	0.011	0.474	2.224	0.027	0.122	0.110	0.088

a. Dependent Variable: Organizational performance

From the results of testing for moderation, it was found that while gender and career status had no moderating effect on the relationship between Total Quality Management and Organizational Performance, age, qualification level, job experience and quality training had moderated this relationship. Therefore, the results lend partial support to question7; is there a significant moderating impact of demographic factors (gender, age, qualification level, career status, job experience and quality training) on the relationship between total quality management practices and organizational performance in Iraqi private higher educational organizations.

4.6 Discussion of the Study Results

The main purpose of this research was to examine the relationship between total quality management elements and organizational performance in private higher educational organizations in the Iraqi context. The research questions answered were:

RQ1: What is the relationship between total quality management practices and organizational performance in private higher educational organizations in Iraq?

This question is divided into a number of sub-questions:

Sub-question (1-1):

What is the relationship between top management and organizational performance?

Sub-question (1-2):

What is the relationship between employee involvement and organizational performance?

Sub-question (1-3):

What is the relationship between customer focus and organizational performance?

RQ 2: To what extent do total quality management practices explain the organizational performance at private higher educational organizations in Iraq?

RQ3: Is there a significant and positive correlation between total quality management practices and organizational performance?

RQ4: Is there a significant and positive correlation between total quality management practices (Top Management) and organizational performance?

RQ5: Is there a significant and positive correlation between total quality management practices (Employee Involvement) and organizational performance?

RQ6: Is there a significant and positive correlation between total quality management practices (Customer Focus) and organizational performance?

RQ7: Is there a significant moderating impact of demographic factors (Gender, Age, Qualification level, Job Experience, and Quality Training) on the relationship between total quality management and organizational performance?

The main results of this research suggest significant and positive relationships between total quality management and organizational performance. Discussion of research results are presented below.

4.6.1 Descriptive Statistics Analysis

Descriptive statistics analysis indicates that the research sample was relatively balanced in terms of the inclusion for both genders. Males numbered 231 out of 408 and represented 56% of the respondents. Females numbered 177 out of 408, and represented 43.4% of the respondents. This means that the empowerment policy in the surveyed organization has been well established to delegate the powers of both genders to fulfill work requirements. The demographic profile of the respondents shows that the majority of the respondents is over 42 years old, and represents 58.4% of the respondents, while those between 26 and 41 were 41.7% of the respondents. This means that the surveyed organization has employees who are age-appropriate with the jobs they occupy and their experience may help to respond to the changes required by the application of total quality management. Descriptive analysis reveals that the majority of the respondents has a master degree and is 57.1% of the respondents, while Ph.D. holders were 40% of the respondents. This is an indication of the high level of qualification achieved by the surveyed organization, which is expected in an institution of higher education. It may be concluded that the organization has committed to the quality of the human element to win customer confidence and achieve competitive advantages through the quality of staff that run educational programs.

Descriptive statistics analysis for demographic variables indicates that the high average of the sample is faculty members, who represent 89.7% of the respondents. This means that the surveyed organization has an obligation to improve its outputs by concerning itself with accreditation standards and academic quality. The descriptive statistics analysis for job experience groups shows that individuals with more than 15 years of experience represent 40% of the respondents. This means that a large proportion of the staff has accumulated experiences enabling them to understand the areas of total quality management and to employ the effectiveness of its elements in improving performance quality. It also indicates the fact that the job experience of the organization members corresponds to their ages and the levels of education as well as their career status.

On the other hand, the descriptive statistics analysis for quality training groups shows that 65.2% of the respondents have not participated in quality training courses. This indicates the absence of systematic training programs in the surveyed

organization that are supposed to ensure the involvement of all employees. Staff training is considered to be one of the basic principles of the successful application of total quality management. Nowadays, educational organizations are more concerned with improving the capabilities of their staff and providing them with the new expertise required by the application of total quality management to gain the confidence of the customer. In addition, the distinction between educational organizations is based on the high quality of staff employed by an organization. The surveyed organization of this study should encourage its staff in this direction.

4.6.2 Discussion of the Research Questions

RQ1: What is the relationship between total quality management practices and organizational performance in the private education sector in Iraq?

Data analysis shows significant and positive correlations between total quality management and organizational performance in the surveyed organization. The general means and standard deviations for total quality management are 3.73 and 9.474, respectively, and they are significant at the 0.01 level. The findings support the conclusion that total quality management is well known and illustrated by the faculty members of the University.

