

The Effect of Implementing Total Quality Management on Job Satisfaction (Including Case-Study)

Reza Azarian¹, Gholamreza Tizfahm Fard², Abotaleb Habibi Machiyani³, Mohammad Taghipour^{4*}

¹ Industrial Engineering, Ghiaseddin Jamshid Kashani, Non-Profit University, Qazvin, Iran

² Department of Management, Allameh Tabatabai University, Tehran, Iran

³ Department of Management, Kharazmi University, Tehran, Iran

⁴ Young Researchers and Elites club, Science and Research Branch, Islamic Azad University, Tehran, Iran

Email Address

Mohamad.taghipour@srbiau.ac.ir (Mohammad Taghipour)

*Correspondence: Mohamad.taghipour@srbiau.ac.ir

Received: 8 May 2020; Accepted: 10 June 2020; Published: 13 July 2020

Abstract:

Projects Most of the research studies conducted by the education organization have attended sub-branches of management and have given less consideration to total quality management (TQM) as an important and comprehensive issue that evaluates an organization from different aspects in order to enhance it. The present study has examined the effect of TQM system and its impact on job satisfaction in the educational organization. This research is applied based on the purpose and is descriptive-survey in terms of nature and method. The statistical population of this study include the managers and experts of different levels of departments of the educational organization, as well as principals, deputies, and school staff; the stratified-random sampling method was used. The method is based on inferential statistics (data correlation analysis) and SPSS software was used to analyze the data. The results showed that there was a significant difference between TQM and increased job satisfaction in the educational organization.

Keywords:

Total Quality Management, Job Satisfaction, Education

1. Introduction

The world is changing and the passage of time and the technical changes of organizations, companies, production and industrial units and services are becoming more complicated. Replacing modern thinking with old thinking in today's world leaves no place for static attitude. Static thoughts result in successive crises and no plan or hope for future.

In this regard, it should be noted that in today's world of complexity and change, organizations' survival lies in competition and reconsideration of methods governing

their activities. In order to survive, they must embrace the changes and adapt to them. They must take the first step and consider the changing needs of customers, strategies, long-term goals and other effective factors.

In today's world, the border between knowledge and ignorance is the gap between nations and societies, so the education of knowledgeable and capable human resources is one of the main challenges. The most important and valuable capital of any organization is the human resources. For this reason, human resources play an essential and important role in the growth, dynamism, growth or even failure of organizations. It should be noted that without efficient staff it is impossible to achieve organizational goals.

The largest, most complex and sensitive social system in any society is the educational system, which outlines the scientific level, progress, and future of any country as it incorporates valuable assets and resources such as teachers and students. Therefore, planning and scientific and managerial measures are of particular importance in such a large organization that has the most valuable reserves of this nation. Cultural-educational issues and their quality play a vital role in the survival of the society and its movement towards growth and development. The division of the countries of the world into two industrial and non-industrial or developed and developing poles depends on the quality of the educational system of those countries. Therefore, in order to improve the quality of educational systems, influential factors such as the role of total quality management (TQM) can be discussed. In this regard, it is necessary to equip ourselves with new theories of various sciences such as management so we can coordinate with the rapid and increasing developments of today's world. Total quality management was developed in the 80's and 90's by management scholars and the most successful companies and service and industrial organizations in the world have achieved great success by taking advantage of it.

TQM is a philosophical-managerial view that has increasingly earned fame in societies and has focused on factors such as paying attention to customer needs and initiatives, ways of providing services and improving quality. Paying attention to quality and striving for permanent improvement plays a fundamental and important role in quality development. In recent years, management promotion systems have evolved rapidly. For the past two decades, simple inspection activities have been supplemented or replaced with quality control methods.

The organization's success and progress require the reforming of methods, which is conducted by the comprehensive management of the organization and one of the most fundamental and important aspects of the task of managing the quality of work. In other words, an organization is more successful if the goods or services provided by it are of higher quality. As the educational organization possesses a high potential of human resources, including employees and students, and the increasing need for improvement and continuous quality in various educational and training dimensions, it is one of the organizations in which the implementation of TQM can play an important role in increasing the quality of work and education; it can also lead the country to the goals and future plans. Much work has been done to improve the management system in the educational organization, which has often been in the field of quality control and supervision of managers, and less attention has been paid to quality management system.

1.1. The Purpose of the Research

The aim of this study was to investigate the effect of TQM on job satisfaction in the educational organization so that through using the information and documents obtained from it, managers and decision makers of the organization can select and implement this management method and create maximum job satisfaction in the educational organization.

1.2. Research Question

What effect does the implementation of the TQM in education have on job satisfaction in the education organization?

2. Review of Literature

Abdi Hevelayi et al.[1], studied Predicting Entrepreneurial Marketing through Strategic Planning (Including Case Study). In the relevant study, the relationship between strategic planning and entrepreneurial marketing in Bank Saderat in the northern region of Tehran was examined.

