

Study of employee's readiness in physical education offices of Ardabil and East and West Azerbaijan provinces in accepting TQM

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Abstract: The Purpose of study was survey of employee's readiness working in physical education offices in West & East Azerbaijan and Ardebil provinces in accepting Total Quality Management. Sample was 125 Employees (45 female and 80 male) that working in the physical education offices of the three mentioned provinces. For response to the study's questions, used the Spinwall (1994) questionnaire including ten variables of TQM and each variable contain of four questions. The questionnaire was distributed among the Employees and then the collected data was analyzed. Statistically method for analysis of data was qualitative methods, t-test, one way ANOVA and Kruskal-Wallis test ($P \leq 0/05$). Result showed that the officials from three selected provinces with the TQM acceptance mean of 128.422 have a high level of readiness. Other result is that: No significant difference between the amount of readiness in accepting TQM among males and females ($P \leq 0/05$). Also significant difference between the different working experiences of employees in officials in accepting the TQM is had ($P \leq 0/05$). There is no significant difference between the officials regarding their educational degree in accepting the TQM as well as there is no significant difference between the officials in accepting different variables of TQM, except for Continuous improvement.

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Introduction

In today's environment whose prominent feature is complexity mixed with lots of changes, organizations helplessly revise most of the aspect and procedures dominant on the manner doing their main activity, not only because of competition, but also due to their own existence. In this complex and variegated environment, the organization, for its existence, should start the changes from within itself to them.

Due to the difficulties involved in bringing changes to the environment, the organization should start the changes from within itself.

Therefore, selection of the direction of changes is very important and the organization should take into account the variegated need of the customers, strategies, long term objectives and other effective factors (2).

Total quality management of one philosophical attitude is a management that. Nowadays, has established its own place with a growing speed in societies and has placed its based on the attention to the needs and initiative of customers, ways of presentation of services and enhancement of quality.

Attention to the quality and attempt to permanent improving play fundamental and important role in

quality development. In recent years, enhancement organizations of quality management have changed rapidly.

In last two decades, the simple inspection activities are completed and replaced by quality control methods. The guarantee of the quality has been established and the way of the evolution has been selected, now permanent quality enhancement and total quality management have replaced with all of them. In recent years, TQM has changed into an effective and important domain in governmental and commercial organization in developing and industrial countries.

As a manner of the fact, in the last decade of 1989, 1990, TQM can be considered as philosophical management that has been executed by organizations and industries managements all over the world.

Zeitz, Mittal & McAulay stated that TQM gradually has changed into the constant aspect in others word most of the Institutions and industries in cultural computational and variable environments have paid their attention to it and provided the means for reinforcement of such plans.

In Iran also investigations related to TQM have been started from two decades ago and continued up

to now. For instance Lamei has done an investigation named evaluation of readiness of an organization for application of TQM in universities of medical sciences that the results of that investigations demonstrated that from 31 universities of medical sciences, fifteen universities, 48% had readiness between 50 to 55 percent and 26% had readiness between 60 to 70 percent and rest of universities had more than 70% readiness for the application TQM.

The research by Siyavashi that investigates the amount of the readiness of the faculty members of physical education and sport sciences faculties in accepting TQM, demonstrated that faculty members with average 122/73 for accepting TQM in faculties of physical education and sport sciences had higher levels of readiness and there was a significant difference between managers and faculty members and also between members faculty members with different scientific levels in accepting TQM. More than 40 percent of the faculty members of physical education and sport sciences faculties recognize students as customers of teaching (15, 10).

Nowadays, one of the theories changing management which is guarantor of services improvement, enhancement of plans is the observance of boundaries of TQM, that application of its instructions lead to changes in national and international organizations. In addition, application of TQM in structures, sport organizations, sport sciences faculty members, sport's federations, committees and gyms in different countries has led to changes in their physical and athletic educations(4).

According to some evidence, the increase of the cost in physical education organizations, in other words, allocation of more resource to these organizations in comparison with less output and products is because of lack of quality in physical education system and its activities (1).

