



Article The Degree of Implementation of Total Quality Management in Universities and Its Relationship to the Level of Community Service from the Perspectives of Faculty Members

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Abstract: The research aimed to identify the degree of implementation of TQM in Jordanian universities and its relationship to the level of community service from faculty members' perspectives and to find out whether there were statistically significant differences related to participants' gender, college, academic rank, experience, type of university, and country of graduation. The study sample consisted of 415 faculty members, and the data were collected in the second semester of 2021–2022. The results indicated that the degree of implementation of TQM in Jordanian universities and the level of community service were both high. There were no statistically significant distinctions in the degree of implementation of TQM related to faculty members' gender, years of experience, and academic rank; however, significant differences were found related to the college and country of graduation variables. The findings also revealed the absence of statistically significant differences in gender, years of experience, academic rank, college, or country of graduation related to the level of community service. Finally, the study concluded that there was a positive correlation between total quality management in Jordanian universities and the level of community service from the faculty members' perspectives.

Keywords: total quality management; community service; faculty members; Jordanian universities

1. Introduction

Total quality has received significant attention because it is one of the main pillars of the new management models that aims to keep pace with and adapt to global and local changes. The global community considers total quality and educational reform as a basis for progress and development. Arguably, access to total quality is the real challenge to be faced the coming decades.

Studying total quality management (TQM) and understanding its meanings and requirements in higher education is essential. Over the past few years, investigators have been dedicated to determining its meanings and activities in higher education and have presented different opinions about it [1]. TQM in higher education means directing all activities and the academic, administrative, and financial processes at all levels in the institution to meet the labor market and students' needs through continuous development and improvement of the quality of services provided to students to obtain a highly qualified graduate [2]. To achieve this, TQM creates a new organizational culture that is committed to satisfying the needs of the client (students and the labor market); providing opportunities for clients' continuous improvement; encouraging the principle of collective participation; and evaluating the appropriateness of all academic, administrative, and financial situations in line with the approach of TQM [3].



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Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). Measuring TQM in higher education institutions requires several measurement areas to be defined [4], although researchers tend to differ when defining these areas. Some limit them to five essential elements, some to nine, and others identify them with seventeen elements [5]. Nevertheless, the difference is in the number and not in the total content. Thus, five elements of TQM measurement in higher education can be identified:

- (1) The quality of university management: this represents the quality of the administrative operations practiced at each administrative level in the university (university president, faculty dean, department head, etc.). It consists of several elements: recognizing management in the quality process; giving responsibility and commitment to quality; strengthening participation in decision-making; and changing leadership style, behavior, and motivation. The higher the quality of the elements, the better the use made by the university of the various resources needed in its services (professors, classrooms, laboratories, libraries, equipment, etc.) [6]. The senior management supports the efforts of TQM, which provides the necessary financial allocations for implementing TQM. In addition, the senior management works to promote the philosophy of TQM [7].
- (2) The quality of university legislation and regulations: these should keep pace with various environmental variables (economic, social, technological, political, and others). The university legislation, in turn, is one of the sources and control of the regulations. Clear, specific, and flexible regulations are a strong aid and an effective facilitator for university administration. This field includes seven sub-elements: how to communicate, teamwork, tasks, higher university, training, goal stability, and reviewing the university's activities [8].
- (3) Student-centered focus quality: in addition to meeting students' and business owners' expectations, the quality of service is measured by professors' and students' participation in designing and evaluating educational programs offered at the university. The implementation of this field has seven sub-elements: qualifying the student as an external customer (academic qualification), adapting to the requirements of the labor market as a supplier, providing feedback from the customer and the supplier, participating in planning the educational process, and solving common problems related to university's management as a supplier and consumer [9].
- (4) Continuous improvement: transferring the philosophy of TQM and implementing it requires continuous training for all employees (professors and administrators). This is done by identifying references or creating a culture of quality by sending the ideas of all university employees to form a culture of quality, studying it, and formulating it with the aim of implementing it. It has several components: achieving the university's goals in quality, investing time in thinking about quality, using measurements, generalizing dependency relationships in the university, continuous development, an audit cycle, and quality certification [10].
- (5) Team building and training: the quality of the assessment focuses on the expectations raised in the target results of the university's performance to prevent errors (instead of assessment to arrange a performance) and to focus on developing faculty members' professional skills. Consequently, they can test different levels of knowledge through specialists and workshops. The quality of assessment includes the performance of faculty members, level of educational programs, students, teaching methods, university textbooks, and classrooms [11]. The university encourages team cohesion, maintains an appropriate atmosphere for the success of the teamwork, and promotes the principle of trust among team members [12].