Haj Abukahaki et al.[2], studied Identification and prioritization of effective indicators on optimal implementation of customer relationship management in the insurance industry(including case study).The present Nowadays, importance of customer within organizations has gone beyond such that the trend of organizations has changed from product-orientation to customer-orientation. Therefore, since the last decade, approach to the issues such as customer relationship management has increased within organizations, that the organizations have felt necessity of the issues such as understanding the customer's needs, reducing the costs for acquisition of new customers, and maintain old customers.

Taghipour et al.[3], studied Risk analysis in the management of urban construction projects from the perspective of the employer and the contractor.Imbalance between anticipated and actual progress in the development of urban construction projects suggests that there are many obstacles and risks which not only causes the urban management be unsustainable, but the reconstruction and development of urban space is also seriously threatened. the results indicated that the experts listed the most significant risks as the delays in the payment of contractors' claims and statements due to the lack of handling financial instruments, the governance of relationships rather than rules in the tenders resulting from employer actions, low commitment to the quality of work provided by their subcontractors, failure to complete the detail engineering by foreign contractors on time, weaknesses in contractors' financial resources, and offering lower prices than reasonable by contractors to win the tender. Finally, the solutions for eliminating or reducing risks in high risk areas have been offered to provide tranquility for contractors and employers.

Rezvani Befrouei MA et al.[4], discussed Identification and Management of Risks in Construction Projects. Today, risk management in construction projects is considered to be a very important managerial process for achievement of project's objectives in terms of time, costs, quality, safety, and environmental sustainability. Instead of employing a systematic approach for identification of risks, their probability and their effects, most of the studies conducted in this area have focused only on a few aspects of risk management in construction project. the present study aims to identify and analyze the risks associated with development of construction in the greater city of Tehran, employing a comprehensive approach that is consisted of five aspects. After the collection and observation of the data, the output was examined

by Pearson correlation also, using charts and tables. The results indicated that “tight project schedule” present in all five categories- imposed the maximum risk. Also “design variations”, “excessive approval procedures in administrative government departments” and “unsuitable construction program planning” were identified as next high risk factors.

Alamdar khoolaki et al.[5], studied Effect of integrated marketing communication on brand value with the role of agency's reputation . In today's world, the core capital of many organizations is the brand of that organization. In this research, the effect of integrated marketing communications on brand value has been considered with the mediating role of the reputation of the organization in Iranian insurance.

Taghipour et al.[6], studied Analysing the Effects of Physical Conditions of the Workplace on Employees Productivity. One of the issues that today will improve the productivity of any organization is attention to the human factors engineering. The aim of this study was to find the amount of employee's satisfaction from environmental and organizational factors of their jobs, thus providing guidelines for improving the identified problems which eventually will lead to increase the productivity.

Baghipour sarami et al.[7], studied Modeling of Nurses' shift Work schedules According to Ergonomics: A case study in Imam sajjad (As) Hospital of Ramsar. In this study, 35nurses working in the emergency ward of Imam Sajjad (AS) Hospital of Ramsar city, Iran, were considered. The final model was implemented with GAMS and at the end, shift working with ergonomic criteria were proposed .The results showed that the proposed working program on one hand will improve satisfaction and efficiency of nurses and on the other hand it can decrease the effects of disorders on shift work.

Taghipour et al.[8], studied Supply Chain Performance Evaluation in IN The IT Industry. The appraisal of several performance measure agendas and metrics already accessible proposes that supply chain performance measure can be detected under different categories such as cost and non-cost. In this study, developed supply chain of IT industry based on BSC from existing decision making models. Then, industrial projects performance and performance evaluation measures have been determined using a designed questionnaire.

Taghipour et al.[9], studied the Study of the Application of Risk Management in the operation and Maintenance of Power Plant Projects. one of the methods used in good decision making, pay attention to risk management, which is known as an important part of project management and control. Risk management has evolved over time and its systematic method has provided managers with a definite path so that they reduce potential threats to a minimum and reach project goals by the least possible deviations. In this paper, subsequent to an introduction of fundamental concepts of risk, risk management, an account of risk management, methods and its techniques are presented. In the end, following a discussion on how it is practically used in projects in a real and practical sample, risk management and its application are implemented and essential investigations are undertaken into its effects.

Mahboobi et al.[10], discussed Assessing Ergonomic Risk Factors Using Combined Data Envelopment Analysis and Conventional Methods for an Auto Parts Manufacturer. occupational injuries are currently a major contributor to job loss around the world. They are also costly for business. The absence of rational analysis

is felt in this area, so mathematical analysis is needed to obtain the logical results of these injuries in order to find gaps or loss points of industry. OBJECTIVE: This paper assesses the effect of five demographic factors on ergonomic risk and occupational injuries using an integrated mathematical programming approach. The obtained results will help managers to carry out any required corrective actions or establish benchmarks.

Taghipour et al.[11], studied Assessment and Analysis of Risk Associated with the Implementation of Enterprise Resource Planning (ERP) Project Using FMEA Technique. Enterprise resource planning (ERP) is one of the latest management tools that can take advantage of information technology to comprehensively gather resources and information in all parts of the organization by an interlocking, system with fast speed and high quality and help users in all organizations and sectors by giving certain modules for managing different sectors such as projects, human resources, and services. Despite the many benefits this system can have for the organization, its implementation and deployment is very risky and costly.

