

Does Practicing Total Quality Management Affect Employee Job Satisfaction in Saudi Arabian Organizations?

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Abstract

While extensive research has been done on total quality management (TQM) practices, few studies have investigated their effect on employee job satisfaction, particularly in Saudi Arabian organizations. Therefore, this study seeks to determine the impact of TQM practices on employee job satisfaction in private firm in Saudi Arabia. A quantitative approach with self-administered survey methodology technique was used to distribute a pre validated pre piloted questionnaire to a 350 employees holding varying positions within the organization at a large Saudi Telecom company between September and December 2013 with response rate 74.5%. The statistical data analysis method used was SPSS program Version 15.0. The results showed that practicing TQM has a significant positive effect on employee satisfaction. Organizational culture was found to be a dominant TQM practice which has a significant impact on improving levels of job satisfaction. The multiple regression analysis which supported the proposed model was found to be creditable and sound. The study finds that Saudi Arabians organizations would benefit from implementing TQM programs to impact employee job satisfaction levels and thus improve quality and productivity.

Keywords: Job satisfaction, Total quality management (TQM), Private organization, Saudi Arabia.

1. Introduction

Total quality management (TQM) is a concept used by organizations to maintain competitive advantage and ensure overall effectiveness (Al Nasser et al., 2013; Chang et al., 2010). Improving quality has been found to increase market shares and returns on investments (Philips et al., 1983), positively affect areas of strategic performance (Al-Tarawneh, 2010) and lower manufacturing costs (Chin & Saudah, 2011).

According to TQM philosophy, most problems that arise in organizations are a result of management decisions and the systems management creates and implement. While employees may have valid and informed ideas about how an organization should operate, their potential input is often curtailed by an instilled managerial culture. The philosophy of TQM, however, recognizes that employees have a valuable contribution to make to their respective organizations and stresses employee input in the form of group meetings, discussions, and planning. The exchange of ideas and concepts leads to increased employee morale and job satisfaction (Dose, 1997), which is associated with positive organizational outcomes (Gray et al., 2003). While the major research focus on TQM in the past has been on organizational performance and customer satisfaction (Hsu & Chen, 2013), studies on the effect of TQM on employee satisfaction, however, have been sparse and slow to develop. However, as Chang et al. (2010) point out, employee satisfaction represents value to a company, which in turn improves service quality and productivity. TQM programs generated significant productivity gains in the long run, although setting the associated systems in place did not result in significant productivity change prior to winning awards (Ananth et al., 2013).

While the concept of quality is hardly unfamiliar to the Saudi private business sector, it is only recently that organizations have begun considering a Total Quality Management approach. Many Saudi organizations have acknowledged the need for an alternative approach to achieving quality and encouraging change and development in their companies. However, TQM as a philosophy was developed for a different business and social culture and environment (Mehdi et al., 2014), and thus can be difficult for managers of Saudi organizations to adopt and implement. As it has been determined that employee involvement and satisfaction plays a large part in business productivity, it is important for managers in Saudi organizations to begin to implement the TQM philosophy in their day to day dealings.

1.1 Job Satisfaction

A central factor of an organization's growth and success is employee job satisfaction (Chin & Saudah, 2011).



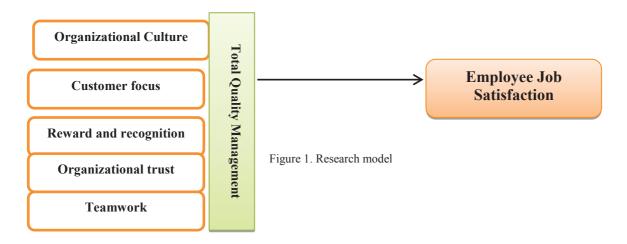
Brief and Weiss (2011) define job satisfaction as the emotional and intellectual fulfillment one receives from one's job While, according to Locke (1976), a person derives emotional gratification from their job as long as their job values are met and satisfied, this satisfaction is largely determined by an organization's management culture and style, by how much empowerment and input employees have, their autonomy within a firm and their involvement in planning and implementation. All these elements have a major influence on employee contentedness and satisfaction. However, in spite of the acknowledgement of the link between TQM principles, employee satisfaction and customer satisfaction (Al Nasser et al., 2013), few studies have been done that examine this connection. This might be because a comprehensive study of TQM would be a long-term project. Therefore, as Morrow (1997) suggests, researchers and practitioners would do well to focus on one area of TQM, such as the effect of TQM on job satisfaction.

