### Saudi Journal of Business and Management Studies

Abbreviated Key Title: Saudi J Bus Manag Stud ISSN 2415-6663 (Print) | ISSN 2415-6671 (Online) Scholars Middle East Publishers, Dubai, United Arab Emirates Journal homepage: https://saudijournals.com

Original Research Article

# **Exploring the Impact of Total Quality Management (TQM) Practices on Employee Satisfaction in the Saudi Health Sector**

Naimah Alsalamah<sup>1</sup>

<sup>1</sup>Alfaisal University, Saudi Arabia

**DOI:** 10.36348/sjbms.2023.v08i06.005 | **Received:** 29.04.2023 | **Accepted:** 03.06.2023 | **Published:** 19.06.2023

\*Corresponding author: Naimah Alsalamah

Alfaisal University, Saudi Arabia

#### **Abstract**

The purpose of the study was to evaluate the impact of Total Quality Management (TQM) practices on employees' satisfaction in the Saudi Arabian health sector. It aimed to contribute to economic development from a microeconomic perspective. The research used primary cross-sectional data from various companies in the Saudi health sector to address major research hypotheses. A semi-structured questionnaire was used to capture the information. A five-point Likert-type scale was used. Data analysis was done using SPSS version 21. Scale validity was determined, and the scale of reliability was estimated by the Cronbach alpha scale. Regression and correlation analysis were used. The findings showed customer focus, continuous improvement, process management, employee involvement, leadership, good vision, communication, and integrated systems are positively and significantly linked with employee satisfaction. In conclusion, the health sector in Saudi Arabia has a high level of various TQM practices, a high level of customer focus, a high level of continuous improvement, a high level of process management, a high level of employee involvement, leadership, a good vision, a high level of communication, and a high level of integrated systems. The study also concludes that the higher the level of TQM practices, the more the employees' satisfaction level has increased by 0.204%, and the higher the level of customer focus, continuous improvement, process management, employee involvement, leadership with a good vision, communication, and integrated systems. It was recommended that leaders and managers in the health sector utilize more interactive technologies to promote improved employee engagement with the institutions.

Keyword: Impact, Exploring, Total Quality Management, Practices, Employee Satisfaction, Health Sector.

Copyright © 2023 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

### 1. INTRODUCTION

TQM is one of the quality-focused strategies which numerous companies promote. Due to its expanding popularity and widespread adoption in the commercial sector, TQM drew the academics attention. TQM, among the good linked as well as strong managerial philosophies, in particular in the last 20 years [Berman & Hijal-Moghrabi, (2022). The lack of a standardized definition makes it difficult to define TQM Generally recognized definitions of TQM are based on the opinions and recommendations of "quality experts" Abbas (2020) cites as an example of an approach to management for enhancing company efficiency covering a number of technological as well as behavior subjects. Additionally, TQM description provided by Oakland et al., (2020) who states; a comprehensive approach to managerial aiming at continuous

improvement of all company operations. Bien a multifaceted concept, TQM includes many operations, more like other meanings do (Baldwin, 2022). Distinct operations were undertaken in various investigators in examining the impacts of TQM as far as budgetary 1 and non-budgetary performances. Abbas (2020) explains that improvement department's role leadership, education, relationship with staff members, excellence data and disclosure, customer focus, seller quality oversight, information technology and analysis, process management, product and service design, strategic planning, as well as staff management. The research, however, is focusing the dimensions of eight TQM, that is: customer focus, continuous improvement, employee management, involvement, leadership & good vision, communication, integrated systems, employee satisfaction.

The employees performances are impacted by TQM and all of its components. The research also indicated that job happiness was more strongly correlated with continued progress than with customer satisfaction. The theory behind Total Quality Management (TQM), a management framework, is that an company achieving success in long-term success through including all its participants, from employees of entry-levels to the executives of highest-ranking, concentrating on quality enhancement and, due to, achieving satisfaction of customer. Employee happiness and satisfaction will be reflected in their increased productivity, improved morale, healthier relationships, commitment to the organization, innovative thinking, and improved change management.

Promoting staff engagement helps the quality system's human components adapt to a changing environment. The two key elements of quality are process management and customer focus. For all employees, quality matters. The concept of quality in TQM should satisfy the needs of the workforce. Management of process is one of TQM's key components. It raises the level of product quality during the manufacturing process. Empirical research demonstrates that process management has a direct, beneficial impact on product quality. Additionally, management leadership fosters quality performance by allowing people to participate in quality culture. Another TQM activity that has a notably positive link with performance quality is the fact-based method of making decision. Numerous academics have discovered that knowledge and good data analysis are considerably, positively linked to quality performance.

This study proposed to use an empirical approach to evaluate the impact of TQM practices on of employee satisfaction. While there is abundant literature on the effect of TQM practices on job satisfaction globally, studies have yet to evaluate the impact of TQM on employee satisfaction of the health sector in Saudi Arabia. According to the literature, employee satisfaction focuses on an individual's career work-

related attitudes and job involvement. Employees said to be satisfied with jobs known of being innovative in resolving problems, fostering a heightened recognition of the need for teamwork, and contributing to the company or firm's overall growth and achievement. Therefore, this study sought to determine the impact of a variety of those TQM practices on employee's satisfaction in health care sectors in Saudi Arabia.

This study aimed to contribute to economic development from a microeconomic perspective. This was achieved by identifying proper management practices that promote employee satisfaction, which can translate to growth and betterment of the health sector, which is vital for the development and growth in Saudi Arabia. The research used primary cross-sectional data from various companies in the Saudi health sector to address the following major research hypotheses, which was further split into sub-hypotheses based on the TQM practices:

H0: TQM practice has no effect on job satisfaction

**H1:** TQM practices have a positive effect on employees' satisfaction.

**H1a:** Good leadership has a positive effect on employees' satisfaction.

*H1b:* Involvement of employees in decision-making has a positive effect on employee's satisfaction.

H1c: Process approach to management has a positive effect on employee's satisfaction.

**H1d:** Training have a positive effect on employee's satisfaction.

H1e: Customer focused management practices have a positive effect on employee's satisfaction

H1f: "Empowerment and teamwork" has a positive effect on employee's satisfaction.

A theoretical TQM model that can be used to study employee satisfaction in the Saudi health sector was built in order to investigate how TQM principles impact employee satisfaction within an organization. Figure (1) below illustrates the study model with the dependent variable of employee satisfaction as well as the independent variables of TQM principles.