Taghipour et al.[12], studied Construction projects risk management by risk allocation approach using PMBOK standard. Projects' managers in plenty of construction projects which are assumed that are under control, are facing risk as an unknown occurrences and they are attempting to control it and are suffering more costs. Though, by a comprehensible effort and applying risk management, risks are identified and controlled before happening or a plan is provided in order to deal with these occurrences and time and cost are saved. Thus, they have to be controlled and appropriately responded by risk management methods. In this regard, risk management process in PMBOK standard can be a suitable approach to solve this problem.

Taghipour et al.[13], studied The Evaluation of the Relationship between Occupational Accidents and Usage of Personal Protective Equipment in an Auto Making Unit. One of the problems that encounter each work society is occupational accidents. Today, despite the improvements of facilities and working conditions, the possibility of accident occurrence in workplaces and especially in industrial places is inevitable. Since the non-use or misuse of PPE is one of the main causes of accidents in industrial units, the aim of this study is to evaluate the association between occupational accidents and the use of PPE in the body section of a vehicle manufacturing unit. The results showed that there is a meaningful positive relationship between the factor of inadequate PPE and probable hazards of the industrial workplace.

Taghipour et al.[14], studied Necessity Analysis and Optimization of Implementing Projects with The Integration Approach of Risk Management and Value Engineering. Risk management and value engineering have appeared as modern management tools since the mid-19th century and have been used separately in different projects. Due to the ineffectiveness resulting from separate implementation of the two approaches in major projects as well as the similarity between them in terms of their goals and executive structures, this research tries to analyze the separate role of each approach in the project process and examine the possibility of integration and correlation between their different phases. This article aims at introducing and examining a tool that simultaneously has the capability of the two categories.

Taghipour et al.[15], studied Evaluating Project Planning and Control System in Multi-project Organizations under Fuzzy Data Approach Considering Resource

Constraints. Projects can be repetitive tasks in specified periods of time and also it may involve some functions which are performed just once. However, in any project, managers and experts consider three basic and important goals: least time, lowest cost and best quality, so all efforts are directed toward achieving these basic goals. Statistics indicate that projects are either conducted on estimated time or delayed and rarely are delivered before due date.

Taghipour et al.[16], studied Implementation of Software-Efficient DES Algorithm. By increasing development of digital telecommunication and the increase of sending and receiving data of various network of data transfer, protection of the safety of data are the most important necessities of the current world. The increase of different bank trading, increasing use of smart cards, moving to electronic government, are the examples of significance of this issue. In this study, an efficient algorithm implementation by MATLAB and C language is presented and is compared with the latest works in this field.

Taghipour et al.[17], studied Risk assessment and analysis of the state DAM construction projects using FMEA technique. Dam construction projects are the most important projects of the country and absorb a considerable amount of the state budget on annual basis. As they take a long time to be completed, they always face risks and many uncertainties. In this study, the researcher intends to use a highly applied qualitative-quantitative methodology (FMEA) to analyze the risks of state dam.

Taghipour et al.[18], studied the impact of ICT on knowledge sharing obstacles in knowledge management process. Today, knowledge is known as a valuable asset in any organization so management of such insensible asset is one of the factors cause success in organizations. But knowledge can be effective when it is shared across the organization. Therefore, knowledge sharing is a key element in the process of knowledge management. This study aimed to check the impact of ICT on knowledge sharing barriers in one of the mobile operator, in Tehran.

Taghipour et al.[19], studied Assessment of the Relationship Between Knowledge Management Implementation and Managers Skills. The Purpose of this study is to consider the effects of knowledge management implementation on manager's skills of Reezmouj System Company. Results showed that there is a relation between knowledge management.

Taghipour et al.[20], studied Evaluation of the effective variables of the value engineering in services. The value engineering is a systematic method for resolving the problems, reducing the cost and improving the function and quality simultaneously and this leads to the increase of customer satisfaction by investigating and improving the value index. The results of this research which are based on the post managers and specialists responses show that applying value engineering by the post managers has significant effects on reducing the cost, saving time and customer satisfaction.

Khalilpour et al.[21], studied The Impact of Accountants Ethical Approaches on the Disclosure Quality of Corporate Social Responsibility Information an Islamic in Iran. The focus of business units on maximizing profits, tackling competitive challenges, emphasizing short-term outcomes, and delivering diverse accounting services has put accountants in a climate of conflict and pressure that has led to unethical outcomes for them. The main purpose of this study is to test a modified

Multidimensional Ethics Scale (MES) to measure the ethical evaluations of accountants and financial managers.

Taghipour et al.[22], studied Identification and Modeling of Radio Wave Propagation Channel in Industrial Environments. Wireless technology in industrial environments is considered due to potential for saving in cable cost, high flexibility in factories, tracing the products and increasing optimization of process.

