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TERTIARY EDUCATION AND MANAGEMENT OF QUALITY: A RESEARCH IN A DEVELOPING COUNTRY CONTEXT*

YÜKSEKÖĞRETİM VE KALİTE YÖNETİMİ: GELİŞMEKTE OLAN BİR ÜLKE BAĞLAMINDA BİR ARAŞTIRMA

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Abstract

Tertiary education is accepted as one of the engines of economic growth at the national level. However, as far as is known, there have been only a few research studies in the literature on efforts to increase the quality level of tertiary education institutions that have both an extensive data set and are based on the context of a developing country. Therefore, this study aims to examine the current situation of quality management efforts in Turkish tertiary education institutions. The data for this study were collected from 672 units of 149 Turkish universities. According to the findings, more than half of the participating organizations did not have any quality management certificate, nor were they making any quality management efforts. Therefore, the findings indicated that there is still a very long and arduous way to be covered by Turkish tertiary education institutions in spite of some important developments.

Keywords: Tertiary Education, Tertiary Education Institutions, Quality Management, Turkey.

Öz

Yükseköğretim, ulusal düzeyde ekonomik büyümenin en mühim öncüllerinden biri olarak kabul edilmektedir. Bununla birlikte bilindiği kadarıyla yazında, yükseköğretim kurumlarının kalite seviyesini artırmaya yönelik çabalar üzerine, hem kapsamlı bir veri setini esas alan hem de gelişmekte olan ülkeler bağlamına dayanan pek az araştırma yapılmıştır. Çalışma, bu doğrultuda Türk yükseköğretim kurumlarında kalite yönetimi

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çabalarının mevcut durumunu incelemeyi amaçlamaktadır. Çalışmanın verileri 149 Türk üniversitesinin 672 farklı biriminden toplanmıştır. Bulgulara göre araştırmaya katılan birimlerin yarısından fazlasının ne herhangi bir kalite yönetimi sertifikası vardır ne de herhangi bir kalite yönetimi çabası bulunmaktadır. Özetle, çalışmanın bulgularına göre, alandaki bazı mühim gelişmelere rağmen, Türk yükseköğretim kurumlarının önünde kalite çalışmaları bağlamında hala oldukça uzun ve meşakkatli bir yolun bulunduğu görülmektedir.

Anahtar Kelimeler: Yükseköğretim, Yükseköğretim Kurumları, Kalite Yönetimi, Türkiye.

1. INTRODUCTION

Some previous studies (e.g. Gyimah-Brempong et al. 2006) found a significant relationship between tertiary education and economic growth of countries. This relationship and some positive organizational outcomes that have been indicated by some research on "Quality Management (QM)" in educational organizations prove the importance of QM for "Tertiary Education Institutions (TEIs)" (Langstrand et al., 2012) and whole countries. Therefore, it is crucial that studies guide and share findings with the relevant audiences.

However, the research-based studies in the field of TEIs have generally focussed on the context of developed countries (e.g. the UK, the USA) (Tari and Dick, 2016). It is known that there are some differences between "Higher Education Systems (HESs)" of developed and developing countries such as expected slower growth in enrollment in HESs of developed countries due to aging populations (Guimarães, 2013). Therefore, examining problems and solutions for HESs of these two groups of countries may be better. However, there are relatively fewer empirical studies on the TEIs of "Developing Countries (DCs)" in the context of QM (Bayraktar et al., 2013). Manatos et al. (2017) also drew attention to the small sample size in many of these empirical studies. Moreover, although there are few QM studies (e.g. Aly and Akpovi, 2001) in the literature that emphasize the subunits of TEIs as most research studies have regarded TEIs as a whole. However, there may be different levels of quality consciousness within a single TEI. Finally, Tari and Dick (2016) underlined the scarcity of studies that focus on the barriers and benefits of QM implementation.

On the other hand, the sample of this study that has an extensive data set covers all regions of Turkey, as a DC. This study also centers on the subunits of TEIs, including faculties, institutes, vocational schools and schools and examines difficulties and benefits of QM implementation and reasons behind non-implementation. Finally, the data of this study were collected from three different types of organizations in terms of their QM efforts, namely organizations with a certificate on QM, organizations that implement QM without holding a certificate and finally, organizations that neither hold a certificate nor currently implement QM. The majority of previous studies have appeared to focus on TEIs in only one or two of these categories.

In brief, the aim of this study was to understand the current status of QM efforts in Turkish TEIs. It is thought that detailed studies on QM in TEIs can enable some comparisons between institutions and countries. For example, administrators in other DCs may take some lessons from the study. In addition, the councils of higher education in other DCs may find an opportunity to compare their HES as a whole with the current situation of QM in Turkish TEIs. With this aim, the study sought the answer to a general research question:

RQ1. "What is the overall status of QM in Turkish TEIs?".

2. LITERATURE REVIEW OF QUALITY MANAGEMENT AND TERTIARY EDUCATION INSTITUTIONS

Since there is no absolute consensus on what QM means (Fuentes et al., 2006), it is possible to give several definitions of QM, which has been adopted as an umbrella term in this study. However, it is fair to say that QM is basically a set of activities that involves planning (determination of goals, policies, strategies related to quality etc.), implementation (providing consistency between quality goals, strategies etc. and leadership, culture and structure of organization) of quality efforts and finally control of quality-based results (Manyaga, 2008). It may be considered as the glue that unifies all these aspects and a driving force for improving quality (Chen et al., 2014). QM has a long past this phase and has been largely institutionalized (Kennedy and Fiss, 2009) and even been transformed into a social movement/order in some countries, including the USA (Hackman and Wageman, 1995) and Turkey (Özen, 2002).