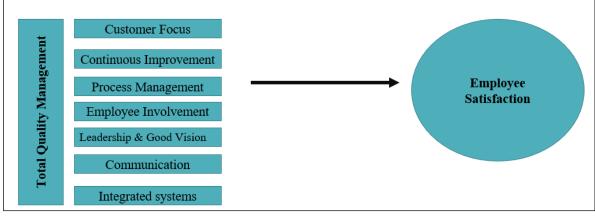


Figure 1: Conceptual Model

#### 3. METHODOLOGY

This study used data collected from the health sector in Saudi Arabia through a semi-structured questionnaire to capture information on various TQM practices and perceived job satisfaction from employees. A five-point Likert-type scale used was to evaluate employee's work-related attitudes. The items measured on a scale of five-point Likert-type ranged starting "very high" (5) to "very low" (1). Before data collection, the researcher also sought permission from the management of the chosen health sector institutions to distribute the questionnaires to employees of various levels and functions within their institutions.

Two independent expert individuals first assessed the face validity of the survey questionnaire. Construct and statistical validity were then assessed using Cronbach's alpha. Descriptive statistical analyses were done for research respondents on the information. Variables that continuous were put summary using the median, standard deviation (SD), and mean, as well as various proportions were employed for variables categories. Employee satisfaction levels were evaluated, overall, and compared by various TQM practices, by use of chi-square test. A model of linear regression was used to evaluate effect of TQM practices on employee satisfaction. Adjustments were made for age, gender, educational background, profession, years of practice, and company type. Statistical significance considered is

at P<.05. All analysis of statistics performed used IBM SPSS 21.0 (Armonk, NY: IBM Corp).

### 4. RESULTS

In order to meet the study's goals, the framework of the study was put to use by analyzing the survey responses, performing factor analyses, determining the tool's reliability, and validity, as well as determining the characteristics of the study sample.

The acquired information was evaluated by use of the SPSS version 21. The scales' validity was then evaluated using of factor analysis, and reliability of scales was estimated by use of the Cronbach alpha scale. Regression analysis and correlation analysis were both used to examine the study's hypotheses. All variables are greater than 0.05, as shown in the table, and all items were included in the component analysis. Finding the dependent and independent variables of the factor structure was done independently using factor analysis with the principal components by varimax rotation. For the independent variable since some items had a correlation coefficient of less than 0.50 or had collinearity with multiple factors and some factors had a single item. Variables in Table (1) had degrees of saturation (DS), as demonstrated in Table (1) below. Results demonstrate that our sample is appropriate for the hypothesis analyses.

#### 4.1 Factor Analyses

Table 1: Saturate the expressions of the study variables

Variable	Phrases	degree of saturation
Customer Focus	I recommend my organisation's customer focus policy to other organisations.	0.531
	I am satisfied with the way my organisation solves our customer needs.	0.588
	Our customers are happy with the way their needs are attended to.	0.613
Continuous	My organisation is inclined to continuous improvement.	0.633
Improvement	There are processes, systems and structures in my organisation that help it continuously improve.	0.777
	How often does your organisation conduct staff training and take measures to improve its services?	0.682
Process Management	Presence of processes, systems and structures in your organization that facilitate better service delivery	0.553
	How satisfied are you with the processes, systems in your organisation that facilitate better service delivery	0.665
	How often does your organisation conduct staff training and take measures to improve its services?	0.543
	prompt attendance of inquiries and cases in your organisation	0.691
Employee Involvement	Employees involvement in decision making process of your organisation	0.795
	Employees satisfaction with their level of involvement in decision making	0.753
	Employees feel free to speak to management about issues in the organisation	0.788