Taghipour et al.[23], studied Evaluating CCPM method versus CPM in multiple petrochemical projects. Although project management has long been under consideration and various methods have been proposed for timing projects, but they have not been completely responsive to the needs of the project for increasing productivity and customer satisfaction. As a result, increased risks and the incompatibility of the project with the initial Base line plan, necessitate using modern techniques (such as CCPM) as opposed to common methods (such as CPM).

Soleymanpour et al.[24], studied Mathematical modeling for the location-allocation problem - allocation of mobile operator subscribers' affairs' agencies under uncertainty conditions. Mobile phone is one of the inventions of the twentieth century that no one could have imagined that it will grow and become a profitable and huge industry in the world. In fact, mobile operators provide access to telecommunications services for users.

Taghipour et al.[25], studied Application of Cloud Computing in System Management in Order to Control the Process. The implementation and maintenance of organizational resources planning systems is really costly for each business. Large business institutes can pay the costs of organizational systems but due to high costs, small to medium businesses prefer the purchase of these systems and their relevant implementation. Cloud has some advantages in comparison to traditional data centers.

Taghipour et al.[26], studied Evaluation of Tourist Attractions in Borujerd County with Emphasis on Development of New Markets by Using Topsis Model. This research aims to identify tourist attractions in Borujerd County in order to develop new tourism markets in Lorestan province of Iran. For that purpose and with the use of GIS, parameters such as slope, aspect, elevation, precipitation, land use, topography, and landform geology are separately studied and digital maps for each feature are created. These activities have been analyzed using TOPSIS multi-criteria decision model and based on marketing factors.

Abdollahzadeh & Taghipour[27], studied Identify and Priorize Suitable Area for Ecotourism Development using Multi-criteria Analysis for Development of the Tourism Market in Iran (Nathanz City). Nathanz city having regard to natural attraction, desert, Karkas mountain, geo sites, protected areas have great potential to develop eco-tourism. The development of tourism in the city requires recognition of the potential and actual potential of the region. The aim of this study is to identify attractions of Nathanz city to develop new markets by using geographic information system. TOPSIS model were prioritized according to the marketing indicators.

Mirzaie et al.[28], studied The Relationship Between Social Bearing Capacities with Conflict as a Result, in the Perception of the Visiting Historical Sites. Sustainable tourism needs to prevent the destruction and degradation of social, cultural and ecological systems in the host society. It is obvious that tourism development and social characteristics is changing. But this, and severity of these changes depend on the size and number of tourism activities.

Abdi et al.[29], studied the relationship between strategic planning with entrepreneurial marketing in the saderat bank of north tehran. Data analysis using SPSS software showed a significant correlation between strategic planning and the four components of entrepreneurial marketing, including consumer awareness, consumer-oriented innovation, value creation, and risk management.

Abbasi & Taghipour,[30], studied An Ant Colony Algorithm for Solving Bi-Criteria Network Flow Problems in Dynamic Networks. The present study tries to focus on the problem of finding the maximum flow along with the shortest path in a dynamic network that this type of the network is presented in. For solving bi-criteria network problems, a two-phased exact algorithm and an ant colony (ACO) algorithm based on bi-criteria are used, where the two-phased exact algorithm is presented by Abbasi et al. and the bi-criteria ant colony algorithm is presented by Ghoseiri et al.. The computational results for 33 random instances showed that, the CPU time of the ACO algorithm has exponential growth comparing to the two-phased complete enumeration algorithm.

Sedaghatmanesh and Taghipour[31], studied Reduction of Losses and Capacity Release of Distribution System by Distributed Production Systems of Combined Heat and Power by Graph Methods. Formulation of long term program of optimization of energy sector has positive effect on economy of country and improving the role of Iran in global energy markets. One of the results of optimization of energy supply sector is improvement of efficiency and reduction of environmental pollutants of energy generation.

Taghipour et al.[32], studied A Survey of BPL Technology and Feasibility of Its Application in Iran (Gilan Province). Recently Broadband over power lines (BPL) has received much attention in communication technology and this is due to economically of sending high data rate services by re-use of power line cables. As data transfer via power lines to final consumer is one of the growing technologies, this study discusses the modeling and optimization of data transfer via power transfer lines and feasibility and adaptation of using this technology in Gilan are investigated.

Seddigh Marvasti et al.[33], studied Assessing the Effect of FRP System on Compressive and Shear Bending Strength of Concrete Elements. Behavior of reinforced concrete structure depends on correct behavior of beam and column so much. Access to necessary bending strength, prevention of changing permanent configuration and prevention of bending failure of section cause to pay attention making resistant of concrete elements specially bearing beams of structures.

Jalili et al.[34], studied Utopia is considered to be the physical form of an ideal human society where the goals are met. Rab-e Rashidi is one of the Islamic utopia that has practically manifested and this view on ideal city in today's modern urbanization can be received based on the perspectives of Kevin Lynch. The results demonstrate the social justice, attention to infrastructure, dynamics in physical aspects of the city, mental image and climate considerations concepts which promote the quality of life in Rab-e Rashidi. Finally Rab-e Rashidi can be a comprehensive model of Islamic utopia for designing modern cities.