1.2. TQM in a University Context

To implement TQM, university staff need not to be isolated from their environment, surroundings, and society. Al-Biladi emphasized that the relationship between the university and society is close and based on two-way influence [13]. The university is an

educational institution located at the top of the pyramid of the educational system in society. It does not exist in isolation from the rest of the other societal systems; instead, it interacts with them. The connection of universities with society and the provision of various activities and services is a necessary component imposed by recent changes [14]. That connection opens the door for TQM to impact community service and aid universities in fulfilling their social obligations and commitments. In fact, various researchers have stressed the significant impact TQM has made on the quality of community service provided by higher education institutions [15,16].

Furthermore, a university professor is required to play a vital role in serving their community by providing educational and awareness programs for community members or conducting training courses for workers and employees in the country. Moreover, they conduct applied research on all the problems facing the community and scientific consultations for individuals, institutions, and bodies; carry out educational services and provide information to members of the community; and perform voluntary charitable work for community members and institutions [17].

The success of universities in advancing their role in community service and development in various fields depends on several factors [18]. These are: (1) establishing strong and open communication channels between universities and work sites in society, especially production centers; (2) opening the way for university students to receive training in various work sites; (3) directing scientific and applied research to solve community problems; (4) allowing the investment of the positive results of university research; (5) setting up a system to encourage university faculty members and researchers to conduct their research projects; (6) creating a suitable climate for fruitful cooperation and constructive joint work between universities and workplaces; and (7) choosing good leaders to advance joint research work between universities and workplaces [19]. The university's performance in its various operations and the achievement of its objectives upon which those operations are based can only be accomplished through the roles and responsibilities of university professors, which reflect the university's operations.

Implementing TQM in the university context does not imply a plan to make colleges commercial or industrial facilities that seek to double their profits by improving their products. Instead, we benefit from it in education and the development of educational management methods to offer quality services, thereby doubling the benefits to society, including its institutions, groups, and individuals. From this standpoint, we found that the university professor is competent to carry out the university's operations and serve the community by performing several positive roles by implementing a set of activities and services to resolve the issues and problems of society.

The university professor is considered one of the educated elites in the community. They actively bring social, economic, cultural, and political changes that serve the community. This requires knowing the requirements that qualify each of them to play this role in the field of community service. For instance, they should: (1) be well acquainted with their work and perform it in an organized and reasonable manner, in addition to being enthusiastic about their work and setting up personal high goals to achieve [13]; (2) have the ability to communicate with officials in community institutions with a high degree of civility and genuine humaneness and be keen to gain a good reputation, whether by evidence of their societal functions with a high efficiency or through consultation between individuals and community institutions and to show a positive trend in his ability to work with community institutions [20]; (3) respect the mentality of those who deal with them and not be arrogant in words or hold on to the opposite opinion because they are more knowledgeable than them; (4) present their ideas appropriately while respecting the mentality of those with whom they interact; (5) respect different viewpoints and allow others to present their views with openness and attention, in addition to providing them with opportunities for cooperative education [21]; (6) have scientific competence in their specialization and the ability to employ it in community service [20]; (7) have suitable behavioral and social skills, communication processes, and public relations and be an example and role model

for community members and have the ability to provide them with knowledge and sound behavioral values [22]; (8) address society's problems by studying and analyzing them and provide solutions that benefit society (such as selecting good research topics related to society's problems); (9) continue to conduct research and find practical implementations of it [23]; and (10) be aware that their role goes beyond the limits of the university's scope. Thus, they serve different sectors and people and become acquainted with the local social bodies, institutions, and their leaders (especially those related to the university), in addition to being familiar with the resources of the university, the government, and the local area surrounding the university [24].