Leadership & Good Vision   Communication   Communication needed by employees to take action   Visionary of your organisation leadership   O.076   O.078   O.079   O.				
Visionary of your organisation leadership   0.704				0.735
Employees' encouragement to be leaders	Good Vision			
Communication   Communication plays a role in efficient service delivery by your organisation   Organisation are explored to get honest feedback to better its services   Communication fastness acted upon to impact better service delivery   Organisation   Orga				
delivery by your organisation   Organisation's communication channels in your organisation are explored to get honest feedback to better its services   Organisation are explored to get honest feedback to better its services   Organisation   Org				
Organisation's communication channels in your organisation are explored to get honest feedback to better its services   Communication fastness acted upon to impact better service delivery   O.742	Communication			0.504
organisation are explored to get honest feedback to better its services				
better its services Communication fastness acted upon to impact better service delivery  Systems  Recommendation to structures and systems in my organization  Recommendation to structures and systems in my organization be adopted by other organisations Customers satisfaction with the seamlessness of your structures and systems in service delivery.  Employee satisfaction  Recommendation of this organisation Our optimism about the future of this organisation Recommendation of this organisation to prospects looking for an employment Encouraging friends and others to seek the services of my organisation  Being happy to be an employee in this organisation Being happ				0.600
Integrated Systems   Integra			to get honest feedback to	
Integrated Systems   Service delivery   Smoothness of structures and systems in my organization   Recommendation to structures and systems in my organizations   O.715			4.1	0.742
Integrated Systems      Systems			cted upon to impact better	0.742
Systems   Recommendation to structures and systems in my organization be adopted by other organisations   0.733   0.733   0.733	Interpreted	·	nd avatama in my	0.715
Recommendation to structures and systems in my organization be adopted by other organisations  Customers satisfaction with the seamlessness of your structures and systems in service delivery.  Employee satisfaction  Recommendation of this organisation to prospects looking for an employment  Encouraging friends and others to seek the services of my organisation  Being happy the way our customers appreciate the quality of our services  Validate  Customer focus axes:  Validate  Continuous  Improvement  Axes: Validate  Continuous  Improvement  Axes: Validate  Process  Management  Axes: Validate  Process of processes, systems and structures in your organisation that facilitate better service delivery  Correlation to propectes to improve its services?  Presence of processes, systems and structures in your organisation that facilitate better service delivery  Axis validate  Axes: Validate  Process  Axis process, systems in your organisation or conduct staff training and take measures to improve its services of inquiries and cases in your organisation  Axis process of your or			nd systems in my	0.713
Customers satisfaction with the seamlessness of your structures and systems in service delivery.   Our optimism about the future of this organisation   O.792	Systems		ures and systems in my	0.733
Employee satisfaction with the seamlessness of your structures and systems in service delivery.  Our optimism about the future of this organisation				0.733
Employee satisfaction   Current about the future of this organisation   Current of this organ				0.782
Employee satisfaction  Recommendation of this organisation to prospects looking for an employment Encouraging friends and others to seek the services of my organisation  Being happy to be an employee in this organisation on the torum my organisation's customer focus policy to other organisation sustemptors.  I recommend my organisation's customer focus policy to other organisation is customer focus policy to other organisation is unstemptory organisation in the torum my organisation is inclined to continuous improvement.  Bernald with the way my organisation is inclined to continuous improvement.  Bernald with the way my organisation is inclined to continuous improvement.  Bernald with the way my organisation is inclined to continuous improvement.  Bernald with the way my organisation or onduct staff training and take measures to improve its services?  Bernald with the way my organisation or onduct staff training and take measures to improve its services?  Bernald with the way my organisatio				0.702
Recommendation of this organisation to prospects looking for an employment Encouraging friends and others to seek the services of my organisation  Being happy to be an employee in this organisation  Being happy to be an employee in this organisation  Being happy to be an employee in this organisation  Being happy to be an employee in this organisation  Being happy to be an employee in this organisation  Being happy to be an employee in this organisation  Being happy to be an employee in this organisation  Being happy to be an employee in this organisation  Being happy to be an employee in this organisation  Being happy to be an employee in this organisation  Being happy to be an employee in this organisation  Being happy to be an employee in this organisation  D.000  D.000  D.000  D.001  D.000  D	Employee			0.599
Looking for an employment   Encouraging friends and others to seek the services of my organisation   Being happy to be an employee in this organisation   0.798   0.709				
Encouraging friends and others to seek the services of my organisation  Being happy to be an employee in this organisation  Being happy the way our customers appreciate the quality of our services  Study tool  P-value   Correlation coefficient   Phrases  The Customer Focus axes: Validate  Customer focus   0.000   0.838**   1 am satisfied with the way my organisations.  Our customers are happy with the way their needs are attended to.  Our customers are happy with the way their needs are attended to.  Our customers are happy with the way their needs are attended to.  Our customers are happy with the way their needs are attended to.  Our customers are happy with the way their needs are attended to.  Our customers are happy with the way their needs are attended to.  Our customers are happy with the way their needs are attended to.  Our customers are happy with the way their needs are attended to.  Our customers are happy with the way their needs are attended to.  Our customers are happy with the way their needs are attended to.  Our customers are happy with the way their needs are attended to.  Our customers are happy with the way their needs are attended to.  Our customers are happy with the way their needs are attended to.  Our customers are happy with the way their needs are attended to.  Our customers are happy with the way their needs are attended to.  Our customers are happy with the way their needs are attended to.  Our customers are happy with the way their needs are attended to.  Our customers are happy with the way their needs are attended to.  Our customers are happy with the way their needs are attended to.  Our customers are happy with the way my organisation on the functions in prove its services?  Presence of processes, systems and structures in your organisation that facilitate better service delivery  Our our organisation that facilitate better service delivery  Our our organisation organisation that facilitate better service delivery  Our organisation solves our customers are happy with the way m				3.7.20
my organisation   Being happy to be an employee in this organisation   0.798   0.709				0.689
Being happy to be an employee in this organisation   0.798   0.709				
Being happy the way our customers appreciate the quality of our services   Study tool   P-value   Correlation coefficient   Phrases			loyee in this organisation	0.798
Study tool   P-value   Correlation coefficient   Phrases				
The Customer Focus axes:    Validate Customer focus  O.000  O.000  O.940**  Our customers are happy with the way my organisation is inclined to continuous improvement.  Axes: Validate Continuous  Improvement  Axes: Validate Process Management  Axes: Validate Process Management  O.000  O.000  O.886**  O.000  O.886**  O.000  O.886**  The renew organisation is inclined to continuous improvement.  O.000  O.886**  O.886**  How often does your organisation that help it continuously improve.  O.000  O.828**  O.000  O.873** Presence of processes, systems and structures in your organisation that facilitate better service delivery  O.000  O.901**  How satisfied are you with the processes, systems in your organisation that facilitate better service delivery  How often does your organisation that facilitate better service delivery  O.000  O.903**  How often does your organisation that facilitate better service delivery  How satisfied are you with the processes, systems in your organisation conduct staff training and take measures to improve its services?  O.000  O.903**  How often does your organisation conduct staff training and take measures to improve its service delivery  How satisfied are you with the processes, systems in your organisation conduct staff training and take measures to improve its service delivery  How often does your organisation conduct staff training and take measures to improve its services?  D.000  O.903**  Employees involvement in decision making process of your organisation with their level of involvement in decision making  Employees feel free to speak to management about issues in the			11	
The Customer Focus axes:    Validate Customer focus  O.000  O.000  O.940**  Our customers are happy with the way my organisation is inclined to continuous improvement.  Axes: Validate Continuous  Improvement  Axes: Validate Process Management  Axes: Validate Process Management  O.000  O.000  O.886**  O.000  O.828**  O.000  O.828**  O.000  O.873**  Presence of processes, systems and structures in your organisation that facilitate better service delivery  How often does your organisation that facilitate better service delivery  How often does your organisation that facilitate better service delivery  How often does your organisation that facilitate better service delivery  How often does your organisation that facilitate better service delivery  How satisfied are you with the processes, systems in your organisation conduct staff training and take measures to improve its services?  O.000  O.903** How satisfied are you with the processes, systems in your organisation conduct staff training and take measures to improve its service delivery  How satisfied are you with the processes, systems in your organisation conduct staff training and take measures to improve its service delivery  How often does your organisation conduct staff training and take measures to improve its service of processes, systems in your organisation conduct staff training and take measures to improve its service of involvement in decision making process of your organisation  Employees involvement in decision making  Involvement  Employees feel free to speak to management about issues in the	Study tool	P-value	Correlation coefficient	Phrases
Customer focus axes:   Validate		0.000		
Customer focus    0.000	Focus axes:			
O.000   O.940**   Our customers are happy with the way their needs are attended to.	Validate			organisations.
Continuous	Customer focus	0.000	0.838**	
2.The Continuous Improvement axes: Validate Process Management Axes: Validate Axes:				organisation solves our customer needs.
Continuous   D.000   D.779**   My organisation is inclined to continuous improvement.		0.000	0.940**	
Continuous   Continuous improvement.				
Improvement axes: Validate Continuous   O.000   O.886**   There are processes, systems and structures in my organisation that help it continuously improve.		0.000	0.779**	
axes: Validate Continuous Improvement  0.000 0.828** How often does your organisation conduct staff training and take measures to improve its services?  3.The Process Management axes: Validate Process Management  0.000 0.873** Presence of processes, systems and structures in your organization that facilitate better service delivery  Process Management  0.000 0.901** How satisfied are you with the processes, systems in your organisation that facilitate better service delivery  How often does your organisation conduct staff training and take measures to improve its services?  0.000 0.903** How often does your organisation conduct staff training and take measures to improve its services?  0.000 0.867** prompt attendance of inquiries and cases in your organisation  4.The Employee Involvement axes: Validate Employee  0.000 0.937** Employees satisfaction with their level of involvement in decision making Involvement 0.000 0.916** Employees fel free to speak to management about issues in the				•
Continuous Improve.  Improvement 0.000 0.828** How often does your organisation conduct staff training and take measures to improve its services?  3.The Process Management axes: Validate Process Management 0.000 0.901** How satisfied are you with the processes, systems in your organisation that facilitate better service delivery how often does your organisation that facilitate better service delivery how often does your organisation conduct staff training and take measures to improve its services?  0.000 0.903** How often does your organisation conduct staff training and take measures to improve its services?  0.000 0.867** prompt attendance of inquiries and cases in your organisation  4.The Employee 10.000 0.945** Employees involvement in decision making process of your organisation of involvement in decision making process of your organisation of involvement in decision making Process feel free to speak to management about issues in the		0.000	0.886**	
Improvement    Display				
Conduct staff training and take measures to improve its services?   3.The Process   Management axes: Validate   Process   Management axes: Validate   Process   Management   Process   Management   Process   Management   Management   Management   Process   Management   Manageme		0.000	0.0001	
3.The Process Management axes: Validate Process Management Axes: Validate Process Management Axes: Validate Process Management Axes: Validate Process Management	Improvement	0.000	0.828**	
3.The Process   0.000   0.873**   Presence of processes, systems and structures in your organization that facilitate better service delivery				
Management axes: Validate       structures in your organization that facilitate better service delivery         Process Process       0.000       0.901** How satisfied are you with the processes, systems in your organisation that facilitate better service delivery         0.000       0.903** How often does your organisation conduct staff training and take measures to improve its services?         0.000       0.867** prompt attendance of inquiries and cases in your organisation         4.The Employee Involvement axes: Validate Employee Involvement       0.000       0.945** Employees satisfaction with their level of involvement in decision making         Involvement       0.000       0.916** Employees feel free to speak to management about issues in the	3 The Dresser	0.000	0 072**	
Axes: Validate Process Management  Management  0.000  0.901** How satisfied are you with the processes, systems in your organisation that facilitate better service delivery  0.000  0.903** How often does your organisation conduct staff training and take measures to improve its services?  0.000  0.867** prompt attendance of inquiries and cases in your organisation  cases in your organisation  4.The Employee Involvement  axes: Validate Employee Involvement  0.000  0.937** Employees satisfaction with their level of involvement in decision making  0.000  0.916** Employees feel free to speak to management about issues in the		0.000	0.873	
Process Management  0.000  0.901** How satisfied are you with the processes, systems in your organisation that facilitate better service delivery  0.000  0.903** How often does your organisation conduct staff training and take measures to improve its services?  0.000  0.867** prompt attendance of inquiries and cases in your organisation  4.The Employee Involvement  axes: Validate Employee Involvement  0.000  0.937** Employees satisfaction with their level of involvement in decision making  0.000  0.916** Employees feel free to speak to management about issues in the				
Management    Discrepance   Di		0.000	0.901**	
that facilitate better service delivery  0.000 0.903** How often does your organisation conduct staff training and take measures to improve its services?  0.000 0.867** prompt attendance of inquiries and cases in your organisation  4.The Employee Involvement axes: Validate Employee Involvement  Employee Involvement  0.000 0.937** Employees satisfaction with their level of involvement in decision making  Involvement  0.000 0.916** Employees feel free to speak to management about issues in the		0.000	0.501	
0.000       0.903**       How often does your organisation conduct staff training and take measures to improve its services?         0.000       0.867**       prompt attendance of inquiries and cases in your organisation         4.The Employee Involvement axes: Validate Employee Involvement Employee Involvement       0.000       0.937**       Employees satisfaction with their level of involvement in decision making         Involvement Involve	Tranagement			
conduct staff training and take measures to improve its services?  0.000  0.867** prompt attendance of inquiries and cases in your organisation  4.The Employee Involvement axes: Validate Employee Involvement  Employee Involvement  O.000  0.937** Employees satisfaction with their level of involvement in decision making  Employee Involvement  0.000  0.916** Employees feel free to speak to management about issues in the		0.000	0.903**	
to improve its services?  0.000 0.867** prompt attendance of inquiries and cases in your organisation  4.The Employee Involvement axes: Validate Employee Involvement Employee Involvement O.000 Employee O.000 O.937** Employees satisfaction with their level of involvement in decision making Drocess of your organisation O.937** Employees satisfaction with their level of involvement in decision making O.916** Employees feel free to speak to management about issues in the		3.000	0.200	
4.The Employee Involvement Employee Employee Involvement  O.000 Involvement  O.000 O.945** Employees involvement in decision making process of your organisation  O.937** Employees satisfaction with their level of involvement in decision making  O.000 O.937** Employees satisfaction with their level of involvement in decision making  O.000 O.916** Employees feel free to speak to management about issues in the				
4.The Employee 0.000 0.945** Employees involvement in decision making process of your organisation  axes: Validate Employee 0.000 0.937** Employees satisfaction with their level of involvement in decision making Employee 1.000 0.916** Employees feel free to speak to management about issues in the		0.000	0.867**	*
4.The Employee Involvement       0.000       0.945**       Employees involvement in decision making process of your organisation         axes: Validate Employee       0.000       0.937**       Employees satisfaction with their level of involvement in decision making         Involvement       0.000       0.916**       Employees feel free to speak to management about issues in the				
Involvement axes: Validate       0.000       0.937**       Employees satisfaction with their level of involvement in decision making         Employee       0.000       0.916**       Employees feel free to speak to management about issues in the	4.The Employee	0.000	0.945**	
Axes: Validate Employee Involvement 0.000 0.937** Employees satisfaction with their level of involvement in decision making 0.000 0.916** Employees feel free to speak to management about issues in the				
Involvement 0.000 0.916** Employees feel free to speak to management about issues in the		0.000	0.937**	
management about issues in the				
	Involvement	0.000	0.916**	
organization				
				organization