Khodakhah Jeddi et al.[35], studied The Analysis of Effect Colour Psychology on Environmental Graphic in Children Ward at Medical Centers. The hospitals are some of architectural spaces, which are assumed as important in terms of design and function due to giving medical services and referrals of various groups of people.

Taghipour et al.[36], discussed Insurance Performance Evaluation Using Bsc-Ahp Combined Technique. one of the most effective practices used by organizations is the use of performance evaluation in order to determine weaknesses and strengths of organizations and fix them and enhance their strengths. Performance management and evaluation play a prominent role in determining and implementing strategies, as well as contributing to organizations' competition power. In this regard, possessing a model for evaluating organization's strategic performance seems essential. One of the techniques is the balanced scorecard which was introduced to evaluate organizations' performance for the first time and is still recognized as a method of strategic planning which can be applicable. The balanced scorecard is a managerial concept which helps managers at all levels controls their key activities. In this research, we aim to assess the performance of various representatives of Kosar Insurance Co. in Qazvin using a combined approach, the balanced scorecard (BSC) and analytical hierarchy process (AHP), and prioritize them and explore their strengths and weaknesses.

Rezvani Befrouie A et al.[37], discussed the design of high-rise building with ecological approach in Iran (Alborz Province). The present study aimed to evaluate the ecological architecture with the concept of increasing energy storage, reduction of fossil energy, reduction of CO2 emission and replacing clean energy. This study aimed to minimize the need of high-rise buildings to fossil fuels, achieving. The results showed that by curve form (oval) for the lowest aspect in east and west and extension in eastern and western (aerodynamic), we can use renewable and clean energy in high-rise buildings in Alborz (Azimie). Also, by solar space (Atrium), we can minimize energy consumption in high-rise buildings in Alborz (Azimie).

Torabi et al.[38], studied Implementation of hierarchy production planning model and its theoretical comparison with manufacturing resources planning (MRP II) (Case study of Iran Khodro Company). Now, the companies and institutions view production management and manufacturing planning systems as one of the aspects raising important competitive advantage for them. This causes that we observe the mentions and new systems in this field. Hierarchy production planning (HPP) is raised as one of the methods. In the past decades, considerable studies have been conducted in this regard. This study attempted to adjust Meibody model of existing models in manufacturing hierarchy.

Taghipour et al.[39], studied Investigating the Relationship between Competitive Strategies and Corporates Performance. The purpose of this study was to investigate the relationship between competitive strategies and corporates performance. Statistical population of research was consisted active experts and specialists in Parsian Bank in Tehran. The results of this research showed that the relationship between competitive strategies and corporates performance among active experts and specialists in Parsian Bank approved.

Taghipour et al.[40], studied The identification and prioritization of effective indices on optimal implementation of customer relationship management using TOPSIS, AHP methods. One of the reasons of failure of customer relationship management is the lack of suitable criteria to evaluate customer relationship management. A comprehensive measure to assess customer relationship is necessary from a systematic view. The present study aims to evaluate and prioritize effective factors on optimal implementation of customer relationship management in Pasargad bank using statistical methods. The present study evaluates and prioritize the effective factors on optimal implementation of customer relationship management

using MADM methods. The results also can be used in the required population and it is an applied design.

Taghipour and Yadi[41], studied Seismic Analysis (Non-Linear Static Analysis(Pushover) and Nonlinear Dynamic) on Cable-Stayed Bridge. Pushover analysis application development is greatly increased in recent years and numerous advanced methods to evaluate the seismic pushover are provided. Because these methods have been proposed mainly for building structures and given the fundamental differences between the behavior of bridge structures and buildings using pushover methods on the bridge structure with the uncertainties faced. Thus a pushover analysis is presented for evaluation of seismic bridge pylons and deck where the effects of displacement and deformation of the plastic joints, structural changes in the modal characteristics of change used plastic forms and effects of higher modes can be seen clearly.

Taghipour and Moosavi[42], studied A look at Gas Turbine Vibration Condition Monitoring in Region 3 of Gas Transmission Operation. Study aims to investigate vibration monitoring status in region three of gas transmission operation in Iran. For this purpose, the vibration condition monitoring systems in a gas compression station have been studied. The number and location of vibration sensors, vibration signal transmission to the control room, alarm and stop command, and the ability to perform advanced vibration analysis for troubleshooting and data storage are taken into consideration.

Taghipour et al.[43], studied The Impact of Working Capital Management on the Performance of Firms Listed in Tehran Stock Exchange (TSE). The purpose of research is to provide evidence regarding the relationship between working capital management and operating profit in production firms in order to achieve profit and income increase goals. The results suggest that working capital management has a relationship with net operating profit.

Azarian et al.[44], studied The effect of total quality management implementation on job satisfaction. The results showed a significant difference between the implementation of TQM and increasing job satisfaction in the education organization.

3. Research Methodology

This research is based on applied purpose and is descriptive-survey in terms of nature and method. In descriptive research the current situation is studied, and if necessary, the relationship between variables is found. On the other hand, it has two practical and fundamental aspects, which in the applied dimension, the results of research in planning and policy-making and decision-making have been used. In this study, we also intended to examine the relationship between the implementation of TQM system and job satisfaction in the education organization with a descriptive-survey method so that its results can be used in future planning, policies, and decisions.

