Arab American University

Faculty of Graduate Studies

Total Quality Management, Employee Outcomes, and Environmental Uncertainty: Unveiling the Dynamic Nexus for Sustainable Organizational Performance in Palestinian Service Sector

By

Lina Thabet

Supervisor

Dr. Mohammad Othman

This thesis was submitted in partial fulfillment of the requirements for the Master's degree in Quality Management

February /2024

I

Thesis Approval

Total Quality Management, Employee Outcomes, and Environmental Uncertainty: Unveiling the Dynamic Nexus for Sustainable Organizational Performance in Palestinian Service Sector.

By

Lina Thabet

This thesis was defended successfully on February 26, 2024 and approved by:

Committee members	Signature
1. Dr. Mohammad Othman: Supervisor	.....
2. Dr. Ashraf Mimi: Internal Examiner	.....
3. Dr. Yahya Salahat: External Examiner	.....

Declaration

I am the undersigned who submitted the thesis entitled:

Total Quality Management, Employee Outcomes, and Environmental Uncertainty: Unveiling the Dynamic Nexus for Sustainable Organizational Performance in Palestinian Service Sector

I declare that this thesis represents my work, which has been done after registration for the master's degree in AAUP and has not been submitted, in whole or in part, in any previous application to this or any other institution for a degree, diploma or other qualifications, except where due reference has been made in the text.

The Name of The Student: Lina Thabet

ID: 202012286

Signature: 

Date: 25/9/2024

Dedication

To my grandmother

My parents, my husband, my brother and sisters

To my family and friends

Acknowledgement

First of all, I pen down my deepest appreciation to God Almighty for the strength and health you granted me throughout the journey of completing my thesis.

Special thanks to Dr. Mohammed Othman, my thesis' supervisor, for his time, effort, and understanding in helping me succeed in my studies. This thesis would not have been possible without his invaluable advice, continuous support and patience.

I would also like to express my gratitude to the committee members. Thank you for your time and effort in reviewing my thesis and providing me with your valuable feedback. Your insights have greatly enriched the quality of my work.

My gratitude also goes to my university, Arab American University. Thank you for the transformative educational journey you have provided. I am grateful for the unwavering support, the nurturing environment, and the countless opportunities.

Lastly, I'd like to thank my family and friends for their encouragement and support throughout my studies.

Abstract

Total quality management (TQM) has been identified as an essential pillar of organizational performance, competitive advantage, and excellence. TQM follows a systematic approach that aims to achieve long-term organizational goals, and it believed to be applicable in manufacturing and service sectors. In this study, TQM has been investigated to understand its contributions to the Sustainable organizational performance (SOP) and employee outcomes (EMO) in the context of the Palestinian service sector. In today's business environment, SOP has become of a great interest and gain a high priority; it is the corner stone of the business survival. On the other hand, this study adopts EMO to highlight the role of employees in the organization. TQM and human resource management (HRM) intersect in the role of developing human resource practices. Many TQM elements involve human factors, such as employee involvement and empowerment, teamwork, internal communication, and management support. TQM is context-dependent. Different contextual factors play a role in the success degree of TQM implementation and it will be risky to accept a standardized conceptualization of any TQM model. This research assesses the contingent effect of environmental uncertainty on the relationship between EMO and SOP. Different theories have been adopted in this research, including quality management theory, resource-based view theory (RBV), the ability, motivation, and opportunity model (AMO), and contingency theory, to theorize the relationships between the research variables. This study provide some beneficial insights that highlights the major role that TQM practices play in improving EMO and SOP, which reflects on customer satisfaction and other organizational aspects. It also show the effect of EU on organizations. Causal research was conducted to

investigate the relationships between research variables. Quantitative data underlying this study was collected using questionnaires. The responses of 123 high-level employees from different Palestinian service sectors were collected and analyzed using the partial least squares structural equation modeling (PLS-SEM). It was found that TQM practices positively affect employee outcomes and SOP. It was also proved that environmental uncertainty moderates the relationship between EMO and SOP. On the other side, the results indicate a negative relationship between employee outcomes and sustainable organizational performance. It also shows that employee outcomes do not mediate the relationship between TQM and SOP. This study contributes to TQM and HRM literature, and provides a beneficial insights about SOP and EMO improvement through the adoption of TQM practices. Some limitations faced the implementation of the research including the political situation in the West Bank and Gaza Stripe that obstruct the data collection process. Further future researches are suggested to cover other contextual aspects using different contingent variables, other future researches could also consider a broader range of respondents to get a broader understanding of this topic.

Keywords: Total Quality Management (TQM), employee outcomes (EMO), ability-motivation-opportunity (AMO), sustainable Organizational performance (SOP), environment uncertainty (EU), Palestinian service sector.

Table of Contents

List of Tables

List of Figures

List of Abbreviations

AB	Ability
AMO	Ability, Motivation and, Opportunity Model
CA	Cronbach's alpha
CF	Customer Focus
CR	Composed Reliability
CT	Contingency Theory
Eco	Economic Performance
EMO	Employee outcomes
EP	Environmental Performance
EU	Environment Uncertainty
f^2	The Effect Size
GDP	Gross Domestic Product
GOF	Goodness of Fit
HRM	Human Resource Management
IA	Information and Analysis
ISO	International Organization for Standardization

L	Leadership
LE	Learning
MBNQA	Malcolm Baldrige National Quality Award
MO	Motivation
NFI	Normed Fit Index
OP	Opportunity
PCBS	Palestinian Central Bureau of Statistics
PLS-SEM	PLS-SEM Partial Least Square Structural Equation Modeling
PM	Process Management
Q^2	The Predictive Relevance
QM	Quality Management
R^2	The Coefficient of Determination
RBV	The Resource-Based View
SOP	Sustainable Organizational Performance
SP	Social Performance
SRMR	Standardized Root Mean Square Residual
SrP	Strategic Planning

TQM	Total Quality Management
UND	Dynamism
UNH	Hostility
UNHE	Heterogeneity
UNM	Munificence
VIF	Variance inflation factor

Chapter One

Introduction

1.1 Overview

This chapter presents the background of the research in the first section, followed by the problem statement, goals, significance of the study, and research questions and hypotheses in the second section. In the last section, the thesis structure is addressed.

1.2 Background

1.2.1 TQM & Performance

Total Quality Management (TQM) has gained wide acceptance for creating competitive advantage and improving performance (El Shenawy et al., 2007). It is an independent system that pairs with other organizational assets to generate competitive advantages (Hackman & Wageman, 1995). The literature is rich in research and points of view on the relationship between TQM and performance, showing the impact of TQM on performance in different terms, such as customer satisfaction and employee satisfaction (Kaur & Sharma, 2014), financial performance (Corredor & Goni, 2010; Nicolau & Sellers, 2010), or operational performance (Kebede & Virdi, 2021).

When TQM is analyzed in terms of performance, some studies represent performance only at limited levels. Corredor and Goñi (2011), cited in Chakravarthy (1986), Zhu (2000), and Martínez et al. (2009), state that organizational performance is a complex term that requires more than one criterion to characterize. They also mentioned that performance covers diverse intentions and levels in the organization. Shafiq et al. (2019) recommended that researchers in future studies should use sufficiently broad constructs to measure organizational performance. Even studies that cover both financial and non-financial sides of organizational performance ignore some aspects

related to society or the environment, for example. For that reason, we are adopting sustainable organizational performance (SOP). It represents a combination of three main elements of organizational performance: environmental, social, and economic. The environmental performance is concerned with the amount of the resources an organization uses in its operations and the environmental impacts created by its activities including waste and emissions. Social performance refers to the impact of the organization on the communities in which it works, accepting and working within the social values and implementing its social responsibilities. The economic performance refers to the ability of an organization to generate profits and create value, increase sales and market share (Hubbard, 2009). Overall, SOP involves balancing between these three aspects of performance to create long-term values for the stakeholders.

SOP has broadened the business perspective from managing economic and financial strategies to equally taking social and environmental responsibilities (Hubbard, 2009). This definition of performance shows that the organization is not merely an economic-financial unit but also responsible for social and environmental aspects (Tasleem et al., 2019). It suggests that a company must balance between profit-oriented, social, and environment-related goals (Tasleem et al., 2019).

On the other hand, a significant issue in management science is how to sustain in the market and show long-term successful performance. According to Schaltegger (2011), sustainability is an organization's key to success. The worldwide orientation towards environment-friendly organizations concerned with society encouraged us to adopt SOP.

1.2.2 TQM & HRM

This research mainly aims to investigate the effect of TQM on SOP. It adopts different theories to get a deep understanding of this topic: Recourse-Based View Theory (RBV), Ability, Motivation,

Opportunity Framework (AMO), Contingency Theory (CT), and Quality Management (QM). According to RBV, organizations depend on resources and capabilities that affect their performance and determine market opportunities. In RBV, management focuses on internal resources to originate sustained competitive advantages (COLBERT, 2004). One of the main internal assets of any organization is the human force. Human Resource Management (HRM) adopts the RBV theory; it considers human potential as a basis for an organization's competitiveness (Wright et al., 1994). Effective management of human resources is a great competitive advantage driver (Saa-Perez & Garcia-Falcon, 2002). Therefore, organizations need to develop HR Practices and programs, including hiring processes, rewards systems, communication systems, and training programs, in a way that differentiates them from other organizations to create superior performance (Bailey, 1993; Wright et al., 1994). TQM and HRM intersect in the role of developing human resource practices. Many TQM elements involve human factors, such as employee involvement and empowerment, teamwork, communications, and management support (Guimaraes, 1996). Paying attention to this relationship between TQM and HRM is necessary to find a linkage between them. Due to the important role of employees in QM, employee outcomes (EMO) have been considered as a moderator between TQM and SOP. In this study, we are adopting the AMO framework for this purpose. The AMO framework is adopted through RBV (Yazdani, 2022). It represents the dimensions of EMO. It defines employees' performance when they have the necessary knowledge and skills to do the job (Ability), have the needed motivation (Motivation), and act in a supportive environment (opportunity). These three elements are reached when the company practices suitable HRM activities, leading to better performance, higher efficiency, and better resources (Ruzic, 2015). Therefore, the first

contribution of this study is examining the TQM-Performance relationship by investigating EMO through the AMO framework.

1.2.3 Contingency Theory (CT)

TQM is context-dependent. In other words, different contextual factors play a role in the success degree of TQM implementation (Sila, 2007; Sousa &Voss, 2002; Sila & Ebrahimpour, 2002, 2003; Douglas & Judge, 2001). Particular TQM practices could be helpful in one country or company rather than others because of specific factors. Studies in the last decade have become more interested in analyzing the effect of different contingency conditions on TQM outcomes (Benson et al., 1991). For example, Ahire and Golhar (1996) studied the impact of company size on TQM practices. Sousa and Voss (2001) found that manufacturing strategy is a contextual factor for TQM practices. Joiner (2007) examined the effect of co-worker and organization support on TQM, considering it a contingency factor.

In contrast, despite many HRM-performance studies, minimal ones considered contingency factor effects. According to Boselie et al. (2005), the effect of EMO on performance depends on different contextual variables. The second contribution of this paper is considering the CT effect on the relationship between EMO and performance.

1.2.4 Field of the Study

As mentioned before, TQM implementation depends on the context. Different situational factors in each country, such as the social, economic, cultural, and political situations, play a role in the success of TQM implementation (Youssef & Zairi, 1995; Lu & Sohal, 1993). Certain practices considered helpful in predicting performance in one country may not be applicable in other

countries in different contexts (Sila & Ebrahimpour, 2003). This research is applied in Palestine, which is a Middle Eastern country. The Middle East is a diverse cultural, economic, and political region. The Middle East has been experiencing economic, political, and social difficulties (Issa & Al Abbar, 2015), including increasing unemployment rates, price inflation, a slow-down in economic activity, low levels of private sector development, weak public and corporate governance, and limited competition (O'Sullivan et al. 2011).

Palestine is a growing country in the Middle East. It suffers from many political, social, and economic challenges. The Palestinian budget depends on external support, and the continuation of the Israeli deductions of tax revenues threatens it. More than 73% of the Palestinian imports of goods and services originated in Israel (Morrar & Gallouj, 2016), and it has total control over the importing processes because it has control over the borders of Palestinian areas; at the same time, Israel has control over raw materials and resources which impedes the industrial activities and the development of the Palestinian economy. Other challenges include the high unemployment rates and the rising consumer prices. Despite this, the Palestinian economy is experiencing a limited recovery, with a 3.6% growth in 2022, compared to 7% in 2021 according to the Palestinian Central Bureau of Statistics (PCBS, 2022). Businesses in Palestine face significant risk and uncertainty, which is projected to have a good or negative impact on the Palestinian economy (PCBS). The Palestinian economy depends mainly on the service sector (Morrar & Gallouj, 2016). It is the cornerstone of the Palestinian economy, where 31% of economic establishments are classified as service providers (Palestinian Ministry of National Economy, 2020).

In general, the service sector is more flexible in managing environmental uncertainty, unlike the manufacturing sector, which depends on importing raw materials from or through the Israeli side,

incurring many challenges. The service sector mainly depends on the labor force. Recently, the service sector in Palestine has increasingly adopted ICT.

The service sector in Palestine faced different restrictions and distortions that constituted a major constraint to its growth and development. Until the mid-90s, specific service sectors, including the financial and telecommunication industries, didn't exist or were very weak. Meanwhile, other sectors, such as air and sea transport, still do not exist. After the Oslo agreement about 30 years ago, the private and the public sectors put a great effort into enhancing the service sector. That led to an increased contribution of the service sector to the Palestinian economy in terms of employment and Gross domestic product (GDP) (Morrar & Gallouj, 2016). According to the latest report for the Palestinian Ministry of National Economy in 2020, the service sector is the most accommodating sector for workers in the local market, with 64.2%; it also accounts for the largest share of GDP at 27.9% (Palestinian Ministry of National Economy, 2020).

The service sector covers education, healthcare, finance and banking, communications, insurance, transportation, consulting, hospitality, information technology, etc. According to the latest study of the PCBS, the number of service establishments in Palestine in 2019 was (41,567), with an increase of 72% since 2009. In the same year, there were 166,833 workers in this industry, compared to 85,756 workers in 2009 (PCBS, 2022).

Despite the quality improvements in the Palestinian service sector, it still faces some quality problems that must be solved to provide superior services. There are still gaps in implementing TQM principles, and further efforts and investments are needed in the quality improvement field (Al-Ghanim, 2003). That is why this topic need to be continuously updated by conducting frequent researches and studies in the Palestinian service sector. Studies implemented in the industrial

sector are also recommended to be done in the service sector to compare results (Herzallah et al., 2014).

1.3 The Research Problem

The relationship between TQM and performance has been studied in many research studies. In this research, we used other variables based on specific needs to cover some gaps in the literature and get a deeper understanding of this relationship. The need for this research lies in highlighting the necessity of improving quality levels in the Palestinian service sector in the face of evolving market dynamics and enhancing sustainable organizational performance by implementing TQM practices and improving EMO. Managers need to be able to recognize the organizational problems that weaken implementing TQM, employee outcomes, and the effect of the EU on their organizations to prepare organizational strategies and plans that increase their chances of surviving and thriving in both local and global markets.

The SOP concept was used because it covers all aspects of performance (environmental, economic, and social) and because all organizations need to look for sustainability in this global situation characterized by high competition and scarcity of resources.

This research is applied in the Palestinian service sector. In general, we studied the service sector to come up with valuable results that could be used in different fields and organization sizes. The service sector dramatically contributes to the Palestinian economy, which is considered a service economy. It contributes approximately 27.9% of the GDP.

Highlighting the importance of the employee role in the TQM-performance relationship, the research employed EMO as a mediating effect between the main variables to see how it influence this relationship. The AMO model was adopted to represent EMO because it involves the main

aspects of EMO – Ability, motivation, and opportunities. Organizational learning was added to the AMO model as a fourth aspect after reviewing many related studies that indicated its importance in this relationship.

As discussed in the introduction, TQM success is context-dependent. It is essential to investigate TQM outcomes in the presence of contingency conditions. According to Sitkin et al. (1994), Ford (2015), and Zhang et al. (2012) environmental uncertainty is a vital contextual factor in quality management. Little is known about the possible influence of the EU on the relationship between EMO and SOP. In this research, we suppose that in markets with higher EU, EMO will be more positively related to SOP compared to when it is low. EU is presented by four primary dimensions - munificence, dynamism, hostility, and heterogeneity.

1.4 Aim and Objectives of the Research

This research aims to investigate the effect of TQM on SOP through EMO. It seeks to determine which TQM practices have the most significant impact on SOP and which dimension is most affected by TQM implementation. EMO is taken as a mediating factor to see how it influences the relationship between TQM and SOP.

This research also investigates the contingent effect of environmental uncertainty (EU) that moderates the relationship between EMO and SOP. The following objectives were developed to reach the aims discussed in this part:

- To investigate the effect of TQM practices on SOP.
- To examine the impact of TQM practices on EMO.
- To investigate the relationship between EMO and SOP.
- To explore the mediating effect of EMO on the relationship between TQM and SOP.

- To examine the moderating effect of EU on the relationship between EMO and SOP.

1.5 Significance of the Research

While reviewing the literature, it was noted that the effect of TQM on performance was investigated in many research studies that concluded with different results. In the Palestinian context, limited research investigated this relationship in the Palestinian service sector, primarily research that studies SOP.

Recently, more attention has been paid to employee roles in quality management. They are considered a success factor in applying quality practices. They affect TQM implementation, and they are also affected by it. Even though there is a gap in the literature in studying the mediating role of EMO in the TQM – SOP relationship, this study also applied the AMO model to present EMO systematically, which is not popular in the present literature.

Finally, the contingent effect is absent in most EMO-performance studies. This research employed the contingency effect of EU as a moderator variable of the EMO-SOP relationship.

1.6 Research Questions and Hypotheses.

The research aims to answer the following questions:

1- Do TQM practices positively influence SOP in Palestinian organizations?

2- Do TQM practices positively influence EMO in Palestinian organizations?

3- Do EMO positively influence SOP in Palestinian organizations?

4- How do EMO mediate the relationship between TQM and SOP in Palestinian organizations?

5- How does EU moderate the relationship between EMO and SOP in Palestinian organizations?

In this research, a group of hypotheses was formulated to be tested to investigate the relationships between variables discussed before.

H1: TQM practices positively influence SOP in Palestinian organizations.

H2: TQM practices positively influence EMO in Palestinian organizations.

H3: EMO positively influence SOP in Palestinian organizations.

H4: EMO mediate the relationship between TQM practices and SOP in Palestinian organizations.

H5: EU moderates the relationship between EMO and SOP in Palestinian organizations.

1.7 Thesis Structure

This research includes six chapters. The second chapter reviews the existing literature related to the research variables and the relationships between them. Chapter three discusses the methodology used, including research design, data collection, research population and sample, and data analysis methods. Chapter four presents the assessment of the measurement and structural model. The fifth chapter discusses the research results and presents the theoretical and practical implications of the study. Finally, the last chapter contains the conclusion, recommendations, and limitations.

Chapter Two

Literature Review

2.1 Overview

This chapter outlines the background of previous studies on the variables, relationships, and hypotheses addressed in this study. It is divided into five sections: TQM practices, TQM and SOP, TQM and EMO, EMO and SOP, and finally, contingency studies in TQM and EMO.

2.1.1 TQM Practices

TQM is a concept first generated in the manufacturing sector in Japan; since then, the term TQM term has been recognized and used worldwide (Prajogo, 2005; Jayaram et al., 2010). TQM is a quality management approach that targets the entire value chain, aiming to provide customers with superior products and services and increase their satisfaction through an emphasis on human factors and continuous improvements (Demirbag et al., 2006; Welikala & Sohal, 2008; Kaynak, 2003). It is a set of guiding principles and a management philosophy characterized by customer orientation, continuous improvement, management commitment, and employee empowerment, considering stakeholders' interests, leading to different benefits such as cost reduction, reputation improvement, employee motivation, and increased profitability (Al-Salim et al., 2002). Combined with other assets in the organization, it also aims to generate competitive advantages (Hackman & Wageman, 1995). It measures the degree of implementation of TQM and evaluates its relationship with other practices (Douglas & Judge, 2001). Different models, such as Malcolm Baldrige National Quality Award (MBNQA), Deming, and the European Foundation Quality Management (EFQM), ISO were developed to measure TQM practices. In this study, MBNQA has been applied to assess TQM practices. It was accepted as a suitable TQM measuring tool and adopted in many

studies (Alanazi, 2020; Fatima & Mahaboob, 2018; D'Souza & Sequeira, 2011). The dimensions proposed by the MBNQA model are leadership, HRM, strategic planning, customer focus, information and analysis, and process management (Alanazi, 2020). Explained in Table (1). "Business results" dimension was omitted due to the existence of the SOP variable as a dependent variable that covers this dimension.

