# EFFECT OF SOFT TQM PRACTICES ON JOB SATISFACTION AND ORGANIZATIONAL COMMITMENT OF HEALTHCARE PROFESSIONALS

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#### ABSTRACT

This study aims to measure the effect of soft TQM practices on job satisfaction and organizational commitment of healthcare professionals. Data were collected from three ISO 9000:2008 certified hospitals located in two northern cities of Pakistan. Out of 800 self-administered questionnaires distributed to doctors and nurses, 530 filled questionnaires were returned. Results were drawn by applying reliability, correlation, and linear regression analyses. Study proves that soft TQM practices exert a positive effect on organizational commitment and job satisfaction of healthcare professionals. However, the study fails to find any significant impact of top management commitment, leadership, and customer focus on job satisfaction. Contrary to previous work, the study proves the negative effect of customer focus on organizational commitment. Hospital administration should be committed to successfully implement the TQM practices for the improvement of organizational commitment and job satisfaction of healthcare professionals. This study can be considered as a pioneer work that examined the relationship of TQM practices with job satisfaction and organizational commitment of healthcare professionals in Pakistan.

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#### 1. INTRODUCTION

To remain profitable, sustainable, and to hold market share, nowadays businesses face a highly challenging and competitive environment that requires better management strategies. Under such circumstances, quality management enhances employee motivation and performance (Anil & Satish, 2019), process innovation (Prajogo & Sohal, 2003), product innovation (Prajogo & Sohal, 2003), product quality (Anil & Satish, 2019; Prajogo & Sohal, 2003) and customer satisfaction (Anil & Satish, 2019; Bouranta, Psomas, Suarez-Barraza, & Jaca, 2019) while decreases wastage and rework (Antony, Leung, Knowles, & Gosh, 2002). Even employees' perceptions of organizational quality efforts exert a significant positive effect on their affective reactions like organizational commitment, job satisfaction, and turnover intentions (Gardner & Carlopio, 1996). As a management philosophy, Total Quality Management (TQM) has grown to be the most chosen approach for productivity and quality improvement of organizations. Effective implementation of TQM practices leads to improvement in innovative (Anil & Satish, 2019; Hoang, Igel, & Laosirihongthong, 2006), quality (Hassan, Mukhtar, Qureshi, & Sharif, 2012), business (Arumugam, Chang, Ooi, & Teh, 2009; Hassan et al., 2012), financial (Anil & Satish, 2019) and overall (Androwis, Sweis, Tarhini, Moarefi, & Amiri, 2018; Bou & Beltrán, 2005; Munizu, 2013) performance of organizations. Application of TQM in service organizations can potentially impact service improvement, value co-creation, and innovation (Polese, Vesci, Troisi, & Grimaldi, 2019). Furthermore, TQM plays an essential role in providing a competitive edge to firms (Alotaibi, Yusoff, & Islam, 2013; Antony et al., 2002; Munizu, 2013). Thus, TQM is widely acknowledged as being a fundamental determinant for the growth and survival of the organizations, being it a service or manufacturing one. (Addis, Dvivedi, & Beshah, 2019; Androwis et al., 2019; Sharma & Gadenne, 2002).

TQM encourages and motivates employees to contribute to the betterment of organizations by participating in planning, discussion and group meetings. Taking employees' opinions and exchanging ideas boosts up employee morale and job satisfaction (Chaichi & Chaichi, 2015). Research proves positive effects of quality (Trivellas & Santouridis, 2014), TQM (Chang, Chiu & Chen, 2010; Prajogo & Cooper, 2010) and TQM practices (Ooi, Arumugam, Teh, & Chong, 2008) on job satisfaction of employees. Basically, TQM focuses on the quality of product and its success depends crucially on change in attitudes and activities of employees. And job satisfaction enhances employees' loyalty (Arsic, Nikolic, Zivkovic, Urosevic, & Mihajlovic, 2012), organizational commitment (De

Menezes, 2012), and job performance (De Menezes, 2012; Khan, Malik, & Janjua, 2019; Prajogo & Cooper, 2010); and lowers employee absenteeism (De Menezes, 2012). It is, therefore, evident that employee job satisfaction is imperative not only in its own right but it also affects the relationship between strategies of quality management and other outcomes desired by employees and organizations (De Menezes, 2012).