In this study, to examine the impact of implementing a TQM system in the education organization, first we used library studies to collect methods and models provided by researchers and scientists, and then used them to develop questionnaires.

3.1. Statistical Population, Sampling Method and Sample Size

The statistical population of this study is the managers and experts of different levels of departments of the Education Organization, as well as the managers, deputies and staff of the Academy of Sciences. Stratified-random sampling method was used so the population of the study was comprised of different economical-cultural groups and random samples were selected from each group.

3.2. Data Analysis Methods and Tools

The method is based on inferential statistics (data correlation analysis) and the data analysis tool was SPSS software.

Table 1. Variables Entered/Removed^b.

| Variables Entered/Removed ^b | | | | | |
|--|---|-------------------|-------------------|--------|--|
| Model | | Variables Entered | Variables Removed | Method | |
| dimension0 | 1 | TQM ^a | . | Enter | |
| a. All requested variables entered. | | | | | |
| b. Dependent Variable: Rezayatshoghli | | | | | |

Table 2. ANOVA^b.

| ANOVA ^b | | | | | | |
|---------------------------------------|------------|----------------|-----|-------------|--------|-------------------|
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 2862.190 | 1 | 2862.190 | 23.296 | .000 ^a |
| | Residual | 13514.917 | 110 | 122.863 | | |
| | Total | 16377.107 | 111 | | | |
| a. Predictors: (Constant), TQM | | | | | | |
| b. Dependent Variable: Rezayatshoghli | | | | | | |

Table 3. Model Summary.

| Model Summary | | | | | |
|--------------------------------|---|-------------------|----------|-------------------|----------------------------|
| Model | | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| dimension0 | 1 | .418 ^a | .175 | .167 | 11.084 |
| a. Predictors: (Constant), TQM | | | | | |

Table 4. Model Summary.

| Coefficients ^a | | | | | | |
|---------------------------------------|------------|-----------------------------|------------|---------------------------|--------|------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 64.400 | 2.370 | | 27.175 | .000 |
| | TQM | .112 | .023 | .418 | 4.827 | .000 |
| a. Dependent Variable: Rezayatshoghli | | | | | | |

4. Conclusion

In order to investigate the relationship between inclusive quality management and job satisfaction in Qazvin Education Organization, linear regression method was used. The results of the research indicate a significant relationship between TQM management and job satisfaction in Qazvin Education Organization. So, it can be said that the implementation of this management method can be one of the factors that can be effective in increasing job satisfaction in the personnel of the organization.

5. Practical Suggestion

- a. Future researchers can select a smaller and more accessible statistical population that can be more easily collected.
- b. The number of parameters of the study can be decreased so that the number of questionnaires is reduced. In this way, the samples can have better and more cooperation.
- c. Educational organization can use TQM as a useful management method to enhance a constructive parameter such as job satisfaction.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this article.

References

- [1] Abdi, H.A.; Safarian, H.S.; Yusefi, S.A.R.; Taghipour, M. Predicting Entrepreneurial Marketing through Strategic Planning (Including Case Study). *Educational Administration Research Quarterly*, 2019, 10(2), 127-142.
- [2] Haj, A.A.; Naami, A.; Fathi, H.K; Taghipour, M. Identificaion and prioritization of effective indicators on optimal implementation of customer relationship management in the insurance industry(including case study). *Journal of Process Engineering*, 2019, 5(1), 18-28.
- [3] Taghipour, M.; Seraj, F.; Amir, H.M.; Farahani, K.S. Risk analysis in the management of urban construction projects from the perspective of the employer and the contractor. *International Journal of organization Leadership*, 2015, 4, 356-373.
- [4] Rezvani, B.M.; Taghipour, M. Identification and Management of Risks in Construction Projects. *American Journal of Civil Engineering*, 2015, 3(5), 170-177.
- [5] Alamdar, K.M.; Naami, A.; Taghipour, M. Effect of integrated marketing communication on brand value with the role of agency's reputation (including case study). *Journal of Process Engineering*, 2019, 5(1), 30-44..
- [6] Taghipour, M.; Mahboobi, M.; Nikoeifar, A.; Soofi, M.E. Analysing the Effects of Physical Conditions of the Workplace on Employee's Productivity (Including Case Study). *International Journal of Environmental Protection and Policy*, 2015, 3(4), 111-119.
- [7] Baghipour, S.F.; Bozorgi, A.A.; Mououdi, M.A.; Taghipour, M. Modeling of Nurses' shift Work schedules According to Ergonomics: A case study in Imam sajjad (As) Hospital of Ramsar. *Journal of Ergonomics*, 2016, 4(1), 1-12.
- [8] Taghipour, M.; Mehrnaz, B.; Khodarezaei, M.; Farid, F. Supply Chain Performance Evaluation in IN The IT Industry. *International Journal of Recent Research and Applied Studies*, 2015, 23(2), 144-156.
- [9] Taghipour, M.; Vosough, A.; Kazemi, N.; Ahitabar, P. The Study of the Application of Risk Management in the Operation and Maintenance of Power

