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Quality Management in the Turkish Higher Education  
Institutions: Preliminary Findings\*

Mehmet Eymen Eryılmaz<sup>a†</sup>, Esen Kara<sup>a</sup>, Ebru Aydoğan<sup>a</sup>,  
Olcay Bektaş<sup>a</sup>, Duygu Acar Erdur<sup>a</sup>

<sup>a</sup>Uludağ University, Department of Business Administration, Görükle Campus, Bursa, 16059, Turkey.

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**Abstract**

There is an extensive literature on antecedents and positive/negative consequences of quality management in manufacturing organizations. However, studies that focus on quality management in higher education institutions are inadequate. In addition, these studies are generally based on developed countries and small samples. This study examines the situation of quality management in higher education institutions of a developing country, Turkey. In addition, it uses a relatively large data set (241 faculties and institutes) for this aim. The findings show that although the Turkish higher education institutions have progressed in their quality efforts in recent years, there is still a long way to go.

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**1. A Brief Literature Review on Quality Management**

In the literature, various terms are used to define efforts that aim to increase quality levels of everything in organizations. For example, IBM prefers to use the term of “Market-Driven Quality” (Bounds et al., 1994). In a similar vein, some Turkish organizations use various concepts to refer to their quality works such as “overall quality” (Benzer, 2003) and “holistic quality” (Önce Kalite, 2003). Therefore, “Quality Management (QM)” will be used during this study as an umbrella term. Before clarifying QM, it will be appropriate to define the concept of quality. “Quality means meeting customers’

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† Corresponding author: Tel.: +90 224 29 41 048; fax: +90 224 29 41 010.

E-mail address: [mehmetery@uludag.edu.tr](mailto:mehmetery@uludag.edu.tr)

(agreed) requirements, formal and informal, at the lowest cost, first time every time” (Flood, 1993: 42). On the other hand, QM is a management philosophy and practice that endeavors to maximize the competitive advantage of an organization via continuous improvement of the quality of its people, processes, products, services and so on (Goetsch and Davis, 1997).

Antecedents and consequences of QM in service and manufacturing organizations have been well documented previously. For example, many empirical studies have emphasized various triggers of QM such as organizational culture and climate (McNabb and Sepic, 1995), organizational size, planning behavior (Temtime, 2003), sectoral awareness (Taylor, 1996) and national culture and cultural values (Lagrosen, 2003; Ngowi, 2000; Noronha, 2002, 2003). In addition, the implementation of QM (overall QM and its subdimensions) seems to have some impact on organizational outcomes in organizations. Many studies have reported positive impacts of QM on various variables such as career satisfaction (Karia *et al.*, 2006), competitive advantage (El Shewany *et al.*, 2007; Powell, 1995), corporate social responsibility behavior (McAdam and Leonard, 2003), customer satisfaction (Rad, 2006; Sun, 2000; Tanninen *et al.*, 2010), employee’s job satisfaction (Karia *et al.*, 2006; Ooi *et al.*, 2007), job involvement (Karia *et al.*, 2006), organizational justice (Mohamed, 2014), organizational commitment (Karia *et al.*, 2006), productivity (Radovilsky *et al.*, 1996; Tanninen *et al.*, 2010), profitability (Radovilsky *et al.*, 1996; Tanninen *et al.*, 2010), R&D performance (Prajogo and Hong, 2008) and organizational performance (Rad, 2006; Sadikoglu and Olcay, 2014; Sun, 2000). Besides these, according to some studies, QM seems to weaken some negative factors in organizations. For example, Teh *et al.* (2009) found that QM reduces role conflict of employees, whereas some scholars have not found any positive effect of QM and others have identified some negative consequences of QM in practitioner organizations. Some authors (e.g. Lam, 1996; Nwabueze, 2001) have attributed these neutral or negative results in some organizations that adopt QM to improper or poor implementation of this philosophy and practice.