As previously stated, QM has gained considerable popularity and become institutionalized almost all over the world. One possible factor behind this may be that positive organisational results have been revealed in research on QM in industrial and service organisations. For example, various studies have found that QM has a positive impact on competitive advantage and plant competitiveness (Douglas and Judge, 2001), customer results such as satisfaction and loyalty (Hossain and Dwivedi, 2015; Karapetrovic et al., 2010), development of an organisational culture (Beskese and Cebeci, 2001), efficiency (Wu and Chen, 2011), employee empowerment (Yang, 2003), employee motivation and satisfaction (Jun et al., 2006), employee skills and workforce quality (Aoun and Hasnan, 2017), financial performance (Bagur-Femenias et al., 2016; Wayhan et al., 2013), innovational development, environment and performance (Hoang et al., 2006a; Hung, 2007; Martinez-Costa and Martinez-Lorente, 2008), internal and external communication (especially with suppliers) (Melao and Guia, 2015), job involvement (Lambert and Ouedraogo 2008), partial and total productivity (especially labour) (Tanninen et al., 2010), learning orientation and organisational learning (Lam et al., 2011; Martínez-Costa and Jiménez-Jiménez, 2008), level of newness (market development and orientation) (Demirbag et al., 2006), market performance and share (Hoang et al., 2006b), on time delivery (Bayazit, 2003), organisational commitment (Elçi et al., 2007), organisational performance (Delic et al., 2014), organisational prestige (Beskese and Cebeci, 2001), perceived organisational support (Allen and Brady, 1997), process improvements (Beattie and Sohal, 1999), product and service quality (Jaca and Psomas, 2015), quality improvement (Bayazit, 2003; Wu and Chen, 2011), social responsibility performance (Sadikoglu and Olcay, 2014) and teamwork (Idris et al., 1996).

Quality of tertiary education seems an important variable for the economic growth of countries. Intense competition among TEIs also appears to necessitate QM implementation in this field (Alves and Raposo, 2007) since students and scholars have more options of available universities as the world becomes smaller day by day. In other words, competition in the global arena forces (Langstrand et al., 2012) TEIs increasingly to recognize the importance of meeting student expectations and delivering high-quality educational services (Raharjo et al., 2007). In conclusion, it is imperative that TEIs not only provide valuable lectures and use modern teaching methods for students but also include the administrative staff into the process of QM (Dlacic et al., 2014).

In contrast, some studies have claimed that QM delivers a lower performance than expected in the context of TEIs. The possible reasons behind this can be collected under two groups of factors; problems that are principally attributed to the nature of QM and problems that originate from the related TEIs. For example, Karapetrovic et al. (1999) stated that QM might be doomed to failure without having a methodical approach and

a specific focus on the TEIs. In a similar vein, according to Koch (2003), the failure that is attributed to QM stems from manifold reasons, one of which is the incompatibility of QM with the culture of a contemporary university. In those terms, ambiguity about who the customers are in the context of higher education and its primary focus on secondary (administrative) processes are other crucial reasons behind this failure. Many scholars (e.g. Langstrand et al., 2012; Quinn et al., 2009) agree with Koch (2003) about the vagueness of customer concept in the TEI context. A further possible problem of QM in the context of TEIs is that quality may have different meanings for various stakeholders of TEIs (Bae, 2007). Furthermore, QM implementation in TEIs is still limited to operations such as business, finance and administrative services to a large extent (Aly and Akpovi, 2001). At this point, Montano et al. (2005) indicate that the success of QM implementation in an TEI largely depends on the participation of all academic and non-academic staff, even though the application of this principle into the TEI setting is a very arduous task (Langstrand et al., 2012) since there is often resistance to change among faculty members (Duarte et al., 2014). Some authors have also claimed that the origin of QM based on industrial organisations is the main problem (Motwani and Kumar, 1997). Also, some difficulties can be derived from specific conditions of related TEIs before and during QM implementation. For example, some studies (e.g. Alia et al., 2010; Campatellia et al., 2011; Nadiri et al., 2009) have stated and sometimes empirically indicated that another crucial factor for the success of QM in TEIs are the human resources-related conditions such as experience and education levels, and numbers of staff. Similarly, some other studies have argued that the success of QM rests on the importance of committed top management (Arturo et al., 2007), quality-based mission and vision statements (Mehta et al., 2014) and flexible financial resources (Tambi et al., 2008).

However, the majority of studies on QM in TEIs appear to report quite positive results as a consequence of QM implementations. For example, various studies have found positive impacts of QM on the clarification of roles and responsibilities (Gamboa and Melao, 2012), cognitive learning outcomes of students (Duque, 2014), competitive advantage of TEI (Yildiz, 2014), cost reduction (Elmuti et al., 1996), institutional image, prestige and reputation (Yildiz, 2014), institutionalization, involvement of people, leadership and time savings (Gamboa and Melao, 2012), morale and motivation of staff (Elmuti et al., 1996), more coordinated management (Sohail et al., 2003), organisational commitment (using job satisfaction as a mediator variable) (Trivellas and Santouridis, 2016), organisational efficiency and effectiveness, organisational (overall) performance (Yeo and Li, 2014), organisational trust (Akdere et al., 2012), overall pass rate of students (Bae, 2007), rate of student enrolment (Gamage et al., 2008), quality of teaching and research (Elmuti et al., 1996), satisfaction and motivation of students (Marinez-Caro, Cegarra-Navarro et al., 2015; Sadeh and Garkaz, 2015; Suárez-Barraza and Rodríguez-González, 2015), and finally, standardization in filing and record maintenance (Sohail et al., 2003).