Theory suggests that TQM practices improve employees' organizational commitment (Ooi, Lee, Chong, & Lin, 2013), job satisfaction (Arsic et al., 2012; Ooi et al., 2013), job involvement (Ooi et al., 2013; Sarathy, 2013), employee motivation (Mosadeghrad, 2006), organizational citizenship behavior (Mendes, Carlos & Lourenco, 2014), work-life quality (Ooi et al., 2013), loyalty (Arsic et al., 2012; Chang et al., 2010), career satisfaction (Ooi et al., 2013) and lower down turnover (Butler, 1996) thus ultimately enhance organizational effectiveness. TQM practices improve employees' work associated attitudes like organizational commitment (Khan et al., 2019; Mendes et al., 2014). It is observed that TQM practices has a positive effect on organizational commitment that ultimately improves organizational citizenship behavior (Mendes et al., 2014), employee performance (Khan et al., 2019) and business excellence (Tutuncu & Kucukusta, 2007). To maximize output, customer satisfaction, organizational performance and to achieve competitive advantage there is a need to manage and align TQM practices to get maximum levels of satisfaction and commitment of employees.

Since the focus of healthcare organizations is patient satisfaction, and consistency in healthcare delivery, they are very well suited for TQM's process orientation (Sommer & Merritt, 1994). And examining the effect of TQM implementation in healthcare industry is totally worthwhile because of positive impact it can make on its internal and external customers (Jackson, 2001). In Pakistan, studies have been undertaken to investigate the relationships of TQM with job satisfaction (Khan et al., 2019), affective commitment (Khan et al., 2019), employee performance (Iqbal & Asrar-ul-Haq, 2018; Khan et al., 2019), supply chain management (Ameer, 2018), organizational performance (Hassan et al., 2012; Iqbal et al., 2017; Ismail, Khurram, & Jafri, 2011) and organizational development (Sajjad & Amjad, 2011). Researchers have studied the effect of TQM practices in manufacturing (Hassan et al., 2012) and service sector (Iqbal et al., 2017) as well. Within service sector, research has been conducted in various industries like logistics (Ameer, 2018), software houses (Iqbal & Asrar-ul-Haq, 2018), telecom (Sajjad & Amjad, 2011), higher education (Asif, Awan, Khan, & Ahmad, 2011) and healthcare (Irfan, Ijaz, Kee, & Awan, 2012; Irfan, Kee, Qureshi, & Hussain, 2014; Ismail et al., 2011; Maqbool & Din, 2019).

In health care sector, Irfan et al. (2014) identified critical success factors of TQM for hospitals. Irfan et al. (2012) explored the role of TQM practices in improving operational performance of public hospitals while Ismail et al. (2011) examined the performance of public sector hospitals after the application of TQM strategies. Maqbool and Din (2019) investigated mediating role of TQM for the relationships of human resource management and information technology infrastructure with performance of public hospitals. Although, effect of TQM practices on employee attitudes like organizational commitment and job satisfaction (Karia & Asaari, 2006; Ooi et al., 2008) has been previously studied in the developed world but the association and impact of TQM practices on job attitudes has remained less explored in Pakistan. Therefore, current study aims to measure the effects of TQM practices on organizational commitment and job satisfaction of healthcare professionals in Pakistan.

#### 2. LITERATURE REVIEW

In mid 1980s, TQM theory was developed in Japan and was popularized by the works of Ishikawa, Deming and Juran. There are various terminologies which have been used to symbolize the general concept of TQM, like; total quality control, total quality improvement, continuous quality improvement, and total quality leadership. However, all these terminologies used the three basic components or factors of TQM, which are quality, continuous improvement and customer satisfaction. Main objectives of TQM are to establish a management system and to create corporate culture to enhance customer satisfaction by offering high quality products and services which shows the result of continuous improvement of organizational processes (Waldman, 1994). It is asserted that in order to gain maximum benefit from TQM practices they must be applied in a holistic manner rather than in bits and pieces. Actually, the word 'total' in acronym TQM represents the cohesiveness and interdependence among various elements of TQM which needs a firm commitment from organization and employees to accept these integrated practices (Prajogo & Cooper, 2010).