The number of empirical studies that have focussed on the higher education sector is more limited. Furthermore, these studies generally have two characteristics. First, the above-mentioned studies have usually been conducted in developed countries (e.g. Campatelli *et al.*, 2011; Cullen *et al.*, 2003). Second, these studies were conducted with small samples (e.g. Campatelli *et al.*, 2011; Cullen *et al.*, 2003; Hill *et al.*, 2003; Lim, 2008; Osseo-Asare Jr and Longbottom, 2002; Sayed *et al.*, 2010). Certainly, there are a few exceptional studies that were conducted in a developing country or have a large sample (e.g. Gamage *et al.*, 2008). This empirical study can be considered to be of importance since it is both based on a developing country as the context and includes a relatively larger sample.

## 2. Methodology

### 2.1. Data

The level of analysis of this study is faculty/institutes. According to “The Council of Higher Education (YÖK)”, there are currently 193 public and private universities in Turkey. A questionnaire was sent to all administrators of 193 Turkish universities via e-mail, thus the questionnaire was sent to 5698 administrators in faculties and institutes of universities.

Since the level of analysis is institutions, responses were taken from 242 institutions. 197 (81%) and 45 (19%) of the respondents were administrators of faculties and institutes respectively. In addition, almost half of the institutions were established in the last 10 years. Information about the establishment year of faculties/institutes is presented below in Table 1.

Table 1: The establishment years of respondent faculties and institutes

Establishment year (between)	Frequency	Percentage (%)
2015-2005	106	44
2004-1995	28	12

1994-1985	35	14
1984-1975	24	10
1974 and before	13	5
No information	36	15
Total	242	100%

The positions held by the respondents were 57 (24%), 103 (43%), 36 (15%), 20 (8%), 19 (7%) and 7 (3%) deans, vice deans, faculty secretaries, institute directors, institute vice directors and institute secretaries respectively.

Of 242 respondents, 195 (81%) were male and 47 (19%) were female.

The ages of the respondents were 26-30 years in 4 (2%), 31-35 years in 26 (11%), 36-40 years in 47 (19%), 41-45 years in 48 (20%), 46-50 years in 52 (21%), and 51 years or older in 65 (27%) respondents. The professional experience of respondents in their occupation varied between 1 and 5 years (8%), 6 and 10 years (7%), 11 and 15 years (11%), 16 and 20 years (21%), 21 and 25 years (22%), 26 and 30 years (12%) and finally 30 years and above (13%).

Tenure varied between 1 and 5 years (40%), 6 and 10 years (15%), 11 and 15 years (11%), 16 and 20 years (13%), 21 and 25 years (12%), 26 and 30 years (5%) and 31 and above (4%).

## 2.2. Data Collection

First, a literature review was conducted to guarantee content validity of the questionnaire. Then, a questionnaire was prepared to be used in the survey. It included three sections. The first section comprised demographic questions (e.g. age, gender, tenure). In the second section, there was one categorical question to clarify the current situation of quality efforts in the respondent's institution. Finally, the third section consisted of open-ended questions which focussed on triggers, processes and consequences of quality efforts. After it was prepared, a pilot study was conducted with three people. The final version of the questionnaire was uploaded to the internet.

A text was then prepared that included the intention of the study, a request for the help of administrators and the internet link of the questionnaire. This text was sent to all administrators via individual mails using the administrator's name and title in the subject part of the e-mail.

## 2.3. Data Analysis

For demographic data, some descriptive statistics were calculated. However, for open-ended questions, a qualitative methodology was applied. First, all the statements of the respondents for every question were read. Then, the researchers endeavored to collect the responses under categories and meta-categories. This iterative process continued until the researchers could not find any concepts that could be collected under a common category.

## 3. Findings

The findings of the study are presented in the tables below.

Table 2. Current position of quality works of university faculties and institutes

Current position of quality works	Frequency	Percentage (%)
Faculty/institute currently has a quality certification for the academic and/or administrative processes	35	14%
Faculty/institute currently does not have a quality certification for the academic and/or administrative processes but quality works are in progress.	80	33%

Faculty/institute currently does not have a quality certification for the academic and/or administrative processes and there is no quality work concerning the development of administrative and/or academic processes	127	53%
Total	242	100%

According to the findings, almost half of the respondents (47%) declared that their institutions had a quality certification or a quality work in progress. Although the ratio is encouraging, there still seems to be a long way to go to achieve the desired level of quality in the country.