Table 1: TQM Practices

MBNQA Dimension	Explanation	References
Leadership (L)	Guide and sustain a high-performance organization, through setting and communicating the organization's vision, mission, and expectations.	Islam, (2007)
Human resource management (HRM)	The policies and practices (including recruitment and selection, performance appraisals, training and development, compensation and reward) that manage people and integrate with the strategic goals and objectives of the organization to achieve a competitive advantage.	Tamer, K., & Darwish (2009)
Strategic Planning (SrP)	A structured and continual process of identifying and assessing an organization's abilities, surrounding	Goetsch and Davis (2012) and Jaafreh and Al-Abedallat (2012)

	environment, long-term goals, and the way to achieve them, as well as customers' expectations and concerns.	
Customer Focus (CF)	It is the strategic emphasis on customer needs through a group of customer relationship practices and organizational procedures and practices.	Douglas, T. J., & Judge Jr, W. Q. (2001).
Information and Analysis (IA)	This dimension addresses gathering, analyzing, and managing organizational data and information, and uses it to optimize organizational performance.	Islam, (2007)
Process Management (PM)	A group of tools and techniques that improve processes. It is the way to integrate the whole organization, and should be understood by all employees.	Lee, R. G., & Dale, B. G. (1998).

2.1.2 TQM & SOP

The TQM-performance relationship is still debated in the literature concerning whether TQM practices would lead to improved performance and which practices have the most significant effect

on performance (Idris, 2011). Some studies proved the positive association between TQM practices and performance (Shenaway et al., 2007). In contrast, others showed that TQM has no significant effect on performance (Westphal et al., 1996) or has an inverse impact (Davis, 1997). Dow et al. (1999) suggested that employee commitment, customer focus, and shared vision positively correlate with organizational outcomes. In another critical study, Samson and Terziovski (1999) concluded that soft TQM elements such as HRM, customer focus, and leadership are the leading performance predictors, while other factors such as information and analysis and process management are neither significantly related nor negatively related.

The TQM concept is based on ethical principles (Zairi & Peters, 2002). This philosophy is compatible with the moral attribute of SOP (Tasleem et al., 2019). Researchers have recently highlighted the connections between TQM and business excellence (Gómez et al., 2017; Saha & Alam, 2022). Zink (2007) recommended that TQM practices could be integrated with the business excellence frameworks to be linked to SOP.

Although many studies examined the relationship between TQM practices and operational performance, few studies focused on the effect of TQM on SOP (Saha et al., 2022), and most established a positive relationship between them. In a study done in Malaysia, Ali & Johl (2022) concluded that soft and hard TQM practices significantly enhance financial, social, and environmental SOP. Khalfallah et al. (2021) argued that sustainability can be included in organization applications by adopting the TQM approach. He also suggested that TQM principles significantly increase organizational sustainability. The results of another study conducted in the UAE's service sector showed that TQM significantly impacts sustainability performance (AlShehail et al., 2022). Tasleem et al. (2019) also agreed with this result and suggested that TQM implementation helps the organization improve all sustainability aspects (financial, social, and

environmental). Zaid (2023) proved that TQM has a positive effect on business sustainability in the Palestinian manufacturing organizations.

Despite having varying results regarding the degree of influence of each TQM element on operational performance and the shortage of studies that cover the TQM-SOP relationship, available theoretical research suggests that TQM elements can positively affect SOP (Abbas, 2020). Therefore, based on the above discussion, the first hypothesis is proposed as follows:

H1: TQM practices affect SOP.

2.1.3 TQM & EMO

As mentioned, TQM is a philosophy that focuses on continuous improvement and aims to achieve superiority to gain customer satisfaction and competitive advantages. This requires building related mission, vision, and plans that every employee in the organization adopts. In recent years, several studies have focused on the role of employees and their contributions to quality management (Bakotić & Rogošić, 2017; Gutierrez et al., 2018; Cho et al., 2017). Employees' participation and empowerment are key to successful TQM implementation (Gatchalian, 1997; Malik et al., 2010). According to Wilkinson et al. (1992), Ishikawa agreed on this point as he stressed the importance of employee involvement. According to Hill (1991), employee participation is the central mechanism for quality improvement; employees should be a part of identifying and improving processes. The emphasis on human resources of TQM awards such as MBNQA, EFQM, Deming Prize of Japan, and ISO9000 Series is evidence of HRM's role in TQM implementation (Uysal, 2012). Prajogo & Brian (2010) suggested that TQM practices must be incorporated with the HR system to achieve a competitive advantage.

On the other hand, TQM implementation is not only affected by human force; it also affects it in return in different ways. Many studies in the literature addressed the topic of EMO in quality management (Menezes, 2012). Salahat and Smirat (2014) linked HRM planning with TQM implementation in a study in the Palestinian private sector. Womack et al. (1990) stated that TQM offers employees opportunities and motivation, while Garrahan & Stewart (1992) and Green (2006) suggested that it can also create a stressful work environment

Researchers of both approaches use common indicators to measure EMO, including job satisfaction, commitment and loyalty rates, absenteeism, and turnover intentions (Chang et al., 2010; Faeq et al., 2022; Ahmed & Idris, 2020; Guimaraes, 1997; Arunachalam & Palanichamy, 2017; Sommer & Merritt, 1994). These indicators are too limited to conceptualize EMO of TQM; in this study, the researcher adopts the AMO framework to theorize EMO. The framework is based on three elements representing EMO: ability, motivation, and opportunities. The effect of TQM practices on each component is discussed in the following part.

2.1.4 TQM & Employee Abilities

TQM practices aim to provide employees with the needed skills and competencies to contribute to quality improvements (Vouzas & Psychogios, 2007). TQM practices build a managerial environment that encourages employees to utilize their skills and abilities to improve the quality of their work (Karia & Asaari, 2006). Organizations that yield power to employees, consistent with TQM principles, give them control over their jobs and make them more responsible for their tasks; it also increases their flexibility to adapt to a changing environment (Yeh, 2003). Shea & Howell (1998) proposed that “self-efficacy” can be enhanced through participating in TQM projects.

According to Zahorik & Keiningham (1996), TQM projects improve work quality through technical and interpersonal skills.

TQM implementation makes changes in the work environment. It requires applying certain practices that directly affect people in the organization. Employee training is one of the main TQM dimensions that is considered an enabler for TQM implementation (Gunasekaran, 1999; Taylor & Taylor2013). Salaheldin (2009), Antony et al. (2002), Saraph (1989), Tamimi (1998), and Lewis (2006) also mentioned training as a critical success factor for TQM implementation, which will lead to an improvement in employee skills, abilities, and capabilities. Training programs help employees increase their knowledge and skills and provide opportunities for individual growth (Ijaz et al., 2012).

In addition, TQM enhances communication between employees themselves and between employees and their managers (Fuentes et al., 2011), which helps transform knowledge and experiences. TQM emphasizes teamwork to provide a cooperative atmosphere between employees and management, which improves employees' performance at all levels (Fuentes et al., 2004). Teamwork and employee cooperation among each other increase self-efficacy (Kirkman & Rosen 1999).

The literature has well documented that TQM practices lead to employee satisfaction (Chang et al., 2010; Ooi et al., 2007; Karia & Asaari, 2006). And this reflects in employee ability in different ways. According to Butler (1996) and Kerr (1996), satisfied employees are more likely to provide high levels of service to their customers (Al-Refaie,2015). Satisfied employees are more productive (Hunter & Tietyen, 1997; Allen & Wilburn, 2002; Sageer et al., 2012; Volyn, 1995). And they exchange knowledge and improve their work performance (Arsić et al., 2012; Mohammad et al., 2013; Ayupp & Kong, 2010; Lee et al., 2015). Employee empowerment, also a

practice of TQM, enables employees to make their own job-related decisions to smooth their work functions and make them responsible for the results (Silver & Randolph, 2004).

2.1.5 TQM & Motivation

TQM practices provide an environment that enhances employee motivation and goal accomplishment (Guimaraes, 1996). It plays a role in developing motivation interventions to engage employees in the quality improvement process (Dubey & Gunasekaran, 2014). Employee participation, a key factor in TQM implementation, will enhance employees' pride and belonging (Ugboro & Obeng, 2000). Thus, employees will feel valued, respected, and essential (Sadikoglu & Zehir, 2010). Silver & Randolph (2004) state that employee empowerment affects employees' behavior and attitude and leads to higher job satisfaction. Teamwork and employee cooperation increase job satisfaction (Kirkman & Rosen, 1999; Griffin et al., 2001). According to Koyuncu et al. (2013), satisfied employees are more dedicated to work. Judge et al. (2000) mentioned that employee satisfaction positively correlates with motivation. They are leading us to an expected result of a relationship between TQM and motivation.

2.1.6 TQM & Opportunities

TQM offers opportunities for self-actualization in the work environment (Snape, 1995). That is because it considers the thoughts and opinions of every employee and gives them the space to express them through supporting employee participation and involvement. TQM practices allow employees to achieve their career objectives and improve their work quality by enhancing their skills and capabilities (Aldakhil et al., 2017).

In his 14 points of management principles, Deming recommended breaking down barriers between staff and departments. Employees' participation and involvement is a crucial TQM element. It

provides them with opportunities to have an input in organizational decisions (Berg, 1999). Management should design a structure and build a culture that supports employees' effective participation (Hill, 1991). Employees' involvement would make them more responsible, motivated, and satisfied with their jobs and discourage their fear of failure (Wilkinson & Witcher, 1991). In organizations that apply TQM practices, employees benefit from decision-making and problem-solving, leading to job satisfaction (Snipes et al., 2005). TQM focuses on delegating responsibilities from upper management to employees (Dimitmades, 2001).

In a total quality setting, jobs are redesigned to give employees autonomy and enable them to participate in decision-making (Hackman & Wageman, 1995). In TQM, employees' involvement and participation are critically essential to improve quality and productivity (Fuentes et al., 2004). Employees' participation in the decision-making and problem-solving process enhances their awareness of their role in reaching organizational excellence (Dahlgaard-Park, 2012). Management must consider employees in decision-making to show greater loyalty and commitment (Arsi´c et al., 2012). One of the criteria of the EFQM is maximizing employees' contribution through their improvement and involvement (Michalska, 2008). Quality improvement teams and quality circles are critical practices for applying TQM; they require employees' participation to resolve quality problems that face them, leading to motivation and satisfaction (Ijaz et al., 2012).

Studies also proved that TQM practices negatively affect employee turnover and absenteeism (Judge et al., 1993). It influences employees' intention to leave the organization (Anjum, 2016). And reduces turnover intentions (Hwang et al., 2020), meaning they see the opportunity to grow in the organization.

2.1.7 TQM & Learning

Previous literature discussed organizational learning as an output of TQM. Many authors believe that TQM significantly and positively affects organizational learning (Hung et al., 2011; Lam et al., 201). TQM helps foster learning (Hendricks & Singhal, 2001). According to Barrow (1993), organizational learning is TQM's primary outcome or product. Many other researchers have mentioned that TQM practices enhance organizational learning (Terziovski & Samson, 2000; Martinez-Costa & Jimenez-Jimenez, 2008; Walley, 2000). TQM organizations observe higher levels of organizational learning (Martinez-Costa & Jimenez, 2008; Pool, 2000). Pool (2000) examined how TQM supports new knowledge within the organization. Due to the significant impact of TQM on organizational learning, it will be considered the fourth dimension of EMO. Pool (2000) examined this relationship, too, and concluded that organizations implementing TQM will observe a higher level of organizational learning than those not exposed to TQM.

According to the literature mentioned, we can say that there is a positive relationship between TQM practices and EMO. Therefore, the second hypothesis is defined as follows:

H2: TQM practices positively influence EMO.

2.1.8 EMO and SOP

The AMO theory provides an excellent framework that explains the relationship between EMO and performance. Recent studies are increasingly adopting the AMO model to understand the EMO - performance relationship better. Almutawa & Zhang (2016) believe that AMO directly affects performance. Obeidat & Mitchell (2016) support the link between AMO and performance. Katou & Budhwar (2010) also agreed that AMO practices affect performance. The AMO model is an essential theoretical framework that outlines the intermediary role of EMO and its

relationship with organizational performance (Yazadani, 2022). According to AMO, when employees have the needed skills, abilities, and knowledge. They are motivated to do their tasks effectively and can participate in the workplace; it is expected that this will be reflected in the organizational performance (Marin-Garcia et al., 2016; Paauwe, 2009; Bos-Nehles et al.,2023).

The effect of AMO on performance was proven in literature. From the studied literature, we can observe a shift in performance indicators towards sustainable indicators that not only evolve around traditional financial indicators, including employees' capacities and talents (Jiang et al., 2018; Székely & Knirsch, 2005). In this study, we used the concept of SOP to express the corporate performance variable. This concept has been widely used recently because of the general understanding of the increasing impact of the sustainability concept on the nature of organizations' operations (Yong et al., 2020). Phan et al. (2020) see that organizations must go beyond economic and regulatory compliance and integrate their economic, social, and environmental performance to improve organizational sustainability.

SOP guarantees the organization's continuity and considers stakeholders' interests (Bianco et al., 2019). It combines three dimensions: economic, social, and environmental, appearing as the interaction between the internal and external environment of the organization (Cizmaș et al., 2020). The financial performance is evaluated in the literature based on different indicators, e.g., profit and income (Zhu et al., 2012), market share (Saha et al., 2022), operational costs (Hassis et al., 2023), processes efficiency (Khan & Nisar, 2019). It is just as important as achieving environmental goals for stakeholders to create a pathway to achieve SOP (Lopes et al., 2020). The second dimension is social performance, it represents a firm's performance based on social indicators, e.g., workforce health and safety (Khan & Nisar, 2019; Saha et al., 2022), workforce capabilities and satisfaction (Khan & Nisar, 2019), community wellbeing (Malik et al., 2021). The

third dimension is environmental performance; organizations are showing increasing interest in the environmental consequences of their production processes, which could respond to the growing public awareness of environmental issues caused by business activities and government regulations and laws. In the literature, environmental performance is measured based on different indicators, e.g., using environmentally friendly materials and reliance on renewable energy (Hassis et al., 2023), as well as reducing toxic materials and emissions (Khan & Nisar, 2019).

One of the research goals is to explore the impact of EMO elements represented in the AMO model on SOP. According to the reviewed literature, the third hypothesis is defined as follows:

H3: EMO positively influence SOP.

After analyzing the relationship between TQM and EMO and the relationship between EMO and SOP, we can see that EMO can explain how TQM affects performance. If the elements of EMO discussed before are well utilized and improved through TQM practices, they will make a difference in the TQM-performance relationship. We can express this relationship in the following hypothesis:

H4: EMO mediate the relationship between TQM practices and SOP.

2.1.9 Contingency Studies in TQM and EMO

Contingency theory means there is no best way to manage different organizations in different environments. An effective organizational strategy in a company may not be effective in another company under different circumstances (Tarter & Hoy, 1998; Otley, 2016). It means something is valid only if certain conditions are met (Chenhall, 2007). This theory shows that a firm's performance is directly related to the context in which it operates (Robertson & Chetty, 2000).

According to CT, organizational effectiveness depends on fitting organizational characteristics, such as structure, to contingencies resulting from different factors leading to a higher performance (Donaldson, 2006; Kihara, 2016; Pennings, 1992; Thompson, 2007; Zott, 2003). Operations management research follows three steps in studying CT: 1) Identifying contingency variables that differentiate between contexts; 2) grouping different contexts based on these contingency variables; and 3) determining the most effective internal designs (responses) in each major group (Sousa & Voss, 2008).

CT has been increasingly mentioned in recent research, yielding many new insights in different fields, including QM (Fuentes et al., 2011; Donaldson, 2001). Alzaza (2022) employed the contingency theory in a study that investigated the quality of an e-learning system in the Palestinian Higher-educational institutions during coronavirus pandemic. Jery and Souaï (2014) found that the relationship between strategic human resources management and organizational performance is contingent on the type of the firm's business strategy. Chang and Huang (2005) confirmed the validity of the contingency model in an Asian society by investigating the effect of the moderating role of product market strategy on the relationship between strategic human resource management and firm performance.

Contingency variable identification is now considered an essential part of related research. Some of the most frequent variables in QM research are as follows: EU (Otley, 2016; Speckbacher & Offenberger, 2010; Lecy et al., 2012; Beleska-Spasova, 2014; Burns & Stalker, 1961; Wadongo & Abdel-Kader, 2014; Donaldson, 2001), organizational strategy (Tharenou et al., 2007), company size (Cagliano et al, 2001; sila, 2007), technology (Donaldson, 2001), ownership structure (Ferreira & Otley, 2005), and organizational structure (Lecy et al., 2012; Ferreira & Otley, 2005).

EU is frequently mentioned as an essential contingent variable in different studies. Sitkin et al. (1994) said the EU affects QM and TQM implementation. Ojra (2014) studied the effect of EU as a contingency factor on organizational performance. Kattan et al. (2007) studied the contingent effect of EU on the management accounting systems in the developing economy of Palestine. EU is defined in the literature as the inability to accurately predict the outcomes of a decision (Pondeville et al., 2013; Kafetzopoulos et al. 2019, Duncan, 1972; Downey & Slocum, 1975) or it is the volatility and lack of predictability in the external environment where firms compete (Gordon, 2009; Miller & Friesen, 1983; Milliken, 1987). The changing events and trends create opportunities and threats for an organization's individuals (Turner, 1993). Organizations that operate in environments with high uncertainty levels need to develop flexible and adaptable systems to manage their activities at the same quality level (Otley, 2016). Environmental and technological changes cause organizational uncertainty (Donaldson, 2001). It also affects an organization's mechanistic structure (organizational hierarchy) (Pennings, 1992). Some studies highlighted the positive side of uncertainty and emphasized its benefits. Uncertainty situations are full of opportunities, and the staff's task is to exploit these opportunities (McGrath & MacMillan, 2000).

Unlike the QM, limited HRM studies considered the effects of contingency variables. Some scholars believe that the EU, among other contingent variables, can affect the relationship between HRM and performance (Katou & Budhwar, 2010). Cogin and Williamson (2014) investigated the interactive relationship between HRM practices and EU on financial and non-financial performance. As well as Delery and Doty (1996) and Becker and Gerhart (1996) studied the moderating role of the EU in HRM research.

As discussed before, the EU could be defined as fluctuation and degree of uncertainty in the environment. These factors affect product performance, quality, and life cycle length. Firms realize they do not have enough information to handle new sources of change in the environment, making it hard to deal with ambiguity (Koufteros et al., 2005). EU is linked to changes in technologies, customers' preferences, demand fluctuation, and supply of materials (Jansen et al., 2006). To survive in such a risky environment, companies need to adapt to these changes, and managers are responsible for improving their organization's ability to change and grow (Clack et al., 2012). Especially in developing economies – such as our field of study – which face more uncertainty than those performing in advanced economies, they must be flexible to achieve innovation and good performance (Yi et al., 2009). They must also enhance their innovative capabilities to gain a competitive advantage in uncertain environments (Hamidi & Shams Gharneh, 2017; Lin et al., 2010). Employees try to understand the changing climate and how it will affect their lives (Fisher and Howell, 2004; Bartunek et al., 2006). According to Donaldson (2001), an organization's superior performance is contingent on the external environment and the internal environment, which highlights the critical role of employees in facing EU impacts.

In this research, we will argue how the EU affects the relationship between EMO and performance. EU leads employees to experience stress (Herscovitch & Meyer, 2002; Rafferty & Griffin, 2006) and confusion (DiFonzo & Bordia, 1998) because of the lack of information. Thus, workforces facing a changing working environment must be more skilled and motivated (Jensen et al., 2009). They also need to be flexible to have the ability to meet varying performance requirements (Miller & Park, 2002). In this context, Ployhart and Bliese (2006) proposed the I-ADAPT theory to describe individual differences in adapting ability. It defines adapting ability as an individual's skill, disposition, willingness, and motivation to change or fit different tasks and features.

According to Ngo and Loi (2008), companies value employees who can adjust to changes and capitalize on opportunities. Organizations expect employees to keep positive job attitudes and high-performance levels in such situations by acquiring new skills and procedures (Cullen et al., 2014). Skilled, motivated, and more participating employees exposed to organizational learning are valuable assets to firms in uncertain environments. Therefore, firms with high EMO can take advantage of turbulent environments, exploit opportunities, and use them to improve performance. They can also retain and attract talented employees with innovative ideas and deliver superior performance in such environments (Oke et al., 2012). However, little is known about the potential effect of the EU on the relationship between EMO and SOP in the organization. In this study, we assume that EMO will be more related to SOP in environments with higher levels of uncertainty. The moderating effect of the EU is investigated in the following hypothesis.