Even though there have been valuable studies in the literature that have focussed on the QM efforts of Turkish TEIs, they have either been conceptual (e.g. Bengisu, 2007) or empirical and conducted with relatively small samples (e.g. Basari et al., 2016; Bayraktar et al., 2008). In addition, these studies have often focussed on only one unit of TEIs. For example, Akan (2014) investigated student satisfaction in only one vocational school. Finally, Karahan and Kuzu (2014) compared the organisational performance of two vocational schools, one of which implemented QM and one which did not. Therefore, the aim of this study was to present the current status of QM efforts in the context of Turkish TEIs with an extensive data set derived from different academic units of TEIs (e.g. faculty, institute, vocational school and school).

3. QUALITY MANAGEMENT IN THE CONTEXT OF TURKISH TERTIARY EDUCATION SYSTEM

Although the Turkish republic appears to be a very young country, the state tradition is rooted in the Seljuk and Ottoman empires, and therefore, there is actually a long tradition of higher education in Turkish culture. For example, Madrasas could be thought of as a different organizational form of contemporary TEIs, and the Nizamiye Madrasa was established in the 7th century AD by Seljuk Turks in Baghdad. As Turkish culture transitioned from the Ottoman Empire to the Turkish Republic in 1923, Turkish TEIs acquired a very democratic, secular and contemporary identity (Küskü, 2003). After a series of modifications in the period between 1923 and 1980, the current HES in Turkey is based on a law introduced in 1981, entitled The Higher Education Law No 2547. This law mainly gave the responsibility of the management of the Turkish HES to "The Council of Higher Education (YÖK)". Some scholars have argued that as a tool of quality assurance, it has broader authority than institutions of quality assurance in developed countries (Özer et al., 2010). It also seems to have made some favorable contributions to QM efforts in the Turkish HES. For example, in 2005, the "Higher Education Academic Assessment and Quality Improvement Commission (YÖDEK)" was established with a YÖK regulation. The primary responsibility of the commission is the implementation of quality assurance in universities (Visakorpi et al., 2008).

In respect of the early QM efforts of Turkish TEIs, these were an outcome of the desire to eliminate worries in education and teaching. Although there were very few QM practices in Turkish TEIs during the early 1990s, by the end of the decade, they had begun to spread rapidly with the Sorbonne and Bologna Declarations (Bayraktar et al., 2008). Over the course of time, there have continued to be some financial concerns about TEIs and the HES, such as stable and significant increases in numbers of students, inadequacies in the numbers of faculty members and increases in the costs of education (Özer, 2012). Despite all these difficulties, some Turkish TEIs have achieved outstanding successes in the field of QM. Some have reached the finals of the EFQM award, and a few have even won it such as Sakarya University. Therefore, it can be stated that the Turkish HES has a heterogeneous structure in general in terms of the quality consciousness of individual Turkish TEIs (Mizikaci, 2006).

4. METHOD

4.1. Aim of the Study

As stated above, the aim of this study was to understand the current status of QM efforts in Turkish TEIs.

4.2. Data and Sampling

The level of analysis in this study was the academic units in TEIs such as faculties, institutes, vocational schools and schools. This level of analysis was preferred since there may be different levels of quality consciousness in different units of the same TEI.

To understand the level of QM efforts in these units, the researchers planned to send a letter to invite administrators of academic units of TEIs to participate in the study. At the first stage, the aim was to contact all units of TEIs in Turkey. However, the researchers could not access the e-mail addresses of some administrators in some TEIs. Therefore, the invitation letter was finally sent to 6023 administrators of 2120 units in 173 Turkish universities via e-mail. As a result of three waves of invitations, the data were collected from 672 higher education units (e.g. faculties, institutes, vocational schools and schools) in 149 universities. Therefore, the return rate was approximately 32% (672 of 2120) and 85% (149 of 173) at the academic unit and university levels respectively.

When a population includes 10.000 units and a confidence level of 95% and a margin of error of 5% are accepted, the appropriate sample size is 370. Therefore, 672 units were adequate for the analysis. The data were collected from TEIs during the period from July 2015 to March 2016. Of the participating universities were 114 were state-funded and 35 were private.

The institutional administrators were 540 (80%) males and 132 (20%) females with an average age of 43.78 ±8.70 years (range, 26–70 years). The average tenure of the participants was 18.16±9.63 years (range, 1-50 years), and the average duration in an administrative position was 8.34±4.40 years (range, 4 months-38 years). The job titles of the administrators who participated in the study are given below in Table 1.