The types of quality certificates that institutions have are presented in Table 3. It will be seen that there is a total of 40 quality certificates which is not consistent with the findings in Table 2. It only implies that some institutions have more than one quality certificate.

Table 3. The type of quality certification

Type of quality certification	Frequency	Percentage (%)
ISO 9001	15	37.5%
MÜDEK	5	12.5%
UTEAK	5	12.5%
EFQM	3	7.5%
JCI (Joint Commission International)	2	5%
ISO 14001	1	2.5%
ISO 15189	1	2.5%
ISO 10002	1	2.5%
Other	7	17.5%
Total	40	100%

Table 4 shows responses to the question of whether uncertified organizations have a goal such as receiving a quality certification. If they have such a target, the type of certification was questioned. The item of “other” includes some responses such as AACSB, AACSB, ABET, E-XCELLENCE, EQUIS, EVEAE, ITMS 4004, JCI, KGS, MİAK and UTEAK.

Table 4. The existence (or absence of) and scope of quality certification target

Target	Frequency	Percentage (%)
Accreditation	16	24%
ISO 9001	11	16%
ISO 17025	2	3%
MÜDEK	5	7%
FEDEK	3	5%
Other	13	19%
Unstated	10	15%
No target	7	11%
Total	67	100%

Institutions with no quality certifications or quality efforts explained this behaviour with the justifications shown below in Table 5. The item of “other” in this table implies that absence of a sample in related university, lack of motivation, dependency on decision of rectorship etc.

Table 5. Justifications of not performing quality efforts

Justification	Frequency	Percentage (%)
Newly-established organization	49	37%
Lack of adequate administrative and academic staff	19	14%
Lack of physical conditions	10	8%
Not considered as a necessity	9	7%
Fear of increased workload for academic and administrative staff	9	7%

No justification	7	5%
The absence of such an issue on the agenda	6	5%
Because it is done by rectorship	6	5%
Other	18	14%
Total	133	100%

The main reasons emphasized by respondents and direct institutions for obtaining a quality certificate are presented in Table 6. Some reasons are the result of rational choices of the administrators of faculties/institutions. (e.g. “providing improvements in processes”) but there are also coercive pressures (e.g. “international obligations of Medicine /Pharmaceutics Education Accreditation Committee”) and normative reasons (e.g. “considering as a necessity”).

Table 6. Reasons for obtaining quality certification

<i>Reason</i>	<i>Frequency</i>	<i>Percentage (%)</i>
Request of senior management	14	32%
Providing improvements in processes	6	14%
Providing recognition	6	14%
Applying to the national medical awards	4	9%
International obligations of Medicine /Pharmaceutics Education Accreditation Committee (UTEAK/ECZAK)	3	7%
Providing standardization	3	7%
Request/desire for being accredited	2	5%
Providing control and traceability	1	2%
Request for being a better faculty	1	2%
Request for acquiring international standards	1	2%
Request for institutionalization	1	2%
Considering as a necessity	1	2%
Receiving quality certificate of a different faculty of the same university	1	2%
Total	44	100%

Some benefits of having a quality certificate that were expected by institutions are presented in Table 7.

Table 7. Expected benefits at the beginning of quality works

<i>Expected benefits</i>	<i>Frequency</i>	<i>Percentage (%)</i>
Determination of areas that need improvement /providing improvement	16	24%
Providing standardization	11	16%
Providing traceability, measurability	8	12%
Improving the quality (physical conditions, equipments etc.)	7	11%
Improving the quality (improving the syllabuses)	6	9%
Recognition, prestige and preferability	5	7%
Ensuring compliance with international standards	5	7%
Convenient behaviour/behaving accordingly to the expectations of stakeholders	3	4%
Creation of a democratic and transparent structure	2	3%
Request for institutionalization	2	3%
Increasing the level of achievement	1	2%
Determination of vision, mission and strategic objectives on a systematic basis	1	2%
Total	67	100%

Table 8 presents the perceived benefits of having a quality certification. This question was asked to certified institutions and they sometimes declared multiple benefits for this question. Providing standardization was the most frequently pronounced benefit of having a quality certification.