H5: EU affects the relationship between EMO and SOP.

Chapter Three

Research Methodology

3.1 Overview

In this chapter, the methods used to conduct this research are discussed. Starting with research measures and conceptual framework, then research design that describes the research work plan. Next, we cover the approach used in the research. Then, data collection, population, and sampling are addressed. Finally, methods and techniques for data collection are explained.

3.2 Measures

This study used pre-tested measures from previous empirical studies to ensure their validity and reliability. The measures used for assessing the research variables are discussed below:

3.2.1 TQM Dimensions

The MBNQA model was adopted to measure the TQM implementation level; it contains six elements: leadership, HRM, strategic planning, customer focus, information and analysis, and process management. This instrument was designed to assess the development degree of the organization on each of the six TQM practices. Many scholars have widely adopted the MBNQA instrument in their TQM studies (e.g., Miyagawa and Yoshida, 2010; Prajogo and Hong, 2008; Haffar et al., 2013).

3.2.2 EMO

EMO was measured based on the AMO model. The AMO model has been widely used in HRM literature to explain the linkage between HR practices and organizational performance (Boxall & Purcell, 2003; Boselie et al., 2005; Ehrnrooth & Björkman, 2012; Appelbaum et al., 2000).

According to the AMO model, performance is a function of ability, willingness to perform (motivation), and opportunity to perform (Blumberg & Pringle, 1982). These three elements must be present for performance to occur, and having a low level of any of these dimensions would decrease performance levels (Blumberg & Pringle, 1982). Based on the model, people will perform well when they have the proper abilities have adequate motivation, and the work environment provides them with participating opportunities (Raidén et al., 2006; Boselie, 2010; Boxall & Purcell, 2003; Marín-García et al., 2011).

It is noteworthy - quoting from Marin-Garcia & Tomas (2016) - that the model's origins were limited to the first two dimensions (ability and motivation); it only considered that the personal dimensions affect performance and ignored the external environment's effect. Blumberg and Pringle (1982) introduced an updated model after adding the missing dimension of "opportunity" to solve this issue. Certain statements were quoted from related studies to express each AMO dimension in the questionnaire.

3.2.3 EU

EU was measured using EU dimensions (Munificence, Dynamism, Hostility, and Heterogeneity). This instrument has been widely adopted for the aim of measuring environmental uncertainty. Munificence describes how the external environment of an organization leads to business growth (Kocabasoglu et al., 2007), including economic growth, consumer demand growth, and growth in industry sales (Kim & Chai, 2016). Dynamism represents the degree of changes in customer preferences, technologies, product design, competitor's practices, etc.… (Khan & Quaddus, 2015; Achrol and Stern, 1988). Hostility captures the degree of competition and governmental control in

the market (Kocabasoglu et al., 2007). Heterogeneity measures the degree of dissimilarity between organizations (Kocabasoglu et al., 2007).

3.2.4 SOP

SOP depends on balancing environmental, social, and economic performance (Schoolman et al., 2012; Kajikawa, 2008). The three dimensions were used to give a comprehensive perception of performance. Table (2) presents the variables, measures, and references for each one:

Table 2: Variables measurement

Variable	Measures	References
TQM practices	MBNQA model: • Leadership (L) • Information Analysis (IA) • Strategic Planning (SrP) • Process Management (PM) • Customer Focus (CF) • Human Resource Management(HRM)	(Jayaram et al., 2010; Prajogo & Sohal, 2006; Wang et al., 2012; Fotopoulos & Psomas, 2010; Sitki-Ilkay & Aslan, 2012; Hassis et al., 2023; Rahman & Bullock, 2005; Alanazi, 2020; Zhang et al., 2021; Edgar et al., 2021; Samson & Terziovski, 1999; Das et al., 2008; Sila & Ebrahimpour, 2005; Baird et al., 2011)
EMO	AMO model: • Ability (AB) • Motivation (MO) • Opportunity (OP) • Learning (LE)	(Almutawa et al., 2016; Sohal & Morrison, 1995; Nientied & Slob-Winterink, 2018; Katou & Budhwar, 2010; Doshi & Nigam, 2023; Skerlavaj et al., 2010; Jimenez &Valle, 2011; Edgar & Everett, 2021)

EU	EU dimensions • Munificence (UNM) • Dynamism (UND) • Hostility (UNH) • Heterogeneity (UNHE)	(Miller & Friesen, 1983; Kim & Chai, 2016; Khan & Quaddus, 2015; Wernerfelt & Karani, 1987; Achrol & Stern, 1988; Brouthers et al., 2002)
SOP	SOP dimensions: • Social Performance (SP) • Environmental Performance (EP) • Economic Performance (Eco)	(Hassis et al., 2023; Khan & Nisar, 2019; Saha et al., 2022; Malik et al., 2021)

3.3 Conceptual Framework

Based on the literature review and the hypotheses, the relationships among variables can be suggested with the model shown in Figure (1), in which TQM indirectly affects SOP through EMO. It also shows the moderating effect of EU on the relationship between EMO and SOP.

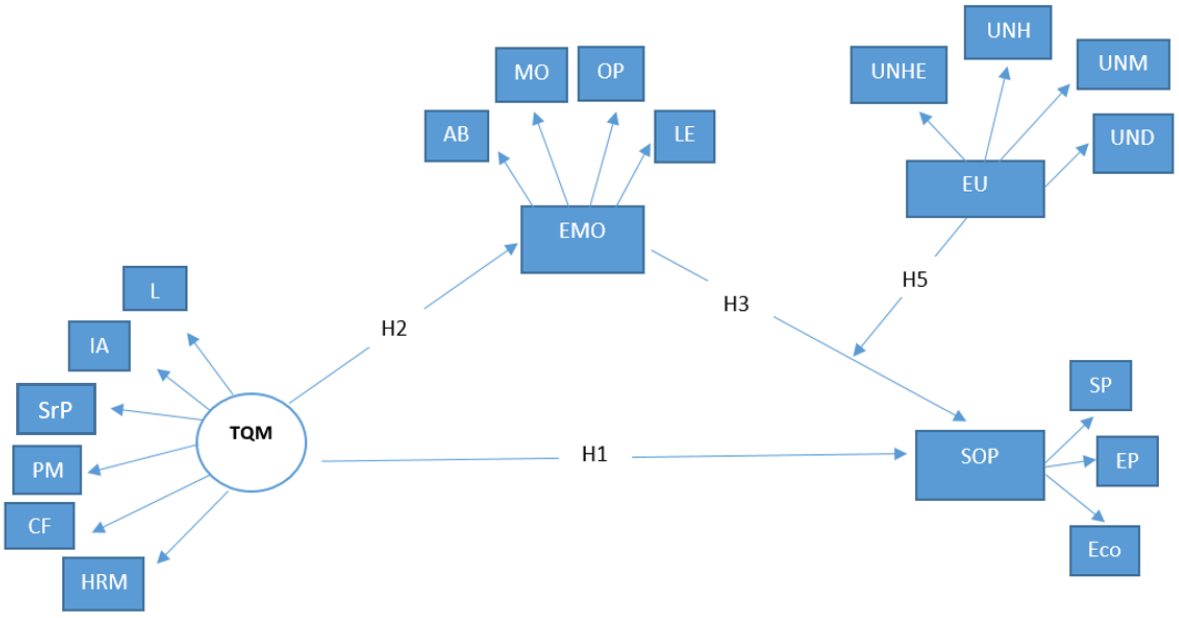

Figure 1: The conceptual framework

3.4 Research Design

Kothari (2004) identified three major study types: descriptive, explanatory, and exploratory. In descriptive research, the researcher describes a situation or case, a theory-based method created by gathering, analyzing, and presenting data. Explanatory research addresses the causal relationship between the variables, examining the effect of independent variables on the dependent variable by collecting, testing, and analyzing data. Exploratory research aims to explore a specific problem or topic by formulating a suggested hypothesis.

In this research, we aim to investigate the effect of TQM on SOP, to understand how EMO affect this relationship, and how environment uncertainty moderates the relationship between EMO and SOP, so it is considered to be causal (explanatory) research because it investigates how some of the mentioned variables causes an effect on others.

3.5 Research Approach

This research used the quantitative approach to test the hypothesis formulated from the literature review. Quantitative research involves a numerical or statistical approach to quantifying data. It seeks to build, confirm, and validate relationships among variables and develop generalizations that contribute to theories (Leedy & Ormrod, 2001, p. 102). A quantitative research employs inquiry strategies such as experiments and surveys and uses instruments to collect data that yield statistical data (Creswell, 2003). According to Williams (2007), a quantitative research is independent of the researcher; therefore, data is used to measure reality objectively.

3.6 Questionnaire Design

The questionnaire was built based on an extensive literature review. The questions were carefully selected to ensure that they express the research variables. A pilot survey was distributed first to ensure the wording and clarity of the survey. The questionnaire's language is Arabic because it was distributed locally. The research questionnaires in English and Arabic are available in Appendix (1) and Appendix (2), respectively. The questionnaire was developed using Google Forms and distributed via email, and also printed and distributed in person to increase the response rate as (Mond, 2004) argued that hand delivery surveys are associated with higher response rates. Data collection started in December 2022 and ended in January 2023. It comprises six sections: Eligibility of respondents, Demographic Information, TQM elements, EMO, EU, and SOP.

The initial part contained ten questions that covered the respondents' demographic information, such as gender, position, department, firm size and field of operation, company location, and whether TQM practices were implemented. This data will be linked to the research variables in the analysis part to generate valuable results. In the second part, the implementation of TQM practices was assessed. Twenty-six questions were asked to measure the six TQM practices: leadership, HRM, strategic planning, customer focus, information and analysis, and process management. Next, we asked fifteen questions that measure EMO, abilities, motivation, opportunities, and learning in this part. In the fourth part, we assess the degree of uncertainty of the environments where each organization operates; sixteen questions covered the fourth dimensions of the EU: Munificence, Dynamism, Hostility, and Heterogeneity. Finally, the fifth part contained sixteen questions that evaluate SOP, including environmental, social, and financial performance.

A seven-point Likert scale was used to determine the degree of approval on each statement of the questionnaire, with endpoints of "strongly disagree (= 1)" and "strongly agree (=7)" in all sections except the EU section where endpoints of "highly unpredictable (= 1)" and "highly predictable (=7)" were used.

3.7 Sampling Techniques

This research aims to evaluate TQM implementation, EMO, EU, and SOP in service-providing companies which have implemented the QM principles and practices and have one of the QM certifications. The questionnaires were directed to high-level employees in these companies. To guarantee that these companies are implementing QM processes, we asked about it in the eligibility section of the questionnaire, and any company that did not do so was deleted.

The required sample size can be determined utilizing G*power 3.1 software (Faul et al., 2009) based on the provided parameters: a small effect size of f^2=0.15 (Cohen, 1988), an alpha level of 0.05, three predictors, and a power of 0.95% (Gefen et al., 2011). With these specifications, we calculate that 119 administrative officers are needed for this study to attain the desired confidence level. Using a convenient sampling strategy, 200 surveys were distributed electronically and in person as hard copies. We obtained 162 replies, with 123 statistically significant, resulting in a response rate of approximately 61%.

3.8 Data Analysis Techniques

To analyze the raw data obtained from the questionnaire, we used Smart PLS 4.0 to test hypotheses, examine the relationships among the research variables and formulate theories. The SEM analysis is conducted on Smart PLS using Ordinary Least Square (OLS) to investigate the causal-effect relationship between the independent and dependent variables. The PLS approach is

used to analyze quantitative data using Smart-PLS, developed by Herman World in 1982. Using PLS-SEM helps analyze small sample sizes and non-normal data, and it can also examine complex models with multiple constructs, indicators, and structural paths despite the data distribution (Hair et al., 2019).

In Smart PLS, variables are classified into exogenous or endogenous, representing independent and dependent variables. The relationships among these variables are visually represented in a diagram, where exogenous variables have outward arrows in the structural model. On the other hand, the endogenous variables have inward arrows in the structural model (Hair et al., 2011).

To build a path model, we need to develop two theories: measurement theory and structural theory. Measuring theory assesses the reliability and validity of the measures, in which we applied composite reliability, convergent validity and discriminant validity. Next, we will examine the relationships between different variables and assess the formulated hypothesis by using coefficients of determination (R^2), the predictive relevance (Q^2), the effect sizes (f^2), and the significance of the path coefficients.

Chapter Four

Data analysis and results

4.1 Overview

The fourth chapter presents quantitative data analysis. In the first part, demographic information of the respondents will be represented and the descriptive data will be discussed. In the second part, the formulated hypothesis will be tested using the Smart-PLS program. This chapter explores the relationships between TQM practices, EMO, EU, and SOP from the perspective of the managerial level in the Palestinian service sector.

4.2 Demographic analysis

The results indicate that 76% of the received responses passed the eligibility test, the answer to the eligibility question in 123 questionnaires out of 162 was that the company applies quality practices. The data was analyzed using the SPSS program. Table (3) summarizes the complete demographic details.

Table 3: Demographic characteristics

Characteristic	Distribution	Frequency (n = 123)	Percentage
Gender	Male	68	55.3%
	Female	55	44.7%
Qualifications	Diploma	1	0.8%
	BA	98	79.7%
	MA	22	17.9%
	PHD	2	1.6%
Department you work in	Quality assurance	31	25.2%
	Sales	8	6.5%
	HR	22	17.9%
	Marketing	11	8.9%
	Procurement	7	5.7%
	Finance	12	9.8%

	Operations	14	11.4%
	Information Technology	7	5.7%
	R & D	2	1.6%
	Customer service	6	4.9%
	Other	3	2.4%
Job position	Supervisor	24	19.5%
	Specialist	8	6.5%
	Unit Head	16	13.0%
	Section Head	34	27.6%
	Manager	29	23.6%
	Regional manager	4	3.3%
	Director	6	4.9%
	Other	2	1.6%
Organization sector	Telecommunications	14	11.4%
	Trading	11	8.9%
	Banking	24	19.5%
	Insurance	16	13.0%
	Education	13	10.6%
	Hospitality	8	6.5%
	Health care	7	5.7%
	consultancy	3	2.4%
	Information Technology	8	6.5%
	Marketing and Advertising	9	7.3%
	Media Services	5	4.1%
	Legal Services	3	2.4%
	Other	2	1.6%
Organization type	Family business	36	29.3%
	Private joint stock	31	25.2%
	Public joint stock	53	43.1%
	Other	3	2.4%
Number of employees	1-10	16	13.0%
	11-50	45	36.6%
	51-200	39	31.7%
	201-500	14	11.4%
	More than 500	9	7.3%
Geographic location	Jenin	5	4.1%
	Tulkarm	4	3.3%
	Tubas	2	1.6%
	Qalqilya	4	3.3%
	Nablus	26	%21.1
	Salfit	0	%0.0
	Jericho	12	9.8%

	Ramallah	38	%30.9
	Jerusalem	10	8.1%
	Bethlehem	9	7.3%
	Hebron	13	10.6%
Quality certificate	ISO 9001	31	25.2%
	ISO 14001	34	27.6%
	ISO 45001	22	17.9%
	Other	36	29.3%
Organization market	Local market	96	78.0%
	Regional market	23	18.7%
	Global market	4	3.3%

4.3 Assessment of constructs implementation

Descriptive statistics were used to assess the research variables in the targeted companies. It describes the implementation level of TQM practices, EMO and SOP, and the predictable level of environmental uncertainty in these companies. Responses were classified into seven equal grades shown in Table (4). These grades are calculated by dividing the response range (7-1=6) by the number of levels (7 levels) in the Likert scale. That equals 0.86, this number is used to determine the intervals of the mean score shown in Table (4).

Table 4: Intervals of levels of implementation

Mean score	Level of implementation
1 to less than 1.86	Very low
1.86 to less than 2.72	Low
2.72 to less than 3.58	slightly low
3.58 to less than 4.44	Moderate
4.44 to less than 5.3	slightly high

5.3 to less than 6.16	High
6.16 - 7	Very high

Table (5) shows the mean and standard deviation of the study variables. The results indicate that the implementation of TQM is high. The results show that the overall mean of TQM practices implementation level is (5.360), while the overall mean of EMO and SOP are (5.207) and (5.224), respectively. EU level is moderate with an average mean of (3.723). The results show a high level of TQM adoption, process management has the highest level (5.590), followed by leadership (5.578), customer focus (5.454), strategic planning (5.358) and HRM (5.242). Information and analysis showed the lowest implementation level (4.935). For employee outcomes, the results revealed that learning level was the highest (5.445), followed by ability (5.405), opportunities (4.998), and finally, motivation (4.981). The results of the EU show that heterogeneity is the highest dimension of the EU dimensions with (4.899), followed by dynamism (3.549), munificence (3.340), and finally, hostility (3.103). Regarding the SOP, the results show that the economic performance has the highest level (5.542), followed by social performance (5.376), and the minimum implementation level was for environmental performance (4.754). Appendix (3) presents the detailed descriptive results of each indicator of the study variables.

Table 5: Descriptive Analysis

Code	**Mean**	**Std. deviation**	**Implementation level**
TQM practices	**5.360**	**1.610**	**High**

Avg_L	5.578	1.362	High
Avg_HRM	5.242	1.688	slightly high
Avg_SrP	5.358	1.616	High
Avg_CF	5.454	1.652	High
Avg_IA	4.935	1.834	slightly high
Avg_PM	5.590	1.506	High
EMO	**5.207**	**1.772**	**slightly high**
Avg_AB	5.405	1.631	High
Avg_MO	4.981	1.866	slightly high
Avg_OP	4.998	1.898	slightly high
Avg_LE	5.445	1.694	High
EU	**3.723**	**1.924**	**Moderate**
Avg_UNM	3.340	2.001	slightly low
Avg_UND	3.549	1.912	slightly low
Avg_UNH	3.103	1.661	slightly low
Avg_UNHE	4.899	2.120	slightly high
SOP Dimensions	**5.224**	**1.615**	**slightly high**
Avg_EP	4.754	1.635	slightly high
Avg_SP	5.376	1.640	High
Avg_Eco	5.542	1.570	High

Smart PLS is used to analyze data. It is a leading software for PLS-SEM. The PLS-SEM technique consists of two steps. First is the assessment of the measurement model, which includes validity and reliability testing. Secondly, the structural model provides for hypothesis testing.

4.4 SEM- PLS Analysis

4.4.1 Assessment of the Measurement Model (Outer Model)

The assessment of the outer model is to determine validity and reliability. Reliability can be measured using Cronbach's alpha (CA) and Composed Reliability (CR). CA and CR values above 0.7 are considered good indicators (Hair et al., 2011). Higher CR values indicate higher levels of reliability. Values between 0.6 and 0.7 are considered acceptable, values between 0.7 and 0.9 are satisfactory to good, and values of 0.95 and higher are problematic since they indicate that the items are redundant, thus reducing construct validity (Hair et al., 2019; Diamantopoulos et al., 2012; Drolet & Morrison, 2001). Values above 0.95 also indicate possible undesirable response patterns, leading to inflated correlations among the indicators' error terms (Hair et al., 2019). According to Vinzi et al. (2010), CR is a better reliability measurement than CA in structural equations. In CA calculation, items are given equal weights, but in CR, items are weighted based on the construct indicators' loadings. Table (6) shows all constructions are reliable since all CR values are higher than 0.6 and lower than 0.95.

Validity is measured using convergent validity by examining item reliability (factor loadings) and discriminant validity. Factor loadings were calculated using the PLS algorithm. According to Hair et al. (2014), the factor loading of the indicator, CR, and average variance extracted (AVE) must be considered to establish convergent validity. According to Hair et al. (2016), the factor loading should be above 0.708, and the AVE value should be higher than 0.50 to be adequate for

convergent validity. Values in Table (6) indicate an acceptable level of indicator validity. After data screening and evaluation, indicators with factor loading values less than 0.708 were removed from the analysis. After evaluating the data, we removed some items to enhance the discriminant validity and improve the fitness of the model.