Table 1. Job Titles of Participants

	Frequency (N)	**Percentage (%)**
Dean	75	11%
Vice Dean	139	21%
Faculty Secretary	47	7%
Institute Manager	35	5%
Vice Institute Manager	44	7%
Institute Secretary	23	3%
Director of School	18	3%
Vice Director of School	64	9%
School Secretary	19	3%
Director of Vocational School	55	8%
Vice Director of Vocational School	114	17%
Vocational School Secretary	39	6%
Total	672	100%

4.3. Data Collection

After completion of the literature review, a questionnaire form was designed to determine the current status of QM efforts in Turkish TEIs. This questionnaire consisted of questions about the demographic data of the participants and their institutions and the QM efforts of the related institutions. Some of the questions were categorical, and the rest (the majority of the questions) were open-ended. By adding some open-ended questions to the questionnaire, it was expected to create an opportunity for very rich data set responses given spontaneously by the participants (Reja et al., 2003). The final form of the questionnaire consisted of a total of 30 questions. After a pilot study was conducted with three respondents, and it was put on an internet page.

Then, an invitation letter was prepared to explain the aim of the study and invite administrators to contribute to this study. In the hope of increasing the attraction of the study, a statement was included in the letter that when requested, the findings would be shared with participants. This letter also included an internet link to the study. Then, the invitation letter was sent by e-mail to the administrators of all institutions in all of the 173 Turkish TEIs.

4.4. Validity and Reliability

Before designing the questionnaire to be used, an extensive literature review was conducted to guarantee content validity (Saraph et al., 1989). A numerical approach to the procedure of content validity was not adopted. The data were analyzed by two researchers. A coefficient of intercoder reliability was calculated to evaluate consistency between these two researchers. During this process, some responses that came from participants were selected randomly and coded by the researchers independently. The reliability between the researchers was determined as 0.88.

In research-based studies, triangulation is a critical tool (Ambert et al., 1995). The nature of this study that is based on self-declarations of the participants makes triangulation more critical. Therefore, the researchers used some tools to confirm the response of participants. For example, some of the participants declared that their units have a quality certificate. At this point, the researchers examined the websites of some units to triangulate the response of participants.

4.5. Data Analysis

Researchers in the team read the responses to all of the open-ended questions; the responses that could be evidence for the main research question were underlined. Then, codes were specified by the researchers, and the codes were collected under various meaningful categories/themes (Yıldırım and Şimşek, 2005). Some of these categories were formed with the help of the literature review. The rest of the categories emerged during the analysis. All processes were implemented through discussions between the two researchers.

4.6. Limitations

Like every study, this research also had some limitations. First, there are some studies (e.g. Walfish et al., 2012) in the literature about self-assessment bias, which imply that individuals often tend to assess themselves higher than their real situations or than other persons. The data set of the current study was based on the self-evaluation of administrations. Therefore, it is possible that the participants of this study may have painted a more optimistic picture of the QM efforts of their units than reality. Second, although there were some closed questions, the mainly open-ended nature of the data collection tool might have created some disadvantages (Reja et al., 2003). For example, one participant emphasized that open-ended questions were difficult for him to respond to. Therefore, open-ended questions might attract some negligent responses. In addition, some questions in the tool for data collection related to the past of the institution and retrospective research may sometimes cause various difficulties (Cooper et al., 2017), such as failing to remember the investigated case correctly.

5. FINDINGS

In the first stage, the question was asked whether the unit had a quality certificate or if they were implementing quality works without a quality certificate. The findings, according to the units, are given below:

Table 2. Current Position of Quality Works of the Academic Units in the Turkish TEIs

	Faculty	**Institute**	**Vocational School**	**School**	**Frequency/ Percentage**
The academic unit currently has a quality certificate for the academic and/or administrative processes.	37	10	17	8	72/(11%)
The academic unit does not currently have a quality certificate for the academic and/or administrative processes, but quality works are in progress.	92	36	58	29	215/(32%)
The academic unit does not currently have a quality certificate for the academic and/or administrative processes, and there is no quality work concerning the development of administrative and/or academic processes.	132	56	133	64	385/(57%)
Total	261	102	208	101	672/(100%)

In the next sections, the findings of the study are placed in three categories of 1)"the findings of the faculty/institute/vocational school/school with a current quality certificate for academic and/or administrative

processes" (Category A), 2)"the findings of the faculty/institute/vocational school/school currently which does not have a quality certificate for academic and/or administrative processes but quality works are in progress" (Category B) and finally, 3)"the findings of the faculty/institute/vocational school/school which does not have a quality certificate for the academic and/or administrative processes and there is no quality work concerning the development of administrative and/or academic processes" (Category C).

5.1. Category A

As stated above, the responses given by administrators of academic units with a quality certificate are presented in Table 3. The oldest date was 2000 when a quality certificate had been obtained by a unit in our data set. According to the participants, the scope of the quality certificates is given below.

Table 3. The Scope of the Quality Certificates

	Faculty	**Institute**	**Vocational School**	**School**	**Frequency/ Percentage**
ISO 9001	14	7	17	3	41/(48%)
EFQM Award	5	-	-	-	5/(6%)
MÜDEK (Association for Evaluation and Accreditation of Engineering Programs)	5	-	-	-	5/(6%)
UTEAK (National Standards for Undergraduate Medical Education)	5	-	-	-	5/(6%)
Others	16	3	4	6	29/(34%)
Total					85/(100%)

The "others" item in the table includes some types of quality certificates such as AACSB, EAEVE (European Association of Establishments for Veterinary Education), EAQUALS, ISO 14001/15189/18001, VEDEK (Association of Evaluation and Accreditation of Educational Institutions and Programs of Veterinary Medicine), etc. Additionally, some of the academic units had more than one certificate. For example, a faculty possessed three different quality certificates such as ISO 9001, ISO 10002 and EFQM Award at the same time. Despite differences stemming from the type and size of the academic unit, the average time between beginning quality works and obtaining a quality certificate was 24.65 months. The minimum and maximum durations to obtain a quality certificate of the participating academic units were two months and 97 months, respectively. Also, there may be various motivational factors behind taking a quality certificate. The primary triggers for the participating units in this study are presented in Table 4.