Table 8. The benefit of having a quality certification

<i>Realized benefits</i>	<i>Frequency</i>	<i>Percentage (%)</i>
Providing standardization	11	23%
Prestige, publicity and recognition of the faculty	10	21%
Increased service quality for all stakeholders	6	12%
Improvements in processes	3	6%

Increased awareness of the academic members in subjects such as training, surveying, assessment	3	6%
Taking continuous feedback from students and staff	3	6%
Creating a sense of pride among academic / administrative staff	3	6%
Continuous improvement	3	6%
Ensuring control and traceability	3	6%
Planning for the future	2	4%
Contributing to the Erasmus program	1	2%
Increased interest in the training of instructors	1	2%
<b>Total</b>	<b>49</b>	<b>100%</b>

Table 9. Drawbacks caused by having a quality certification

<i>Drawbacks</i>	<i>Frequency</i>	<i>Percentage (%)</i>
Shortage of qualified staff who will be assigned for quality efforts	5	38%
Some increases in bureaucracy and time-consuming tasks such as record keeping and reporting	3	23%
Some increases in some costs such as stationery expenses	3	23%
Reduction in staff motivation	1	8%
Negative impacts on curriculum	1	8%
<b>Total</b>	<b>13</b>	<b>100%</b>

The drawbacks of having a quality certification are presented in Table 9. This finding is consistent with the findings of some previous studies that there may be negative consequences of quality efforts in terms of respondents. In addition, the findings showed that the number of drawbacks of having a quality certification stated by the respondents was more limited than the benefits.

Table 10 and Table 11 show the time that was required by institutions to receive a quality certification and expenses that were incurred by the institution during the process of receiving certification. These responses were given by the institutions that have a quality certification.

Table 10. Retrieval time for quality certification

<i>Time</i>	<i>Frequency</i>	<i>Percentage (%)</i>
Less than 1 year	5	14%
Between 1-2 years	17	49%
Between 2-3 years	5	14%
Between 3-4 years	3	9%
More than 4 years	4	11%
Unspecified	1	3%
<b>Total</b>	<b>35</b>	<b>100%</b>

Table 11. The type of expenses incurred during the process of obtaining quality certification

<i>Expenditure Items</i>	<i>Frequency</i>	<i>Percentage (%)</i>
Stationery	6	16%
Training	5	14%
The procurement of services (consulting, audit etc.)	5	14%
Laboratory	5	14%
Organization of physical environment	4	11%
Certification	2	6%
Travel allowance	2	6%
Improvement of educational and physical infrastructures	2	6%
Other (e.g. employing security or other personnel)	5	14%
<b>Total</b>	<b>36</b>	<b>100%</b>

Table 12 shows the difficulties that were experienced by certified organizations during the quality certification process. In addition, Table 13 indicates findings about institutions which do not currently have certification but have some quality efforts. Table 14 presents findings about the benefits provided by these institutions that are uncertified but are undertaking quality efforts.

Table 12. Difficulties in obtaining quality certification

<i>Difficulties</i>	<i>Frequency</i>	<i>Percentage (%)</i>
Unwillingness of staff and lack of motivation	8	32%
Costs - financial difficulties	5	20%
Personnel resistance to change	3	12%
Increases in workloads	4	16%
Lack of personnel	1	4%
Suspicion of the benefits of the quality certificate-of disbelief	1	4%
Physical shortage infrastructure	1	4%
Systems incompatibility (assessment methods)	1	4%
Dissemination and internalization of the system	1	4%
Insufficient Reports	1	4%
No difficulty	10	40%
Total	25	100%

Table 13. The activities carried out by institutions which do not currently have certification but have quality works