Table 6: Results of the Measurement Model

Construct	Items	Item Loading	CA	CR	AVE
L	L1	0.777	0.782	0.859	0.604
	L2	0.772			
	L3	0.761			
	L4	0.798			
HRM	HRM1	0.805	0.885	0.921	0.744
	HRM2	0.895			
	HRM3	0.875			
	HRM4	0.871			
SrP	Srp1	0.842	0.82	0.893	0.736
	Srp2	0.888			
	Srp3	0.843			
CF	CF1	0.833	0.884	0.915	0.683
	CF2	0.869			
	CF3	0.842			
	CF4	0.818			

	CF5	0.770			
IA	IA1	0.873	0.876	0.924	0.801
	IA2	0.938			
	IA3	0.873			
PM	PM1	0.818	0.815	0.878	0.643
	PM2	0.829			
	PM3	0.781			
	PM4	0.779			
AB	AB1	0.927	0.891	0.932	0.822
	AB2	0.901			
	AB3	0.890			
MO	MO2	0.912	0.88	0.907	0.735
	MO3	0.878			
	MO6	0.832			
OP	OP1	0.885	0.888	0.931	0.818
	OP2	0.909			
	OP3	0.919			
LE	LE1	0.868	0.757	0.861	0.675
	LE2	0.762			
	LE3	0.831			

EU	UND3	0.842	0.904	0.933	0.776
	UNH3	0.884			
	UNHE1	0.868			
	UNM1	0.928			
EP	EP1	0.891	0.863	0.907	0.709
	EP2	0.885			
	EP3	0.808			
	EP4	0.777			
SP	SP1	0.873	0.885	0.920	0.743
	SP2	0.872			
	SP4	0.855			
	SP5	0.848			
Eco	Eco1	0.858	0.889	0.921	0.693
	Eco2	0.858			
	Eco3	0.833			
	Eco4	0.774			
	Eco5	0.836			

Regarding discriminant validity and variable correlation, we did the Fornell- Larcker test and determined the Heterotrait-Monotrait ratio of correlations (HTMT). Fornell-Lacker criterion compares the square root of the average variance extracted (AVE) with the correlation of latent

constructs. The latent construct should explain its indicator's variance better than other latent constructs. Therefore, the square root of each construct's AVE should be higher than the correlations with other latent constructs (Abd Hamid et al., 2017), as shown in Table (7).

Table 7: Fornell-Larcker criterion - Discriminant Validity

	L	HRM	SrP	CF	IA	PM	AB	MO	OP	LE	EU	EP	SP	Eco
L	0.777													
HRM	0.729	0.862												
SrP	0.711	0.788	0.858											
CF	0.649	0.692	0.649	0.827										
IA	0.651	0.742	0.641	0.641	0.895									
PM	0.662	0.781	0.690	0.659	0.655	0.802								
AB	0.769	0.808	0.773	0.730	0.687	0.739	0.906							
MO	0.737	0.834	0.768	0.668	0.751	0.752	0.820	0.858						

OP	0.725	0.801	0.748	0.722	0.785	0.733	0.807	0.834	0.904					
LE	0.651	0.668	0.715	0.676	0.564	0.636	0.765	0.781	0.685	0.821				
EU	-0.735	-0.771	-0.731	-0.692	-0.716	-0.73	-0.834	-0.825	-0.861	-0.8	0.881			
EP	0.487	0.619	0.564	0.449	0.597	0.592	0.52	0.618	0.514	0.416	-0.519	0.842		
SP	0.768	0.824	0.824	0.703	0.711	0.763	0.809	0.848	0.84	0.774	-0.85	0.508	0.862	
Eco	0.7	0.731	0.745	0.725	0.652	0.711	0.807	0.778	0.752	0.71	-0.788	0.462	0.756	0.832

Henseler et al. (2015) state that HTMT values less than 0.9 indicate discriminant validity. Results show in Table (8) that some HTMT values are slightly larger than 0.9. Therefore, the bootstrapping procedure (complete) was implemented to one-sided confidence intervals with a significant level of 0.05 for the HTMT. The HTMT is significantly lower than 1 (by looking at the upper bound of HTMT's bootstrap confidence interval), which indicates sufficient discriminant validity (Henseler *et al*., 2015).

Table 8: Heterotrait-Monotrait Ratio (HTMT) - Discriminant Validity –

	AB	CF	EP	EU	Eco	HRM	IA	L	LE	MO	OP	PM	SP	SrP
AB														
CF	0.822													
EP	0.585	0.506												
EU	0.925	0.77	0.579											
Eco	0.905	0.82	0.52	0.871										
HRM	0.908	0.779	0.701	0.859	0.82									
IA	0.776	0.726	0.674	0.796	0.734	0.84								
L	0.922	0.782	0.577	0.869	0.838	0.869	0.78							
LE	0.934	0.827	0.504	0.929	0.864	0.818	0.684	0.844						
MO	0.945	0.772	0.717	0.994	0.867	0.972	0.869	0.901	0.959					
OP	0.908	0.814	0.577	0.932	0.879	0.901	0.883	0.870	0.833	0.962				
PM	0.868	0.776	0.701	0.846	0.833	0.919	0.769	0.825	0.81	0.905	0.861			
SP	0.911	0.794	0.569	0.947	0.850	0.929	0.800	0.920	0.944	0.980	0.946	0.899		
SrP	0.904	0.762	0.634	0.846	0.875	0.929	0.751	0.883	0.900	0.922	0.876	0.844	0.930	

The multi-collinearity factor was evaluated using the variance inflation factor (VIF). O'Brien (2007) considered the threshold for VIF value to be ten. On the other hand, Becker et al. (2015) suggested that multi-collinearity can occur at the value of 3. According to Hair et al. (2019), VIF values of five or less indicate the non-existence of multi-collinearity. The results presented in Table (9) shows that all elements are under 5, which means that multi-collinearity does not exist.

Table 9: VIF values

Construct	VIF value
AB	4.144
CF	2.313
EP	1.374
Eco	2.383
HRM	4.516
IA	2.493
L	2.621
LE	2.823
MO	4.651
OP	3.895
PM	2.879
SP	2.526
SrP	3.055
UND3	2.172
UNH3	2.788
UNHE1	2.659
UNM1	3.752
EU x EMO	1

After assessing the examinations of the measurement model, we can conclude that the model is reliable and valid. Figure (2) shows the adopted measurement model.

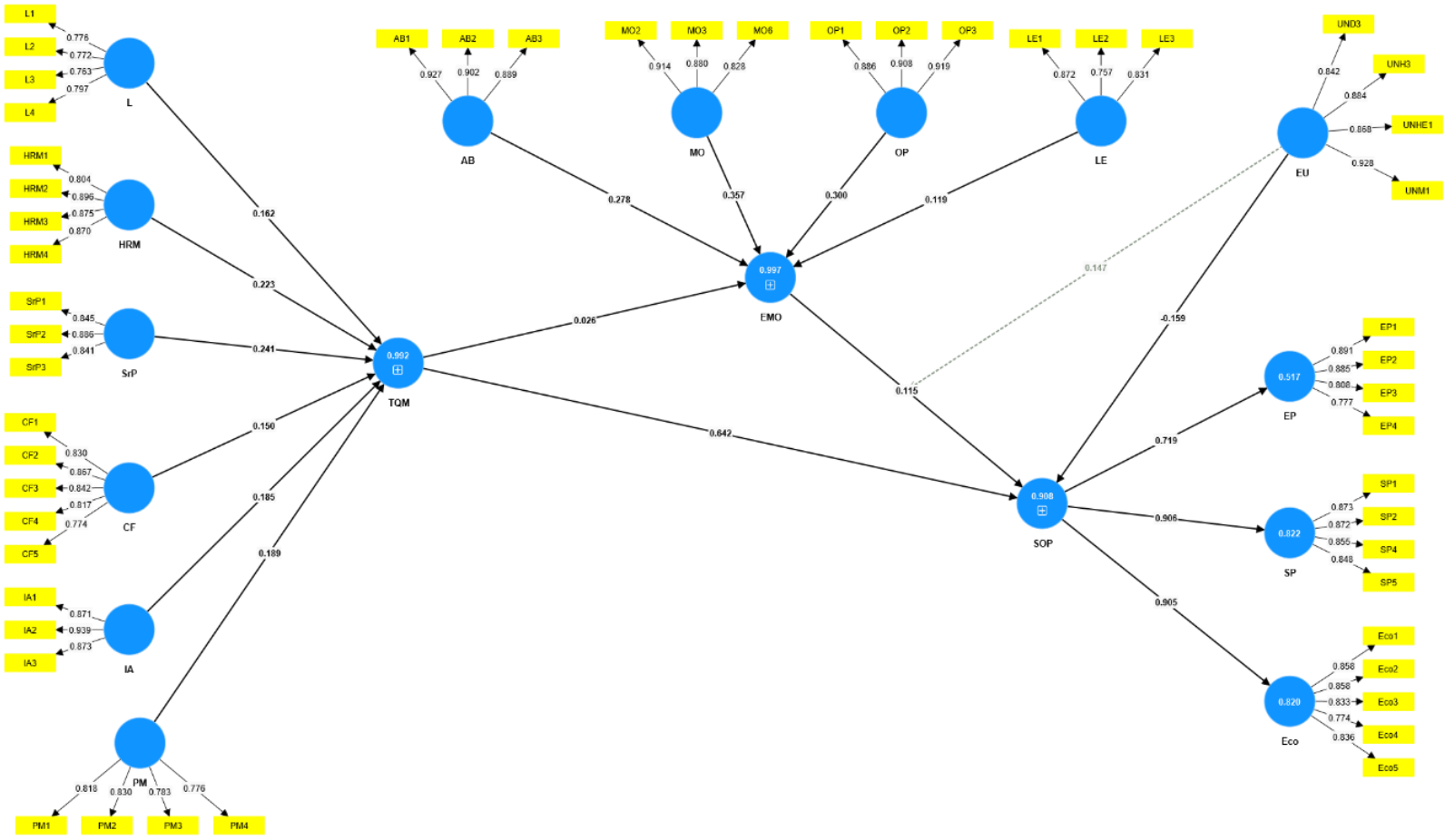

Figure 2: The measurement model.

4.4.2 Assessment of Structural Model (Inner Model)

After the measurement model has been confirmed, it's time to investigate the structural model and examine the construct's relationships. There are several techniques for assessing the structural model; four main tests were used: the coefficient of determination (R^2), the predictive relevance (Q^2), the effect size (f^2), and the significance of the path coefficients.

4.4.2.1 The coefficient of determination (R^2)

Examining the coefficient of determination (R^2) is the first step in assessing the structural model. It represents the model's predictive accuracy. R^2 measures the model's explanatory power and represents the variance proportion in an endogenous construct. R^2 values range between 0 and 1; higher values indicate higher accuracy and explanatory power. As a guideline, R^2 values above 0.67 are considered substantial, 0.33-0.67 are moderate, 0.19-0.33 are weak, and less than 0.19 are unacceptable (Chin, 1998). Based on the Table (10) below, dependent variables had achieved a high score of R^2.

4.4.2.2 The Predictive Relevance (Q^2)

It is important to examine the Q^2 measure. It is a predictive relevance that measures how much the path model can predict the endogenous variable. Q^2 value is determined using the Blindfolding procedure. If the Q^2 value is greater than zero for the endogenous construct, then exogenous constructs have predictive relevance for this construct (Hair et al., 2011). Table (10) shows Q^2 values, which suggests that the model has sufficient predictive quality.

Table 10: R^2 and Q^2 result

	R^2	R-square adjusted	Q^2
EMO	0.868	0.867	0.843
SOP	0.900	0.896	0.862

4.4.2.3 The Effect Size (f^2)

The effect size (f^2) measures the impact of each exogenous variable on the endogenous construct. f^2 measures the changes in R^2 value when one of the exogenous constructs is removed from the

model; it is used to evaluate whether the deleted construct has a substantive effect on the endogenous constructs. If the variable has a f^2 value less than 0.02, it has no effect size; 0.02-0.15 is a small effect size; 0.15-0.35 is a medium-sized effect; above 0.35, it has a large effect size (Cohen, 1988).

Table (11) shows the value of f^2 for the exogenous variables. TQM and EMO explain the endogenous variable SOP with f^2 values of 0.437 and 0.014, respectively. Therefore, the effect of TQM on SOP is high, while EMO has no effect on SOP, TQM has a very high effect on EMO with an f^2 value of 6.596, and EU has a small effect on SOP with an f^2 value of 0.056.

Table 11: f^2 values

Construct	**f^2 values**	**Result**
The effect of EMO on SOP	0.014	No effect
The effect of EU on SOP	0.056	Small effect size
The effect of TQM on EMO	6.596	Large effect size
The effect of TQM on SOP	0.437	Large effect size

4.4.2.4 Goodness of Fit (GOF)

The GOF model measures the ability to rely on the developed model for the measurement and structural models. It shows the level at which the study model is fit. Hu and Bentler (1999) and Hair et al. (2021) said a model fits well if the Standardized Root Mean Squared Error (SRMR) equals or less than 0.08. The SRMR is a standardized measure of the discrepancy between the data correlation matrix and the estimated model correlation matrix (Yamin, 2022).

Maydeu et al. (2010) suggested that the Normed Fit Index (NFI) ranges between 0 and 1; the closer the value to 1, the better the fit. It is used to evaluate the adequacy of a model in explaining the relationships between observed variables and latent constructs. Based on these criteria, Table (12) values indicate that the model fits well.

Table 12: Model Fit

	Saturated model	**Estimated model**
SRMR	0.049	0.06
d_ULS	0.361	0.555
d_G	0.389	0.547
Chi-square	239.59	321.274
NFI	0.899	0.865

4.4.2.5 The Significance of the Path Coefficients

The path coefficient is used to measure the path coefficient significance and to test the proposed hypothesis. It is estimated by running the PLS –algorithm. Bath coefficient values range from -1 to +1. Values closer to +1 indicate a strong positive relationship, while values closer to -1 represent a strong negative relationship. The bootstrapping procedure was used in this test; the results are shown in Table (13). The results show a significant positive relationship between TQM practices and SOP, with ($\beta = 0.589$, T-value = 6.649, p-value = 0.000) supporting *H1*. Investigating the effect of TQM practices on EMO revealed a significant positive relationship with ($\beta = 0.932$, T-value = 56.718, p-value = 0.000); hence, *H2* is supported. On the other hand, the results show no significant relationship between EMO and SOP ($\beta = 0.146$, T-value = 1.472, p-value = 0.141);

hence *H3* is unsupported. In addition, the results indicate that EMO does not mediate the relationship between TQM and SOP (β = 0.136, T = 1.455, p-value = 0.146); therefore, *H4* is unsupported. Finally, *H5* is proved (β = 0.143, T = 2.430, p-value = 0.015), and EU moderates the relationship between EMO and SOP.

Table 13: Path Coefficient of the Research Hypotheses

Path	Hypothesis	β-value	Std.Dev.	T-value	P-value	Result
TQM -> SOP	H1	0.589	0.089	6.649	0.000	Supported
TQM -> EMO	H2	0.932	0.016	56.718	0.000	Supported
EMO ->l SOP	H3	0.146	0.099	1.472	0.141	Unsupported
TQM -> EMO -> SOP	H4	0.136	0.093	1.455	0.146	Unsupported
EU x EMO -> SOP	H5	0.143	0.059	2.430	0.015	Supported

4.4.2.6 Moderating Test

As mentioned before, the results indicated the moderating effect of the EU on the relationship between EMO and SOP. Figure (3) of the simple slope plot also proved the same result. It shows that for high EU (+1 standard deviation below the mean; green line), we have a stronger relationship (steeper line) between EMO and SOP. But, when the EU is weak (-1 standard deviation above the mean; red line), EMO has no real effect on SOP.

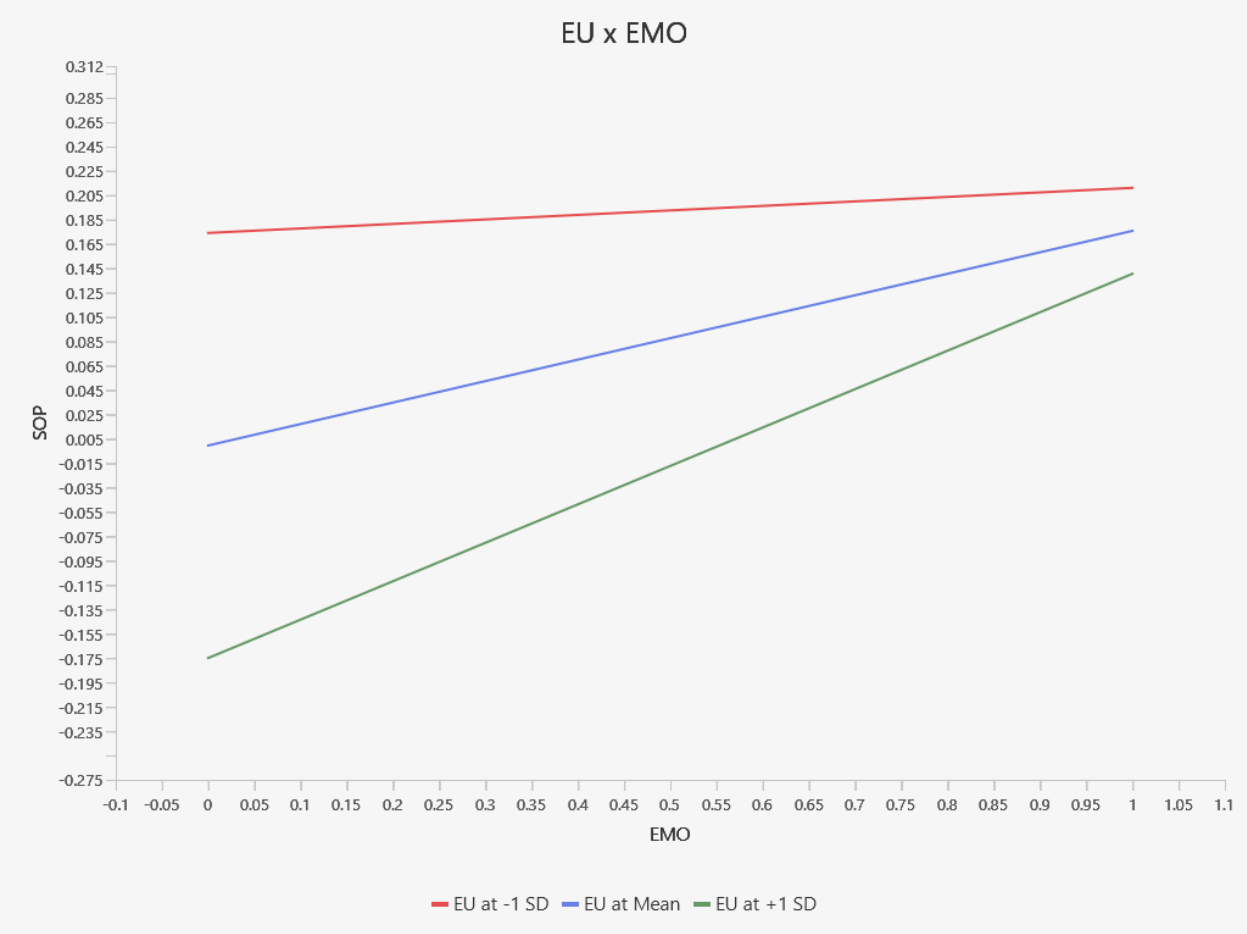

Figure 3: Slope analysis for the moderator

Chapter Five

Discussion

5.1 Overview

In this chapter, the results are discussed. The relationships between variables are interpreted, and then the explanation of the tested hypothesis are addressed.

5.2 Discussion of Results

After the assessment of the results, the following theoretical implications are addressed:

5.2.1 TQM & SOP

This study explores the impact of TQM techniques and EMO on SOP in the face of environmental uncertainty. The relationship between TQM and SOP has been introduced in the first hypothesis. The results show that TQM directly, positively, and significantly affects SOP. This means that the proper adoption of TQM practices improves an organization's environmental, social, and economic performance. This finding is similar to those of other earlier studies that looked into the same relationship (Hassis et al., 2023; Abbas, 2020; Ali & Johl, 2022). This positive relationship is attributable to the set of TQM practices that focus on continuous improvement.

TQM provides the base for superior environment performance since it aims to minimize resources used during the processes and increase resource utilization, leading to an increase in the entire system efficiency, defects elimination, and reduction in operational costs and time wasted, which in return will improve quality, enhance customer satisfaction, and improve the financial performance of the company. Furthermore, Abbas (2020) and Yuan & Xiang (2018) asserted that TQM procedures influence social performance, which shapes the company's reputation in the eyes

of customers, hence improving customer loyalty. This observation is consistent with the results of Todorut (2012) and Kang et al. (2015). According to (Shahzad et al., 2019), organizations ignore the social aspect of sustainability, as it is the least measurable dimension.