5.The	0.000	0.951**	Organisation leadership in giving a
Leadership &	0.000	0.551	clear direction and communication
Good Vision			needed by employees to take action
axes: Validate	0.000	0.896**	Visionary of your organisation
Leadership &	0.000	0.870	leadership
Good Vision	0.000	0.899**	Employees' encouragement to be
Good Vision	0.000	0.899	leaders
6. The	0.000	0.942**	Communication plays a role in efficient
Communication			service delivery by your organization
axes: Validate	0.000	0.914**	Organisation's communication channels
Communication			in your organisation are explored to get
	0.000	0.02 6 14 14	honest feedback to better its services
	0.000	0.936**	Communication fastness acted upon to
	0.000	0.00 500	impact better service delivery
7. The	0.000	0.936**	smoothness of structures and systems in
Integrated			my organization
Systems axes:	0.000	0.915**	Recommendation to structures and
Validate			systems in my organization be adopted
Integrated			by other organisations
Systems	0.000	0.902**	Customer's satisfaction with the
			seamlessness of your structures and
			systems in service delivery.
8. The	0.000	0.890**	Our optimism about the future of this
Employee			organization
satisfaction	0.000	0.887**	Recommendation of this organisation to
axes: Validate			prospects looking for an employment
Employee	0.000	0.831**	Encouraging friends and others to seek
satisfaction			the services of my organization
	0.000	0.903**	Being happy to be an employee in this
			organisation
	0.000	0.889**	Being happy the way our customers
			appreciate the quality of our services