Studies show that in Iran, physical education offices are not in an acceptable level in quantitative and qualitative terms, and there are various difficulties in their way that has lead to the decrease in their levels (8).

The aim of total quality management is the process of best applications of employees and concentration on the needs of customers that will lead to decrease in costs, more profit, satisfaction of customers need, and observance of qualitative standards (15). Total quality management, neither is a magical treatment nor is immediately applicable thing (4).

Hart and Mossfield have suggested in qualitative studies that organizations for accepting TQM must be investigated, before executing the TQM (15).The process of readiness of the organization gives information about the purpose and quality of an

organization and leads people to support and participate in TQM.

With this regards, the researcher is determined to demonstrate to what extent the employees of all the physical education organizations of provinces of East, West Azerbaijan and Ardabil have the required readiness for accepting TQM in terms of thought, reflection, inclination and point of view, and which factor among this available factors in this reflection, is most valued according to this people's perspective.

And finally to determine to difference between the amount of readiness of employees and some of their characteristics all physical education organizations of provinces in accepting TQM reflection and by recognizing available fields to present suggestions to eliminate the available obstacles in the application of TQM in all of the physical education organization s of the selected provinces, so that this study could be an introduction for executing TQM and for the improvement of qualitative services of all of the physical education organization of provinces in future.

By considering of important role of human resource in implementation of total quality management and Chadwick's statement in terms of an importance of employee's perspective behavior determines the quality, therefore, before the execution of TQM, we should get information about the perspectives and pay attention to employee's readiness, environmental condition and culture of organization (6).

With regard to importance of the duties of all physical education organizations of provinces, the most important which includes: development and extension of sport and training of physical power and reinforcement healthy spirit in province's peoples, educating and training of exercise tutor throughout the province, establishing, equipping and controlling the gyms, providing and regulating the quantitative and qualitative developmental programs of physical education in province et cetera. And with regard to the available qualitative difficulties in this section, the researcher is determined to study the readiness of the employees in all of the physical education organizations of selected provinces.

In spite the vast researches done in the TQM field in industry, there hasn't been such researches in this field, in general, in physical education organization in the country and in particular, in the whole physical education organizations in the provinces. Due to this gap, investigation of this study in the whole physical education organizations of the selected provinces seems essential.

Method of study

This research is descriptive-analytic and survey, that its data collection is done Field Study. This study

is done for investigating, describing, and understanding the nature of conditions. Statically society of this study includes all the employees in the whole physical education organizations of the provinces of East and West Azerbaijan and Ardabil, who were engaged in doing their responsibilities in the mentioned provinces during the years 2010-2011.

The numbers of employees in the whole physical education organizations in the mentioned provinces are 157 participants. The sample in this study is equal to statically society. Due to the not returning the sent questionnaires and eliminating the problematic ones, the final number of the sample includes 125 participants.

Table 1- Number of members of statically society by separating the whole physical education organization of place of service.

Place of service	Male	Female	Total	Number of questionnaire sent	Number of questionnaires returned
East Azerbaijan	39	21	60	60	41
West Azerbaijan	33	19	52	52	47
Ardabil	35	10	45	45	37
Total	107	50	157	157	125

In this study, the information is gathered through the use of total quality management Spinwal questionnaire (1994). This questionnaire included 2 parts. First part of the questionnaire included information and individualistic characteristics such as gender, number of experience, educational field and place of work in the whole organization. The second part included ten questions with four components of TQM.

The researcher has measured the opinions of employees of the whole physical education organizations of the selective provinces in the form of questions in on to one correspondence with the ten feature TQM and according to continuum of four Likert scale, more agree(4), agree(3), disagree(2), and more disagree(1).

There are different ways for measuring the validity of questionnaire that is whether it really measures what it is supposed to measure or not. In order to determine the content validity of the questionnaire, and determine its appropriateness for the whole physical educations organization of the selected provinces, the questionnaire was distributed among the number of professors in physical education faculties, then the existing vague points were eliminated with the help of ten eminent professors of universities of Tehran, Guilan and Shomal-Amol.