Many researchers have raised the topic of TQM; they include Karia and Asaari, who found a positive impact of applying the principles of TQM to job satisfaction and organizational loyalty in universities [25]. However, they found that the estimates of faculty members and students regarding the quality of the educational process in the college of education were only partially achieved and insufficient concerning scientific and technological development [25].

There was a discrepancy in the faculty members' perspectives regarding educational process quality over the departments of natural sciences and humanities in the faculty of education. As shown in [26], there is a correlation between the capabilities of higher education institutions to provide high-quality educational services and the expectations of education beneficiaries in academic life.

Some researchers indicated that TQM practices exist in universities at a high rate [27]. Another study also found significant contributions to quality management in higher education institutions [1]. Other researchers revealed that quality management practices were sufficient to improve cognitive processes [28].

Total quality has become an increasingly important and decisive success factor in higher education institutions [29]. Some researchers found that there were moral relationships between most of the obstacles and the implementation of TQM that ranged from students' problems to funding scientific research, community service, teaching staff, senior management, and educational curricula [30]. Others concluded that the lack of adoption of the philosophy of performance evaluation, as well as the absence of clear plans and the scarcity of a sufficient number of qualified faculty members, did not contribute to the required level of performance of both faculty members and administrators [31].

In his findings, Farhat reflected a complete conviction that the quality of education depends on specific and precise standards that clarify what must be learned and acquired and the level required to reach it in each area related to the educational process [32]. As a result, this will improve the educational system with its various human and material components and raise its performance. Consequently, what are the global standards for total quality in education? How and when did it arise, and what are its purposes and characteristics? What are the types of standards directed to educational institutions and programs? What is the overall quality? What are the benchmarks and performance indicators? How can the goals be reached by applying international standards for the quality of education?

One study showed that the prevalence of a quality culture in general reached an average level, which meant that the culture of quality determined the level of performance of the faculty members in the educational institution [33]. The results also revealed differences between males and females in favor of males in the prevalence of quality culture. However, there were no differences according to specialization. Other researchers concluded that there was a strong trend toward awareness of the concept of TQM at the University of Jordan due to the high percentage of educational consultants' qualifications [34]. Furthermore, it became clear that the University of Jordan's administration was concerned with applying TQM and providing opportunities for employees of all categories through team building, which led to continuous improvement in work performance.

Several researchers addressed the issue of community service for university faculty members. For example, according to Al-Qathmi, one of the fundamental reasons that prompts universities and technical colleges is the desire to bridge the gap between education, preparation, and rehabilitation agencies on the one hand and employment agencies on the other [35]. Consequently, this leads to offering specific training programs and establishing community service centers for continuing education. However, the most critical factors that contribute to the alignment between the educational institutions' outputs and the Saudi labor market requirements are the involvement of the private sector in preparing and developing training programs and strengthening the cooperation between their planning and the workforce. Another study found a relationship between the degree of community service among undergraduate students and the level of citizenship regardless of gender, race, or the educational level of their parents [36].

In comparison, Barakat noted that the role of Arab universities according to the estimates of faculty members was at a high level in individual preparation, although at an average level in the fields of knowledge, societal development, and knowledge generation [37].

Another study found weak advisory services provided by universities to the local community and public and private sector institutions, a lack of sufficient spaces for training programs, weakness in awareness programs provided by community service centers, and weakness in the relative importance of the function of community service and continuing education in universities [14].

