

Reasons for accepting Total Quality Management (TQM) by the managers of physical education organization: a survey in Fars province of I.R.IRAN

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Abstract: This paper sets out the reasons for accepting Total Quality Management (TQM) by the managers of physical education organization of Fars province. Approach / Methodology – this is a descriptive correlation – based paper. The sample Includes 90 managers, assistants and deputy chairman of physical education offices of Fars province. The instrument used in this paper is the Spinwal's (1994) standard questionnaire. The reliability coefficient (Cronbach's α) of this study is about %84. In order to analyze data, Man-Whitney's non-parametric test and Spearman's correlation test are used. Findings - The paper makes clear that the managers of physical education are highly ready to accept TQM and also there is a meaningful relation between men's and women's acceptance of TQM. Conclusion – The managers of physical education organization of Fars province are highly ready to accept TQM.

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1) Introduction

Total Quality Management (TQM) mixes the clarity of objectives and the revolutionary procedure together and contains all working aspects, including classification of the customer's needs and evaluation of their satisfaction level. *Quality* means to satisfy the customers' needs and *management* means to develop and preserve organizations' capacity with the aim of improving quality continually. It is worth considering that TQM refers to the new attitude of organization toward the human resource. TQM's programs are based on a dynamic organizational culture by which the field of persons' efforts for improving quality is prepared. In this regard, one of the main goals of TQM is to develop human resource (Olia&Jamali,2009). Challenges caused by global competition have encouraged the organizations to improve their service quality and capability. The basics of TQM have been globally accepted as the main instrument for improving organizational performance, identity and how to face with market challenges (Tavakoli, 2002).

Today, most of organizations have promoted the quality of their services in order to stabilize their position. TQM is the key factor used by organizations in solving problems (Boon, 2007). In the modern

world, competition is the best tool for preserving service quality. In reality, TQM refers to how to manage the future (Foroozanfarzieh, 1992). The current era is called "the unpredictable changes period". The that the organizations must recognize their internal abilities and strong and weak points in order to face the environmental treats and to use probable opportunities (Kristin, 2004). The management problems are quite complicated so that it is impossible to solve them simply. Therefore, the organizations should try to satisfy the needs of the modern society (Sarmadi, Shalbah, 2007). Total quality management is not simply achievable. It is a new method by which the old structures of the management are rebuilt. Through long – term obligation, unity and training, TQM can reach the best goals some of which are not simply achievable (Ahmadi, Karami, 2007).

Physical education plays a main role in securing mental and physical health of the people. Therefore, most of developed countries have established organizations in which there are many experts who present suitable services to the people. Such countries have invested in physical education sector (Gitlow, Prancevicius, 2008). Therefore, it is necessary to change the management methods of physical education offices and to use more dynamic

intellectual systems instead of traditional ones. Today, TQM is of great importance so that most of developed countries have implemented it in many sectors of their organizations, including industrial and financial ones. Although most countries have implemented TQM in their physical education organizations for many years, our country has paid no attention to such management method. Regarding the key role of sport and physical education in social development and with respect to the influence of such management method in improvement of managers' and employees' work trends, it is necessary to investigate the output of using TQM in physical education system. The study, sought to resolve the main questions of: To what extent can the managers accept TQM? Is there any difference between males' and females' acceptance of TQM? Is there any difference between the managers' job experience and the acceptance of TQM? Generally, this is to say that all categories of TQM including continual improvement, leadership, customer convenience, group working, evaluation, educational degree and training are paid attention by the managers of physical education offices of Fars.

2) Review of literature

During recent years, total quality management system has increasingly changed. In 1924, Dr. Walter, A. shewartz produced a system named statistical process control (SPC) system in laboratory of Bell company by which variances of production systems were measured. SPC is one of the main tools of TQM used for adapting and recognizing work procedures. In 1946, after the World War II, Japan established nonprofit organization and Japanese Union of Scientists and Engineers (Phusavat & Kanchana, 2007). In this year, the American Quality control society was also established (Edward Deming, a physician who worked at agriculture sector and research office of America) was obliged to train SPC and quality control systems to the employees of American Defense Industries (Siavashi, 2007).

In 1950, JUSE invited Deming to train SPC and quality control systems to the Japanese trainees. In 1951, JUSE introduced *Deming Reward* for the best quality control in order to increase the quality of Japanese industry. Dr. Fig bam published his book "Total Quality Control" in 1951. In 1954, Joseph Jordan emphasized on the implementation of quality control program and drawing the customer's satisfaction in industrial society of Japan (Sharifzadeh, 2000).