It is worthy saying that in 2005 Mohammad Siyavashi had used questionnaire in a study named the study of readiness of members of scientific committee of faculties of physical education and athletic sciences all over the word in accepting TQM and had reported its reliability 0.86.

For measuring the reliability of the questionnaire, the questionnaire in a pilot study was distributed a number of employees of the whole physical educations organization of the selected provinces, after gathering, adding up and calculating coefficient correlation (Cronbach's alpha) of the earlier questionnaire with the use of SPSS software(version 18) , the coefficient correlation of 0.84 was obtained.

Results of the study

Most of the employees of the whole physical education organizations of the selected provinces were gender male (68%), level of the education were bachelor (58.3%), educational field were non physical education (66.4%), and background service of 1 to 5 years (68%).

In order to determine the normality of the distribution of data the Kolmogorov–Smirnov test (K–S test) was used. According to this test, the distribution is normal whenever the amount of P is more than critical point (0.05).According to table 4 the result of the K–S test revealed that the obtained data had normal distribution.

Table 2. Frequency distribution in term of gender and level of education.

Characteristics of the individual		Number	Percent
Gender	Male	85	68
	Female	40	32
Level of education	Diploma	25	20
	Associate degree	31	8.24
	Bachelor's Degree	58	4.46
	Above of bachelor	11	8.8

Table 3- Frequency distribution in term of background services and place of service

Characteristics of the individual		Number	Percent
Background services	1 to 5 years	41	32.8
	6 to 10 years	24	19.2
	11 to 15 years	24	19.2
	16 to 20 years	15	12
	21 to 25 years	15	12
	26 to 30 years	6	4.8
Place of service	East Azerbaijan	41	32.8
	West Azerbaijan	47	37.6
	Ardabil	37	29.6

Table 4- Result of the Kolmogorov–Smirnov test

	Leadership commitment	Continuous Improvement	Offers System	Customer orientation	Quality objectives	Use of Information	Evaluation And Feedback	Education	Quality groups	Teamwork	Readiness for Acceptance
Z	1.602	1.877	1.847	1.721	1.835	1.886	2.527	1.432	2.742	1.426	0.779
Sig	*0.012	*0.003	*0.002	*0.005	*0.002	*0.002	*0.000	*0.003	*0.000	*0.034	0.578

* $P \leq 0.05$ is significant

Determining the difference between the amount of readiness of employees of the whole physical education organizations of the provinces in accepting TQM reflection with some of their

features. In order to compare the average of readiness in accepting TQM among males and females of the research society and according to the normal distribution of data the independent T –test was used.

Table 5 – Comparing the readiness in accepting TQM between males and females in research society

Variables	Groups	Number	M±SD	Degrees of freedom	Significance level
the readiness in accepting	male	85	127.94 ±9.83	123	0.429
	female	40	129.45 ±10.10		

According to the information of table and according to the level of observed significant in the independent T-test, there is not any significant difference between the amount of readiness of females in comparison with males in research society in accepting TQM.

In order to compare average of readiness in accepting TQM among employees with different levels of education and according to the normal distribution of data, one-way analysis of variance test was used.

Table 6 – Comparing the readiness in accepting TQM between employees according to their level of education

Variables	Groups	M±SD	Degrees of freedom	Significance level
The readiness in accepting TQM	Diploma	130.56 ± 10.39	3	0.274
	Associate degree	128.61 ± 8.96		
	Bachelor's Degree	126.79 ± 10.24		
	Above of bachelor	131.61 ± 8.88		

In order to compare the average of readiness in accepting TQM between employees of the whole physical education organizations in the selected

provinces and according to the normal distribution of data, the one-way analysis of variance test was used.

Table 7 – Comparing the readiness in accepting TQM between employees whole of the physical education of the selected provinces according to the place of their work.

Variables	Groups	M±SD	Degrees of freedom	Significance level
The readiness in accepting TQM	East Azerbaijan	128.09 ±9.84	2	0.431
	West Azerbaijan	129.80 ±9.52		
	Ardabil	127.02 ±10/47		

According to the result of the ANOVA test, that is revealed in the table 7. There was not significant difference between employees of the whole of the physical education of the selected provinces according to the place of their work.