According to Mercy, the university provides scientific solutions to many development challenges that face the local community and rewards research that seeks to strengthen cooperation between universities and local communities [38]. Another study found that the university's role in community service did not rise above 60% and that there was a relationship between the university's role in community service and responsibility toward workers and students [39]. There were also no differences in the university's role regarding community service in light of its social responsibility with respect to personal variables such as gender, age, years of service, and place of work.

Al-Shammari concluded that universities have a good role in social responsibility in general, but that responsibility is still not defined in a way that makes it a straightforward task with organized rules, a transparent methodology, or a specific budget [40]. As noted by Tagoe [41], students have a favorable view of learning through community service.

Al-Biladi's study showed that the university professor's role in community service was high in applied research and medium in the fields of awareness and public service [13]. Another study found that the level of what universities offer to serve the community was medium, the level of what universities offer to serve society in light of partnership was high, and the level of obstacles to the role of partnership in supporting universities' ability to serve society was also high [18]. Furthermore, the level of requirements to stimulate the role of partnership in supporting universities' ability to serve the community was medium.

Some researchers stated that the level of community service among faculty members in Jordanian universities was high [42]. However, there were differences between faculty members in favor of humanities faculties. In terms of gender, females outperformed males, while the performance of graduates from foreign countries exceeded the performance of those who graduated in other countries. Academic rank was in favor of professors and associate professors, and the experience was in favor of those with 10 years or more. Finally, Mu'tah University outperformed the other universities. Overall, participation in community service activities develops the cognitive skills of faculty members and leads to a high rate of their contributions to developing teaching methods and acquiring the necessary skills to deal positively with students [43].

1.3. Statement of the Problem

Education reform has received significant attention in most countries, and total quality represents a great deal of this interest because it is one of the main pillars of the new management models to keep pace with global and local changes and adapt to them. Therefore, the global community has seen total quality and educational reform as a basis for progress and development because total quality is the real challenge facing nations in the coming decades. Researchers have also emphasized that TQM helped provide better services to its primary customers—students—and the community. For example, Willis and Taylor stressed that the foundation of TQM centered around the needs of customers in order to guide the activities of employees to ensure the success of the organization [44]. Similarly, in an educational context, TQM is an integral part of the school institution and positively impacts the educational services provided within it, which in turn strengthens student academic achievement [45]. However, there is a shortage of studies worldwide that examined the relationship between TQM and the level of community service among university faculty members [13,18,30,32,40] and none from the kingdom of Jordan. Therefore, this study attempted to fill that research gap by investigating the relationship between TQM and community service from the perspectives of university faculty members at Jordanian universities. This study particularly sought to answer the following research questions:

- 1. What is the degree of TQM implementation in universities from faculty members' points of view?
- 2. Is there a statistically significant variance in this degree of implementation according to gender, university, academic rank, years of experience, college, or country of graduation?
- 3. What is the level of community service of faculty members in Jordanian universities according to the faculty members themselves?
- 4. Is there a statistically significant difference in the level of community service among Jordanian university faculty members based on their gender, academic rank, years of experience, type of academic institution, or country of graduation?
- 5. Is there a relationship between the degree of implementation of TQM and the level of community service in Jordanian universities?

2. Materials and Methods

To answer these questions, the researchers followed a descriptive design based on a correlational survey, which was suitable for collecting data with a relatively large number of participants.

2.1. Population and Sample

The population of the study consisted of all 1435 faculty members from three major public universities in Jordan (Yarmouk University, representing the northern region; Hashemite University, representing the middle region; and Mu'tah University, representing the southern region of the country). The study sample consisted of 415 faculty members or 28.9% of the total population chosen using a stratified random method. Table 1 shows the final distribution of the study sample.

Variable	Categories	Frequency	Percentage (%)
	Male	291	0.70
Gender	Female	124	0.30
	Less than 5 years	114	0.27
Years of experience	5 to 10 years	176	0.43
-	More than 10 years	125	0.30
	Professor	130	0.30
Academic rank	Associate professor	142	0.35
	Assistant Professor	142	0.35
Fearlin	Scientific	165	0.40
Faculty	Humanities	250	0.60
Care lasetien secondary	Arabic	187	0.45
Graduation country	Foreign	228	0.55
Tot	Total		100%

Table 1. Research sample characteristics.