As noted, while there has been little research done on the relationship between employee satisfaction and customer satisfaction, this is particularly true in the context of employee satisfaction within organizations in Saudi Arabia. In order to fill the gap in the research, this paper examines the possible benefits of adopting the TQM philosophy on Saudi Arabian organizations, and in particular the effect of implementing TQM principles on Saudi employees. Among the questions that this research addresses is whether TQM influences employee satisfaction in Saudi organizations and if TQM strategies have an evident effect on employee perception and job satisfaction.

This paper identifies five key TQM elements as practices used by organizations to increase employee job satisfaction: teamwork, customer focus, reward and recognition, organizational culture and organizational trust. According to Dale (1999), within TQM concepts, organizational culture, the determined set of values and guiding beliefs within an organization, is important in terms of organizational excellence and for ensuring job satisfaction. Culture plays an important role in effecting employees' thoughts, feelings, interactions and performance (Yusof & Ali, 2000). There are cultural differences between western organizations where TQM was initially implemented and Saudi Arabian organizations which might make the adoption of TQM difficult. The cultural differences should be expanded on in regards to Saudi Arabian businesses for readers unfamiliar with the Saudi organizations (Abbas, 2013). Reward and recognition is defined in terms of increased salaries, bonuses, and promotions based on based on yearly performance reviews and as means of publically rewarding employees for their performance (Juran & Gryna, 1993). Philips et al. (1983) point out that customer focus is measured by the degree to which an organization satisfactorily meets customers' needs and expectation. Teamwork, according to Noorliza and Zainal (2000), refers to the amount of autonomy an organization gives its employees on all levels and to what extent they encourage teamwork. This leads to the principle of organization trust where a company recognizes employees' abilities and capabilities and trusts them to make changes and implement procedures based on their experience (Hsu & Chen, 2013).

2. Framework Model

In order to examine how TQM principles effect employee satisfaction within an organization, we developed a theoretical TQM model which can be used to focus on job satisfaction of employees at a large Saudi Telecom company. In figure 1 below, the independent variables of TQM principles and the dependent variable of employee job satisfaction as the dependent variable are shown in the research model.





The research model demonstrates that implementing TQM practices can have a significant positive influence on the job satisfaction of employees working at a large telecom company in Saudi Arabia. Therefore, the following hypothesis can be derived:

H1: The implementation of TQM practices can have a positive significant impact on employee job satisfaction within Saudi organizations

3. Methods

In the present study, a quantitative approach was adopted using self-administered survey methodology technique. A pre-validated pre-piloted questionnaire with five-point Likert scale was used ranging from (1) "strongly disagree" to (5) "strongly agree" adapted from the literature (Zhang et al., 2000; Lau & Idres, 2001; Wright & Cropanzano, 1998). The target population of the study was a mix of employees at a large Saudi Telecom company. Based on a convenience sampling method, questionnaires were sent to a total of 350 employees holding varying positions within the organization and collected between September and December 2013 with response rate 74.5%. A convenience sample of 15% (n=25) of the questionnaire was piloted on a target sample for the purpose of Cronbach's coefficient alpha test efficiency which assesses the reliability of the questionnaire questions. The result was a satisfactory 0.901, as 0.70 is the cut off value for being acceptable according to Hair et al. (2006). The resulting data from the pilot test was excluded from the final analysis. The SPSS program (Version 15.00) was used for statistical data analysis. Correlation studies determined the link between the dependent and independent variables. The significance of the independent and dependent variables were confirmed by multiple regression analyses.

4. Results

Exploratory Factor Analysis was used at the beginning to identify the constructs dimension to select the higher factor loadings and to validate the underlying structure of TQM practices. The factor analyses were diagnosed and found to have met the necessary statistical assumptions, as indicated by their high KMO measure. Likewise, as shown by their high KMO measure, the factor analyses met the necessary statistical assumptions. A loading of 0.5 or greater on the factor and 0.35 or lower on the other factors were considered. We can also see that the Bartlett's test of sphericity was significant; <0.050. According to Hair et al. (2006) and Abbas et al. (2013), a five factor model may adequately represent the data and the result of the analysis may be considered satisfactory. The results of the factor analysis are summarized in Table I. Similarly, factor analysis was conducted to see the dimensionality of the independent variable (job satisfaction) and the result of the analysis was considered satisfactory.