The first main question is divided into three sub-questions that were answered by the results.

Sub-question (1-1):

What is the relationship between top management and organizational performance?

Data analysis shows strong means and standard deviations for the items of top management. The general means and standard deviations of top management are 3.86 and 0.500, respectively. The data analysis reveals that there is a significant correlation between the elements of top management and organizational performance in the surveyed organization. The high agreement by the respondents with the six items identified for the element of top management indicates that the respondents support the fact that the top management was committed to quality improvement by explaining the quality policy and goals to the organization's members. Their views

also supported the fact that top management allocates sufficient resources to improve the quality of operations in the surveyed organization.

Sub-question (1-2):

What is the relationship between employee involvement and organizational performance?

Data analysis shows significant and strong positive means and standard deviations for the element of employee involvement. It gives 3.62 and 0.534, respectively. The results indicate meaningful and significant correlations between employee involvement and organizational performance. The majority of respondents in the surveyed organization agreed that employees were authorized with enough powers and given opportunities to participate in decision-making. Moreover, they agreed that employees had been provided with enough training education to performance tasks.

Sub-question (1-3):

What is the relationship between the customer focus and organizational performance?

Data analysis shows significant and positive means and standard deviations for the element of customer focus. It gives for each of its eight items values of 3.73 and 0.492 for their means and standard deviations, respectively. In general, the means and standard deviations of customer focus are quite high in the surveyed organization such that it means that there are meaningful and significant correlations between customer focus and organizational performance. The results reveal that the majority of respondents in the research population agreed that employees are trained on customer focus. They also agreed that the organization always meets customer needs and expectations. Their views agreed that the organization conducted market research to determine customer needs, and retaining satisfied customers is considered to be a key factor for the organization's success.

RQ 2: To what extent do total quality management practices explain the organizational performance in the private education sector in Iraq?

Organizational performance is measured by identifying nine items to determine the customer satisfaction with performance quality. The results reveal the means and

standard deviations for items of organizational performance as being highly statistically significant in the surveyed organization. The general mean is 3.72, while the total average of the standard deviation is 0.365. As a result, the general mean of organizational performance in the private education sector is higher and could be matched with the general mean of total quality management. Data analysis reveals that the majority of respondents in the surveyed organization agreed that the implementation of total quality management has affected organizational performance and resulted in the acquisition of larger market shares. Their views also agreed that total quality management enhanced service quality and improved operational efficiency as well as reducing operation costs. Furthermore, the respondents in the surveyed organization also agreed that the implementation of total quality management practices increased the retention of customers which contributed to achieving their satisfaction.

RQ3: Is there a significant and positive correlation between total quality management practices and organizational performance?

The third question was answered and supported by the results. Correlation analysis has revealed that the relationship between total quality management and organizational performance is strong and positive with a value of 0.599, which is significant at the 0.01 level. This correlation result reflects the high level of connection between the two research variables, namely total quality management and organizational performance.

RQ4: Is there a significant and positive correlation between total quality management practices (Top Management) and organizational performance?

The fourth question was tested and supported by the results. The coefficient and analysis revealed that the correlation between the elements of top management and organizational performance is strongly positive with a value of 0.568, which is significant at the 0.01 level.

RQ5: Is there a significant and positive correlation between total quality management practices (Employee Involvement) and organizational performance?

The fifth question was tested and supported by the results. The coefficient and data analysis indicated the correlation between employee involvement and

organizational performance is strongly positive with a value of 0.552, which is significant at the 0.01 level.

RQ6: Is there a significant and positive correlation between total quality management practices (Customer Focus) and organizational performance?

The sixth question was tested and supported by the results. Data analysis has revealed a high number of statistically significant and positive correlations between customer focus and organizational performance. Correlation analysis showed that the value of the correlation is 0.585, which is significant at the 0.01 level. The result of this correlation between the total quality management and organizational performance is inspired by using the elements of top management, employee involvement, and customer focus. The general coefficient of total quality management elements is positive and strong. This could indicate that there is a successful application of these practices with the surveyed organization. From data analysis, we can state that the research questions can be tested and validated.

RQ7: Is there a significant moderating impact of demographic factors (gender, age, qualification level, job experience, and quality training) on the relationship between total quality management and organizational performance?