2.2. Research Instruments

Two questionnaires were developed to collect the data in this study. The first measured the degree of TQM implementation in Jordanian universities. The development of that questionnaire was based on the work of [23,30,34]. The second questionnaire measured the level of community service and was designed based on several previous studies [13,18,40]. Both questionnaires adopted a five-point Likert scale (5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, and 1 = never agree). A rating scheme was used based on the computerized average score of the three-tiered scale: low (1–2.33), medium (2.34–3.67), and high (3.68–5).

For validation, both questionnaires were submitted in their initial form to a group of experts to comment on their relevance, clarity, and language accuracy. The reviewers were asked to suggest any additions, deletions, or replacements of any unsuitable items in the questionnaires. Based on the experts' feedback, some modifications were introduced to the questionnaires to make them ready for the administration stage.

To ensure the stability of each instrument, a suitable statistical analysis was performed to calculate the correlation coefficients between items in each questionnaire as well as the correlation between each item of each questionnaire and its dimension. The calculated correlation coefficients in the TQM questionnaire ranged from (0.51–0.94), while the correlation coefficients in the community service questionnaire ranged from (0.54–0.92), which indicated acceptable statistical values at α 0.05. Finally, Cronbach's alpha test was used to calculate the stability coefficient of each item of the two questionnaires; this yielded a value of 0.726 for the items in the TQM questionnaire and 0.740 for the items in the community service questionnaire.

Lastly, the revised versions of the questionnaires were administered to the study's sample during the second semester of the 2021–2022 academic year.

2.3. Data Collection and Analysis

Data for this study were collected electronically. To obtain consent from our participants, we asked the faculty members to complete a consent form that indicated their desire to participate in the study followed by questions about demographic information and the survey items. It is worth mentioning here that the appropriate permissions were granted by all participating universities before administering the study's questionnaires.

For the data analysis, SPSS software version 21 was used. Both descriptive statistical indices (means and standard deviations) and analytical statistical indices (MANOVA and Pearson correlation coefficients) were calculated to answer the research questions. We chose MANOVA because the study had multiple levels of independent variables and the interaction between these variables had an effect on the dependent variables.

3. Results

The mean and standard deviation of the total answers to the first question, which concerned the degree of implementation of TQM in Jordanian universities, were 3.68 and 0.74, respectively, which indicated a high degree of implementation of TQM.

Notably, items related to the quality of university management achieved the highest mean (3.79) with a standard deviation of (0.72). Items related to continuous improvement came second (M = 3.76, SD = 0.88) followed by those items that focused on students' quality (M = 3.71, SD = 0.72). Finally, items related to teamwork had a medium average (M = 3.48, SD = 0.76).

To answer the second question, which concerned the difference in the degree of implementation of TQM according to gender, years of experience, academic rank, college, and country of graduation, we used MANOVA. The results revealed no statistically significant differences for gender, years of experience, or academic rank, but did show statistically significant differences for the college variable in favor of faculties of humanities ($\alpha \le 0.05$, F = 4.461, p = 0.013) and country of graduation for graduates of foreign countries ($\alpha \le 0.05$, F = 11.094, p = 0.001) (Table 2).

Effect	Value	F-Value	Sig.
Hotelling	0.023	2.655	0.105
Wilkes	0.938	1.340	0.264
Wilkes	0.951	0.601	0.549
Wilkes	0.933	4.461	0.013
Hotelling	0.057	11.094	0.001
	Hotelling Wilkes Wilkes Wilkes Wilkes	Hotelling0.023Wilkes0.938Wilkes0.951Wilkes0.933	Hotelling 0.023 2.655 Wilkes 0.938 1.340 Wilkes 0.951 0.601 Wilkes 0.933 4.461

Table 2. Multiple variance analysis MANOVA of the effect of selected variables on the degree of TQM implementation.