After completing the EFA, internal consistency reliability to test uni-dimensionality was evaluated using Cronbach's alpha. Each construct showed acceptable Cronbach's alpha readings above 0.60 (Nunnally, 1978). On the basis of the data presented in the table, given that the Cronbach alpha value is >0.80 (Nunnally, 1978), there is sufficient evidence to suggest that the reliability of the constructs was acceptable.

Prior to the multiple linear regression analysis, correlation coefficient analysis was used to describe the association between TQM practices with employee job satisfaction, as shown in Table 2. These results indicate that a significant correlation was observed between all of the tested relationships between these parameters. As the correlation matrix shows, TQM practices were positively and moderately linked to employee job satisfaction. Between the independent variables (TQM practices) and the dependent variable (job satisfaction), the correlation coefficients were less than 0.9, showing that the data was not affected by a collinearity problem (Hair et al., 2006). The findings showed that the respondents who had a greater awareness of TQM practices exhibited more job satisfaction.



Table 1. Exploratory Factor Analysis and Reliability levels of instruments

Variables	Instruments items	Factor loading	KMO	α	
Customer focus	Item 1	Item 1 0.847			
	Item 2	0.736		0.811	
	Item 3	0.698		0.811	
	Item 4				
Organizational trust	Item 1	0.701			
	Item 2	0.872		0.709	
	Item 3	0.903		0.798	
	Item 4	0.884			
Teamwork	Item 1	0.811			
	Item 2	0.789			
	Item 3	0.779	0.077	0.891	
	Item 4	0.725	0.877		
	Item 5	0.698			
Reward and recognition	Item 1	0.801			
	Item 2	Item 2 0.816			
	Item 3	0.741		0.814	
	Item 4	0.722	1		
	Item 5	0.737			
Organizational culture	Item 1	0.832			
	Item 2	0.804 0.752		0.828	
	Item 3				
	Item 4	0.688		1	
Job satisfaction	Item 1	0.632			
	Item 2	0.775			
	Item 3		0.819	0.743	
	Item 4				
	Item 5	0.698			

Table 2. Correlations of Constructs (n=261)

Correlations	Mean	Std. Div.	1	2	3	4	5
Customer focus	4.02	0.61					
Organizational trust	3.98	0.58	0.55*				
Teamwork	3.44	0.53	0.52*	0.58*			
Reward and recognition	3.62	0.77	0.55*	0.63*	0.69*		
Organizational culture	3.99	0.69	0.44*	0.41*	0.54*	0.64*	
Job satisfaction for employees	4.00	0.62	0.43*	0.49*	0.52*	0.58*	0.60*

^{**} Correlation is significant at the p < 0.01 levels (2-tailed).

Multiple linear regressions were carried out in order to better comprehend the link between TQM practices and employee job satisfaction. The results are summarized in Table III. The results indicate that all the relationships were found to be significant at either the p<0.001 or p<0.05 level. Thus, the statistically significant relationship between TQM practices and employee job satisfaction was shown.

Table 3. Multiple linear regression analysis between TQM practices and employee job satisfaction

Independent variables	Collinearity statistic		Employees' job satisfaction			
	Tolerance	VIF	Beta	t-value	Sig.	Result
Reward and recognition	2.511	0.411	0.126	1.299	0.04*	Accepted
Organizational trust	1.667	0.389	0.193	1.610	0.03*	Accepted
Teamwork	2.432	0.401	0.298	3.477	0.01*	Accepted
Customer focus	1.821	0.515	0.198	2.892	0.02*	Accepted
Organizational culture	1.590	0.498	0.382	4.998	0.00**	Accepted

Overall model F = 29.98; p < 0.01; $R^2 = 0.502$; Adjusted $R^2 = 0.479$; Durbin-Watson test = 1.879