Iqbal and ul-Haq (2018) mentioned the social benefits behind quality improvement, including greater customer satisfaction, societal acceptance, and employee integration. For Valmohammadi and Roshanzamir (2015), the benefits of TQM are related to the company position, productivity increase, and the ability to adapt to changing conditions.

Siddiqui and Rahman (2007) evaluated the impact of TQM implementation and concluded that it contributes to maintenance, cost reduction, productivity reduction, service quality superiority, customer satisfaction, reduction of time consumed on production, and human resources optimization. Sun et al. (2004) and Talib et al. (2011) focused on the contribution of TQM in enhancing business performance and confirmed that several researchers agreed that quality improvement leads to sustainable competitive advantage. All these outputs of TQM directly and indirectly affect SOP.

The results show a positive relationship between TQM practices and economic performance. This relates to the findings of Singh et al. (2018) and Al-Qahtani et al. (2015). One explanation of this relationship is that TQM practices improve the operational performance of the firm (Abbas, 2020; Sharma & Modgil, 2020), TQM implementation leads to employee satisfaction (Abu-Doleh, 2012), which leads to an improvement in the operational performance (Hassan et al., 2014). TQM also helps the organization to build a competitive advantage over other competitors (Narula et al., 2018) due to its role in reducing operating costs and defects, which leads to enhanced quality of the provided services and products (Abbas, 2020). TQM also has a direct impact on quality,

efficiency, innovation, and delivery (Prajogo, 2007; Ochieng et al., 2015), all of which are regarded as significant aspects of operational success (Sharma & Modgil, 2020).

Other TQM practices, such as customer focus, are a key factor affecting the three dimensions of SOP. They enhance a firm's financial results and employee satisfaction (Anaza & Rutherford, 2012; Chotekorakul & Nelson, 2013). They also directly and indirectly affect cost benefits, employee satisfaction, and innovation (Krivokapic et al., 2013; Anaza & Rutherford, 2012).

According to García-Alcaraz et al. (2019), the major benefit of TQM implementation is the economic SOP, including different operational and social benefits. It helps in increasing productivity and reducing costs. Singh et al. (2018) claimed lower waste and reprocessing costs, leading to higher customer loyalty and retention levels and, therefore, higher financial profitability and dividends for shareholders. York and Miree (2004) have a similar opinion. TQM practices affect economic performance, including product sales and financial profitability. On the other hand, AdrianaTisca et al. (2015) believed that TQM implementation is risky since the benefits depend on the quality level of the firm.

5.2.2 TQM & EMO

The second hypothesis analyzed the relationship between TQM practices and EMO. The results show that TQM positively and significantly influences EMO, represented by the AMO model. TQM practices have a positive effect on employees' abilities, motivation, opportunities, and learning skills. This result is consistent with other studies, such as Morrow (1997) and Hwang et al. (2020), who investigated the relationship between soft TQM practices and EMO. First, the results support the relationship between TQM and employee abilities, including employee skills, employee ability to solve job-related problems, and employee ability to take necessary job-related

decisions. TQM builds a working environment in which employees gain the ability and commitment to enhance productivity and, therefore, achieve organizational objectives (Obeidat et al., 2018).

As Karia and Asaari (2006) suggested, organizations that apply TQM practices improve their employee satisfaction and commitment. Satisfied employees contribute to continuous improvement (Sadi Koglu & Zehir, 2010), deliver high-quality services (Al-Refaie, 2015), and share knowledge and improve their work performance (Arsić et al., 2012; Ayupp & Kong, 2010; Lee et al., 2015). Continuous improvement is an element of TQM, which leads to better performance by building customer satisfaction and improving labor capabilities and skills (Aartsengel & Kurtoglu, 2013).

Secondly, the results show a positive relationship between TQM implementation and employee motivation. This means that employees are satisfied and motivated in organizations that apply TQM practices. This result could be explained by the fact that TQM contains HRM practices that contribute to employees' motivation, including the improvement of the work environment and internal communication, employee empowerment, and teamwork. According to TQM, quality is about the workforce. They are the fundamental pillar of the firm's success. Therefore, TQM adopters are investing in their employees and providing them with the best work environment that keeps them motivated and satisfied.

Thirdly, TQM practices positively affect employee opportunities. Much other researches proved this relationship. Kuta and Abdulwaheed (2022) concluded that TQM empowers employees and offers them opportunities to participate and contribute. In addition, Amin et al. (2017) found that TQM initiatives provide employees with opportunities to enrich their motivation and achieve their career objectives, using their abilities and skills to improve their work quality. Chang et al. (2010)

and Arsic et al. (2012) highlighted the importance of taking employees into account in the decision-making process by their managers to increase their loyalty and commitment. Hwang et al. (2020) discovered that soft TQM techniques improve employees' preparedness for change, resulting in improved commitment and lower turnover intentions. According to Yazdani (2022), TQM improves employees' behavior characterized by some indicators such as absenteeism, turnover and retention. Based on the study of Antony et al. (2002), TQM initiatives have improved employee involvement, communication, and productivity. All these outputs of TQM reinforce employees' opportunities in the organization.

Finally, this research confirms the effect of TQM on learning. This result was also presented in Sohal & Morrison (1995), Martinez-Costa & Jimenez (2008) (2009), Hackman & Wageman (1995), Yazdani (2022), Hendricks & Singhal (2001), Martinez- Lorente et al. (2000), Terziovski & Samson (2000), Hung et al. (2011) suggested that leadership and HRM practices are the main forces of organizational learning. This result is due to some of TQM practices that allow employees to earn new expertise and information, including interaction and communication with other employees, training, teamwork, and periodic evaluation of performance.

5.2.3 EMO and SOP

Based on the results, H3 was not supported. The results do not represent a positive relationship between EMO characterized by the elements of the AMO model and SOP. It was contrary to the results of some previous studies, which found that EMO positively affect organizational performance (Ogbonnaya & Valizade, 2016; Ruzic, 2015; Boselie et al., 2005; Boselie, 2010; Choi & Eboch, 1998; Boxall & Purcell, 2003) studied this relationship indirectly, who found that the AMO theory enhances green HRM practices and employees' productivity, which improves organizational performance. Organizations with talented employees who have enough abilities and

knowledge, are motivated, and have the opportunity to engage should expect to see higher performance.

The strong effect of the contingent variable may explain the result of H3. Recently, many QM researchers studied the effect of contingency variables, contrary to HRM and especially AMO-performance studies. Usually, the relationship between EMO and SOP has been investigated in the absence of the contingent effect (Snape & Redman, 2010; Becker & Gerhart, 1996; Delery & Doty, 1996; Huselid, 1995).

In the fifth hypothesis, the moderating effect of the EU on the relationship between EMO and SOP is analytically proven. According to the masking of effects rule by Montgomery (2001), if the effect of the moderator is high, it may hide the direct effect of the main variables.

5.2.4 The Mediating Effect of EMO

Data testing shows no mediating effect of EMO on the relationship between TQM practices and SOP. This is obvious since there is no significant relationship between the mediator effect (EMO) and the dependent effect (SOP) (Hayes, 2017).

5.2.5 The Moderating Effect of the EU

H5 in this research investigated the contingency effect of EU. It was analytically proven that high levels of EU affect the relationship between EMO and SOP. CT consideration is one of the contributions of this study. The results show that EMO effectively respond to the environment of the organization; when the environment in which the organization performs is highly uncertain, employees try to be more skilled, flexible, and motivated. This result is also agreed upon by Zhang & Lv (2015) and Jensen et al. (2009). In such situations, skilled, motivated, and participating

employees are considered valuable assets to the organization. Employees with the needed skills, knowledge, and decision-making skills can assess the situation and suggest possible solutions. Moreover, motivated employees keen to achieve organizational goals are always open to new knowledge and opportunities, which could rescue the organization in a turbulent environment (Zhang & Lv, 2015). Finally, employees who participate more in the organization take responsibility for the organizational benefits. Organizational performance is higher in conditions of environmental uncertainty than in stable situations.

The results show that the EU, presented in four dimensions (munificence, dynamism, hostility, and heterogeneity), influences the relationship between EMO and SOP. A munificence environment benefits organization, including governmental incentives, lower taxes, robust infrastructure, technical knowledge (Decarolis & Deeds, 1999), and lower interest rates and insurance premiums for projects that serve the environment. Abundant resources, high customer demand, and high sales levels characterize it. It allows the firm to obtain resources and develop other capabilities, giving it superiority over other competitors in generating organizational capabilities (McEvily & Zaheer, 1999).

In a dynamic market where customer preferences, technologies, or competitor practices constantly change, the organization needs all members to collect data and information and suggest new ideas and solutions. Organizations must improve EMO to achieve the needed performance level. A dynamic environment increases the need for collective efforts from employees; in contrast, in a stable environment with routinized and standardized tasks, the need for collective entrepreneurial capability is decreased (Yan & Yan, 2017). The findings indicate that the more dynamic the environment is, the more significant the contribution of collective efforts. Organizations often see

dynamic environments as opportunities, not as threats, and they are willing to rely on the collective efforts of their employees to benefit from these opportunities (Yan & Yan, 2017).

Wang et al. (2012) sees technological turbulence as a motivator to adopt TQM practices. Yazdani (2022) does not support this point because of the distance between the Iranian automobile part manufacturers and the innovative technologies used by abroad manufacturers due to the limited Iranian international trade with other countries and the absence of needed resources to invest in new technologies, technological turbulence considered as a curse, not a blessing. Such factors hide the moderating effect of environmental dynamism.

As mentioned before, hostility captures the degree of competition and governmental control in the market. In highly competitive service fields, competitors must enhance and grow their performance to the TQM (Yazdani, 2022). Competition may bring benefits for organizations to improve and grow. In the case of Yazdani (2022), competition led to a higher level of employee attitude, learning, and motivation, which led to performance improvement. Competition could result from higher productivity, better quality, higher customer satisfaction, and reduced costs. Competition is a significant factor in improving organizations. Here comes the role of the government in raising domestic competition by applying motivational practices and supporting firms to improve their performance and technologies (Yazdani, 2022). According to the Palestinian Ministry of Economy (2020), Palestinian enterprises are divided into 88.6% microenterprises, 7.4% small enterprises, 2.6% medium-sized enterprises and 1.4% large enterprises, with modest capacities and technological development, which limits their competition capabilities.

Environmental heterogeneity means that the elements of the population that the firm deals with in its external environment are different from each other (Aldrich, 1979; Khandwalla, 1973); these elements include individuals, organizations, and any other social element that affects its

operations. This means the company has to deal with very different types of customers with different characteristics, preferences, and needs. This could be a motivator for the company to delegate power to employees and involve them in the decision-making process (Miller & Friesen, 1983). A high degree of environmental heterogeneity could provide the organization with both opportunities and threats. In a heterogenic environment, new market niches appear, bringing new market opportunities. A heterogenic environment increases the load on an organization regarding the administration, marketing, production, and other areas of business. It requires a collective effort from employees, adequate skills and capabilities, and a good motivation level. In this situation, employees need to have the opportunity to participate and make decisions to respond to the diverse needs and provide a good performance.

Chapter Six

Conclusions and Recommendations

6.1 Overview

In this chapter, a conclusion about the study is addressed. Moreover, recommendations for service providers are highlighted. In this chapter, limitations and suggestions for future research are also presented.

6.2 Conclusions

This study investigates the relationship between TQM practices, EMO, and SOP in EU. The study shows that TQM practices positively impact SOP. The study employed SOP to present a large perspective of SOP; it covers three main performance dimensions (environmental, social, and economic).

The study adopted the AMO framework to present EMO. Most previous QM studies have used limited people-related indicators such as employee satisfaction, turnover and absenteeism rate, which is not enough to measure the impact of QM on employees. On the other hand, the AMO framework represents a wider range of EMO. The results indicate a positive relationship between TQM practices and EMO. It shows that TQM practices can improve EMO. This contribution filled the gap between QM theory and the AMO framework and proved that TQM works as a complementary tool to HRM practices to improve performance.

The second contribution of the study is considering the contingency variable. It investigates the contingent effect of EU in the relationship between EMO and SOP. Very few studies adopted the

CT in a similar study context. The findings revealed that the EU moderates the relationship between EMO and SOP. An uncertain environment carries many opportunities for companies; it enhances EMO, which leads to improving SOP. Employees feel more responsible in such situations and work on improving their skills and abilities to maintain a good level of performance. They are more motivated and committed to their jobs and have a higher level of organizational learning. Management needs to adopt a flexible structure, enhance internal communication and cooperation, and support employees by increasing their participation, involvement, and training to convert a turbulent situation into an opportunity to grow.

The context of the study is considered the third contribution. The study was conducted in the Palestinian service sector. Most TQM studies conducted in Palestine focused on the manufacturing sector. Furthermore, the Palestinian economy faces exceptional circumstances due to all the political and economic situations it is undergoing. So, applying the results of studies conducted in other stable or mature economies in the Palestinian market is challenging. The service sector is the driver of the Palestinian economy, so it is essential to understand what factors affect it. This paper studied the service sector, so the results and theories apply to different fields.

6.3 Recommendations

Considering the discussed results, several recommendations are presented to the Palestinian service sector:

- Service providers need to be more aware of quality concepts in general and TQM practices in particular. They will notice an improvement in their EMO and an improvement in their SOP.

- EU carries opportunities to enhance SOP when management has the wisdom to focus on its internal customers.
- The workforce is the main foundation of your success, so invest in it.
- Environmental performance is as important as economic and social performance and neglecting it will negatively affect the other two performance dimensions.
- The company gains social support by improving TQM practices and EMO, including a positive reputation and positioning and high loyalty rates, reflected in the financial situation.

6.4 Research Limitations and Future Research

The current research faced some limitations. First, it was conducted during an extraordinary political situation, so we could not include the Gaza Strip in the study. The political situation in the West Bank has made data collection difficult. Second, the study was conducted in an area with special conditions, which may limit the generalization of the results in other regions. This study adopted the EU as a contingent variable; we suggest that an ongoing trend of contextual aspects, such as size, culture, location…etc., should be applied in future research. Future studies may consider a broader range of respondents, not only people at the management level. It could be implemented in the Palestinian manufacturing sector. Research variables could be explained by a different set of constructs and structures to suit each company, field or country. The analysis does not show whether these different companies are reaching their potential performance levels by adopting the same TQM practices and EMO dimensions. Therefore, organizations should be aware that some of the desired outcomes of TQM may not be achieved due to lack of fit and it must establish a more suitable fit based on the organizations' unique characteristics. Researchers could

use the current research model as a guideline in implementing other researches in different contexts.

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.

Achrol, R. S., & Stern, L. W. (1988). Environmental determinants of decision-making uncertainty in marketing channels. Journal of marketing research, 25(1), 36-50.

AdrianaTisca, I., Cornu, G., Diaconu, N., & Dumitrescu, C. D. (2015). Diagnosis, risk and efficiency in the implementation of TQM in small and medium enterprises. Procedia Economics and Finance, 26, 215-218.

Ağca, V., Topal, Y., & Kaya, H. (2012). Linking intrapreneurship activities to multidimensional firm performance in Turkish manufacturing firms: an empirical study. International Entrepreneurship and Management Journal, 8, 15-33.

Ahire, S. L., & Golhar, D. Y. (1996). Quality management in large vs small firms. Journal of small business management, 34(2), 1.

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.

Alanazi, M. H. (2020). The mediating role of primary TQM factors and strategy in the relationship between supportive TQM factors and organisational results: An empirical assessment using the MBNQA model. Cogent Business & Management, 7(1), 1771074.

Al-Ghanim, A. (2003). The impact of implementing quality management principles of IS09000 on business effectiveness: An applied study at Palestinian businesses. An-Najah University Journal for Research-A (Natural Sciences), 17(1), 53-74.

Ali AlShehail, O., Khan, M., & Ajmal, M. (2022). Total quality management and sustainability in the public service sector: the mediating effect of service innovation. Benchmarking: An International Journal, 29(2), 382-410.

Ali, K., & Johl, S. K. (2022). Impact of total quality management on SMEs sustainable performance in the context of industry 4.0. In Proceedings of International Conference on Emerging Technologies and Intelligent Systems: ICETIS 2021 (Volume 1) (pp. 608-620). Springer International Publishing.

Allen, D. R., & Wilburn, M. (2002). Linking customer and employee satisfaction to the bottom line: a comprehensive guide to establishing the impact of customer and employee satisfaction on critical business outcomes. Quality Press.

Almutawa, Z., Muenjohn, N., & Zhang, J. (2016). THE EFFECT OF HUMAN RESOURCE MANAGEMENT SYSTEM ON EMPLOYEES'COMMITMENT: THE MEDIATING ROLE OF THE AMO MODEL. The Journal of Developing Areas, 50(6), 17-29.

Al-Refaie, A. (2015). Effects of human resource management on hotel performance using structural equation modeling. Computers in Human Behavior, 43, 293-303.

Al-Salim, M., Al-Alawneh, A., & Harhoosh, A. TQM Applications in The Jordanian Software Companies; A field study.

Alzaza, N. S. (2022). Assessment of the Contingency Theory on Performance Mobile Learning in the Palestinian Higher Education Institutions during Coronavirus Pandemic: Moodle Case Study.

Amin, M., Aldakhil, A. M., Wu, C., Rezaei, S., & Cobanoglu, C. (2017). The structural relationship between TQM, employee satisfaction and hotel performance. International Journal of Contemporary Hospitality Management, 29(4), 1256-1278.

Anjum, A. (2016). Impact of CSR & TQM on employee's turnover intention: mediating role of organizational commitment. International Journal of Academic Research in Business and Social Sciences, 6(9), 210-229.

Antony, J., Leung, K., Knowles, G., & Gosh, S. (2002). Critical success factors of TQM implementation in Hong Kong industries. International journal of quality & reliability management, 19(5), 551-566.

Appelbaum, E., Bailey, T., Berg, P. and Kalleberg, A. (2000), Manufacturing Advantage: Why High Performance Work System Pay off, Cornell University Press, Ithaca, NY.

April Chang, W. J., & Chun Huang, T. (2005). Relationship between strategic human resource management and firm performance: A contingency perspective. International journal of manpower, 26(5), 434-449.

Arsić, M., Nikolić, D., Živković, Ž., Urošević, S., & Mihajlović, I. (2012). The effect of TQM on employee loyalty in transition economy, Serbia. Total Quality Management & Business Excellence, 23(5-6), 719-729.

Arunachalam, T., & Palanichamy, Y. (2017). Does the soft aspects of TQM influence job satisfaction and commitment? An empirical analysis. The TQM Journal, 29(2), 385-402.

Ayupp, K., & Kong, W. (2010). The impact of task and outcome interdependence and self-efficacy on employees' work motivation: An analysis of the Malaysian retail industry. Asia Pacific Business Review, 16(1-2), 123-142.

Bailey, T. (1993). Organizational innovation in the apparel industry. Industrial Relations: A Journal of Economy and Society, 32(1), 30-48.

Baird, K., Hu, K.J. and Reeve, R. (2011), "The relationships between organizational culture, total quality management practices and operational performance", International Journal of Operations and Production Management, Vol. 31 No. 7, pp. 789-814.

Bakotić, D., & Rogošić, A. (2017). Employee involvement as a key determinant of core quality management practices. Total Quality Management & Business Excellence, 28(11-12), 1209-1226.

Barrow, J. W. (1993). Does total quality management equal organizational learning. Quality progress, 26(7), 39-43.

Bartunek, J. M., Rousseau, D. M., Rudolph, J. W., & DePalma, J. A. (2006). On the receiving end: Sensemaking, emotion, and assessments of an organizational change initiated by others. The Journal of applied behavioral science, 42(2), 182-206.

Becker, B. and Gerhart, B. (1996), "The impact of human resource management on organizational performance: progress and prospects", Academy of Management Journal, Vol. 39 No. 4, pp. 779-801.

Beleska-Spasova, E. (2014). Determinants and measures of export performance–comprehensive literature review. Journal of contemporary economic and business issues, 1(1), 63-74.

Benet Zepf, A., Marin-Garcia, J. A., & Küster, I. (2018). Clustering the mediators between the sales control systems and the sales performance using the AMO model: A narrative systematic literature review. Intangible Capital, 14(3), 387-408.

Benson, P. G., Saraph, J. V., & Schroeder, R. G. (1991). The effects of organizational context on quality management: an empirical investigation. Management science, 37(9), 1107-1124.

Bianco, F., & Venezia, M. (2019). Features of R&D Teams and innovation performances of sustainable firms: Evidence from the "sustainability pioneers" in the IT hardware industry. Sustainability, 11(17), 4524.