Regarding the influence of environmental condition on the use of TQM, Packrat (1995) argues that in order to implement TQM, at first, environment

al conditions must be investigated and then, some factors including conception and expectations of the employees and the managers should be evaluated. Hart & Misfiled (1998) suggest before TQM implementation, the organizations' ability for accepting TQM should be measured. The process of organizational preparation gives the organization some information about the quality and goals and causes persons to support TQM. Acheson's (1995) study shows that the more organization's preparation, the better TQM process will be implemented (Sayadi, Tooranlu, Rezajani, 2008).

3) Methodology

This is a descriptive study in which data was gathered using square model. This study is aimed to investigate the identity and current condition of TQM process. The samples include 120 managers and consultants of Fars physical education offices.

Table (1) Classification of the sample's positions

positions	number	Sent questionnaires	Returned questionnaires
General manager of physical education of Fars	1	1	1
Assistants	4	4	4
Managers	20	20	20
Assistants of offices of Fars	12	12	12
Boards of Fars province	35	35	26
Deputy of chiefs	38	38	27
total	120	120	90

4) Data gathering

This is a questionnaire – based study in which the Spinal's questionnaire has been used. This questionnaire contains two parts. The first part includes some personal information about position, gender, scientific degree, educational field, work place and work experience. The second includes 10 four- choice elements of TQM. The managers' and consultants' viewpoints were assessed based on Liker's criterion included choices (a) completely agree, (b) agree, (c) disagree and (d) completely disagree.

5) Statistical method

Descriptive statistic methods were used to determine the mean index and standard deviation. In order to answer the research questions, the Man-Whitney's non – parametric test and the Spearman's test were used for analyzing data and graphs, respectively.

6) Findings

From the results of Kolmogrov – Smirnov’s test, it becomes clear that distribution of gathered data was unnatural, because $P < 0.05$.

To what extent can the managers accept TQM?

Table (2) includes the degree of TQM acceptance by the managers of Fars physical education offices.

Table (2): The degree of TQM acceptance

statistic	variable	number	Minimum	Maximum	Average	Standard deviation
TQM	Male	38	106.00	124.00	117.11	3.44
	Female	52	102.00	128.00	116.66	5.95
	Total	90	102.00	124.00	116.85	5.02

Table 3 depicts the average of TQM acceptance by the women compared to the men and all subjects.

The comparison between TQM acceptance by men and women

With respect to the results of Kolmogorov – Smirnov’s test, the Man-Whitney’s test was used to compare the degrees of TQM acceptance by men and women.

Table(3): The measured variables relative to both men and women

statistic	variable	Number	Average	Sum
TQM	Male	38	45.09	1713.50
	Female	52	45.80	2381.50

Table (4): The measured statistics

statistic	Man-Whitney	W	Z	Meaningfulness
TQM	972.50	1713.50	-0.127	0.899

The results of Man-Whitney’s test show that there is no difference between the degrees of TQM acceptance by women and men ($P < 0/05$).

The relation between TQM acceptance and work experience, educational degree and education field

The Spearman’s correlation coefficient test was used for determining the relation between TQM acceptance and work experience, educational degree and education field. The results are shown in table 5.

Table (5) the correlation between TQM and work experience, educational degree and education field

Variable-statistic -group		work experience	Educational degree	Education field	
TQM	Male	Correlation coefficient	-0.016	-0.085	0.036
		Meaningfulness	0.922	0.613	0.832
		number	38	38	37
	Female	Correlation coefficient	0.098	0.001	0.098
		Meaningfulness	0.493	0.992	0.672
		number	51	52	52
	Total	Correlation coefficient	0.101	-0.021	-0.038
		Meaningfulness	0.346	0.844	0.722

	number	89	90	89
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From the results of Spearman’s correlation coefficient test, this is to say that there is no meaningful relationship between TQM and work experience, educational degree and education field.

Table (6): Total statistics of 10 elements of TQM

Statistic-variable	Total average	Average		Average mean	
		Female	Male	Female	Male
Team working	11.52	11.76	11.34	49.71	42.42
Quality group	9.97	9.89	10.03	43.19	46.61
training	12.59	12.34	12.76	39.46	49.91
Evaluation and feedback	12.07	12.03	12.09	45.17	45.74
Using data	11.76	11.95	11.63	48.63	43.22
Qualitative objectives	13.39	13.34	13.43	44.66	46.12
Customer service	12.03	11.95	12.09	43.76	46.77
Suggestion system	10.50	10.52	10.48	46.64	44.66
Continual improvement	12.03	11.87	12.15	43.08	47.27
leadership commitment	10.34	10.59	10.16	51.05	41.08

7) Conclusion

After analyzing research hypotheses, it became clear that the managers of physical education offices of Fars province are highly inclined to accept TQM.