#### 2.1 TQM practices

Quality management comprises of soft and hard elements. The hard side covers a range of tools and techniques required to improve production processes such as statistical techniques, just-in-time inventory and quality function development while the soft side relates with people factors like leadership, empowerment, teamwork and culture.

Promotion and up-gradation of hard aspects of TQM are not the only factors which are responsible for the improvement in performance, it is the ultimate responsibility of people to make quality happen (Rahman & Bullock, 2005). The soft elements which are concerned with leadership issues could have critical importance over the already mentioned hard elements (Ismail et al., 2011). It is also evident that a TQM strategy, when implemented through and in coordination of a human resource strategy that encourages the involvement and commitment of all employees with quality objectives, gives better results (Bou & Beltrán, 2005). And analysis of failures of TQM organizations highlights the negligence of the soft side of quality management (Zeng, Phan, & Matsui, 2015). Extant literature proves that people-related or soft TQM practices positively influence quality performance (Abdullah, Uli, & Tari, 2008), organizational performance (Abdullah et al., 2008) and job satisfaction of employees (Prajogo & Cooper, 2010). Sila and Ebrahimpour (2002) in their work based on 76 quality management surveys conducted from 1989 to 2000 identified seven practices as having the highest coverage in quality management literature. Amongst the seven practices, current study picks five TQM practices which include leadership and top management commitment, education and training, teamwork, organization culture and customer focus.

#### 2.2 TQM practices and job satisfaction

Job satisfaction is often refers to positive affective responses by an individual employee to his/her job. Generally the factors that determine the job satisfaction at workplace include good relationships with management and colleagues, interesting job, independent work and chances for development (Cass, Siu, Faragher, & Cooper, 2003). Highly satisfied employees show higher intentions to participate in continuous improvement efforts of the company (Jurburg, Viles, Tanco, Mateo, & Lleo, 2019). Quality programs bring significant improvement in various dimensions of job satisfaction like management and supervision, organizational policies, task requirements and working conditions (Mosadeghrad, 2014a). Therefore, TQM practices are found to be important influencers of individuals' job satisfaction (Arsic et al., 2012). A study conducted in Pakistan also concludes that the TQM practices has a positive effect on job satisfaction of the higher educational institutes' employees (Khan et al., 2019). Implementation of TQM practices improve employees' job satisfaction and thus modify the working environment (Guimaraes, 1996; Ooi et al., 2008). However, De Menezes' (2012) work could not prove a positive link of quality management with employee job satisfaction. And surprisingly, some TQM practices like employee empowerment (Arsic et al., 2012), training (Chang et al., 2010) and teamwork (Addis et al., 2019) were found to be negatively associated with job satisfaction.

# 2.3 TMQ practices and organizational commitment

An employee's loyalty towards its organization is referred as organizational commitment. There are other variables as well which are connected to the same concept of organizational commitment, like; desire to maintain membership, degree of goal and value congruency with the organization, and willingness to exert effort on behalf of the organization (Bateman & Strasser, 1984). TOM needs a particular and specific approach to human resource management that demands employee commitment with organizational goals. It is not restricted to securing their compliance through direct supervision and incentives (Bou & Beltrán, 2005). Basically, committed employees potentially find their performance facilitated by receiving timely, clear and accurate information from their superiors (Allen & Brady, 1997). Moreover, organizational commitment is an antecedent of organizational citizenship behavior which in turn significally influcences employee performance (Mendes et al., 2014). Organizational commitment acts as an antecedent of quality management (Chansatitporn, Pobkeeree, Nongkhai, & Sangkijporn, 2019) and an effect of TQM practices (Chih & Lin, 2009; Guimaraes, 1996) as well. Even employees' perceptions of organizational quality efforts have positive effect on their organizational commitment (Gardner & Carlopio, 1996). It is evident that a positive execution of TQM strategies improves the employees' motivation to perform better, and the likelihood of their staying with the company for longer period of time. Mendes et al. (2014) reveals a positive relationship of TQM with organizational commitment of employees. Khan et al.'s (2019) work conducted in Pakistan also proves positive impact of TQM practices on affective commitment of employees working in higher educational institutes.