Table 4. The Main Triggers To Obtain A Quality Certificate

	Faculty	**Institute**	**Vocational School**	**School**	**Frequency/ Percentage**
Initiative/vision of rectorship	11	3	1	-	15/(26%)
Being a better/high standard academic unit	6	-	2	1	9/(15%)
Desire to create a more institutional/standard structure	2	1	4	-	7/(12%)
Gaining acceptance at national/ international level	3	1	1	-	5/(9%)
Coercive pressures/obligations	4	-	1	-	5/(9%)
Others	7	3	4	3	17/(29%)
Total					58/(100%)

In Table 4, the category of "others" includes items such as a result of strategic planning, recommendations of scholars who work for the related unit and focus on the "quality management" as an area of expertise, and mimetic isomorphism.

It is possible that academic organizations begin their quality efforts with some expectations. Table 5 presents the expectations of academic units when they were beginning the QM efforts. As in the other tables, Table 5 also includes the category of others comprising items such as increasing competitive power, achieving transparency, building teamwork in related academic units and increasing effectiveness.

Table 5. Expected Benefits at the Beginning of Quality Works

	Faculty	**Institute**	**Vocational School**	**School**	**Frequency/ Percentage**
Improving the quality	11	9	6	1	27/(23%)
Standardization (in documents, operations etc.)	9	1	5	3	18/(15%)
Determination of the areas that need corrections and finding of inadequacies	8	3	3	2	16/(14%)
Meeting national/ international standards	8	-	2	-	10/(8%)
Institutionalization	3	-	2	2	7/(6%)
Increasing the controllability	3	-	2	1	6/(5%)
Others	21	3	8	3	35/(29%)
Total					119/(100%)

In addition, organizations may experience some difficulties during the process of obtaining a quality certificate. The difficulties experienced by participating organizations are given in Table 6.

Table 6. Difficulties Experienced During the Process of Obtaining a Quality Certificate

	Faculty	**Institute**	**Vocational School**	**School**	**Frequency/ Percentage**
Low level of staff motivation and resistance to change	12	1	9	2	24/(46%)
Inadequacies in numbers and educational levels of staff	4	-	2	1	7/(13%)
Financial inadequacies	5	-	1	-	6/(12%)
Extra works-work overloads	3	-	2	1	6/(12%)
Others	5	-	3	1	9/(17%)
Total					52/(100%)

In Table 6, the category of others includes statements such as difficulties in the internalization of continuous improvement by staff, inadequacies in infrastructure and physical conditions, coordination problems and ambiguities about the goals of certification in the minds of staff. According to participants, obtaining quality certificates entailed some expenses. The average expense was calculated as 57,108 Turkish Liras (range 1,000–500,000 TL, median 15,000 TL).

According to the administrators of the academic units, the benefits of having a quality certificate for the academic and/or administrative process are presented in Table 7.

Table 7. The Benefits of Having a Quality Certificate

	Faculty	**Institute**	**Vocational School**	**School**	**Frequency/ Percentage**
Gaining strength in institutional reputation/image/prestige	9	1	2	3	15/(13%)
Improvements in process	3	2	8	2	15/(13%)
Standardization	2	4	4	2	12/(10%)
Increases in service quality	8	1	-	-	9/(7%)
Increases in process control	3	4	1	-	8/(7%)
Determination/elimination of deficiencies	6	-	-	-	6/(5%)
Increases in feedbacks	4	1	-	-	5/(4%)
Description of processes/jobs	2	1	2	-	5/(4%)
Increase in institutionalization	-	-	3	2	5/(4%)
Tasks becoming easier	1	2	-	2	5/(4%)
Others	20	3	6	5	34/(29%)
Total					119/(100%)

In the table above, the administrators pronounced increases in motivation/organizational commitment of employees, being a model institution, increases in short and long-term planning efforts, improvements in documentation, gaining competitive advantage, increases in organizational transparency, justice, productivity and effectiveness etc. as the "other" benefits of having a quality certificate.

Also, participants were asked about the possible drawbacks of having a quality certificate. The findings are presented in Table 8. The category of others included some items such as resistance of and some decreases in the motivation of personnel, increases in workloads, negative impacts on curriculum, etc.

Table 8. The Drawbacks of Holding a Quality Certificate

	Faculty	**Institute**	**Vocational School**	**School**	**Frequency/ Percentage**
No drawback	9	3	4	3	19/(43%)
Increases in bureaucracy/time consuming tasks	6	1	1	-	8/(18%)
Increases in costs	3	1	-	2	6/(14%)
Others	8	1	2	-	11/(25%)
Total					44/(100%)

5.2. Category B

Two hundred fifteen academic units that have this status participated in the study. On the other hand, this category also includes a small number of academic units that do not have a current quality certificate but had one previously. The QM activities implemented by these academic units are given in Table 9.