The relationship between Total Quality Management and Organizational performance was tested further to determine whether demographic variables (gender, age, qualification level, career status, job experience and quality training) moderated this relationship. Multiple regression analysis was used in each case where Total Quality Management Square is used as an indicator of Organizational Performance. Moderating testing revealed that gender and career status had no moderating effect on the relationship between Total Quality Management and Organizational Performance. However, age, qualification level, job experience and quality training had moderated this relationship. Therefore, the results support the seventh question: is there a significant moderating impact of demographic factors (gender, age, qualification level, career status, job experience and quality training) on the relationship between total quality management practices and organizational performance in Iraqi Private higher educational organizations?

Regression analysis was also used to test Total Quality Management as a predictor of Organizational Performance. Two types of regression analysis were

compared, the first being a simple linear regression where Total Quality Management is a predictor of Organizational Performance, and the second being quadratic regression where the Total Quality Management square is used as a predictor of Organizational Performance. Regression analysis demonstrates that total quality management square is a better predictor of Organizational Performance than Total Quality Management. The R square of the Quadratic model (0.376) is higher than the R square of the linear model (0.358). This means that the quadratic model explains 37.6% of the variability of the response data around it, while the linear model only explains 35.8% of the same variability. The conclusion is that the quadratic model is a better predictor of the relationship between the two variables than the linear model.

Coefficients reveal a significant β value for total quality management square. This means that one unit change in total quality management square brings approximately 0.085 units of change in organizational performance. Comparing the standardized coefficients, the total quality management square has a higher β value (0.715) than the total quality management β value (-0.104). This result leads again to the same conclusion and it is explained that total quality management practices applied to organizational performance increase in a quadratic mode rather than in a linear mode.

CHAPTER FIVE

CONCLUSIONS AND PROPOSALS

5.1 Conclusions

The main purpose of this research was to examine the relationship between total quality management and organizational performance at the University of Isra'a in the Iraqi context. Findings from this research may be useful for managers and faculty members of the University by highlighting the importance of total quality management practices and their critical impact on improving quality as the best method to enhance employees' participation in organizational activities and to improve organizational performance. Total quality management has received considerable attention in higher educational organizations due to the successes achieved by the application of total quality elements in improving output quality as well as better meeting customer needs.

The results of numerous studies in the literature agreed that total quality management as an administrative philosophy is the best approach to enhance organizational performance. These results are reinforced further by the literature (Mohammed Haker & Olgun Çiçek, 2014; Abdullah. Al-Nasser, Rushami. Z. Yusoff & Rabiul Islam, 2013), which demonstrated total quality management as having significant and positive impacts on organizational performance. The findings from the literature review indicated that all total quality management elements were significantly correlated with organizational performance (Chepkech Wilson, 2014).

Results from the current research indicate that total quality management was well known and illustrated by the respondents in the surveyed organization. Findings suggested that the private University of Isra'a is staffed by high-quality people, especially the faculty members and managers at the Ministry of High Education and

Scientific Research. The large numbers of University members have accumulated experience to use total quality management elements to improve the quality of service. Results also indicate that the job experience of the respondents corresponds to their level of education as well as their career status. Results also from this research revealed a high number of statistically significant correlations between the total quality management and organizational performance in the surveyed organization. Regression and correlation analysis demonstrated that the three elements of total quality management (top management, employee involvement, customer focus) significantly correlated with organizational performance. On the other hand, coefficients and data analysis revealed that the general means and standard deviations of organizational performance in the surveyed organization were higher and could be matched with the general mean of total quality management. The finding also suggested that the majority of the respondents agreed that the organizational performance has been influenced by the application of total quality management practices. Finally, the research questions were tested and supported by results of the study.

5.2 Proposals for Practical Implications

The practical recommendations presented by this research will be based on the results found after analyzing the data collected from the surveyed organization.