Atchison’s (1995) study shows that the more organization’s preparation, the better TQM process will be implemented (Sanaey, Banwet, Karunes, 2004). Heart and Misfield (1996) argue that the organization’s ability to accept TQM should be examined before its implementation. It is worth arguing that the organization’s preparedness causes the persons to achieve more information about TQM and accept it better. Regarding the importance of the employee's attitude toward TQM, Chadwick (1997) states that the employee’s attitudes and behaviors have influence on the quality. Therefore, it is better to pay attention to the employee’s attitudes, environmental conditions and organizational culture before TQM implementation (Soltani, 2001). In a survey aiming to evaluate the attitudes of the managers of university of Shiraz toward the TQM acceptance, it became clear that the managers' attitude is highly positive (Ghasemzadeh, 2002).

Michele Elaine (1998) studied TQM process in the schools of Minnesota. Results showed that there is a difference between the attitudes of the managers and the employees toward the TQM implementation. It is worth noting that the manger accept TQM implementation better when they are prepared to accept it. Bass’s (1995) study emphasizes on the human values, no anxiety, not being affiliated with others and paying attention to the persons’ attitudes

by the manager. Tower (1993) argues that it is necessary to coordinate all organizational factors in order to improve organizational performance and solve the problems. Weeks (1995) found that how the personal belief acts as an effective factor in management. He concluded that the high managers' belief is the main factor affecting on the success of TQM (Siavashi, 2007).

Professor Juan argues that about %80 of the quantitative problems are raised from the management weakness and %20 from the employees' weakness (Soltani, 2006). With respect to the findings, it is believed that TQM basics have influence on the organization's performance. It is worth considering that TQM is a culture, not a tool. Therefore, it is necessary to use it in the physical education organizations. In sum, TQM can be considered as a procedure for reaching higher quality and better goals. This study agrees with the studies by Ghasimzadeh(2003), NoohPisheh (2005), Pasand (2005) and Siadati (2007). This is to say that the mentioned researchers have studies TQM relative to the samples included training organizations. Some other researchers have called their studied organization industrial training organization because of undesirable participation of the persons, bad quality of the services, lack of working motivation, dissimilarity of TQM and related organization, lack of competition at working place and inefficiency of TQM in such organizations.

Note that the men's and women's attitudes are different only from one perspective (i.e. training element). This is because the women play main cultural roles (e.g. teaching in universities) along with the men.

Compared to the past, women have had graduate study during recent years. Moreover, they have participated in social activities more than before. Rabin (2002) concluded that there is no difference between men and women from some perspectives including personal ability, competition, motivation, leadership, learning and attitude (Robbins,2003). Ledger (1995) revealed that there is no meaningful difference between men's and women's attitudes toward TQM. Evidences show that there is no direct relationship between accepting TQM and factors such as work experience, educational degree and education field (Ghasemizadeh,2002). The evidences come from this study show that compared to the men, the women accept elements such as group working, use of data, suggestions system, leadership commitment and total quality management better. On the other hand, the men accept elements training quality, evaluation and feedback, qualitative goals, customer service and continual improvement better than women. It is worth noting that among the men and

the women, the highest (13.39) and the lowest (9.97) scores were related to the elements qualitative goals and quality groups, respectively.

Ghasemizadeh concluded that among six elements training, participation, leadership, continual improvement, customer service and evaluation, the two elements customer service and training had the highest and lowest influence, respectively on the person's attitudes toward TQM. In this study, the managers didn't pay attention to quality groups, because those who want to establish to quality group should have different ideas and various education fields. From the viewpoint of Edward Doming, the lack of quality groups influences negatively on the management (Jafari, 2008).

From the results, the managers are averagely at the age of 40 and 72.2 of them has married. About 50% of them have B.A degree with less than 5 work experience. All subjects were agreeing with TQM implementation in physical education office.

In general, this is to say that TQM implementation prepares desirable conditions proportional to the organizational performance and development. Therefore, it is necessary the country's physical education organization to implement TQM project in order to improve the capabilities of the managers and the employees with the aim of developing sport culture. It is necessary the employees to have a TQM workshop.

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