Note: $\alpha = 0.05$.

With respect to the level of community service offered by university faculty members, the results showed a high level with a mean value of M = 3.97 and a standard deviation of SD = 0.38.

To answer the fourth question, which regarded whether there was a statistically significant difference in the level of community service among Jordanian university faculty members based on their gender, academic rank, years of experience, type of academic institution, or country of graduation, we used the MANOVA test. The results of the statistical analysis indicated no statistically significant differences for any of these variables (see Table 3).

Table 3. Results of MANOVA tests for the selected variables.

Sum of Squares	Degrees of Freedom	Mean Squares	F-Value	Sig.
0.032	1	0.032	0.214	0.644
0.099	2	0.050	0.326	0.722
0.086	2	0.043	0.284	0.753
0.029	2	0.014	0.094	0.910
0.025	1	0.025	0.165	0.685
31.316	406	0.152		
31.741	414			
	0.032 0.099 0.086 0.029 0.025 31.316	0.032 1 0.099 2 0.086 2 0.029 2 0.025 1 31.316 406	0.032 1 0.032 0.099 2 0.050 0.086 2 0.043 0.029 2 0.014 0.025 1 0.025 31.316 406 0.152	0.032 1 0.032 0.214 0.099 2 0.050 0.326 0.086 2 0.043 0.284 0.029 2 0.014 0.094 0.025 1 0.025 0.165 31.316 406 0.152 0.152

Note: $\alpha = 0.05$.

Regarding the fifth question, which concerned the relationship between the degree of implementation of TQM in Jordanian universities and the level of community service among faculty members, the Pearson correlation coefficient was calculated, and the results indicated a positive correlation between TQM and the level of community service. The value of the correlation coefficient was 0.195, and the *p*-value was 0.00.

4. Discussion

The results of this study showed that the degree of TQM implementation in Jordanian universities from the perspectives of faculty members was high. This result can be explained by the need to keep pace with contemporary global changes and obtain regional and global accreditations that require university administration to apply comprehensive quality standards throughout their vision and mission. This requires making specific changes to the university laws and regulations to keep pace with changes in the implementation of TQM procedures by the university administration and teaching staff. This also seems evident through university management procedures by establishing deanships and centers that monitor the implementation of total quality standards and international communication at the university level. In addition, universities should organize training courses and academic workshops for faculty members to support their enthusiasm to continuously implement TQM standards. The results of this study also emphasized the need to revise universities' laws and regulations to keep pace with recent global changes. This result was consistent with the findings of Ghantiwi [11].

The findings also revealed no statistically significant differences in the degree of implementation of TQM based on participants' gender, years of experience, or academic rank. Several studies in the literature similarly found that gender was nearly inconsequential in the adoption of TQM [46,47]. However, while gender may have had a negligible impact on the perception of participants, other research showed that gender impacted the attitudes of school personnel toward TQM [48]. As far as the rank in academia, Alnaweigah found no statistical difference between his participants related to their academic rank [46]. Likewise, the findings of Wu's study showed that the quality of TQM schoolwide was not impacted in any notable way by the years of experience of teachers [47].

The responses of Jordanian university faculty members showed no significant differences based on the university administration's clear trend toward applying comprehensive quality standards in the university's procedures. It is worth noting here that universities are striving to update their systems and regulations to keep pace with contemporary scientific variables related to quality, obtain international accreditation, and request that faculty members develop plans related to their tasks to keep pace with the requirements of comprehensive quality standards. Al-Otaibi indicated that TQM implementation in the university setting requires offering specialized training and continuous improvement to the university's employees in general and faculty members in particular [49] to achieve the university's goals in quality by investing time in thinking about quality, using quality measures, continuous development, auditing, and quality certification. TQM is a procedure that improves the educational system and trains qualified individuals who can meet community expectations [50].