<i>The Activities</i>	<i>Frequency</i>	<i>Percentage (%)</i>
Accreditation	26	22
Improvement of physical areas	10	8
Forming quality commission/ quality management unit / quality circles	8	7
Standardization of documents	11	9
Conducting internal audits	7	6
Preparing job descriptions	6	5
Preparing a strategic plan –SWOT Analysis	6	5
Taking quality training	6	5
Process monitoring and improvement	9	8
Improvement of academic programs	7	4
Establishment of academic performance criteria	3	3
Application to TAPDER/UTEAK	3	3
Ensuring compliance with the Health Ministry Standard (ADSM)	2	2
Exchanges of ideas with stakeholders	3	3
Quality audits	2	2
Sharing quality mission with employees	2	2
Conducting employee satisfaction surveys	2	2
Conducting student satisfaction surveys	2	2
Establishing a request /suggestion box	1	1
Giving training in human relations and communication skills	1	1
Adding courses about quality management to curriculum	1	1
Building organizational identity	1	1
Taking consultancy services	1	1
Total	120	%100

Table 14. Benefits provided by institutions which do not currently have a certification but have quality efforts

<i>Benefits</i>	<i>Frequency</i>	<i>Percentage (%)</i>
Standardization	19	17%
Ensuring and improving quality and standard education	12	13%
Process improvement	9	10%
Providing traceability, measurability	7	6%
Institutionalization	5	5%
Giving appropriate services according to the expectations of stakeholders	5	5%
Corporate reputation/ prestige/recognition	4	4%
Improving physical atmosphere	3	3%

Clarification of work flow	3	3%
Transparent management	3	3%
Ensuring awareness about education	2	2%
Improvement of staff motivation	2	2%
Improvement of student motivation	2	2%
To ensure successful students prefer the organization	2	2%
To ensure successful academic staff prefer the organization	2	2%
Providing ease of operation	3	3%
To ensure quality awareness of staff	2	2%
Increase in performance	1	1%
Efficient use of resources	1	1%
Creating team spirit	1	1%
Participants management	1	1%
Creating a system in which personnel changes do not affect the work	1	1%
Reduction of work load	1	1%
Gaining Time	1	1%
Peaceful working environment	1	1%
Improving organizational affiliation	1	1%
Situation analysis	1	1%
Revealing the administrative staff satisfaction level	1	1%
Revealing the academic staff satisfaction level	1	1%
To ensure measurable academic performance	1	1%
Increase student satisfaction	1	1%
Establishing corporate culture	1	1%
Objective measurability of the work done by employees	1	1%
Corporate reliability	1	1%
Clarification of job definitions	1	1%
Providing dynamism	1	1%
Emphasis on employee equality	1	1%
Improving occupational health and safety	1	1%
Compliance with international standards	1	1%
Determination of customer satisfaction and complaints	1	1%
Determination of the environmental benefits and drawbacks of the organization	1	1%
Total	90	%100

Finally, Table 15 showed that inconveniences have been experienced by institutions that have not been certified but have had some quality efforts.

Table 15. Inconveniences caused by quality works in institutions that have not had certification

<i>The Activities</i>	<i>Frequency</i>	<i>Percentage (%)</i>
Increase in academic and administrative staffs' workload	6	24
Personnel resistance to change	5	20
Costs	3	12
Time consume	2	8
Documentation excess and decrease in productivity	2	8
The lack of readiness of students	1	4
Limitation of improvisation and creative earnings	1	4
Difficulty of audits	1	4
Suspicion and disbelief of staff to quality	1	4
Increase in bureaucracy	1	4
The problem of physical area that is caused by archiving obligation	1	4
Lack of trained staff	1	4
Total	25	%100

#### 4. Conclusion

The aim of this study was to determine the current situation of QM in Turkish higher education institutions. With this aim, a questionnaire was designed and sent to administrators of all faculties and institutes of Turkish universities. A total of 242 institutions completed the questionnaires. The findings



indicated that although the Turkish higher education institutions have shown great improvements during recent years, it seems that they still have a long way to go.

The main originalities of this study are both its context and sample size. There is only a limited number of empirical studies that examine higher education institutions in a developing country with a large sample. However, this study examined the current situation of QM among Turkish higher education institutions with a relatively larger sample (n=242).

In future studies, QM efforts in the higher education institutions of two or more developing countries could be compared. In addition, a comparison could be made between developing and developed countries.

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