- Plant Projects. *International Journal of Business Management*, 2018, 3(3), 98-110.
- [10] Mahboobi, M.; Taghipour, M.; Azadeh, M. Assessing Ergonomic Risk Factors Using Combined Data Envelopment Analysis and Conventional Methods for an Auto Parts Manufacturer. *Work-A Journal of Prevention Assessment Rehabilitation* (accepted), 2020.
- [11] Taghipour, M.; Shabrang, M.; Habibi, M.H; Shamami, N. Assessment and Analysis of Risk Associated with the Implementation of Enterprise Resource Planning (ERP) Project Using FMEA Technique (Including Case-Study). *Management*, 2020, 3(1), 29-46.
- [12] Taghipour, M.; Hoseinpour, Z.; Mahboobi, M.; Shabrang, M.; Lashkarian, T. Construction projects risk management by risk allocation approach using PMBOK standard. *Journal of Applied Environmental and Biological Sciences*, 2015, 5(12), 323-329.
- [13] Taghipour, M.; Kheirkhahan, H.; Mahboobi, M.; Mohammadi, M. Evaluation of the Relationship between Occupational Accidents and Usage of Personal Protective Equipment in an Auto Making Unit. *International Journal of Innovative Research in Science. Engineering and Technology*, 2015, 4(9), DOI: 10.15680/IJRSET.2015.0409141.
- [14] Taghipour, M.; Seraj, F.; Seraj, M. Necessity Analysis and Optimization of Implementing Projects with The Integration Approach of Risk Management and Value Engineering. *Journal of Economics and Management*, 2015, 5(1), 330-346.
- [15] Taghipour, M.; Shamami, N.; Lotfi, A.; Parvaei, M.S. Evaluating Project Planning and Control System in Multi-project Organizations under Fuzzy Data Approach Considering Resource Constraints(Case Study: Wind Tunnel Construction Project). *Management*, 2020, 3(1), 29-46.
- [16] Taghipour, M.; Moghadam, A.; Moghadam, N.S.B. Implementation of Software-Efficient DES Algorithm. *Advances in Networks*, 2015, 3(1), 7-22.
- [17] Taghipour, M.; Sharifzadeh, S.; Seraj, F. Risk assessment and analysis of the state DAM construction projects using FMEA technique. *Engineering*, 2015, 4(2), 195-203, Corpus ID: 110496771.
- [18] Taghipour, M.; Mahboobi, M.; Gharagozlou, H. The Impact of ICT on Knowledge Sharing Obstacles in Knowledge Management Process (Including Case-Study). *Iranian Journal of Information processing and Management*, 2016, 31(4), 1049-1074..
- [19] Taghipour, M.; Saffari, K.; Sadri, N. Assessment of the Relationship Between Knowledge Management Implementation and Managers Skills (Case Study: Reezmoj System Company in Iran). *Science Journal of Business and Management*, 2016, 4, 114-120.
- [20] Taghipour, M.; Nokhbefallah, M.; Nosrati, F.; Yaghoubi, J.; Nazemi, S. Evaluation of the effective variables of the value engineering in services(Qazvin post center case study). *Journal of Applied Enviromental and Biological Science*, 2015, 5(12), 319-322.
- [21] Khalilpour, M.; Kamyabi, Y.; Nabavi, C.S.A; Taghipour, M. HE Impact ofAccounts'Ethical Approaches on The Disclosure Quality of Corporate Social