Table 9. The QM Activities Carried Out by Institutions Which Do Not Currently Have a Quality Certificate But Have Quality Works

	Faculty	**Institute**	**Vocational School**	**School**	**Frequency/ Percentage**
Preparation for accreditation	32	3	3	3	41/(14%)
Forming a quality unit/committee of quality/quality team	13	6	6	5	30/(10%)
Preparation of quality documents (policies, procedures, etc.)	11	3	6	2	22/(8%)
Identification, follow-up and improvement of current processes	7	2	8	4	21/(7%)

Strategic planning (creation of mission-vision statements, SWOT analysis etc.)	8	5	7	1	21/(7%)
Internal audits	12	2	5	1	20/(7%)
Rearrangement of curricula (adaptation to Bologna processes etc.)	9	2	4	4	19/(6%)
Preparation of infrastructure projects and improvement of physical conditions	11	5	2	1	19/(6%)
Assessment and improvement of satisfaction (personnel, student etc.)	10	1	6	1	18/(6%)
Taking quality trainings	5	3	6	3	17/(6%)
Others (e.g. preparing/revising job descriptions, collaborations with stakeholders, complaint/suggestion box)	32	6	19	11	68/(23%)
Total					295/(100%)

Besides, QM efforts may also create some benefits and drawbacks for organizations that do not have a quality certificate. The benefits provided by organizations are presented in Table 10.

Table 10. The Benefits Provided by Institutions Which Do Not Currently Have A Quality Certificate But Have Quality Works

	Faculty	**Institute**	**Vocational School**	**School**	**Frequency/ Percentage**
Management of processes in a better way	17	7	7	2	33/(12%)
Standardization	10	4	7	2	23/(9%)
Increases in service quality	10	3	5	4	22/(8%)
A stronger institutional reputation/image/prestige at national and/or international level	12	2	6	1	21/(8%)
Institutionalization	11	1	7	1	20/(8%)
Increases in efficiency and/or effectiveness	4	2	8	1	15/(6%)
More systematic operation	5	2	6	1	14/(5%)
Increases in student satisfaction	7	-	3	-	10/(4%)
Be able to see weak/missing points of organization	6	2	-	1	9/(3%)
Increases in quality consciousness	4	-	3	2	9/(3%)
Increases in employee satisfaction	4	-	4	-	8/(3%)
Increases in productivity	5	-	2	1	8/(3%)
More corporate governance	3	2	1	-	6/(2%)
Increases in employee motivation	2	1	1	2	6/(2%)
Much more social/economic contribution to the society	1	4	-	1	6/(2%)
Others	29	7	14	7	57/(22%)
Total					267/(100%)

In Table 10, the category of "others" includes some responses such as decreases in workloads of personnel, improvements in physical conditions, increases in efforts of innovation, increases in university-industry collaboration, greater dynamism of the organization, stronger participation of stakeholders in processes, sectoral leadership, stronger organizational justice and participative management etc.

Having quality works may have some drawbacks. According to the participants, these drawbacks are presented in Table 11.

Table 11. The Drawbacks Experienced by Institutions Which Do Not Currently Have a Quality Certificate But Have Quality Works

	Faculty	**Institute**	**Vocational School**	**School**	**Frequency/ Percentage**
No drawback	6	7	7	4	24/(31%)
The resistance of employees to the change	5	2	2	1	10/(13%)
Time consuming activities	3	1	4	1	9/(12%)
Intensive documentation works	4	1	2	-	7/(9%)
Increases in work loads	2	2	1	1	6/(8%)
Extra financial burdens	3	1	-	1	5/(6%)
Others	4	5	4	3	16/(21%)
Total					77/(100%)

Some of these academic units that do not have a quality certificate prepare some of the quality documents. These documents are given below in Table 12.

Table 12. The Quality Documents Prepared by Institutions Which Do Not Currently Have a Certificate But Have Quality Works

	Faculty	**Institute**	**Vocational School**	**School**	**Frequency/ Percentage**
Quality objectives	23	10	15	6	54/(23%)
Meeting records of quality teams	19	5	13	2	39/(16%)
Quality policy	18	7	8	5	38/(16%)
Quality manual	18	7	6	2	33/(14%)
Standard quality forms	5	2	4	-	11/(5%)
Strategic plan	4	2	2	-	8/(3%)
Job descriptions	5	2	1	-	8/(3%)
Internal control guide	3	-	4	-	7/(3%)
Procedures	4	1	1	1	7/(3%)
Mission-vision statements	2	1	2	1	6/(3%)
Others	13	3	6	4	26/(11%)
Total					237/(100%)

In this table, the statement of "others" includes some items such as organizational charts, quality plan, SWOT analysis, etc.

In addition, the question was asked of "If you have an intent, which quality certificate does your academic unit plan to obtain in the future?". The responses are given below in Table 13.