The all the saturation values for the study variables were greater than 0.05, which shows that there is no need to delete any of the study variables and it turns out that there are 4 latent root factors that are greater than one, and these factors explain 76.24% of the variation that occurs in the variables, which is a high value. The KMO value is equal to 0.909, which is an acceptable value, as it is higher than 0.600, and this means that the measurement is excellent at a significance of 0.000.

### 4.2 Validate the Study Tool

Questionnaire validity was proved by calculating the correlation coefficients to find out the extent of the internal homogeneity of the research tool:

From the findings in Table (2), shows that validate for Customer Focus axes items was statistically significant in 0.05 and the tool has structural validity. Table (3) shows that validate for Continuous Improvement axes items were statistically significant in 0.05 and the tool has structural validity. Validate for

Process Management axes items was statistically significant in 0.05 and the tool has structural validity. Validate for Employee Involvement axes items was statistically significant in 0.05 and the tool has structural validity. Validate for Leadership & Good Vision\_axes items was statistically significant in 0.05 and the tool has structural validity. Validate for Communication axes items was statistically significant in 0.05 and the tool has structural validity. Validate for Integrated Systems axes items was statistically significant in 0.05 and the tool has structural validity. Validate for Employee satisfaction\_axes items was statistically significant in 0.05 and the tool has structural validity.

### 4.3 Reliability study tool

The value of Cronbach alpha for all study tool is more than 0.7 and the study tool is high Reliability. This is shown in Table 2.

Table 2: Reliability questionnaire

Number of elements	Cronba ch Alpha	Dimension
3	0.876	Customer Focus
3	0.770	Continuous Improvement
4	0.908	Process Management
3	0.926	Employee Involvement
3	0.902	Leadership & Good Vision
3	0.923	Communication
3	0.905	Integrated Systems
5	0.925	Employee satisfaction
27	0.973	Total questionnaire

#### 4.4 Demographic Characteristics

**Table 3: Sample According to Demographic Characteristics** 

	Categories	N	%
Gender	Male	40	80
	Female	10	20
Age	18-29	15	30
	30 – 39	29	58
	40 - 49	6	12
Educational background	Diploma or less	1	2
	Bachelor's	36	72
	Master's	12	24
	Ph.D.	1	2
Job level	First-level management.	12	24
	Entry-level.	6	12
	Middle management.	12	24
	Intermediate or experienced (senior staff)	14	28
	Executive or senior management.	6	12
Type of the company	Semi-government	14	28
	Public	16	32
	Private	20	40
Your job experience	0-5 years	10	20
	6 – 10 years	27	54
	11 – 15 years	9	18
	>15	4	8

As shown in Table 4, the all-expression Customer Focus axes were the high and it shows the high level of the Customer Focus in the health sector in Saudi Arabia where mean is 4.080 and S.D 1.004. The expression Continuous Improvement axes were the very high and 2 expression Continuous Improvement axes were the high it shows the high level of the Continuous Improvement in the health sector in Saudi Arabia where mean is 4.053 and S.D 1.082. The all-expression Process Management axes were the high and it shows the high level of the Process Management in the health sector in Saudi Arabia where mean is 3.975 and S.D 1.043. The all-expression Employee Involvement axes were the high and it shows the high level of the Employee Involvement in the health sector in Saudi Arabia where mean is 3.800 and S.D 1.214.

The all-expression Leadership & Good Vision axes were the high and it shows the high level of the Leadership & Good Vision in the health sector in Saudi Arabia where mean is 3.953 and S.D 1.185. The allexpression Communication axes were the high and it shows the high level of the Communication in the health sector in Saudi Arabia where mean is 4.033 and S.D 1.051. The all-expression Integrated Systems axes were the high and it shows the high level of the Integrated Systems in the health sector in Saudi Arabia where mean is 3.967 and S.D 1.017. It shows the high level of the various TQM practices in the health sector in Saudi Arabia where mean is 3.980 and S.D 1.083. The 2 expression Employee satisfaction axes were the very high and 3 expression Employee satisfaction axes were the high it shows the high level of the Employee satisfaction in the health sector in Saudi Arabia where mean is 4.168 and S.D 1.018.