- Responsibility Information an Islamic Perspective in Iran. *National Academy of Managerial Staff of Culture and Arts Herald*, 2018, 1, 1173-1181.
- [22] Taghipour, M.; Sedaghatmanesh, P.; Safari, M.; Hekmati, N. Identification and Modeling of Radio Wave Propagation Channel in Industrial Environments. *International Journal of Innovative Research in Science, Engineering and Technology*, 2015, 4(9), 9260-9271.
- [23] Taghipour, M.; Seraj, F.; Amin, M.; Changiz, D.M. Evaluating CCPM method versus CPM in multiple petrochemical projects. *Management*, 2020, 3(3), 1-20.
- [24] Soleymanpour, M.; Taghipour, M.; Shamami, N. Mathematical modeling for the location-allocation problem - allocation of mobile operator subscribers' affairs' agencies under uncertainty conditions. *Journal of Multidisciplinary Engineering Science and Technology*, 2020, 7(5), 11845-11852.
- [25] Taghipour, M.; Soofi, M.E.; Mahboobi, M.; Abdi, J. Application of Cloud Computing in System Management in Order to Control the Process. *Management*, 2020, 3(3), 34-55.
- [26] Taghipour, M.; Ahmadi, S.J. Evaluation of Tourist Attractions in Borujerd County with Emphasis on Development of New Markets by Using Topsis Model. *Science Journal of Business and Management*, 2015, 3(5), 175-189.
- [27] Abdollahzadeh, N.; Taghipour, M. Identify and Priorize Suitable Area for Ecotourism Development using Multi-criteria Analysis for Development of the Tourism Market in Iran (Nathanz City). *International Journal of Innovative Research in Science, Engineering and Technology*, 2015, 4(11), 11525-11536.
- [28] Mirzaie, F.; Nazari, A.; Zargham, B.H; Taghipour, M. The Relationship Between Social Bearing Capacities with Conflict as a Result, in the Perception of the Visiting Historical Sites. *Journal of Investment and Management*, 2015, 4(6), 403-408..
- [29] Abdi, H.A.; Safarian, H.S.; Yusefi, S.A.R.; Taghipour, M. the relationship between strategic planning with entrepreneurial marketing in the saderat bank of north tehran. *Journal of Process Engineering*, 2018, 4(10), 34-42.
- [30] Abbasi, S.; Taghipour, M. An Ant Colony Algorithm for Solving Bi-criteria Network Flow Problems in Dynamic Networks, 2015, 3(5), 34-48.
- [31] Sedaghatmanesh, P.; Taghipour, M. Reduction of Losses and Capacity Release of Distribution System by Distributed Production Systems of Combined Heat and Power by Graph Methods. *American Journal of Electrical Power and Energy Systems*, 2015, 4(6), 84-99.
- [32] Taghipour, M.; Safari, M.; Bagheri, H. A Survey of BPL Technology and Feasibility of Its Application in Iran (Gilan Province). *Science Journal of Circuits, Systems and Signal Processing*, 2015, 4(5), 30-40.
- [33] Seddigh, M.B.; Beheshti, S.M.A.; Chegini, H.; Taghipour, M. Studied Assessing the Effect of FRP System on Compressive and Shear Bending Strength of Concrete Elements. *International Journal of Innovative Research in Science, Engineering and Technology*, 2015, 4(11), 11511-11524.

- [34] Jalili, L.; Ghafourian, M.; Toopal, T.; Taghipour, M. Comparative Study of Khaje Rashid al-Din Views on Rab-e Rashidi Islamic Utopia and Kevin Lynch Ideas. *Journal International Journal of Archaeology*, 2015, 3(5), 39-47.
- [35] Khodakhah, J.L.; Kasrayee, F.; Khodakhah, J.S.; Taghipouret, M. The Analysis of Effect Colour Psychology on Environmental Graphic in Childeren Ward at Medical Centers. *Psychology and Behavioral Sciences*, 2016, 5(2), 51-61.
- [36] Taghipour, M.; Vosough, A.; Azizi, D.; Abdi, J. Insurance Performance Evaluation Using Bsc-Ahp Combined Technique. *Journal National Academy of Managerial Staff of Culture and Arts Herald*, 2018, 4, 112-120.
- [37] Rezvani, B.A.; Ghobadian, V.; Taghipour, M. The design of high-rise building with ecological approach in iran(Alborz Province). *International Journal of Modern Trends in Engineering and Research*, 2015, 2(10), 455-464.
- [38] Torabi, F.; Taghipour, M.; Madankan, M.; Mahdijoo, R.; Mahdijoo, A. Implementation of hierarchy production planning model and its theoretical comparison with manufacturing resources planning (MRP II) (Case study of Iran Khodro Company). *Journal of Applied Environmental*, 2015, 3(12), 196-202.
- [39] Taghipour, M.; Barzegar, P.; Mahboobi, M.; Mohammadi, S. Investigating the Relationship between Competitive Strategies and Corporates Performance (Case Study: Parsian Banks of Tehran). *Management*, 2020, 3(4), 13-28.
- [40] Taghipour, M.; Ganji, F.; Zolfagharijoo, A.; Lotfi, A.; Torabi, F. The identification and prioritization of effective indices on optimal implementation of customer relationship management using TOPSIS, AHP methods(Case study: Pasargad bank). *Management*, 2020, 3(4), 43-60.
- [41] Taghipour, M.; Yadi, H. Seismic Analysis (Non-Linear Static Analysis (Pushover) and Nonlinear Dynamic) on Cable-Stayed Bridge. *American Journal of Civil Engineering*, 2015, 3(5), 129-139.
- [42] Taghipour, M.; Moosavi, A. A look at Gas Turbine Vibration Condition Monitoring in Region 3 of Gas aTransmission Operation. *Journal of Environmental Science, Computer Science and Engineering & Technology(JECET)*, 2020, 9(3), 423-432.
- [43] Taghipour, M.; Habibi, M.H.; Amin, M. The Impact of Working Capital Management on the Performance of Firms Listed in Tehran Stock Exchange (TSE). *Journal of Multidisciplinary Engineering Science and Technology (JMEST)*, 2020, 7(6), 12146-12154.
- [44] Azarian, R.; Rahmani, M.; Taghipour, M. The Impact of Implementing Total Quality Management on Job Satisfaction. First International Conference on the Role of New Technologies in the Humanities, Allameh Tabatabai University, Tehran, 2016.



© 2020 by the author(s); licensee International Technology and Science Publications (ITS), this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (<http://creativecommons.org/licenses/by/4.0/>)