Blumberg, M., & Pringle, C. D. (1982). The missing opportunity in organizational research: Some implications for a theory of work performance. Academy of management Review, 7(4), 560-569.

Bonavia, T., & Marin-Garcia, J. A. (2011). Integrating human resource management into lean production and their impact on organizational performance. International Journal of Manpower, 32(8), 923-938.

Boon Ooi, K., Abu Bakar, N., Arumugam, V., Vellapan, L. and Kim Yin Loke, A. (2007), "Does TQM influence employees' job satisfaction? An empirical case analysis", International Journal of Quality & Reliability Management, Vol. 24 No. 1, pp. 62-77. https://doi.org/10.1108/02656710710720330.

Boselie, P. (2010). High performance work practices in the health care sector: a Dutch case study. International journal of manpower, 31(1), 42-58.

Boselie, P., Dietz, G., & Boon, C. (2005). Commonalities and contradictions in HRM and performance research. Human resource management journal, 15(3), 67-94.

Bos-Nehles, A., Townsend, K., Cafferkey, K., & Trullen, J. (2023). Examining the Ability, Motivation and Opportunity (AMO) framework in HRM research: Conceptualization, measurement and interactions. International Journal of Management Reviews.

Boxall, P. and Purcell, J. (2003), Strategy and Human Resource Management, Palgrave Macmillan, Basingstoke and New York.

Brah, S. A., Tee, S. S., & Rao, B. M. (2002). Relationship between TQM and performance of Singapore companies. International Journal of Quality & Reliability Management, 19(4), 356-379.

Brouthers, K. D., Brouthers, L. E., & Werner, S. (2002). Industrial sector, perceived environmental uncertainty and entry mode strategy. Journal of Business Research, 55(6), 495-507.

Cagliano, R., Blackmon, K., Voss, C., 2001. Small firms under MICROSCOPE: international differences in production/operations management practices and performance. Integrated Manufacturing Systems 12 (6/7), 469–482.

Chakravarthy, B. S. (1986). Measuring strategic performance. Strategic management journal, 7(5), 437-458.

Chandler, G. N., & McEvoy, G. M. (2000). Human resource management, TQM, and firm performance in small and medium-size enterprises. Entrepreneurship theory and practice, 25(1), 43-58.

Chang, C. C., Chiu, C. M., & Chen, C. A. (2010). The effect of TQM practices on employee satisfaction and loyalty in government. Total quality management, 21(12), 1299-1314.

Chenhall, R. H., & Langfield-Smith, K. (2007). Multiple perspectives of performance measures. European management journal, 25(4), 266-282.

Cho, Y. S., Jung, J. Y., & Linderman, K. (2017). The QM evolution: Behavioral quality management as a firm's strategic resource. International Journal of Production Economics, 191, 233-249.

Cizmaș, E., Feder, E. S., Maticiuc, M. D., & Vlad-Anghel, S. (2020). Team management, diversity, and performance as key influencing factors of organizational sustainable performance. Sustainability, 12(18), 7414.

Clack, A., Fass, S., & Honan., D. (2012). Insights and trends: Current portfolio, programme, and project management practices. https://doi.org/10.1002/pmj.20141

Cogin, J. A., & Williamson, I. O. (2014). Standardize or customize: The interactive effects of HRM and environment uncertainty on MNC subsidiary performance. Human Resource Management, 53(5), 701-721.

Colbert, B. A. (2004). The complex resource-based view: Implications for theory and practice in strategic human resource management. Academy of management review, 29(3), 341-358

Corredor, P., & Goñi, S. (2010). Quality awards and performance: is there a relationship?. The TQM Journal, 22(5), 529-538.

Corredor, P., & Goñi, S. (2011). TQM and performance: Is the relationship so obvious?. Journal of Business Research, 64(8), 830-838.

Coyle-Shapiro, J. A.-M. (2002). Changing Employee Attitudes: The Independent Effects of TQM and Profit Sharing on Continuous Improvement Orientation. The Journal of Applied Behavioral Science, 38(1), 57–77. https://doi.org/10.1177/0021886302381004.

Cullen, K. L., Edwards, B. D., Casper, W. C., & Gue, K. R. (2014). Employees' adaptability and perceptions of change-related uncertainty: Implications for perceived organizational support, job satisfaction, and performance. Journal of business and psychology, 29, 269-280.

D'Souza, S. C., & Sequeira, A. H. (2011). Application of MBNQA for service quality management and performance in healthcare organizations. International Journal of Engineering, Science and Technology, 3(7), 73-88.

Dahlgaard-Park, S. M. (2012). Core values–the entrance to human satisfaction and commitment. Total Quality Management & Business Excellence, 23(2), 125-140.

Das, A., Paul, H., & Swierczek, F. W. (2008). Developing and validating total quality management (TQM) constructs in the context of Thailand's manufacturing industry. Benchmarking: an international journal, 15(1), 52-72.

Davis, T. R. (1997). Breakdowns in total quality management: an analysis with recommendations. International Journal of Management, 14, 13-22.

Delery, J.E. and Doty, H.D. (1996), "Modes of theorizing in strategic human resources management: test of universalistic, contingency, and configurational performance predictions", Academy of Management Journal, Vol. 39, pp. 802-836.

Demirbag, M., Tatoglu, E., Tekinkus, M., & Zaim, S. (2006). An analysis of the relationship between TQM implementation and organizational performance: evidence from Turkish SMEs. Journal of manufacturing technology management, 17(6), 829-847.

DiFonzo, N., & Bordia, P. (1998). A tale of two corporations: Managing uncertainty during organizational change. Human Resource Management: Published in Cooperation with the School of Business Administration, The University of Michigan and in alliance with the Society of Human Resources Management, 37(3-4), 295-303.

Dimitmades, Z. S. (2001). Empowerment in total quality: Designing and implementing effective employee decision-making strategies. Quality Management Journal, 8(2), 19-28.

Donaldson, L. (2001). The contingency theory of organizations. Sage.

Donaldson, L. (2006). “The contingency theory of organizational design: challenges and opportunities”, in Burton, R.M., Eriksen, B., Hakonsson, D.D. and Snow, C.C. (Eds), Organization Design: The Evolving State-of-the-Art, Springer, New York, NY, pp.19-40.

Doshi, P., & Nigam, P. (2023). Analysing the effect of AMO framework on the employee's voice behaviour. Journal of Organizational Effectiveness: People and Performance, 10(2), 218-232.

Douglas, T. J., & Judge Jr, W. Q. (2001). Total quality management implementation and competitive advantage: the role of structural control and exploration. Academy of Management journal, 44(1), 158-169.

Dow, D., Samson, D., & Ford, S. (1999). Exploding the myth: do all quality management practices contribute to superior quality performance?. Production and operations management, 8(1), 1-27.

Downey, H. K., & Slocum, J. W. (1975). Uncertainty: Measures, research, and sources of variation. Academy of Management journal, 18(3), 562-578.

Dubey, R., & Gunasekaran, A. (2015). Agile manufacturing: framework and its empirical validation. The International Journal of Advanced Manufacturing Technology, 76, 2147-2157.

Duncan, R. B. (1972). Characteristics of organizational environments and perceived environmental uncertainty. Administrative science quarterly, 313-327.

Edgar, F., Blaker, N. M., & Everett, A. M. (2021). Gender and job performance: linking the high performance work system with the ability–motivation–opportunity framework. Personnel Review, 50(1), 47-63.

Ehrnrooth, M., & Björkman, I. (2012). An integrative HRM process theorization: Beyond signalling effects and mutual gains. Journal of Management Studies, 49(6), 1109-1135.

El Shenawy, E., Baker, T., & Lemak, D. J. (2007). A meta-analysis of the effect of TQM on competitive advantage. International Journal of Quality & Reliability Management, 24(5), 442-471.

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.

Fatima, S., & Mahaboob, S. A. (2018). Total quality management practices and organizational performance-an MBNQA model based study of two hospitals. Sumedha Journal of Management, 7(4), 27-38.

Ferrarini, F., & Curzi, Y. (2023). AMO-enhancing practices, open innovation and organizations' innovation in the European context: Testing a mediation model. European Journal of Innovation Management, 26(6), 1697-1720.

Ferreira, A., Otley, D., 2005. The Design and Use of Management ControlSystems:An Extended Framework for Analysis, AAA Management Accounting Section 2006 Meeting Paper. Available at SSRN: http://ssrn.com/abstract=682984.

Fisher, S. L., & Howell, A. W. (2004). Beyond user acceptance: An examination of employee reactions to information technology systems. Human Resource Management: Published in Cooperation with the School of Business Administration, The University of Michigan and in alliance with the Society of Human Resources Management, 43(2-3), 243-258.

Ford, M. W. (2015). Supply chain quality management and environmental uncertainty: A contingency perspective. Quality Management Journal, 22(4), 54-65.

Fotopoulos, C. V., & Psomas, E. L. (2010). The structural relationships between TQM factors and organizational performance. The TQM journal, 22(5), 539-552.

Fuentes-Fuentes, M. M., Albacete-Sáez, C. A., & Lloréns-Montes, F. J. (2004). The impact of environmental characteristics on TQM principles and organizational performance. Omega, 32(6), 425-442.

Fuentes-Fuentes, M. M., Lloréns-Montes, F. J., Molina-Fernández, L. M., & Albacete-Sáez, C. A. (2011). Environment-quality management coalignment across industrial contexts: An empirical investigation of performance implications. Industrial Marketing Management, 40(5), 730-742.

García-Alcaraz, J. L., Flor-Montalvo, F. J., Avelar-Sosa, L., Sánchez-Ramírez, C., & Jiménez-Macías, E. (2019). Human resource abilities and skills in TQM for sustainable enterprises. Sustainability, 11(22), 6488.

Garrahan, P., & Stewart, P. (1992). Management control and a new regime of subordination: Post-Fordism and the local economy. In Fordism and flexibility: Divisions and change (pp. 107-117). London: Palgrave Macmillan UK.

Gatchalian, M. M. (1997). People empowerment: the key to TQM success. The TQM magazine, 9(6), 429-433.

Goetsch, D. L., and S. B. Davis. 2012. Total Quality Management – an internal customer approach, seventh edition. New Jersey: Pearson Custom Publishing.

Gómez-López, R., López-Fernández, M. C., & Serrano-Bedia, A. M. (2017). Implementation barriers of the EFQM excellence model within the Spanish private firms. Total Quality Management & Business Excellence, 28(7-8), 695-711.

Gordon, L. A., Loeb, M. P., & Tseng, C. Y. (2009). Enterprise risk management and firm performance: A contingency perspective. Journal of accounting and public policy, 28(4), 301-327.

Green, F. (2006), Demanding Work: The Paradox of Job Quality in the Affluent Economy, Princeton University Press, Princeton, NJ.

Griffin, M. A., Patterson, M. G., & West, M. A. (2001). Job satisfaction and teamwork: The role of supervisor support. Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior, 22(5), 537-550.

Guimaraes, T. (1996). TQM's impact on employee attitudes. The TQM magazine, 8(1), 20-25.

Guimaraes, T. (1997). Assessing employee turnover intentions before/after TQM. International Journal of Quality & Reliability Management, 14(1), 46-63.

Guimaraes, T. (1996), "TQM's impact on employee attitudes", The TQM Magazine, Vol. 8 No. 1, pp. 20-25. https://doi.org/10.1108/09544789610107225.

Gunasekaran, A. (1999). Agile manufacturing: a framework for research and development. International journal of production economics, 62(1-2), 87-105.

Gutierrez-Gutierrez, L. J., Barrales-Molina, V., & Kaynak, H. (2018). The role of human resource-related quality management practices in new product development: A dynamic capability perspective. International Journal of Operations & Production Management, 38(1), 43-66.

Hackman, J. R., & Wageman, R. (1995). Total quality management: Empirical, conceptual, and practical issues. Administrative science quarterly, 309-342.

Haffar, M., Al-Karaghouli, W., & Ghoneim, A. (2013). The mediating effect of individual readiness for change in the relationship between organisational culture and TQM implementation. Total quality management & business excellence, 24(5-6), 693-706.

Hair J, Hult GTM, Ringle C, Sarstedt M. (2014). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM) (Los Angeles: SAGE Publications, Incorporated).

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. European business review, 31(1), 2-24.

Hamidi, F., & Shams Gharneh, N. (2017). Impact of co-creation on innovation capability and firm performance: A structural equation modeling. AD-Minister no. 30, (June), 73–90. https://doi.org/10.17230/ad-minister.30.4

Hassis, S., Othman, M., Saleh, Y. (2023). Impact of total quality management on corporate sustainability through the mediating role of corporate social responsibility in the manufacturing sector. The TQM Journal, 35(8), 2572-2597**.** Https://doi.org/10.1108/TQM-08-2022-0259.

Hendricks, K. B., & Singhal, V. R. (2001). Firm characteristics, total quality management, and financial performance. Journal of operations management, 19(3), 269-285.

Herscovitch, L., & Meyer, J. P. (2002). Commitment to organizational change: extension of a three-component model. Journal of applied psychology, 87(3), 474.

Herzallah, A. M., Gutiérrez-Gutiérrez, L., & Munoz Rosas, J. F. (2014). Total quality management practices, competitive strategies and financial performance: the case of the Palestinian industrial SMEs. Total Quality Management & Business Excellence, 25(5-6), 635-649.

Hill, S. (1991). How do you manage a flexible firm? The total quality model. Work, Employment and Society, 5(3), 397-415.

Hubbard, G. (2009). Measuring organizational performance: beyond the triple bottom line. Business strategy and the environment, 18(3), 177-191.

Hung, R. Y. Y., Lien, B. Y. H., Yang, B., Wu, C. M., & Kuo, Y. M. (2011). Impact of TQM and organizational learning on innovation performance in the high-tech industry. International business review, 20(2), 213-225).

Hwang, G. H., Yoon, H. J., & Choi, M. (2020). Soft TQM practices and EMO: a mediational analysis. Quality Management Journal, 27(3), 147-158.

Idris, F. (2011). Total quality management (TQM) and sustainable company performances: Examining the relationship in Malaysian firms. International Journal of Business and Society, 12(1), 31.

Ijaz, A., Kee, D. M. H., & Irfan, S. M. (2012). Internal customer job satisfaction and role of TQM practices. Far East journal of psychology and Business, 6(2), 1-14.

Imran, M., Arshad, Q., Haq, R., Mobeen, M., Kamran Khan, M., & Pervaiz, U. (2016). Human resource practices and knowledge sharing: The moderating role of trust. International Journal of Organizational Leadership, 5, 15-23.

Iqbal, A.; Asrar-ul-Haq, M. Establishing relationship between TQM practices and employee performance: The mediating role of change readiness. Int. J. Prod. Econ. 2018, 203, 62–68. [CrossRef].

Islam, R. (2007). MBNQA criteria in education: assigning weights from a Malaysian perspective and proposition for an alternative evaluation scheme. International transactions in operational research, 14(5), 373-394.

Issa, N. S. C., & Al Abbar, S. D. (2015). Sustainability in the Middle East: achievements and challenges. International Journal of Sustainable Building Technology and Urban Development, 6(1), 34-38.

Jaafreh, A. B. and A. Z. Al-Abedallat. 2012. The effect of quality management practices on organizational performance in Jordan: An empirical study. International Journal of Financial Research 4, no. 1:93–109.

Jansen, J. J., Van Den Bosch, F. A., & Volberda, H. W. (2006). Exploratory innovation, exploitative innovation, and performance: Effects of organizational antecedents and environmental moderators. Management science, 52(11), 1661-1674.

Jayaram, J., Ahire, S. L., & Dreyfus, P. (2010). Contingency relationships of firm size, TQM duration, unionization, and industry context on TQM implementation—A focus on total effects. Journal of operations Management, 28(4), 345-356.

Jensen, H. K., Wieclaw, J., Munch-Hansen, T., Thulstrup, A. M., & Bonde, J. P. (2009). Does dissatisfaction with psychosocial work climate predict depressive, anxiety and substance abuse disorders? A prospective study of Danish public service employees. Journal of Epidemiology & Community Health.

Jery, H., & Souaï, S. (2014). Strategic human resource management and performance: the contingency approach case of Tunisia. International Journal of Humanities and Social Science, 4(6), 284-291.

Joiner, T. A. (2007). Total quality management and performance: The role of organization support and co-worker support. International journal of quality & reliability management, 24(6), 617-627.

Judge, T. A., Bono, J. E., & Locke, E. A. (2000). Personality and job satisfaction: The mediating role of job characteristics. Journal of applied psychology, 85(2), 237.

Kafetzopoulos D, Psomas E, Skalkos D (2019) Innovation dimensions and business performance under environmental uncertainty. Eur J Innov Manag. https ://doi.org/10.1108/EJIM-07-2019-0197.

Kajikawa, Y. (2008). Research core and framework of sustainability science. Sustainability Science, 3, 215-239.

Karia, N., & Hasmi Abu Hassan Asaari, M. (2006). The effects of total quality management practices on employees' work-related attitudes. The TQM magazine, 18(1), 30-43.

Katou, A. A., & Budhwar, P. S. (2010). Causal relationship between HRM policies and organisational performance: Evidence from the Greek manufacturing sector. European management journal, 28(1), 25-39.

Kattan, F., Pike, R., & Tayles, M. (2007). Reliance on management accounting under environmental uncertainty: The case of Palestine. Journal of Accounting & Organizational Change, 3(3), 227-249.

Kaur, P., & Sharma, S. K. (2014). Evaluating the Relationship and Influence of Critical Success Factors of TQM on Business Performance: Evidence from SMEs of Manufacturing Sector. IUP Journal of Operations Management, 13(4).

Kaynak, H. (2003). The relationship between total quality management practices and their effects on firm performance. Journal of operations management, 21(4), 405-435.

Kebede Adem, M., & Virdi, S. S. (2021). The effect of TQM practices on operational performance: an empirical analysis of ISO 9001: 2008 certified manufacturing organizations in Ethiopia. The TQM Journal, 33(2), 407-440.

Keng Boon, O., Arumugam, V. and Seng Hwa, T. (2005), "Does soft TQM predict employees' attitudes?", The TQM Magazine, Vol. 17 No. 3, pp. 279-289. https://doi.org/10.1108/09544780510594243.

Khalfallah, M., & Lakhal, L. (2021). The impact of lean manufacturing practices on operational and financial performance: the mediating role of agile manufacturing. International Journal of Quality & Reliability Management, 38(1), 147-168.

Khan, E. A., & Quaddus, M. (2015). Examining the influence of business environment on socio-economic performance of informal microenterprises: content analysis and partial least square approach. International Journal of Sociology and Social Policy, 35(3/4), 273-288.

Kihara, A. S. N. (2016). Influence of strategic contingency factors on performance of large Manufacturing Firms in Kenya (Doctoral dissertation, JKUAT COHRED).

Kim, M., & Chai, S. (2016). Assessing the impact of business uncertainty on supply chain integration. The International Journal of Logistics Management, 27(2), 463-485.

Kirkman, B. L., & Rosen, B. (1999). Beyond self-management: Antecedents and consequences of team empowerment. Academy of Management journal, 42(1), 58-74.

Kocabasoglu, C., Prahinski, C., & Klassen, R. D. (2007). Linking forward and reverse supply chain investments: The role of business uncertainty. Journal of Operations Management, 25(6), 1141-1160.

Koufteros, X., Vonderembse, M., & Jayaram, J. (2005). Internal and external integration for product development: the contingency effects of uncertainty, equivocality, and platform strategy. Decision sciences, 36(1), 97-133.

Koyuncu, M., Burke, R., Fixenbaum, L., & Tekin, Y. (2013). Antecedents and consequences of employee voice behaviour among front-line employees in Turkish hotels. Anatolia, 24(3), 427-437.

Kuta, D. C., & Abdulwaheed, D. (2022). IMPACT OF TOTAL QUALITY MANAGEMENT PRACTICES ON THE PERFORMANCE OF INSURANCE COMPANIES IN NIGERIA. Gusau Journal of Business Administration, 1(1), 11-11.

Lam, S. Y., Lee, V. H., Ooi, K. B., & Lin, B. (2011). The relationship between TQM, learning orientation and market performance in service organisations: An empirical analysis. Total Quality Management & Business Excellence, 22(12), 1277-1297.

Lecy, J.D., Schmitz, H.P. and Swedlund, H. (2012), "Non-governmental and not-for-profit organizational effectiveness: amodern synthesis", Voluntas: International Journal of VoluntaryandNonprofitOrganizations,Vol.23No.2,pp.434-457.

Lee, J. S., Back, K. J., & Chan, E. S. (2015). Quality of work life and job satisfaction among frontline hotel employees: A self-determination and need satisfaction theory approach. International Journal of Contemporary Hospitality Management, 27(5), 768-789.