## 2.3.1 Leadership role and commitment of top management

Leadership and commitment of senior management is a distinguishing feature of organizations in which TQM has been implemented successfully (Abdullah et al., 2008; Chansatitporn et al., 2019; Iqbal et al., 2017; Mosadeghrad, 2006). It is so important because leaders are responsible for providing vision, investing in people, defining goals, development of a learning context and developing relationships with customers (Alotaibi et al., 2013; Mosadeghrad, 2014a). Besides this, effective leadership also improves quality of work life (Ooi et al., 2013). Top management commitment increases job satisfaction of manufacturing employees (Addis et al., 2019; Arsic et al., 2012; Arunachalam & Palanichamy, 2017). Moreover, management leadership is a positive predictor of satisfaction of government employees (Chang et al., 2010). However, a study fails to find any significant effect on job satisfaction of production workers exerted by of leadership and top management commitment (Ooi et al., 2008). Similarly,

employees who perceive more support from the leadership were significantly more committed to their organizations (Chih & Lin, 2009). A study conducted in Indian manufacturing firms proves a positive effect of top management commitment on organizational commitment of employees (Arunachalam & Palanichamy, 2017).

#### 2.3.2 Education and training

Efficiency of quality programs undertaken in an organization can be established by the training initiatives that emphasize quality management (Mathews et al., 2001). And investment in training and education programs for employees is of much importance for the success of TQM (Mosadeghrad, 2006; Zhang, Waszink, & Wijngaard, 2000). Proper education and training helps organizations to narrow the gap between management perception and actual specifications of the TQM model (Mosadeghrad, 2014b). Training and development is important for the job satisfaction of nurses and for the perfect execution of their nursing activities (Araujo & Figueiredo, 2019). Extant literature proves that training and education positively influence job satisfaction of employees (Arsic et al., 2012; Arunachalam & Palanichamy, 2017; Bouranta et al., 2019; Karia & Asaari, 2006). Somehow, Ooi et al.'s (2008) work fails to show a significant impact of education and training on job satisfaction of production workers. On the other hand Chang et al.'s (2010) study proves a negative effect of employee training on satisfaction of government employees in Taiwan. Training and education of employees also results in increased commitment with the organization (Karia & Asaari, 2006). Arunachalam & Palanichamy's (2017) work reveals a positive effect of employee training on commitment of employees. A study conducted with nursing staff also proves significant positive effect of training and development on their positive attitudes like organizational commitment (Araujo & Figueiredo, 2019).

#### 2.3.3 Customer focus

Strength of quality management implementation in a company lies in customer focus (Arumugam et al., 2009). And customer oriented process management ensures success (Iqbal et al., 2017) and continued existence of the organization (Kanji, 1990). Customer focus is found to exert a positive influence on market orientation (Samat, Ramayah, & Saad, 2006), quality of service (Samat et al., 2006) and employees' quality of work life (Ooi et al., 2013). Somwhow, various studies conducted with manufacturing employees fail to prove a significant effect of customer focus on job satisfaction (Addis et al., 2019; Arunachalam & Palanichamy, 2017; Karia & Asaari, 2006; Ooi et al. 2008). Research reveals a positive effect of customer focus on organizational commitment of employees (Chih & Lin, 2009). And increased levels of customer focus exert a direct effect on employees' tendency to stay with the same organization (Ooi, Veeri, Yin, & Vellapan, 2006). However, studies conducted in manufacturing firms fail to prove significant influence of customer focus on organizational commitment (Arunachalam & Palanichamy, 2017) and affective commitment (Ooi, Safa, & Arumugam, 2006) of employees.