### 4.5 The variables of study

Table 4

Phrases of the Customer Focus axes:	Mean	Median	S. D	Degree	Arrangement
I recommend my organisation's customer focus policy to other			S. D	Degree	2.
organisations.	4.100	4.000	1.111	High	2
I am satisfied with the way my organisation solves our customer					3
needs.	3.980	4.000	0.845	High	3
Our customers are happy with the way their needs are attended to.	4.160	4.000	1.057	High	1
Phrases of the Continuous Improvement axes:	4.100	4.000	1.037	Iligii	1
My organisation is inclined to continuous improvement.				Very	1
Wy organisation is menned to continuous improvement.	4.240	4.000	1.001	High	1
There are processes, systems and structures in my organisation that					2
help it continuously improve.	4.080	4.000	1.027	High	2
How often does your organisation conduct staff training and take					3
measures to improve its services?	3.840	4.000	1.218	High	
Phrases of the Process Management axes:		l .	l		
Presence of processes, systems and structures in your organization					3
that facilitate better service delivery	3.960	4.000	1.029	High	
How satisfied are you with the processes, systems in your					4
organisation that facilitate better service delivery	3.900	4.000	1.129	High	•
How often does your organisation conduct staff training and take					1
measures to improve its services?	4.080	4.000	1.066	High	1
prompt attendance of inquiries and cases in your organization	3.960	4.000	0.947	High	2
Phrases of the Employee Involvement axes:	3.700	1.000	0.517	111511	1 2
Employees involvement in decision making process of your					1
organization	3.900	4.000	1.233	High	1
Employees satisfaction with their level of involvement in decision					3
making	3.680	4.000	1.220	High	
Employees feel free to speak to management about issues in the					2
organization	3.820	4.000	1.190	High	_
Phrases of the Leadership & Good Vision axes:		l .	l	<u>l</u>	
Organisation leadership in giving a clear direction and	• • • • •	4.000			1
communication needed by employees to take action	3.980	4.000	1.134	High	
Visionary of your organisation leadership	3.980	4.000	1.204	High	2
Employees' encouragement to be leaders	3.900	4.000	1.216	High	3
Phrases of the Communication axes:				18	
Communication plays a role in efficient service delivery by your					3
organization	3.980	4.000	1.078	High	
Organisation's communication channels in your organisation are					2
explored to get honest feedback to better its services	4.040	4.000	1.009	High	_
Communication fastness acted upon to impact better service					1
delivery	4.080	4.000	1.066	High	
Phrases of the Integrated Systems axes:			I		II.
smoothness of structures and systems in my organization	4.020	4.000	1.059	High	1
Recommendation to structures and systems in my organization be					3
adopted by other organizations	3.900	4.000	1.055	High	
Customers satisfaction with the seamlessness of your structures and		4.05-	0.6	/	2
systems in service delivery.	3.980	4.000	0.937	High	•
Phrases of the Employee satisfaction axes:		1	1	1	1
Our optimism about the future of this organization	4.140	4.000	1.030	High	4
Recommendation of this organization to prospects looking for an					5
employment	4.120	4.000	0.961	High	
Encouraging friends and others to seek the services of my		<b>7</b> 05 -		Very	2
organization	4.200	5.000	1.107	High	
Being happy to be an employee in this organization	1			Very	1
=	4.200	4.000	0.948	High	-
Being happy the way our customers appreciate the quality of our		4.600	4 0		3
services	4.180	4.000	1.044	High	_
DUI VICUS	L	1	l	l	1

#### 4.6 Test Research Hypotheses

### H1: TQM practices have a positive effect on employees' satisfaction

It is clear from Table (5) there was a correlation among levels of job satisfaction and total

quality management levels in the health sector in the Kingdom of Saudi Arabia Where was the value chisquare Statistically significant at 0.05 and the relationship was positive correlated with the value of the correlation coefficient 0.836

Table 5: Association between TQM practices and employees' satisfaction

		<b>Employees' Satisfaction Level</b>			
		Low	Medium	High	Total
TQM practices level	Low	2(66%)	2(33%)	0(0%)	4
	Medium	1(33%)	3(50%)	3(7%)	7
	High	0(0%)	1(17%)	38(93%)	39
Total		3	6	41	50
chi-square		35.030			
P-VALUE		0.000			
Pearson's correlation		0.836			
P-VALUE		0.000			

In Table (6) the simple regression equations were significant at the level of 0.05, and it showed a positive statistical significance impact of the TQM practices on employees' satisfaction, it was correct and

the hypothesis turned out to be more as it increased TQM practices level 1 percent is the employees' satisfaction level has increased 0.204%

Table 6: Impact TQM practices on employees' satisfaction

P-VALUE	F	T	В
0.000	111.788**	10.573**	0.204

### H1a: Customer Focus have a positive effect on employees' satisfaction

It is clear as indicated in Table (7) there was a correlation between the levels of job satisfaction and that of Customer Focus in the health sector in the

Kingdom of Saudi Arabia Where was the value chisquare statistically significant at 0.05 and the relationship was positive correlated with the value of the correlation coefficient 0.727

Table 7: Correlation between Customer Focus and employees' satisfaction

		<b>Employees' Satisfaction Level</b>			
		Low	Medium	High	Total
Customer Focus	Low	2(67%)	1(17%)	0(0%)	3
level	Medium	0(0%)	2(33%)	3(7%)	5
	High	1(33%)	3(50%)	38(93%)	42
Total	Total		6	41	50
chi-square		27.972			
P-VALUE		0.000			
Pearson's correlation		0.727			
P-VALUE	P-VALUE				

In Table (8) the simple regression equation is significant at 0.05 level, and there is a positive statistical significance impact of the Customer Focus on employees' satisfaction, it was correct the hypothesis

and turned out it there was more increase in Customer Focus level 1 percent was the employees' satisfaction level has increased 1.199%.

Table 8: Impact Customer Focus on employees' satisfaction

P-VALUE	$\mathbf{F}$	T	В
0.000	53.954**	7.345**	1.199

### H1b: Continuous Improvement have a positive impact on employees' satisfaction

It was clear as indicated in Table (9) there is a correlation between the levels of job satisfaction and the levels of Continuous Improvement in the health sector

in the Kingdom of Saudi Arabia Where was the value chi-square statistically significant at 0.05 and the relationship was positive correlated with the value of the correlation coefficient 0.626.

Table 9: Correlation between Continuous Improvement and employees' satisfaction

	Employees' Satisfaction Level				
		Low	Medium	High	Total
Continuous Improvement level	Low	2(67%)	1(17%)	1(2%)	4
	Medium	0(0%)	5(83%)	5(12%)	10
	High	1(33%)	0(0%)	35(85%)	36
Total		3	6	41	50
chi-square		34.897			
P-VALUE		0.000			
Pearson's correlation		0.626			
P-VALUE		0.000			

In Table (10) the regression equation shows significance at 0.05 level, and so there was a positive statistical significance impacts of Continuous Improvement on employees' satisfaction, it was correct

that the hypothesis turned out to be more increasing Continuous Improvement level 1 percent was employees' satisfaction level has increased 1.038%.