Lee, R. G., & Dale, B. G. (1998). Business process management: a review and evaluation. Business process management journal, 4(3), 214-225.

Lewis, W. G., Pun, K. F., & Lalla, T. R. M. (2006). Exploring soft versus hard factors for TQM implementation in small and medium-sized enterprises. International Journal of productivity and performance management, 55(7), 539-554.

Lin, R., Chen, R., & Chiu, K. K. (2010). Customer relationship management and innovation capability: An empirical study. Industrial Management & Data Systems, 110(1), 111–133. https://doi.org/10.1108/02635571011008434.

Lopes de Sousa Jabbour, A. B., Vazquez-Brust, D., Chiappetta Jabbour, C. J., & Andriani Ribeiro, D. (2020). The interplay between stakeholders, resources and capabilities in climate change strategy: converting barriers into cooperation. Business Strategy and the Environment, 29(3), 1362-1386.

Lu, E., & Sohal, A. (1993). Success factors, weaknesses and myths concerning TQM implementation in Australia. Total Quality Management, 4(3), 245-256.

Malik, S. A., Iqbal, M. Z., Shaukat, R. A. Z. I. A., & Yong, J. (2010). TQM practices & organizational performance: evidence from Pakistani SMEs. International Journal of Engineering & Technology, 10(4), 26-31.

Malik, S. Y., Hayat Mughal, Y., Azam, T., Cao, Y., Wan, Z., Zhu, H., & Thurasamy, R. (2021). Corporate social responsibility, green human resources management, and sustainable performance: is organizational citizenship behavior towards environment the missing link?. Sustainability, 13(3), 1044.

Marin-Garcia, J. A., & Tomas, J. M. (2016). Deconstructing AMO framework: A systematic review. Intangible capital, 12(4), 1040-1087.

Martinez-Costa, M., & Jimenez-Jimenez, D. (2008). Are companies that implement TQM better learning organisations? An empirical study. Total Quality Management, 19(11), 1101-1115.

Martínez-Costa, M., Choi, T. Y., Martínez, J. A., & Martínez-Lorente, A. R. (2009). ISO 9000/1994, ISO 9001/2000 and TQM: The performance debate revisited. Journal of operations management, 27(6), 495-511.

Maydeu-Olivares, A., & Garcia-Forero, C. (2010). Goodness-of-fit testing. International encyclopedia of education, 7(1), 190-196.

McGrath, R. G., & MacMillan, I. C. (2000). The entrepreneurial mindset: Strategies for continuously creating opportunity in an age of uncertainty (Vol. 284). Harvard Business Press.

Menezes, L.M. (2012), "Job satisfaction and quality management: an empirical analysis", International Journal of Operations and Production Management, Vol. 32 No. 3, pp. 308-328.

Michalska, J. (2008). Using the EFQM excellence model to the process assessment. Journal of Achievements in Materials and Manufacturing Engineering, 27(2), 203-206.

Miller, D., & Friesen, P. H. (1983). Strategy-making and environment: the third link. Strategic management journal, 4(3), 221-235.

Miller, L. T., & Park, C. S. (2002). Decision making under uncertainty—real options to the rescue?. The engineering economist, 47(2), 105-150.

Milliken, F. J. (1987). Three types of perceived uncertainty about the environment: State, effect, and response uncertainty. Academy of Management review, 12(1), 133-143.

Miyagawa, M. and Yoshida, K. (2010), "TQM practices of Japanese-owned manufacturers in the USA and China", International Journal of Quality and Reliability Management, Vol. 27 No. 7, pp. 736-55.

Morrar, R., & Gallouj, F. (2016). The growth of the service sector in Palestine: the productivity challenge. Journal of Innovation Economics & Management, (1), 179-204.

Morrow, P. C. (1997). The measurement of TQM principles and work-related outcomes. Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior, 18(4), 363-376.

Ngo, H. Y., & Loi, R. (2008). Human resource flexibility, organizational culture and firm performance: An investigation of multinational firms in Hong Kong. The International Journal of Human Resource Management, 19(9), 1654-1666.

Nicolau, J. L., & Sellers, R. (2010). The quality of quality awards: diminishing information asymmetries in a hotel chain. Journal of Business Research, 63(8), 832-839.

Nientied, P., & Slob-Winterink, C. (2018). The role of hrm in fostering innovation: A case study of a Dutch technical company. Dynamic Relationships Management Journal, 7 (2), 13–24.

O'Sullivan, A., Rey, M. E., & Mendez, J. G. (2011). Opportunities and Challenges in the MENA Region. Arab world competitiveness report, 2012, 42-67.

Obeidat, S. M., Mitchell, R., & Bray, M. (2016). The link between high performance work practices and organizational performance: Empirically validating the conceptualization of HPWP according to the AMO model. Employee Relations, 38(4), 578-595.

Oke, A., Walumbwa, F.O. and Myers, A. (2012), "Innovation strategy, human resource Policy, and firms' revenue growth: the roles of environmental uncertainty and innovation performance", Decision Sciences, Vol. 43 No. 2, pp. 273-301.

Otley, D. (2016). The contingency theory of management accounting and control: 1980–2014. Management accounting research, 31, 45-62.

Paauwe, J. (2009). HRM and performance: Achievements, methodological issues and prospects. Journal of Management studies, 46(1), 129-142.

Palestinian Central Bureau of Statistics. (2022). The Performance of the Palestinian Economy in 2022, and Economic Forecasts for 2023. Chrome extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.pcbs.gov.ps/portals/_pcbs/PressRelease/Press_En_EcoForecastsYear2023E.pdf

Palestinian Ministry of Economy. (2020). Economic situation. https://www.mne.gov.ps/ministry.aspx?NewsId=2161

Pennings, J. M. (1992). Structural contingency theory: A re-appraisal. In Research in organization behavior, XIV (pp. 267-309). JAI Press.

Phan, T. T. H., Tran, H. X., Le, T. T., Nguyen, N., Pervan, S., & Tran, M. D. (2020). The relationship between sustainable development practices and financial performance: A case study of textile firms in Vietnam. Sustainability, 12(15), 5930.

Ployhart, R. E., & Bliese, P. D. (2006). Individual adaptability (I-ADAPT) theory: Conceptualizing the antecedents, consequences, and measurement of individual differences in adaptability. In Understanding adaptability: A prerequisite for effective performance within complex environments (pp. 3-39). Emerald Group Publishing Limited.

Pondeville, S., Swaen, V., & De Rongé, Y. (2013). Environmental management control systems: The role of contextual and strategic factors. Management accounting research, 24(4), 317-332.

Pool, S.W. (2000),The learning organization: motivating employees by integrating TQM philosophy in a supportive organizational culture", Leadership & Organization Development Journal, Vol. 21 No. 8, pp. 373-378. https://doi.org/10.1108/01437730010379276).

Prajogo, D. I. (2005). The comparative analysis of TQM practices and quality performance between manufacturing and service firms. International Journal of Service Industry Management.

Prajogo, D. I., & Cooper, B. K. (2010). The effect of people-related TQM practices on job satisfaction: a hierarchical model. Production Planning and Control, 21(1), 26-35.

Prajogo, D. I., & Hong, S. W. (2008). The effect of TQM on performance in R&D environments: A perspective from South Korean firms. Technovation, 28(12), 855-863.

Prajogo, D. I., & Sohal, A. S. (2006). The relationship between organization strategy, total quality management (TQM), and organization performance—the mediating role of TQM. European journal of operational research, 168(1), 35-50.

Rafferty, A. E., & Griffin, M. A. (2006). Perceptions of organizational change: a stress and coping perspective. Journal of applied psychology, 91(5), 1154.

Rahman, S. U., & Bullock, P. (2005). Soft TQM, hard TQM, and organisational performance relationships: an empirical investigation. Omega, 33(1), 73-83.

Raidén, A. B., & Dainty, A. R. (2006). Human resource development in construction organisations: An example of a “chaordic” learning organisation?. The learning organization, 13(1), 63-79.

Ringle, C. M., Wende, S., and Becker, J.-M. 2022. "SmartPLS 4." Oststeinbek: SmartPLS GmbH, http://www.smartpls.com.

Robertson, C., & Chetty, S. K. (2000). A contingency-based approach to understanding export performance. International Business Review, 9(2), 211-235.

Rosenbusch, N., Rauch, A., & Bausch, A. (2013). The mediating role of entrepreneurial orientation in the task environment–performance relationship: A meta-analysis. Journal of management, 39(3), 633-659.

Rust, R. T., Zahorik, A. J., & Keiningham, T. L. (1996). Service marketing. New York, NY: HarperCollins.

Ružić, M. D. (2015). Direct and indirect contribution of HRM practice to hotel company performance. International Journal of Hospitality Management, 49, 56-65.

Saa-Perez, P. D., & Garcia-Falcon, J. M. (2002). A resource-based view of human resource management and organizational capabilities development. International journal of human resource management, 13(1), 123-140.

Sadikoglu, E., & Zehir, C. (2010). Investigating the effects of innovation and employee performance on the relationship between total quality management practices and firm performance: An empirical study of Turkish firms. International journal of production economics, 127(1), 13-26.

Saffar, N., & Obeidat, A. (2020). The effect of total quality management practices on employee performance: The moderating role of knowledge sharing. Management Science Letters, 10(1), 77-90.

Sageer, A., Rafat, S., & Agarwal, P. (2012). Identification of variables affecting employee satisfaction and their impact on the organization. IOSR Journal of business and management, 5(1), 32-39.

Saha, P., & Alam, M. A. (2022). Smart management scheme for the efficient control of industrial inventory. American Journal of Industrial and Business Management, 12(4), 519-530.

Saha, P., Talapatra, S., Belal, H. M., & Jackson, V. (2022). Unleashing the Potential of the TQM and Industry 4.0 to Achieve Sustainability Performance in the Context of a Developing Country. Global Journal of Flexible Systems Management, 23(4), 495-513.

Salahat, M. A., & Smirat, I. M. (2014). Linking HRM Planning to TQM Implementation in Palestinian Private Sector, the Moderating Role of Competitive Strategies: A Proposed Study. International Journal of Management, IT and Engineering, 4(12), 45-59.

Salaheldin, S. I. (2009). Critical success factors for TQM implementation and their impact on performance of SMEs. International journal of productivity and performance management, 58(3), 215-237.

Samson, D., & Terziovski, M. (1999). The relationship between total quality management practices and operational performance. Journal of operations management, 17(4), 393-409.

Saraph, J. V., Benson, P. G., & Schroeder, R. G. (1989). An instrument for measuring the critical factors of quality management. Decision sciences, 20(4), 810-829.

Schaltegger, S. (2011). Sustainability as a driver for corporate economic success. Consequences for the development of sustainability management control. Society and Economy. In Central and Eastern Europe | Journal of the Corvinus University of Budapest, 33(1), 15-28.

Schoolman, E. D., Guest, J. S., Bush, K. F., & Bell, A. R. (2012). How interdisciplinary is sustainability research? Analyzing the structure of an emerging scientific field. Sustainability Science, 7, 67-80.

Seibert, S. E., Silver, S. R., & Randolph, W. A. (2004). Taking empowerment to the next level: A multiple-level model of empowerment, performance, and satisfaction. Academy of management Journal, 47(3), 332-349.

Şener, İ. (2012). Strategic responses of top managers to environmental uncertainty. Procedia-Social and Behavioral Sciences, 58, 169-177.

Shafiq, M., Lasrado, F., & Hafeez, K. (2019). The effect of TQM on organisational performance: empirical evidence from the textile sector of a developing country using SEM. Total Quality Management & Business Excellence, 30(1-2), 31-52.

Sharma, S., & Modgil, S. (2020). TQM, SCM and operational performance: an empirical study of Indian pharmaceutical industry. Business Process Management Journal, 26(1), 331-370.

Shea, C. M., & Howell, J. M. (1998). Organizational antecedents to the successful implementation of total quality management: a social cognitive perspective. Journal of Quality Management, 3(1), 3-24.

Sila, I. (2007). Examining the effects of contextual factors on TQM and performance through the lens of organizational theories: An empirical study. Journal of Operations management, 25(1), 83-109.

Sila, I., & Ebrahimpour, M. (2002). An investigation of the total quality management survey based research published between 1989 and 2000: A literature review. International Journal of Quality & Reliability Management, 19(7), 902-970.

Sila, I., & Ebrahimpour, M. (2003). Examination and comparison of the critical factors of total quality management (TQM) across countries. International journal of production research, 41(2), 235-268.

Sila, I., & Ebrahimpour, M. (2005). Critical linkages among TQM factors and business results. International journal of operations & production management, 25(11), 1123-1155.

Sila, I., 2007. Examining the effects of contextual factors on TQM and performance through the lens of organizational theories: an empirical study. Journal of Operations Management 25 (1), 83–109.

Sıtkı İlkay, M., & Aslan, E. (2012). The effect of the ISO 9001 quality management system on the performance of SMEs. International Journal of Quality & Reliability Management, 29(7), 753-778.

Sitkin, S. B., Sutcliffe, K. M., & Schroeder, R. G. (1994). Distinguishing control from learning in total quality management: a contingency perspective. Academy of management review, 19(3), 537-564.

Škerlavaj, M., Song, J. H., & Lee, Y. (2010). Organizational learning culture, innovative culture and innovations in South Korean firms. Expert systems with applications, 37(9), 6390-6403.

Snape, E., Wilkinson, A., Marchington, M., & Redman, T. (1995). Managing human resources for TQM: possibilities and pitfalls. Employee Relations, 17(3), 42-51.

Snipes, R. L., Oswald, S. L., LaTour, M., & Armenakis, A. A. (2005). The effects of specific job satisfaction facets on customer perceptions of service quality: an employee-level analysis. Journal of business research, 58(10), 1330-1339.

Sohal, A. and Morrison, M. (1995), "Is there a link between total quality management and leaning organization?", The TQM Magazine, Vol. 7 No. 3, pp. 41-44.

Sommer, S. M., & Merritt, D. E. (1994). The impact of a TQM intervention on workplace attitudes in a health-care organization. Journal of Organizational Change Management, 7(2), 53-62.

Sousa, R., & Voss, C. A. (2001). Quality management: universal or context dependent?. Production and operations management, 10(4), 383-404.

Sousa, R., & Voss, C. A. (2002). Quality management re-visited: a reflective review and agenda for future research. Journal of operations management, 20(1), 91-109.

Sousa, R., & Voss, C. A. (2008). Contingency research in operations management practices. Journal of Operations management, 26(6), 697-713.

Speckbacher, G., & Offenberger, P. (2010). The design of management control systems in non-profit organizations: how can trust and control be balanced. Vienna University Of Economics And Business.

Swamidass, P. M., & Newell, W. T. (1987). Manufacturing strategy, environmental uncertainty and performance: a path analytic model. Management science, 33(4), 509-524.

Székely, F.; Knirsch, M. Responsible leadership and corporate social responsibility: Metrics for sustainable performance. Eur. Manag. J. 2005, 23, 628–647.

Tamer, K., & Darwish (2009). The impact of strategic human resource management implementation on firm performance. BBS Doctoral Symposium 23rd &24th March 2009.

Tamimi, N. (1998). A second-order factor analysis of critical TQM factors. International Journal of Quality Science, 3(1), 71-79.

Tarter, C.J. and Hoy, W.K. (1998), "Toward a contingency theory of decision making", Journal of Educational Administration, Vol. 36 No. 3, pp. 212-228. https://doi.org/10.1108/09578239810214687.

Tasleem, M., Khan, N., & Nisar, A. (2019). Impact of technology management on corporate sustainability performance: The mediating role of TQM. International Journal of Quality & Reliability Management, 36(9), 1574-1599.

Taylor, A., and M.Taylor (2013). Factors Influencing Effective Implementation of Performance Measurement Systems in a Small and Medium-sized Enterprises and Large Firms: A Perspective from Contingency Theory. International Journal of Production Research52(3):847–866.

Terziovski, M., & Samson, D. (2000). The effect of company size on the relationship between TQM strategy and organisational performance. The TQM magazine, 12(2), 144-149.

Tharenou, P., Saks, A. M., & Moore, C. (2007). A review and critique of research on training and organizational-level outcomes. Human resource management review, 17(3), 251-273.

Thompson, V.A. (2007). Bureaucracy and innovation. Administrative Science Quarterly, 10, 1-20.

Turner, J.R. (1993), "Integrated supply chain management: what's wrong with this picture?", Industrial Engineer, Vol. 14, pp. 190-202.

Ugboro, I. O., & Obeng, K. (2000). Top management leadership, employee empowerment, job satisfaction, and customer satisfaction in TQM organizations: an empirical study. Journal of quality management, 5(2), 247-272.

Uysal, G. (2012). Human resource focus in TQM awards. Uysal, Gürhan (2012). Human Resource Focus in TQM Awards. Journal of US China Public Administration, March, 9(3), 338-345.

Valmohammadi, C., & Roshanzamir, S. (2015). The guidelines of improvement: Relations among organizational culture, TQM and performance. International Journal of Production Economics, 164, 167-178.

VanYperen, N. W., Van Den Berg, A. E., & Willering, M. C. (1999). Towards a better understanding of the link between participation in decision-making and organizational citizenship behaviour: A multilevel analysis. Journal of Occupational and Organizational Psychology, 72(3), 377-392.

Volyn, K. (1995). TQM advocate: Better work & happier employees. Wenatchee Bus. J, 9, 40.

Vouzas, F., & Psychogios, A. G. (2007). Assessing managers' awareness of TQM. The TQM magazine, 19(1), 62-75.

Wadongo, B., & Abdel-Kader, M. (2014). Contingency theory, performance management and organisational effectiveness in the third sector: A theoretical framework. International Journal of Productivity and Performance Management, 63(6), 680-703.

Walley, K. (2000). TQM in non-manufacturing SMEs: evidence from the UK farming sector. International Small Business Journal, 18(4), 46-61.

Wang, C. H., Chen, K. Y., & Chen, S. C. (2012). Total quality management, market orientation and hotel performance: The moderating effects of external environmental factors. International journal of hospitality management, 31(1), 119-129.

Welikala And, D., & Sohal, A. S. (2008). Total Quality Management and employees' involvement: A case study of an Australian organisation. Total Quality Management, 19(6), 627-642.

Wernerfelt, B., & Karnani, A. (1987). Competitive strategy under uncertainty. Strategic Management Journal, 8(2), 187-194.

Westphal, J. D., Gulati, R., & Shortell, S. M. (1996, August). THE INSTITUTIONALIZATION OF TOTAL QUALITY MANAGEMENT: THE EMERGENCE OF NORMATIVE TQM ADOPTION AND THE CONSEQUENCES FOR ORGANIZATIONAL LEGITIMACY AND PERFORMANCE. In Academy of management proceedings (Vol. 1996, No. 1, pp. 249-253). Briarcliff Manor, NY 10510: Academy of Management.

Wilkinson, A., & Witcher, B. (1991). Fitness for use? Barriers to full TQM in the UK. Management Decision, 29(8).

Wilkinson, A., Marchington, M., Goodman, J., & Ackers, P. (1992). Total quality management and employee involvement. Human Resource Management Journal, 2(4), 1-20.

Williams, C. (2007). Research methods. Journal of Business & Economics Research (JBER), 5(3).

Womack, J.P., Jones, D.T. and Roo, D. (1990), The Machine that Changed the World, Harper Collins, New York, NY.

Wright, P. M., McMahan, G. C., & McWilliams, A. (1994). Human resources and sustained competitive advantage: a resource-based perspective. International journal of human resource management, 5(2), 301-326.

Yamin, S. (2022). Olah Data Statistik: SmartPLS 3 SMARTPLS 4 AMOS & STATA. Depok: PT Dewangga Energi Internasional.

Yan, J., & Yan, L. (2017). Collective entrepreneurship, environmental uncertainty and small business performance: A contingent examination. The Journal of Entrepreneurship, 26(1), 1-26.

Yazdani, B. (2022). TQM, EMO and performance: the contingency effect of environmental uncertainty. International Journal of Quality & Reliability Management, 39(2), 647-672.

Yeh, Y. J. (2003). Implementing a sustainable TQM system: employee focus. The TQM Magazine, 15(4), 257-265.

Yi, L., Yuan, L., & Zelong, W. (2009). How organizational flexibility affects new product development in an uncertain environment: Evidence from China. International Journal of Production Economics, 120(1), 18–29. https://doi.org/ 10.1016/j.ijpe.2008.07.026.