Table 13. The Type of Quality Certificate That Academic Units Plan to Obtain in the Future

	Faculty	**Institute**	**Vocational School**	**School**	**Frequency/ Percentage**
ISO 9001	13	7	13	2	35/(46%)
MÜDEK	6	-	-	-	6/(8%)
EVEAE	4	-	-	-	4/(5%)
AACSB	3	-	-	-	3/(4%)
EQUALS	-	-	1	2	3/(4%)
FEDEK	3	-	-	-	3/(4%)
JCI	3	-	-	-	3/(4%)
Pearson Assured	-	-	-	3	3/(4%)
UTEAK	2	1	-	-	3/(4%)
Other	11	1	-	1	13/(17%)
Total					76/(100%)

In this table, the category of other included items such as ABET, ISO 17025, EQUIS, ORPHEUS and Turkish Excellence Award.

5.3. Category C

The first question for the organizations in this group was what were the reasons behind not performing quality efforts. The findings are given in Table 14.

Table 14. Reasons Behind Not Performing Quality Efforts

	Faculty	**Institute**	**Vocational School**	**School**	**Frequency/ Percentage**
Due to being a newly established academic unit	49	14	27	22	112/(27%)
Inadequacies in numbers of academic/administrative staff	20	5	21	9	55/(13%)
Insufficiency in physical conditions/infrastructure	17	4	15	5	41/(10%)
Since there is no need	10	3	14	7	34/(8%)
Inadequate consciousness and knowledge about quality management	5	5	15	4	29/(7%)
Work overloads and time inadequacies	7	4	7	4	22/(5%)
Since it is/should be started from top management (rectorship)	7	3	6	3	19/(4%)
No demand/encouragement or constrain from top management (rectorship)	7	-	6	2	15/(4%)
Others	31	14	29	18	92/(22%)
Total					419/(100%)

The items of "others" include some statements such as the incomplete process of institutionalization, financial constraints, insufficiency in the number of students, negligence, being a closed faculty, absence of a collaboration between university and industry, absence of an example related to quality management, etc.

Finally, the organizations in this group were asked whether or not they had a current attempt, such as beginning to perform QM efforts. The responses are presented in Table 15.

Table 15. Attempts to Begin Efforts of Quality Management and the Scope of the Effort

	Faculty	**Institute**	**Vocational School**	**School**	**Frequency/ Percentage**
No, we have not made any attempts to implement QM	75	33	80	38	226/(67%)
In the future, we are going to implement QM in both academic and administrative processes	10	6	6	3	25/(7%)
In the future, we are going to implement QM	6	1	11	2	20/(6%)
Yes, we are making attempts to implement QM currently in both academic and administrative process	3	4	4	8	19/(5%)
Yes, we are currently making attempts to implement QM	6	2	7	2	17/(5%)
Yes, we are currently making attempts to implement QM only in academic processes	5	2	1	1	9/(3%)

Yes, we are currently making attempts to implement QM only in administrative processes	2	1	2	2	7/(2%)
In the future, we are going to implement QM only in academic processes	3	-	-	3	6/(2%)
In the future, we are going to implement QM only in administrative processes	2	1	3	-	6/(2%)
We are indecisive about implementing QM	2	1	-	1	4/(1%)
Total					339/(100%)

6. DISCUSSION

This study aimed to examine the current status of QM efforts in Turkish TEIs. First, the findings of the study revealed that 20% of the participants of this study were female administrators. Although, in different fields of science, the ratio of Turkish female professors is higher than the average ratio in the European Union (Öztan and Doğan, 2015), some recent studies (e.g. Şentürk, 2015) have also claimed that the numbers and participation in the decision-making processes of female administrators in Turkish TEIs is not as high as desired. Therefore, this finding of the current study may be a precursor of a not radical but small improvement in the ratios of female administrators in Turkish HES.

As seen in Table 2, approximately 43% of the participating academic units declared that they were interested in QM activities. According to QM literature, the commitment of all units and the adaptation of QM efforts into all activities is essential for success at an organizational level. For example, Antony et al. (2004) underlined the importance of consistency among departments about QM. However, in the current study, there was no consistent stance about QM in the participating academic units of many TEIs. In some TEIs, there were some radical differences in consciousness levels of QM from one academic unit to another. There may be several reasons for this difference. For example, the director of a school and the vice director of a vocational school explained the weak consciousness of QM in their units as schools and vocational schools often being seen as stepchildren by rectorships of related TEIs. In brief, whatever the main reason, providing consistency of QM among academic (and administrative) units and all activities seems to be crucial for the success of QM at TEI level.

As another point, if Table 3 and 13 are examined, it may be easily observed that when the concept of QM is announced, the first thing that comes to the minds of administrators of Turkish TEIs is ISO 9000 standards. It was evident for administrators of vocational schools. For example, 17 of 21 certified vocational schools in the study data set had an ISO 9000 certificate (in Table 3) and 13 of 14 vocational schools that intended to obtain a quality certificate in the future also planned to apply for ISO 9000 certification (in Table 13). This stance of administrators appears to be consistent with the findings of some previous studies (e.g. Gotzamani and Tsiotras, 2001) that conceptualize ISO 9000 as an appropriate first step towards QM journey, although it may even create a danger such as a certain degree of steadiness (Escanciano et al., 2001). This consistency might stem from administrators of vocational schools examining QM literature before setting a road map. Finally, one possible task for top management of TEIs at this point may be a reminder that obtaining ISO 9000 quality certificate should not be the last stop on the QM journey.