Regarding the degree of implementation of TQM in Jordanian universities, the results of this study indicated a statistically significant difference for the college variable in favor of the humanities colleges. This result can be explained by the high interest of colleges of humanities to obtain academic and international accreditation compared to other colleges in the university. That interest was evident in the frequent number of TQM-related activities that were implemented such as holding seminars, workshops, meetings, and panel discussions, as well as asking faculty members to develop plans and teaching methods that were in line with quality requirements.

The results also showed a statistically significant difference in terms of the participants' country of graduation variable. The difference was in favor of those who graduated in foreign countries. This difference might be attributed to the TQM experiences that those graduates witnessed and practiced in their universities throughout their years of study. Tenner and DeToro argued that enhancing faculty members' participation, interest, knowledge, and commitment to implementing TQM standards in their contexts is crucial to the successful implementation of TQM standards [51]. Therefore, having faculty members involved in implementing TQM is critical because they use the concepts and processes of TQM in their classrooms as a way to improve the quality of their products [52]. This in turn leads to a better understanding of students about the material and ultimately plays a vital role in improving their learning competencies. Faculty members' participation means that they are dedicated and committed to implementing TQM standards [51].

As shown in the results of this study, the level of community service in Jordanian universities was at a high level. The university performs its various operations according to the changes that occur in the surrounding contexts. These functions can only be achieved by updating the roles and responsibilities of university faculty members such as their roles in teaching, scientific research, administration, self-development, and community service. Accordingly, faculty members are key to implementing TQM inside and outside the university. Faculty members are the ones whom the university relies upon to disseminate its quality standards in the services delivered to the surrounding community. They progress by linking TQM standards to the needs of the production and service sectors, which makes the community permanently prosperous and in line with global developments [13,18,20,21].

It is important to note that university faculty members need to dedicate ample time and effort to pursue this kind of engagement with the community, and they must also be cognizant of the time that is typically needed for successful community–university partnerships to develop [38]. Baum argued that the purpose of the collaboration must be clear, specific, and realistic from the outset [53].

On the other side, community members need to derive benefits that directly enable them to address issues of concern to them [54]. Another crucial component of institutionalizing and sustaining community–university engagement is to link the university's interaction with a community to the generation of new knowledge [55]. Creighton emphasizes that although there is an interest in greater collaboration with communities in academic institutions, most of these initiatives are conceived and driven from the perspectives of faculty and students rather than those of communities, with the result that communities often do not feel that they derive real benefits from such partnerships [56]. There is a strong ethical aspect to TQM that calls for administrators to take heed of the interests of their stakeholders [57]. Administrators of higher education institutions are responsible to their stakeholders and the community in carefully considering how they integrate TQM to promote educational objectives.

Another issue that tends to bedevil collaboration between communities and universities is the difference in cultures, including "customary mode of work, commitment to social change and socio-political positions" [58]. It is argued that given the different power relations between communities and university researchers, a change in attitude is required to community partners being viewed as equals and not simply as research subjects, and the expertise and knowledge brought by communities need to be acknowledged and valued [59,60]. These conclusions resonate in several other studies as well [37,39,61].

Interestingly, the results of this study showed no statistical significance between the level of community service that faculty members performed regardless of their gender, number of years of experience, academic rank, and type of college, which was expected. Therefore, the role of the university faculty member in community service is one of the best ways to look at a university institution's future, including how it adopts responsibility for clarifying faculty members' role in society's development by overcoming the obstacles that prevent their effective involvement and contribution to their respective communities [54,56].

It is important to mention that the results of this study showed a positive correlation between TQM in Jordanian universities and the level of community service from the faculty members' perspectives. This result can be explained by the fact that the degree of implementation of TQM standards in Jordanian universities had a positive impact, and the level of community service was a logical result. Therefore, the universities' pursuit of TQM to keep pace with the accelerating global changes and obtain international accreditations for different fields of study has become a core quality practice of the universities' work. This will definitely enhance the academic status and recognition of Jordanian universities and enable them to compete with other leading regional and international universities and obtain advanced rankings [18,40].