In order to compare the average of readiness in accepting TQM between employees with different background services and according to the normal distribution of data, one-way ANOVA was used.

Table 8 – Comparing the readiness in accepting TQM between employees according to their background services

Variables	Groups	M±SD	Degrees of freedom	Significance level
The readiness in accepting TQM	1 to 5 years	128.60 ±9.94	5	*0.044
	6 to 10 years	123.20 ±9.43		
	11 to 15 years	132.41±9.74		
	16 to 20 years	128.13±9.34		
	21 to 25 years	130.40 ±10.59		
	26 to 30 years	127.83 ±4.21		

* $P \leq 0.05$ is significant

According to ANOVA test, and also according to the results of the table 8 it was revealed that the difference between employees in the whole physical education organizations of selected provinces in accepting TQM is significant($p=0.044$). The employees with 11 to 15 years of experience had more readiness for accepting TQM.

Comparing the readiness in accepting different items of TQM between the employees of the whole of the physical education organizations of selected provinces.

For testing this hypothesis, average of the readiness in accepting every components of TQM, from employees of all the physical education organizations of every selected province was compared with other provinces by Kruskal–Wallis test. The result demonstrated that in readiness for accepting different items of TQM, only in accepting the constant improvement items, there was a significant difference between employees of the whole of the physical education of the selected provinces.

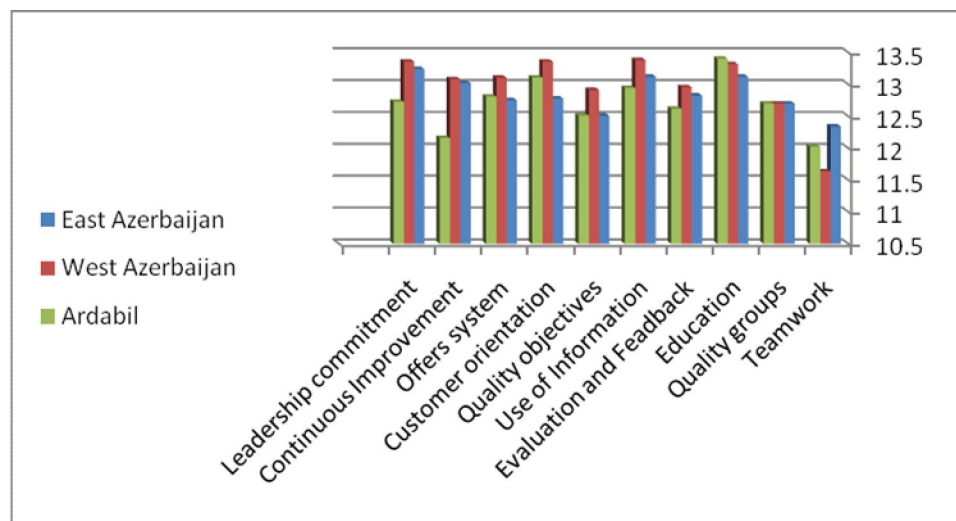
**Figure 1** – comparing the average of the readiness in accepting every components of TQM from the employees of selected provinces.

Table 9- result of the Kruskal–Wallis test for comparing the readiness in accepting components of TQM

	Leadership commitment	Continuous Improvement	Offers System	Customer orientation	Quality objectives	Use of Information	Evaluation And Feedback	Education	Quality groups	Teamwork
Chi square	3.740	7.900	1.661	2.719	3.249	3.146	2.939	0.822	2.40	3.46
DF	2	2	2	2	2	2	2	2	2	2
Significant	0.154	*0.019	0.436	0.257	0.193	0.207	0.230	0.643	0.300	0.177

*P ≤ 0.05 is significant

In order to measure the condition of overall amount of readiness in accepting TQM, and with regard to number of questions of the questionnaire which were 40, the lower score for readiness of individuals was 40 and the highest score was 160. According to distributions of the scores, 80 and lower than that in terms of amount of readiness in accepting TQM were considered as low levels and the score between 80.1 to 120 were in an intermediate level and 120.1 and higher than that were evaluated as higher level.