Yong, J. Y., Yusliza, M. Y., Ramayah, T., Chiappetta Jabbour, C. J., Sehnem, S., & Mani, V. (2020). Pathways towards sustainability in manufacturing organizations: Empirical evidence on the role of green human resource management. Business Strategy and the Environment, 29(1), 212-228.

York, K.M.; Miree, C.E. Causation or covariation: An empirical re-examination of the link between TQM and financial performance. J. Oper. Manag. 2004, 22, 291–311. [CrossRef]

Youssef, M. A., & Zairi, M. (1995). Benchmarking critical factors for TQM: part II–empiricalresults from different regions in the world. Benchmarking for Quality Management & Technology, 2(2), 3-19.

Zaid, A. A., & Sleimi, M. (2023). Effect of total quality management on business sustainability: the mediating role of green supply chain management practices. Journal of Environmental Planning and Management, 66(3), 524-548.

Zairi, M., & Peters, J. (2002). The impact of social responsibility on business performance. Managerial Auditing Journal, 17(4), 174-178.

Zhang, B., Comite, U., Yucel, A. G., Liu, X., Khan, M. A., Husain, S., & Oláh, J. (2021). Unleashing the importance of TQM and knowledge management for organizational sustainability in the age of circular economy. Sustainability, 13(20), 11514.

Zhang, D., Linderman, K., & Schroeder, R. G. (2012). The moderating role of contextual factors on quality management practices. Journal of Operations Management, 30(1-2), 12-23.

Zhu, J. (2000). Multi-factor performance measure model with an application to Fortune 500 companies. European journal of operational research, 123(1), 105-124.

Zhu, Q., Sarkis, J., & Lai, K. H. (2012). Green supply chain management innovation diffusion and its relationship to organizational improvement: An ecological modernization perspective. Journal of Engineering and Technology Management, 29(1), 168-185.

Zink, K. J. (2007). From total quality management to corporate sustainability based on a stakeholder management. Journal of management history, 13(4), 394-401.

Zott, C. (2003). Dynamic capabilities and the emergence of intraindustry differential firm performance: Insights from a simulation study. Strategic Management Journal 24(2): 97-125.

Appendices

Appendix (1): Questionnaire in English language.

الجامعة العربية الأمريكية
ARAB AMERICAN UNIVERSITY

Arab American University-Palestine

Faculty of Graduate Studies

Quality Management Program

Total Quality Management, Employee Outcomes, and Environmental Uncertainty: Unveiling the Dynamic Nexus for Sustainable Organizational Performance in Palestinian Service Sector

Dear Participant,

Thank you for taking the time to respond to this questionnaire. I am Lina Thabet, a student from AAUP. I am pursuing a master's degree in quality management, and this survey is an integral part of fulfilling the thesis requirements. All provided information will be used exclusively for scientific purposes and will be treated with utmost confidence.

This questionnaire consists s of five sections and is designed to be completed within approximately 15 minutes. Your participation is highly appreciated and will significantly contribute to the success of this research.

Thank you for your cooperation.

Sincerely,

Lina

Master's Candidate in Quality Management

Questionnaire sections:

Section 1: Eligibility to Participate in the Survey

Section 2: Demographic Information.

Section 3: Total quality management practices.

Section 4: Employee outcomes.

Section 5: Environmental uncertainty.

Section 6: Sustainable Organizational Performance.

	Section One: Eligibility to Participate in the Survey:	
E1	Does your company apply quality practices?	○ YES ○ NO
If your answer is (YES) to the previous question, please complete the questionnaire.		

	Section Two: Demographic Information	
DI1	Gender	○ Female ○ Male
DI2	Qualification	○ Diploma ○ Bachelor's ○ Master's ○ PhD and above
DI3	Department	○ Quality assurance ○ Sales ○ HR ○ Marketing ○ Procurement ○ Finance ○ Operations ○ Information technology ○ Research and development ○ Customer service ○ Other, please specify_____
DI4	Job position	○ Supervisor ○ Specialist ○ Unit Head ○ Section Head ○ Manager

		○ Regional manager ○ Director ○ Other, please specify_____
DI5	Organization sector	○ Telecommunications ○ Trading ○ Banking ○ Insurance ○ Education ○ Hospitality ○ Health care ○ consultancy ○ Information Technology ○ Marketing and Advertising ○ Media Services ○ Legal Services ○ Other, please specify_____
DI6	Organization type	○ Family business ○ Private joint stock ○ Public joint stock ○ Other, please specify_____

DI7	Number of employees in the organization	○ 1-10 ○ 11-50 ○ 51-200 ○ 201-500 ○ More than 500
DI8	Geographic location	○ Jenin ○ Tulkarm ○ Tubas ○ Qalqilya ○ Nablus ○ Salfit ○ Jericho ○ Ramallah ○ Jerusalem ○ Bethlehem ○ Hebron
DI9	What quality certificate does your company have?	○ ISO 9001 for quality management ○ ISO 14001 for environmental management ○ ISO 45001 for health and safety management ○ Other, Please specify……..

DI10	Where does your company provide its services (you can choose more than one option)	○ Local market ○ Regional market ○ Global market

	Section three: TQM Practices							
	In this section, please choose the number that represents the best description, noting that the higher number indicates the higher degree of approval.							
Code	Clause	1 Strongly Disagree	2 Disagree	3 Slightly Disagree	4 Undecided	5 Slightly Agree	6 Agree	7 Strongly Agree
	Leadership							
L1	Top management applies quality management and continuous improvement.							
L2	Top management provide needed resources for quality improvement.							

L3	Top management make plans for creating culture of learning and change.							
L4	Top management regularly review quality-related results.							
	Human Resource Management (HRM)							
HRM1	The management gives high value to recruitment and selection criteria.							
HRM2	The organization maintains a work environment that contributes to the health, safety and well-being of all employees.							
HRM3	The company has effective “top-down” and “bottom-up” communication process.							

HRM4	The organization regularly examines employee satisfaction.							
HRM5	The supervisors encourage employees to work as a team.							
HRM6	The organization provides job security for employees.							
	Strategic Planning							
STP1	The company has a clear vision and mission statements which are supported by all employees.							
STP2	The organization sets and reviews short and long-term goals through a comprehensive planning process.							
STP3	Determined policies and plans take the needs of							

	stakeholders into account.							
STP4	The organization uses performance measures to track the progress of action plans.							
	Customer Focus							
CF1	Periodic market studies are conducted to identify customers' needs and expectations.							
CF2	Customers' requirements are taken into consideration when designing new services.							
CF3	The organization measures and analyses customer satisfaction and dissatisfaction.							
CF4	The organization resolves customer							

	complaints promptly and effectively.							
CF5	There are effective communication channels with customers that help build a strong relationship with them.							
	Information and analysis							
IA1	The organization has information system that allows access and utilization of customer preference information.							
IA2	Various statistical tools and techniques (Charts, Graphs, and other) are used to monitor services quality.							
IA3	Top management uses quality data to make decisions and plans.							
	Process Management							

PM1	Process instructions are standardized and documented.							
PM2	Employees understand process instructions well.							
PM3	Processes are designed to minimize the chances of employee errors.							
PM4	The organization continuously improves the processes used to provide its services.							

	Section Four: Employee Outcomes							
	In this section please choose the number that represents the best description, noting that the higher number indicates the higher degree of approval.							
Code	Clause	1 Strongly Disagree	2 Disagree	3 Slightly Disagree	4 Undecided	5 Slightly Agree	6 Agree	7 Strongly Agree

	Abilities							
A1	Our employees have the required skills and abilities to do their job effectively.							
A2	Our employees have the ability to systematically solve job-related problems.							
A3	Employees can make the necessary decisions to carry out their jobs.							
	Motivation							
M1	The workplace motivates the employees to get the best of themselves.							
M2	Employees' job satisfaction is in a good level.							
M3	The company has a good incentives system.							

M4	The company has a good appraisal system.							
M5	Compensations are determined based on the performance appraisal report.							
M6	Employees receive enough compliments and positive feedback regarding their innovation work.							
	Opportunity							
O1	Employees have the opportunity to participate in decision-making.							
O2	The organization has succeeded in retaining employees.							
O3	Employees can express their ideas about how processes can be							

	improved in the organization.							
	Learning							
LE1	The organization often organizes internal training for employees.							
LE2	Employees share knowledge and experiences with each other.							
LE3	Employees are provided with feedback for performance.							

	Section Four: Environment Uncertainty							
	In this section please choose the number that represents the best description, noting that the higher number indicates the higher degree of approval.							
Code	Clause	1 Strongly Unpredictable	2 Unpredictable	3 Slightly Unpredictable	4 Undecided	5 Slightly Predictable	6 Predictable	7 Strongly Predictable

	Munificence							
M1	Growth in consumer demand within the industry is.							
M2	Growth in industry sales is.							
M3	Current market share changes are.							
	Dynamism							
DY1	Changes in customers' preferences are.							
DY2	Actions of competitors are.							
DY3	The technological breakthroughs used to provide services are.							
DY4	Change in quality level accepted by customers is.							
	Hostility							
H1	Customers switching to competitors is.							

H2	Price changes for competitors' services are.							
H3	Competitors' marketing strategy changes are.							
H4	Entrance of new competitors is.							
H5	Legal regulations affecting the business sector are.							
H6	Current political situation is.							
	Heterogeneity							
Code	Clause	1 Strongly Disagree	2 Disagree	3 Slightly Disagree	4 Undecided	5 Slightly Agree	6 Agree	7 Strongly Agree
HE1	In your industry, there is a wide range of consumer tastes.							
HE2	One of the main challenges you face is							

	customizing services to suit different tastes.							
HE3	Your market contains many different customer segments.							

	Section Four: sustainable Organizational Performance							
	In this section please choose the number that represents the best description, noting that the higher number indicates the higher degree of approval.							
Code	Clause	1 Strongly Disagree	2 Disagree	3 Slightly Disagree	4 Undecided	5 Slightly Agree	6 Agree	7 Strongly Agree
	Environmental performance							
ENP1	Increased purchase of environmentally friendly materials.							
ENP2	Reduction in toxic materials/waste/emissions harmful to the environment.							

ENP3	Increased use of recyclable materials.							
ENP4	Increased reliance on renewable energy sources to provide our services.							
ENP5	There is improvement in the use and efficiency of materials needed to provide our services.							
	Social performance							
SP1	Increased attention to workforce health and safety system.							
SP2	Improving workforce capabilities, and increase their job satisfaction.							
SP3	Improving the quality of services provided and committing to society ethics.							

SP4	Improving coordination with stakeholders, including employees, customers, suppliers, partners, collaborators, shareholders, government...etc.							
SP5	Improving community health and safety.							
SP6	The organization succeeded in building a positive public image of its own.							
	Economic Performance							
EP1	Improved financial performance since the implementation of quality practices.							
EP2	Increased market share during the past few years.							

EP3	Increased quality of the services provided while saving the operational costs.							
EP4	Services\ offers provided are comparable to or better than those of competitors.							
EP5	The key measures and results related to processes efficiency, effectiveness, capability, capacity or productivity have been improved.							

Appendix (2): Descriptive Analysis

Code	Item	Mean	Standard deviation
L1	Top management applies quality management and continuous improvement.	5.715	1.277
L2	Top management provide needed resources for quality improvement.	5.551	1.348
L3	Top management make plans for creating culture of learning and change.	5.595	1.336
L4	Top management regularly review quality-related results.	5.449	1.487
HRM1	The management gives high value to recruitment and selection criteria.	5.589	1.392
HRM2	The organization maintains a work environment that contributes to the health, safety and well-being of all employees.	5.196	1.717
HRM3	The company has effective "top-down" and "bottom-up" communication process.	4.956	1.866
HRM4	The organization regularly examines employee satisfaction.	5.000	1.885
HRM5	The supervisors encourage employees to work as a team.	5.494	1.418
HRM6	The organization provides job security for employees.	5.215	1.849
STP1	The company has a clear vision and mission statements which are supported by all employees.	5.392	1.627
STP2	The organization sets and reviews short and long-term goals through a comprehensive planning process.	5.424	1.597
STP3	Determined policies and plans take the needs of stakeholders into account.	5.430	1.516
STP4	The organization uses performance measures to track the progress of action plans.	5.184	1.722
CF1	Periodic market studies are conducted to identify customers' needs and expectations.	5.209	1.879
CF2	Customers' requirements are taken into consideration when designing new services.	5.443	1.699
CF3	The organization measures and analyses customer satisfaction and dissatisfaction.	5.487	1.567
CF4	The organization resolves customer complaints promptly and effectively.	5.614	1.475
CF5	There are effective communication channels with customers that help build a strong relationship with them.	5.519	1.642
IA1	The organization has information system that allows access and utilization of customer preference information.	4.772	1.912
IA2	Various statistical tools and techniques (Charts, Graphs, and other) are used to monitor services quality.	4.886	1.861
IA3	Top management uses quality data to make decisions and plans.	5.146	1.730
PM1	Process instructions are standardized and documented.	5.544	1.500
PM2	Employees understand process instructions well.	5.595	1.441
PM3	Processes are designed to minimize the chances of employee errors.	5.500	1.595
PM4	The organization continuously improves the processes used to provide its services.	5.722	1.488
A1	Our employees have the required skills and abilities to do their job effectively.	5.443	1.610
A2	Our employees have the ability to systematically solve job-related problems.	5.405	1.596
A3	Employees can make the necessary decisions to carry out their jobs.	5.367	1.687

M1	The workplace motivates the employees to get the best of themselves.	4.975	1.895
M2	Employees' job satisfaction is in a good level.	5.006	1.843
M3	The company has a good incentives system.	4.892	1.874
M4	The company has a good appraisal system.	5.076	1.797
M5	Compensations are determined based on the performance appraisal report.	4.791	1.952
M6	Employees receive enough compliments and positive feedback regarding their innovation work.	5.146	1.833
O1	Employees have the opportunity to participate in decision-making.	4.804	1.989
O2	The organization has succeeded in retaining employees.	5.032	1.877
O3	Employees can express their ideas about how processes can be improved in the organization.	5.158	1.829
LE1	The organization often organizes internal training for employees.	5.044	2.036
LE2	Employees share knowledge and experiences with each other.	5.601	1.441
LE3	Employees are provided with feedback for performance.	5.690	1.604
M1	Growth in consumer demand within the industry is.	3.462	2.113
M2	Growth in industry sales is.	3.329	1.979
M3	Current market share changes are.	3.228	1.912
DY1	Changes in customers' preferences are.	3.475	2.108
DY2	Actions of competitors are.	3.000	1.752
DY3	The technological breakthroughs used to provide services are.	3.949	1.770
DY4	Change in quality level accepted by customers is.	3.772	2.019
H1	Customers switching to competitors is.	2.222	1.615
H2	Price changes for competitors' services are.	3.696	1.751
H3	Competitors' marketing strategy changes are.	3.519	1.808
H4	Entrance of new competitors is.	3.532	1.680
H5	Legal regulations affecting the business sector are.	3.614	1.631
H6	Current political situation is.	2.032	1.478
HE1	In your industry, there is a wide range of consumer tastes.	4.968	2.101
HE2	One of the main challenges you face is customizing services to suit different tastes.	4.861	2.070
HE3	Your market contains many different customer segments.	4.867	2.189
ENP1	Increased purchase of environmentally friendly materials.	4.519	1.751
ENP2	Reduction in toxic materials/waste/emissions harmful to the environment.	4.677	1.679
ENP3	Increased use of recyclable materials.	4.411	1.675
ENP4	Increased reliance on renewable energy sources to provide our services.	4.639	1.690
ENP5	There is improvement in the use and efficiency of materials needed to provide our services.	5.525	1.381
SP1	Increased attention to workforce health and safety system.	5.304	1.755
SP2	Improving workforce capabilities, and increase their job satisfaction.	5.108	1.818
SP3	Improving the quality of services provided and committing to society ethics.	5.538	1.483
SP4	Improving coordination with stakeholders, including employees, customers, suppliers, partners, collaborators, shareholders, government...etc.	5.443	1.578
SP5	Improving community health and safety.	5.424	1.617
SP6	The organization succeeded in building a positive public image of its own.	5.437	1.586

EP1	Improved financial performance since the implementation of quality practices.	5.449	1.626
EP2	Increased market share during the past few years.	5.513	1.567
EP3	Increased quality of the services provided while saving the operational costs.	5.468	1.661
EP4	Services\ offers provided are comparable to or better than those of competitors.	5.608	1.514
EP5	The key measures and results related to processes efficiency, effectiveness, capability, capacity or productivity have been improved.	5.671	1.482

الملخص

تعتبر دارة الجودة الشاملة (TQM) الركيزة الأساسية للأداء التنظيمي والميزة التنافسية والتميز. تتبع إدارة الجودة الشاملة منهجًا منظمًا يهدف إلى تحقيق أهداف تنظيمية طويلة المدى، ويُعتقد أنها قابلة للتطبيق في قطاعي التصنيع والخدمات. في هذه الدراسة، تمت دراسة إدارة الجودة الشاملة لفهم مساهماتها في الأداء التنظيمي المستدام (SOP) ونتائج الموظفين (EMO) في سياق قطاع الخدمات الفلسطيني. في بيئة الأعمال اليوم، أصبح الأداء التنظيمي المستدام ذا أهمية كبيرة ويحظى بأولوية عالية؛ إنه حجر الزاوية في استمرارية الأعمال. ومن ناحية أخرى، تتبنى هذه الدراسة نتائج الموظفين لتسليط الضوء على دور الموظفين في المنظمة. تتقاطع إدارة الجودة الشاملة وإدارة الموارد البشرية في تطوير ممارسات الموارد البشرية. تتضمن العديد من عناصر إدارة الجودة الشاملة عوامل بشرية، مثل مشاركة الموظفين وتمكينهم، والعمل الجماعي، والتواصل الداخلي، ودعم الإدارة.

تعتمد إدارة الجودة الشاملة على السياق. تلعب العوامل السياقية المختلفة دورًا في درجة نجاح تطبيق إدارة الجودة الشاملة وسيكون قبول تصور موحد لأي نموذج لإدارة الجودة الشاملة أمرًا محفوفًا بالمخاطر. يقيم هذا البحث التأثير المحتمل لعدم اليقين البيئي على العلاقة بين EMO وSOP. تم اعتماد نظريات مختلفة في هذا البحث، بما في ذلك نظرية إدارة الجودة، ونظرية الرؤية القائمة على الموارد (RBV)، ونموذج القدرة والتحفيز والفرصة (AMO)، ونظرية الطوارئ، لبناء العلاقات بين متغيرات البحث. تقدم هذه الدراسة بعض الأفكار المفيدة التي تسلط الضوء على الدور الرئيسي الذي تلعبه ممارسات إدارة الجودة الشاملة في تحسين EMO وSOP، مما ينعكس على رضا العملاء والجوانب التنظيمية الأخرى. كما يظهر تأثير عدم اليقين البيئي على المنظمات. وتم اجراء هذا البحث السببي للتحقيق في العلاقات بين المتغيرات. تم جمع البيانات الكمية الأساسية لهذه الدراسة باستخدام الاستبيانات. تم جمع وتحليل استجابات 123 موظفًا اداريا من مختلف قطاعات الخدمات

الفلسطينية باستخدام نمذجة المعادلة الهيكلية بالمربعات الصغرى الجزئية (PLS-SEM). لقد وجد أن ممارسات إدارة الجودة الشاملة تؤثر بشكل إيجابي على نتائج الموظفين والأداء التنظيمي المستدام (SOP). وقد ثبت أيضًا أن عدم اليقين البيئي يعدل من العلاقة بين EMO وSOP. وعلى الجانب الآخر تشير النتائج إلى وجود علاقة سلبية بين نتائج الموظفين والأداء التنظيمي المستدام. كما يوضح أيضًا أن نتائج الموظفين لا تتوسط في العلاقة بين إدارة الجودة الشاملة والأداء التنظيمي المستدام. تساهم هذه الدراسة في أدبيات إدارة الجودة الشاملة وإدارة الموارد البشرية، وتوفر رؤى مفيدة حول تحسين الأداء التنظيمي المستدام ونتائج الموظفين من خلال اعتماد ممارسات إدارة الجودة الشاملة. واجه تنفيذ البحث بعض القيود بما في ذلك الوضع السياسي في الضفة الغربية وقطاع غزة الذي أعاق عملية جمع البيانات. يُقترح إجراء المزيد من الأبحاث المستقبلية لتغطية الجوانب السياقية الأخرى باستخدام متغيرات طارئة مختلفة، ويمكن للأبحاث المستقبلية الأخرى أيضًا أن تأخذ في الاعتبار نطاقًا أوسع من المستجيبين للحصول على فهم أوسع لهذا الموضوع.