5. Summary and Concluding Remarks

We concluded from the findings of this study that both the degree of implementation of TQM in Jordanian universities and the level of faculty members' community service were high. The results also revealed no statistically significant differences in the degree of TQM implementation related to faculty members' gender, years of experience, and academic rank. However, both faculty members' college and country of graduation showed statistically significant differences. The findings also revealed no statistically significant differences related gender, years of experience, academic rank, college, or country of graduation related to the level of community service. Lastly, we concluded that there was a positive correlation between TQM in Jordanian universities and the level of community service from the perspective of faculty members.

All faculty members were committed to using concepts and processes of TQM in their classrooms as a way to quality improvement. Based on the results of this study, the authors set forth the following implications for policy change and practice:

- 1. Develop adequate TQM programs to define more fields in Jordanian universities. TQM programs must be comprehensive and involve all staff members at higher education institutions (HEIs) to spread the culture of TQM among all university members. However, it is important to note that implementing these programs requires deliberate effort from institutions across the board.
- 2. The lack of training plays an important role in the implementation of TQM in Jordanian universities; therefore, managers must provide suitable and adequate training programs for university faculty members and management staff to implement the principles of TQM at the levels of their programs, departments, and colleges. Each institution should implement programs that educate teachers and administrators on the benefits of TQM [62]. Administrators should assess the current programs implemented at their institution and determine how TQM practices could be adopted.
- 3. In order to improve the quality of higher education in Jordan—the caliber of graduates, the scientific research quality, and the effectiveness of community service— -policymakers and managers of higher education institutions must develop clear strategies to incorporate TQM systems that involve teachers, staff, administrators, students, the community, and other shareholders.
- 4. Universities should strengthen the culture of comprehensive quality assurance and academic accreditation in all university tasks—including community service—and pay attention to media awareness to highlight the role of university professors in solving society's problems through scientific research.
- 5. Establish and encourage an effective system of rewards and recognition to raise educational quality. It is advised that all higher education institutions recognize and honor university faculty members who excel in their work. Those who excel in their positions should be able to obtain promotion without having to wait until a certain number of years has passed. This would give employees control over their own promotions.
- 6. Encourage university faculty members to participate in scientific conferences, especially those that involve community members.

The current study has contributed important findings to the literature, but future studies could improve upon our results. For example, additional research could examine the following areas:

- 1. This research could be replicated using qualitative methods such as observations, interviews, or other documentation to obtain an even more complete view of the challenges associated with implementing TQM.
- 2. The participants in this study were limited to academic staff. However, future studies might also include non-teaching participants and students at universities.
- 3. The findings of the study strongly suggested that TQM should be intentionally implemented and deeply instilled within all teaching and non-teaching staff working in an organization. Doing so creates an organizational culture that is committed to fulfilling the needs of clients (i.e., students and the labor market); providing continuous improvement; ensuring collective participation; and gauging the appropriateness of all academic, administrative, and financial activities in accordance with the approaches of TQM. When it is wholly manifested and internalized, the organization encourages continuous learning and amplifies its potential to demonstrate increasingly improved performance. Future studies might look into how higher education institutions could plant the seed of TQM in their organizations to make it the norm in the educational culture.
- 4. There is a need for further studies that highlight the variables that may hold back the implementation of TQM in Jordan HEIs.
- 5. Future studies could focus on TQM in universities across the world that have had success in implementing it. The results could then be compared to those of TQM within Jordan in order to improve upon practices and find areas of common practice.

All in all, significant change is required in the education process because it must take into account various political, economic, social, and international changes. Moreover, the proficiency, knowledge, and quality of services offered by universities play important roles in economic development. As a result, countries around the globe recognize the critical need to create and implement effective educational development strategies. TQM is a critical component of educational institutions that shapes their success and ensures that the expectations of students, administrators, parents, the community, and other stakeholders in the educational process are met.

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