Every individual's score on the questionnaire reveals his/her amount of readiness in accepting TQM from the employees of the whole physical education organizations of the selected provinces, the average of the whole people in the research society computed and represented in the table below.

Table 10– average readiness of the employees of the whole of that physical education of the selected provinces an accepting TQM.

Office work	Mean
East Azerbaijan	128.09
West Azerbaijan	129.80
Ardabil	127.02
Total	128.42

Overall, the employees of the all of the physical education organizations of the East, West Azerbaijan and Ardabil provinces gained the mean score of 128.42 from the maximum score of 160, so they had high readiness for accepting TQM.

According to the high amount of readiness of the physical education organizations of the selected provinces in accepting TQM and with regard to the result of the Atchison's study which shows that the higher readiness, the organization has in accepting TQM, the higher its success will be in executing TQM.

We can draw this conclusion that probably the execution of TQM in physical education organizations of the selected provinces will be successful and the probability of success will be higher with the help of training.

Discussion and conclusion

With regard to the findings of the research, there was not any significant difference between average females and males in accepting TQM, and this issue can be justified like this, women in today's society can play important roles in various activities equal to men due to the self confidence that they have gained and also due to the changes in men's opinions about women's social activities.

In recent years, the number of women who succeeded in gaining higher education certificates has increased in society. It is because of that females can have more cooperation in social activities and this issue has decreased their distance with men in doing different industrial and educational activities. Also the studies of the Ledbetter (1995), Ghasemzadeh (2003), Salehipour (2005) and Siyavashi (2005) demonstrate that there is not any significant difference between female's and males views about TQM (9, 12, 13, 15).

According to the findings of the study, there is a significant difference between the amount of readiness of employees of physical education organization (offices) on the selected provinces and different experience in accepting TQM.

The employees with 11 to 15 years of experience had the most average (132.41), and employees with 6 to 10 year of experience had the least average (132.20).

The result revealed that the employees with less work experience showed more resistance in comparison with other employees. All of these resistances are because of special reasons. Sometimes these reasons are not explicit and obvious. As a result, no attempts have been done for investigating its roots and eliminating them.

Generally speaking, possible resistance reasons of this group of employees in accepting TQM can be mentioned as follows:

- Lack of awareness about the necessity of the execution of changes
- Culture and previous function of the organization
- Being worried about the job security
- Getting accustomed to the available methods and being afraid of doing the intangible methods
- Being afraid losing power and control
- Opposing with technology, new equipments and new work process due to the increase in an unwanted duties and increase in responsibilities
- Lack of skills and experiences required to the management of process systems, and new technology
- Opposing new methods

Also, according to the obtained results about the average obtained score of the individuals with regard to work background experience, there is a possibility that naturally, the in experienced people due to increase in their age show more resistance against the changes. Finally, less experience and aging will lead to less readiness in accepting TQM.

This result corresponds to Clarck results (1996), Clarck investigated the relationship between the perceptions of members of scientific committee, resistance against changes and function of an organization. He find that the older the members. The more resistance they'll show against changes.

Beckanal found in his research that the employees with less work experience had more perceptions about the change and showed less resistance against the change which do not correspond to the findings of this study (13).

Asadi et al, (2005) find in their study that physical education managers with 6 to 10 years of experience had the most efficiency, the managers with more than 10 years of experience had very good efficiency and managers with less than 5 years of experience had an intermediate level of efficiency (5).

As demonstrated in this study, there isn't any significant difference between the amount of readiness of employees in physical educations offices of the selected provinces and different levels of educations in accepting TQM.

The employees with master's degrees had the most average (131.61) and employees with bachelor's degrees had least average 126.79.

With regard to the decrease of readiness in accepting TQM, in employees with bachelor's

degrees, there is a possibility that decrease of their readiness average is influenced by their educational field.