Table 10: Impact Continuous Improvement on employees' satisfaction

P-VALUE	F	T	В
0.000	30.936**	5.562**	1.038

### H1c: Process Management have a positive effect on employees' satisfaction

It is clear in Table (11) there was a correlation between the levels of job satisfaction and the levels of Process Management in the health sector in the Kingdom of Saudi Arabia Where was the value chisquare Statistically significant at 0.05 and the relationship was positive correlated with the value of the correlation coefficient 0.852.

Table 11: Correlation between Process Management and employees' satisfaction

	<b>Employees' Satisfaction Level</b>				
		Low	Medium	High	Total
Process Management level	Low	3	1	0	4
	Medium	0	4	5	9
	High	0	1	36	37
Total		3	6	41	50
chi-square		50.727			
P-VALUE		0.000			
Pearson's correlation		0.852			
P-VALUE		0.000			

In Table (12) the regression equation is significant at 0.05 level, and there was a positive statistical significance effect of Process Management on employees' satisfaction, it was correct the hypothesis it

turned out that the more increase in Process Management level 1 percent the employees' satisfaction level has increased 1.031%.

Table 12: Impact Process Management on employees' satisfaction

P-VALUE	F	T	В
0.000	127.533**	11.193**	1.031

### H1d: Employee Involvement have a positive effect on employees' satisfaction

It was clear from Table (13) there is a correlation between the levels of job satisfaction and that of Employee Involvement in the health sector in the

Kingdom of Saudi Arabia Where was the value chisquare Statistically significant at 0.05 and the relationship was positive correlated with the value of the correlation coefficient 0.655.

Table 13: Correlation between Employee Involvement and employees' satisfaction

		<b>Employees' Satisfaction Level</b>			
		Low	Medium	High	Total
Employee Involvement level	Low	3	1	3	7
	Medium	0	2	6	8
	High	0	3	32	35
Total		3	6	41	50
chi-square		21.664			
P-VALUE		0.000			
Pearson's correlation		0.655		•	
P-VALUE		0.000			

In Table (14) the regression equation is significant at 0.05 level, and there was a positive statistical significance effect of Employee Involvement on employees' satisfaction, it was correct that the

hypothesis showed that more increase in Employee Involvement level 1% and employees' satisfaction level also increased 0.863%.

Table 14: Impact Employee Involvement on employees' satisfaction

P-VALUE	F	T	В
0.000	36.118**	6.010**	0.863

It is clear from Table (15) there is a correlation between the levels of job satisfaction and the levels of Leadership & Good Vision in the health sector in the Kingdom of Saudi Arabia Where was the value chisquare Statistically significant at 0.05 and the relationship was positive correlated with the value of the correlation coefficient 0.722.

H1e: Leadership & Good Vision have a positive effect on employees' satisfaction

Table 15: Correlation between Leadership & Good Vision and employees' satisfaction

		<b>Employees' Satisfaction Level</b>			Total
		Low	Medium	High	
Leadership & Good Vision level	Low	3(100%)	2(33%)	2(5%)	7
	Medium	0(0%)	1(17%)	2(5%)	3
	High	0(0%)	3(50%)	37(90%)	40
Total		3	6	41	50
chi-square		24.904			
P-VALUE		0.000			
Pearson's correlation		0.722			
P-VALUE		0.000			

In Table (16) the regression equation is significant at 0.05 level, and there was a positive statistical significance effect of the Leadership & Good Vision on employees' satisfaction, it was correct the

hypothesis turned out to be the more it increased Leadership & Good Vision level 1% is the employees' satisfaction level has increased 0.994%.

Table 16: Impact Leadership & Good Vision on employees' satisfaction

P-VALUE	F	T	В
0.000	52.381**	7.237**	0.994

## H1f: Communication have a positive effect on employees' satisfaction

It was clear in Table (17) there is a correlation between the levels of job satisfaction and the levels of Communication in the health sector in the Kingdom of Saudi Arabia Where was the value chi-square Statistically significant at 0.05 and the relationship was positive correlated with the value of the correlation coefficient 0.671.

Table 17: Correlation between Communication and employees' satisfaction

		<b>Employees' Satisfaction Level</b>			
		Low	Medium	High	Total
Communication level	Low	2(67%)	2(33%)	1(2%)	5
	Medium	0(0%)	3(50%)	6(15%)	9
	High	1(33%)	1(17%)	34(83%)	36
Total		3	6	41	50
chi-square		23.310			
P-VALUE		0.000			
Pearson's correlation		0.671			
P-VALUE		0.000			

In Table (18) the regression equation is significant at 0.05 level, and there was a positive statistical significance effect of the Communication on employees' satisfaction, it was correct the hypothesis it

was revealed that the more it increased Communication level 1 percent is employees' satisfaction level has increased 1.022%.

Table 18: Impact Communication on employees' satisfaction

P-VALUE	F	T	В
0.000	39.270**	6.267**	1.022

### H1g: Integrated Systems have a positive effect on employees' satisfaction

It was clear as indicated in Table (19) there was a correlation between the job satisfaction levels and the levels of Integrated Systems in the sector of health

in the Saudi Arabia Kingdom. Where was the value chisquare statistically significant at 0.05 as well as the relationship was positive correlated with the value of the correlation coefficient 0.709.

Table 19: Correlation between Integrated Systems and employees' satisfaction

	<b>Employees' Satisfaction Level</b>					
		Low	Medium	High	Total	
Integrated Systems	Low	2(67%)	2(33%)	0(0%)	4	
level	Medium	0(0%)	2(33%)	5(12%)	7	
	High	1(33%)	2(33%)	36(88%)	39	
Total		3	6	41	50	
chi-square		25.925				
P-VALUE		0.000				
Pearson's correlation		0.709				
P-VALUE	•	0.000				

In Table (20) the regression equation is significant at 0.05 level, and there was a positive statistical significance effect of Integrated Systems on employees' satisfaction, it was correct the hypothesis it

was revealed that the more it increased Integrated Systems level 1 percent was the employees' satisfaction level has increased 1.132%.