5.2.1 Top Management

The current research examined the correlation between the elements of top management and organizational performance in the surveyed organization. The findings suggest that the element of top management significantly correlates with organizational performance. This finding aligns with that of Chepkech Wilson (2014), who explained that top management plays a critical role in improving organizational performance. He added that the top management is responsible for setting the quality goals and determining their policy directs the mechanism of implementation to performance improvement. Other researchers have suggested in their studies on the impact of top management on organizational performance that top management has a direct impact on improving employee performance and

enhancing organizational outcomes. In their study on the impact of total quality management on organizational performance, Sila and Ebrahimpour (2002) noted that top management plays a crucial role in mobilizing the capabilities of individuals and has a direct effect on organizational performance. The same result was found by Muthama Kimanthi Ambrose (2014) in his study on the impact of total quality management on organizational performance in Kenya, indicating that top management plays an important role in empowering employees and creating suitable conditions in the workplace thereby encouraging them to make additional efforts towards the attainment of goals resulting in the improvement of organizational performance. Rachel Y. Awoku (2012) pointed out that total quality management practices correlate positively with organizational performance, stressing that leadership was the most element of total quality management, which correlates significantly with organizational performance. Results from this research highlighted the element of top management as having a significant and positive impact on improving the quality and enhancing organizational performance. The respondents' views agreed that the top management was committed to improving performance by setting quality goals and policies and allocating resources to improving service delivery methods. They also agreed that the top management emphasized continuous improvement of quality. As a result, the top management in the surveyed organization must demonstrate its commitment to improving organizational performance by taking into account the following factors:

- 1- Promoting quality culture and encouraging staff to improve service quality provided to the customer continually
- 2- Formulating a clear vision for the organization that reflects the common values of both individuals and the organization
- 3- Setting quality goals and defining effective policies that respond to all changes required by the application of total quality management
- 4- Constructing a creative environment that provides convenience for employees and supports efforts to improve performance
- 5- Adopting scientific research methods in measuring organizational performance

5.2.2 Employee Involvement

The results of this research indicate that employee involvement is correlated significantly with the organizational performance in the surveyed organization. This result is supported by findings from the literature. E. Sofijanovska and V. Zabijakin Chatleska (2013) conducted a study on employee empowerment and organizational performance in the Republic of Macedonia. The results of their study highlighted that employee involvement, participation in decision-making, and empowerment correlated significantly with organizational performance. Ali Bakhit Jaafreh and Abedalfattah Z. Al-Abedallat (2013), in their study on the effect of quality management on organizational performance in Jordan, found that the participation of employees in an organization's activities has a positive impact on organizational performance. The results from the study conducted by Beatrice A. Dimba (2010) suggest that employee involvement and training has a significant impact on performance. Findings from this research showed a meaningful and significant correlation between employee involvement and organizational performance in the research population. The data analysis indicated that the respondent in the surveyed organization agreed that the staff of the University had authorized sufficient powers and had provided opportunities to participate in decision-making. They also agreed that the staff were encouraged by the top management to work in teams, and the top management had channels of communications with employees to listen to their views and observations. Therefore, the surveyed organization should enhance organizational performance by considering the following:

- 1- Providing employees with the opportunity to participate in decision-making
- 2- Empowering employees with adequate power to accomplish tasks
- 3- Developing and educating staff through participation in quality training courses.
- 4- Paying attention to the employees' opinions and suggestions that contribute to improving performance
- 5- Encouraging teamwork to perform tasks

5.2.3 Customer Focus

Results from the current research revealed the high statistically significant correlation between customer focus and organizational performance in the surveyed organization. The same results are supported by Mohommed Hakar and Çiçek Olgün (2014) in their study on the examination of the relationship between total quality management and performance at Grine American University in North Cyprus. They found that the customer focus was one of the most influential total quality management elements predicting the organizational performance of the University. The same results was also found by Giang, Nguyen & Duong, Ninh (2017), who examined the impact of total quality practices on organizational performance. They suggested the element of customer focus has the highest impact on organizational performance. Similarly, Shehzad Akhtar, Hashim Zameer & Rashid Saeed (2014) noted that customer focus has a significant impact on organizational performance.

Results from this research revealed that there is a strong correlation between customer focus and organizational performance in the surveyed organization. Data analysis indicated that the respondents' views in the research population agreed with the fact that their organization recognizing the importance of focusing on the customer needs was the best way to improve the performance of the organization. They also agreed that their organization considers customer satisfaction to be a key factor in achieving the success of the organization. Consequently, the surveyed organization should organize performance by focusing on the following aspects:

- 1- Training the staff on customer focus
- 2- Conducting market research to determine customer needs
- 3- Creating effective communication channels with customers, identifying their complaints, observations, and using this information as feedback to modify policies and develop educational programs
- 4- Setting plans and educational programs according to customer need
- 5- Believing that the customers represent the ultimate goal of an organization

The current research was limited to examining the effect of three elements of total quality management, top management, employee involvement, and customer focus on organizational performance in the private higher education organization in the Iraqi context. Therefore, given the importance of total quality management elements in the context of higher educational organizations, the research recommends that future studies should examine more elements of total quality management to enhance its importance in improving performance. Conducting an extensive study to examine the effect of total quality management on organizational performance in the context of the public and private higher educational organizations is also highly warranted.