The findings in Table 4 indicate that QM efforts in Turkish TEIs often commence as a top-down change project. In keeping with the previous table, Table 6 may show that the academic-administrative staff of these units put up resistance to top-down efforts of QM. This finding is consistent with some previous studies (e.g. Eryılmaz and Eryılmaz, 2015) that have presented examples of resistant attitudes of individuals to top-down change projects. Solutions may be the use of a combination of top-down and bottom-up change approaches (Skordoulis, 2004) or

an in-depth diagnosis of organizational culture first to overcome the resistance in the QM context. Then, if necessary, active efforts can be implemented to change attitudes, beliefs and values of staffs in TEIs.

In addition, some emphasis in Tables 4, 9 and 12 indicate that participants conceive QM and "Strategic Management (SM)" as complementary. Again, it may be the result of administrators reading about QM or their individual experience of administration. This complementary characteristic of the relationship between QM and SM is consistent with some studies (e.g. Coşkun, 2011) in related literature that claim an arm in arm proceeding of QM and SM. It is known that this stream that underlines the necessity of interaction between QM and SM is primarily inspired by a Japanese approach, Hoshin Kanri.

As emphasized before, Table 5 and 7 give answers to the questions of "which benefits did your unit expect from QM implementation at the beginning of the process?" and "which benefits did your unit obtain from QM after obtaining a quality certificate?". A comparison of these two tables may express many points. Although it is possible that participants who contributed some items in Table 5 may not have declared any ideas for the same items in Table 8, and it may also be said that expectations at the beginning of the QM journey and the perceived outcomes of having a certificate for TEIs are partially consistent with each other. For example, academic units declared their desire to improve quality (27 units), then, 9 and 15 units reported increases in service quality and improvements in processes, respectively. In a similar vein, academic units expected standardization (18 units) and some (12 units) obtained it. At this point, the most eye-catching finding is that only 5 academic units expected to improve image, prestige and/or reputation, whereas 15 administrators reported some increases in image, prestige and/or reputation of their units. The limited interest and information of Turkish TEIs about corporate image/reputation (Öncel and Sevim, 2014) may be a reason for the limited expectations of administrators about some increases in image, prestige or reputation with the implementation of QM.

Table 7 and Table 10 revealed higher reputation/image/prestige as a result of QM efforts both in academic units with a quality certificate and in those that do not have a quality certificate. This finding appears consistent with some findings in the literature. For example, Staw and Epstein (2000) indicated that the implementation of QM has significant and positive effects on corporate reputation. In a similar vein, Oluseye et al. (2014) found that in Nigerian TEIs there was a positive and significant correlation between QM implementation and perceived image of the TEIs.

Table 8 and 11 present drawbacks of QM for two types of academic units; those with a quality certificate, and those with no quality certificate who were but making QM efforts. The perceived drawbacks of QM implementation were seen to be very similar in both groups. For example, the most common response in both of these groups was "no drawback". In a similar vein, there are many common items of "drawbacks" such as increases in time-consuming and bureaucratic activities, increases in costs, increases in needs of personnel, etc. This finding is consistent with the study of Sila (2007), which reported indifference in many points between ISO-registered and non-ISO-registered companies. Similarly, in the current study, even if the unit had no certificate, the implementation of many quality activities by these academic units may create some similarities in the drawbacks experienced. Finally, when Tables 7, 8, 10 and 11 are evaluated together, the participants seem to perceive that the benefits of QM efforts outweigh the drawbacks.

Finally, Table 14 indicated that "being a newly established academic unit" and "inadequacies in numbers of academic and administrative staff" were the most critical factors behind the behavior of not performing quality efforts. These findings seem to be consistent with literature that has focussed on the antecedents of the spread of

new management techniques among organizations such as organizational age (Kimberly and Evanisco, 1981), and organizational size (Batra and Pall, 2015).

7. CONCLUSION

The aim of this study was to understand the current status of QM efforts in Turkish TEIs. The study revealed that even though there are some positive developments, there is still a long way to go for Turkish TEIs in the context of a QM journey. Also, findings indicated many similarities among different units in many points such as the scope of quality certificate, expected benefits at the beginning of quality works, the drawbacks of holding a quality certificate, etc. These similarities may enable an experience sharing on the quality journey between different units of tertiary organizations.

This study hopes to make some small contributions to the related literature. First, in the context of QM, this study considered different units of TEIs at the same time. Second, previous studies have often focussed on one group of organizations, whereas this study evaluated three groups of organizations, namely certified organizations, non-certified but QM focussed organizations and finally, both non-certified and non-QM focussed organizations. Third, the previous empirical literature on QM in TEIs has primarily focused on TEIs in developed countries. The current study used data from Turkey, a DC. Finally, the study benefitted from the comparatively extensive data set coming from 672 units of 149 universities. The combination of these factors appears to create the chance to make small contributions to the literature.

Finally, this study appears to create some opportunities for future studies. For example, some studies (e.g. Fernando, 2001) have previously investigated the effects of the use of popular management techniques on various dimensions of corporate performance and corporate reputation/image. In the current study, participants reported that implementation and certification of QM contribute to reputation/image/prestige of their academic units. However, as far as is known, this claim has not been statistically analysed to date. Therefore, in the context of TEIs, this finding could be tested statistically in future studies. In addition, the number of cross-country studies in this field is limited (Tari and Dick, 2016). As far as known, there is also no study that compares the difficulties/benefits of QM in TEIs of developed countries and DCs. Therefore, in the context of TEIs, some cross-cultural QM studies, including both type of countries, can be conducted for comparison.

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