Table 20: Impact Integrated Systems on employees' satisfaction

P-VALUE	F	T	В
0.000	48.438**	6.960**	1.132

#### 5. DISCUSSION

From the study, the results of the study clearly show the impact of total quality management (TQM) practices on employee satisfaction in the Saudi Health sector. The findings showed that Customer Focus, Continuous Improvement, Process Management, Employee Involvement, Leadership & Good Vision, Communication and Integrated Systems showed a positive significance that associated with employee satisfaction. The findings are concur with that of

Ahmed & Idris (2020) who state that at the 5% level of significance, their findings revealed a favorable correlation among soft TQM features and employees' satisfaction with their jobs.

The research found high level of the various TQM practices in the health sector in Saudi Arabia and high level of the Customer Focus, high level of the Continuous Improvement, high level of the Process Management, high level of the Employee Involvement, high level of the Leadership & Good Vision, high level

of the Communication and high level of the Integrated Systems in the health sector in Saudi Arabia and the high level of the Employee satisfaction in the health sector in Saudi Arabia. This finding goes hand in hand with that of Alsughayir (2014) who explain that the assessed organizations shown high commitment levels to the implementation of health. This was assessed using high average scores for the TQM pillars such as leadership, customer focus, people involvement, as well as continuous improvement.

The results reveal a positive statistical significance impact of the TQM practices on employees' satisfaction in the health sector in Saudi Arabia, there is a statistically positive significant impact of the Customer Focus, Continuous Improvement, Process Management, Employee Involvement. Leadership & Good Vision, Communication and Integrated Systems on employees' satisfaction, in the health sector in Saudi Arabia. The results are concur with that of Škarica (2021); Faeq et al., (2022); Glaveli et al., (2022), which reveals a statistically significant positive correlation between employee work satisfaction and each single variable of five soft TQM components.

The results indicate further that the more it increased TQM practices level 1% is the employees' satisfaction level has increased 0.204% and the more it increased Customer Focus, Continuous Improvement, Process Management, Employee Involvement, Leadership & Good Vision, Communication and Integrated Systems level, 1% is the employees' satisfaction level has increased 1.199%, 1.038%, 1.031%, 0.863%, 0.994%, 1.022% and 1.132% Respectively. These findings are supported by that of Bailey (2022) who argues that the major factor in employee involvement and satisfaction is the quality of your product or service, which gives your employees meaningful employment. In addition, the results concur with that of Ahmed & Idris (2020), who state that factors focus, employee such as customer communication, and continual improvement had a significant effect on service quality and so employee satisfaction.

### 6. CONCLUSION

The research concluded that high level of the various TQM practices in the health sector in Saudi Arabia and high level of the Customer Focus, high level of the Continuous Improvement, high level of the Process Management, high level of the Employee Involvement, high level of the Leadership & Good Vision, high level of the Communication and high level of the Integrated Systems in the health sector in Saudi Arabia and the high level of the Employee satisfaction in the health sector in Saudi Arabia.

It is further concluded that there is a statistically positive and significant impact of the TQM practices on employees' satisfaction in Saudi Arabia

health sector in, there is a statistically significant positive impact of the Customer Focus, Continuous Improvement, Process Management, Employee Involvement, Leadership & Good Vision, Communication and Integrated Systems on employees' satisfaction, in the Saudi Arabia health sector.

Additionally, the study conclude that, the more it increased TQM practices level 1% is the employees' satisfaction level has increased 0.204% and the more it increased Customer Focus, Continuous Improvement, Process Management, Employee Involvement, Leadership & Good Vision, Communication and Integrated Systems level, 1% is the employees' satisfaction level has increased 1.199%, 1.038%, 1.031%, 0.863%, 0.994%, 1.022% and 1.132% Respectively.

The study suggests that leaders and managers in the health sector utilize more interactive technologies to promote improved employee engagement with the institutions. As a result, it will be easier to fully comprehend their staff, which will help them make better judgments on how to best meet their demands. There is a pressing need to make sure that the staff training requirements are kept to a minimum in order to reduce staff training expenditures while maintaining performance. According to the report, those in charge of developing health policies should look for ways to make their varied ideal performances easier to achieve and sustain. For further studies, it is recommended that, since the focus of the study was the impact of TQM procedures on Saudi Health sector, studies focusing on different nations may be conducted by other researchers.

### **ACKNOWLEDGEMENT**

The authors are grateful to Alfaisal University and the supervisors, as well as the participants who participated in giving out useful information that was used in the study. A special thanks goes to the staff of the department at Alfaisal University. The author also thanks the anonymous reviewers for their insightful comments and suggestions for improving this paper.

### REFERENCES

- Abbas, J. (2020). Impact of total quality management on corporate sustainability through the mediating effect of knowledge management. *Journal of Cleaner Production*, 244, 118806.
- Ahmed, A. O., & Idris, A. A. (2020). Examining the relationship between soft total quality management (TQM) aspects and employees' job satisfaction in "ISO 9001" Sudanese oil companies. *The TQM Journal*, 33(1), 95-124.
- Alsughayir, A. (2014). Does practicing total quality management affect employee job satisfaction in Saudi Arabian organizations. European Journal of Business and Management, 6(3), 169-175.

- Bailey, C. (2022). Employee engagement: Do practitioners care what academics have to say—and should they?. *Human Resource Management Review*, 32(1), 100589.
- Baldwin, C. (2022). A Multifaceted Approach: Information Literacy Instruction for Emerging Young Adults. *International Journal of Library* and Information Studies, 12(3), 1-14.
- Berman, E. M., & Hijal-Moghrabi, I. (2022). Performance and Innovation in the Public Sector: Managing for Results. Taylor & Francis.
- Faeq, D. K., Ali, B. J., & Akoi, S. (2022). The Impact of People Related TQM and CSR on Employees Job Satisfaction. *UKH Journal of* Social Sciences, 6(1), 1-9.
- Glaveli, N., Vouzas, F., & Roumeliotou, M. (2022). The soft side of TQM and teachers job satisfaction: an empirical investigation in primary and secondary education. *The TQM Journal*, *34*(5), 922-938.
- Oakland, J. S., Oakland, R. J., & Turner, M. A. (2020). *Total quality management and operational excellence: text with cases*. Routledge.
- Singh, V., Kumar, A., & Singh, T. (2018). Impact of TQM on organisational performance: The case of Indian manufacturing and service industry. *Operations Research Perspectives*, 5, 199-217.
- Škarica, I., & Vrtodušić Hrgović, A. M. (2021).
   Employee attitudes on TQM implementation and job satisfaction in public health sector. Zbornik Veleučilišta u Rijeci, 9(1), 187-209.