In order to test autocorrelation, the Durbin-Watson test was performed. The Durbin-Watson of 1.879 falls between the acceptable range (1.5 < D < 2.5) showing no autocorrelation problem in the data and, hence, non-autocorrelation. To test multicollinearity among the dependent variables, collinearity statistics were calculated. These calculations showed that tolerance values were between 2.511 and 1.590. A review of the tolerance statistics presented in the coefficients analysis indicates that all independent variables (IV) were tolerated in the model with the tolerance statistics exceeding 0.1. Hair at al. (2006) explained that when tolerance value for a given IV is less than 0.1, multicollinearity is a distinct problem. Therefore, collinearity is not a serious problem in the data of this study. Variation Inflation Factors (VIF) is all less than 10. Based on the findings of this study, we can conclude that employment of TQM concepts can effectively account for 50.2% in employee job satisfaction, which partially supports H1.

5. Discussion

This study revealed that there is a strong link between organizational culture as a dominant TQM practice and job satisfaction. Since employees recognize that organizational culture has a major impact on their satisfaction, the findings support that there is more job satisfaction and work-related outcomes are higher when the organizational culture is monitored and better TQM practices are developed. The findings support Keng et al.'s (2005) assertions that organizational culture not only guides and directs an employee's behavior but also the interaction and affective reactions within an organization. According to Al Nasser et al. (2013), organizational culture encourages employees to attain satisfaction levels. In considering the relationship between teamwork and employee satisfaction, this study found that when there is a positive correlation between teamwork and employee satisfaction, a supportive relationship between team members develops which facilitates the work (Keng et al., 2005). Chin & Saudah (2011)

posited that working as a team leads to better employee attitudes, while, according to Hsu & Chen (2013) partnerships between workers and managers are a major factor in assuring successful organizations. The importance of customer focus was another important consideration according to the research findings, in that it was found to positively influence employee job satisfaction. According to Mehdi et al. (2014), Keng et al. (2005) and Chapman and Al-Khawaldeh (2000), the implementation of TQM lends itself to the optimal use of people and resources by managers, which translates to production of goods valued by customers; thus, a strong relationship between employees and customers ensues.

According to the study, organizational trust also has a positive influence on employee job satisfaction. Therefore, according to the principles of TQM, in order to establish support and trust, executive and management teams should practice employee empowerment and have confidence in their employees' capabilities. This finding is consistent with Keng et al. (2005), Noorliza and Zainal (2000), and Flatherty and Pappas (2000) who found that employee job satisfaction is improved when employees feel that their organizations trust their capabilities. This study also revealed that reward and recognition have a positive effect on employee satisfaction. This concurs with the study done by Brief and Weiss (2011) who found greater amount of employee satisfaction when the employees' efforts are rewarded by the organization. However, in contrast, Keng et al. (2005) found no noticeable correlation between reward and recognition and employee job satisfaction. The results of our study could be due to the rewards emphasized, such as opportunities for advancement, salary increases, and acknowledgement of good performance (Hsu & Chen, 2013), all of which are major factors that could affect employee satisfaction.

6. Conclusion

The result of this study showed that practicing TQM has a significant positive effect on employee satisfaction. Moreover, organizational culture was found to be a dominant TQM practice, which has a significant impact on improving levels of job satisfaction. The multiple regression analysis which supported the proposed model was found to be creditable and sound. As well, this study confirmed the findings of previous studies which reported higher job satisfaction within organizations when TQM practices were implemented. Thus, the adoption of TQM programs has a positive influence on employee satisfaction, thereby satisfying human resource management goals.

The findings of the study have important implications for practitioners and policy-makers in developing countries. The use of a Saudi organization proved to be useful as an illustration of the extent of TQM effects on job satisfaction. A firm interested in implementing and identifying TQM efforts could employ the model to identify changes in employee job satisfaction. The findings could encourage top management to review their



TQM programs, with a view to the training needs of employees within a business. The result would lead to better employee performance, higher level of employee job satisfaction, increased commitment to the organization.

7. Limitations

Despite these encouraging results, there are several limitations to this study. First of all, it may lack generalizability, as the sample was selected conveniently and the response rate was 74.5 %. As the study was conducted only in Riyadh, it does not necessarily reflect the attitude of consumers in other cities in Saudi Arabia; subsequent research could collect data from other places. Also, while every effort was made to limit the social bias that could influence the employees' responses to the questionnaires, nevertheless, bias cannot be completely excluded in answers given by the respondents.

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