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APPENDIXES

1. Appendix A: Research Questionnaire.....	81
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Appendix A: Research Questionnaire

Dear Respondent

My name is Adel A DULIMY.I am currently studding for Master Degree in Business Administration at the UNIVERSITY OF TURKISH AERONAUTICAL ASSOCIATION –INSTITUE OF SCIENCE AND TECHNOLOGY – Department of Business Administration. My Research Topic is "Effect of Total Quality Management (TQM) on organizational Performance in Iraqi private Educational Organizations"

I humbly appeal to you for your co-operation in this research study. I would appreciate it very much if you would kindly complete the attached questionnaire. Please note that your answers are very important to test the effect of TQM on organizational performance.

Confidentially of the information will be respect.

Thank you for your co-operation

Your s Sincerely

Section ONE: Demographic Information

- 1- Gender: male female
- 2- Age 18-20 21-25 26-33 34-41 42-49
 50 and above
- 3-Qualification: High School Bachelor
 Master Ph.D.
- 4- Career Status: Manager at the University faculty member
 Manager in Ministry of Higher Education
 Other (please explain)
- 5- Job Experience: 1-5 6-10 11-15
 16-20 21-25 26-30 30+
- 6- Do you have courses on quality training?
 yes no

Section Two: Total Quality Management (TQM) Questionnaire (Source: CHEPKECH WILSON, 2014)

For each of the following statements, please indicate your level of agreement by ticking the box that is most appropriate. Where: 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree.

Table A.1: Top management

Top Management	1	2	3	4	5
Support of Quality policy by top level management.					
Selection, promotion of staff by top level management.					
Top level management is committed to quality.					
Top level management allocates adequate resources to maintain quality of operations.					
The commitment of top level management is critical for success of total quality management implementation.					
Organization processes and operations are standardized.					
Employee Involvement	1	2	3	4	5
Employees are given chance to participate in decision making.					
Employees are provided with enough training and education to adequately perform their tasks.					
There is a clear communication channel between employee and senior managers.					
Employees' opinions are listened by top level managers.					
Employees are encouraged to work in teams by senior managers.					
Customer Focus	1	2	3	4	5
Employees are trained on customer focus.					
Attention to customer needs is a key to organizational success.					
The organization always meets customer needs and expectations.					
Customer complaints are given priority by the organization.					
The organization performs market research to find out customer needs.					
Customer have clear channel with the organization.					
Retaining customers a key factor for the organizations success.					
Employees derive satisfaction from fulfilling customer expectations.					

Section Three: Organizational Performance Questionnaire (Source: MUTHAMA AMBROSE, 2016)

For each of the following statements, please indicate your level of agreement by ticking the box that is most appropriate. Where: 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree.

Table A.2: Organizational performance.

Organizational Performance	1	2	3	4	5
Implementation of quality management has increased organizational profitability.					
Quality management practices have enhanced academic excellence which contributed to organizational performance.					
Effective implementation of total quality management has increased organization competitiveness.					
Implementation of total quality management resulted in acquisition of bigger market share.					
Quality management practices have enhanced service delivery in the organization.					
Implementation of total quality management practices has ensured effective waste reduction of operations.					
Total quality management practices improve operation efficiency thus reducing operation costs.					
Implementation of total quality management focuses on increased retention as a result of customer satisfaction.					
Implementation of total quality management practices contributed to the increase the number of students enrolled at the university.					

PERSONAL INFORMATION

Name Surname : Adel Aldulimy
Nationality : Iraq
Birth place and date : Iraq, 18.1.1982
Marital Status : Married
E-mail : adel111_adel111@yahoo.com

EDUCATION

High School : AL-Qudes secondary school
University : BAGHDAD
MASTERS : University of Turkish Aeronautical Association

FOREIGN LANGUAGE

Arabic
English