Asadi et al find in their study that managers of physical education faculties and groups who had passed the specialized courses of sport management, had excellent efficiency scores and the managers who had only passed the teaching management courses, had good and intermediate efficiency scores and finally 851 of the managers who hadn't passed any teaching management courses had weak and intermediate efficiency scores.

Moreover, the managers with PHD degrees had the most open thoughts in confronting with the situations.

According to the findings of the study, there is a significant difference between employees in physical education offices of East, West Azerbaijan and Ardabil provinces in accepting only improvement item of TQM. Teaching with the average score of 13.28 and teamwork with the average score of 11.98 have the most and the least average points among the items of accepting TQM, respectively.

Due to the importance of the educating employees, most of the studies in TQM field, have pointed to it.

Tim Newman(2001) in his study, mentions educating the employees as one of the seven main factors of TQM and Dominguez emphasizes it in season 6 and 13 (3, 14). in the research, Kimerling found that right education can decrease 3.3 percent of the costs (7). Hosseinpour (1998), in a research named "investigating the execution of principles of TQM in offices and teaching and training centers by using the ideas of experts and managers and the relation of executing this method with their job satisfaction" found that teaching is one the main elements for executing TQM (11).The result of Ghasemzadeh demonstrated that among the six items of teaching, cooperation, leadership, constant improvement customer orientation and evaluation, attention to customer and teaching have the most and the least amount of influence in people's perception against TQM, respectively, which don't correspond to this research (7).

References

1. Amiran.H(1992) **Cooperative management by quality control groups**, Azin Amin publisher, First published in 1992.
2. Ansari.m(2007), **investigating the important new tools of management in twenty one century**, The third national conference of performance management, Islamic republic of Iran 15-16 may 2007.

3. Asad,M.R, Hamidi.M (2004), **investigation of the condition of total quality management in physical education organization of the country**, journal of Olympics,NO24.
4. Asad,M.R, Hamidi.M, Asadi,H (2003), **The relationship between TQM and efficiency fields of athletic organization of the country**, journal of Olympics, NO14.
5. Asadi.H, Hashemi.A, and Moharramzadeh.M (2001), analysis of efficiency of management of the faculties and physical education grapes of Iran, journal of Harakat,NO11.
6. Bicas,c, sanial(1995), **innovation in university management**, Translated by Miri.V and Nave Ebrahim,a(2000), First edition, Tehran: Institute for Research and Planning in Higher Education.
7. De Guzman,A.B., Torres,J.R., 2004, **The university of Santo Tomas Viewed from the lens TQM: implication to Total Quality Education, Asia pacific Education Review** .University of santa Tamas Philippnes.5(1), pp.88-99.
8. Ejtehadi,M.(1994), **investigation of strength and weaknesses in higher education system of Islamic republic of Iran**, journal of research and programming in higher education, 7th year,NO7.
9. GhasemZadeh, A., (2003), **Analytical assessment of readiness to accept TQM managers Shiraz University**, Master's thesis, University of Shiraz.
10. Golparvar, M., and Samani S,H,R (2009), **The direct and indirect relationship between total quality management (TQM) and perceived procedural justice**, organizational commitment, Journal of Humanities Science, Volume 13, N0 2.
11. Hussainpour, SH, (1997), **The Office of Education specialists and administrators' attitudes toward the implementation of Total Quality Management**, Master's thesis learning management science, Alzahra university.
12. Ledbetter,J,T.,1995, **hange in perception of empowerment in the technical institutes in Georgia as a result of TQM**, 56(9).
13. Salehipour, S., (2004), **issue of the acceptance of Total Quality Management in the Faculty of Teacher Education**, Educational Administration Master's thesis, University of Tarbiate Moallem.
14. Saraiva,M .,Reise, E., 2006, **The paradigm of the total quality management in the Portuguese higher education** .ISCTE-portugal.
15. Siyavashi, M., (2005), **Preparation of Physical Education and Sports Science faculty members across the country adopting the total quality management**, B.Sc. thesis, University of Guilan.

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