#### 2.3.4 Teamwork

Teamwork is a significant TQM practice and remains an important and crucial factor for the successful execution of TQM plans (Mosadeghrad, 2014b). Karia & Asaari's (2006) work proves positive effect of empowerment and team work on job satisfaction of employees. Research reveals that teamwork enhances job satisfaction of employee in manufacturing companies (Arsic et al., 2012; Ooi et al., 2008). Teamwork is found a positive predictor of satisfaction of government employees as well (Chang et al., 2010). Surprisingly, few studies prove negative effect of teamwork on job satisfaction of employees working in manufacturing firms in India (Arunachalam & Palanichamy, 2017) and Ethiopia (Addis et al., 2019). Literature reports that teamwork results in increased level of employees' commitment with the organization (Chih & Lin, 2009; Karia & Asaari, 2006). A study conducted in Malaysia also reveals significant positive effect of teamwork on affective commitment (Ooi et al., 2006). On the other hand, Arunachalam and Palanichamy's (2017) work proves a negative effect of teamwork on organizational commitment.

#### 2.3.5 Organization culture

TQM practices are more probable to be successful when organization culture is compatible with the values and basic assumptions planned by the TQM regulation (Kujala & Lillrank, 2004; Mosadeghrad, 2006). In reality, an organization's culture has an essential impact on circumstances inside the organization (Guerra, Martinez, Munduate, & Medina, 2005). Organization's culture makes an influential impact for determining the performance of employees in the company (Litzky et al., 2006). The empirical studies proves that organization culture has a positive and significant effect on job satisfaction of production workers (Ooi et al., 2008). Organization culture improves emotional connections amongst employees and positively affects their involvement in their commitments with the organization (Hackman & Wageman, 1995). The success of TQM practices including organization culture exerts a strong influence on employees' organizational commitment (Mosadeghrad, 2006). On the basis of the above cited literature, the following hypotheses have been developed:

H<sub>1</sub>: There is a positive effect of leadership and top management commitment (H1a), education and training (H1b), customer focus (H1c), teamwork (H1d), organization culture (H1e) on job satisfaction of healthcare professionals

H<sub>2</sub>: There is a positive effect of leadership and top management commitment (H1a), education and training (H1b), customer focus (H1c), teamwork (H1d), organization culture (H1e) on organizational commitment of healthcare professionals

### 3. RESEARCH METHODOLOGY

This study measures the effect of soft TQM practices on employees' job satisfaction and organizational commitment. Population of the study comprises of healthcare professionals working in ISO certified hospitals in Pakistan. Healthcare professionals include medical and nursing staff of the hospital. Sample was drawn from three ISO certified hospitals located in two northern cities of Pakistan wherein 1825 health care professionals were employed. Pilot study based on 45 respondents confirmed the understandability of questions and the reliability of the scales. In order to collect the data 700 questionnaires, in total, were circulated. At the end a total of 530 questionnaires were returned, which were completely filled and could be sued for the sake of analysis. Thus response rate in this case was around 75.7%. Data collection was done through a self-administered questionnaire which was consisted of 34 items. Scales used by Ooi et al. (2008) were employed to measure leadership and top management commitment (four items), education and training (four items), customer focus (three items), team work (four items) and organization culture (four items). For the measurement of job satisfaction, Wright and Cropanzano (1998) five-items scale was used, which was also utilized by Ooi et al. (2008) in a similar kind of quantitative study. Organizational commitment was measured through a ten-items scale developed by Mowday, Steers and Porter (1979). Responses were recorded on a five-point Likert-type scale against all the items.

#### 4. RESULTS AND DISCUSSION

Age of the respondents ranges from 21 to 58 years. Table 1 reveals that majority of the respondents are females (52.8%), married (77.2 %), medical professionals (74.3%) and have permanent jobs (95.8%).

**Table 1.** Profile of the respondents

Variables	Category	Count	Percentage
Gender	Male	250	47.2
	Female	280	52.8
Marital Status	Married	409	77.2
	Unmarried	121	22.8
Nature of Duty	Medical	394	74.3
•	Nursing	136	25.7
Job Status	Permanent	508	95.8
	Contract	22	4.2
Education	BSc	148	27.9
	MBBS	250	47.2
	FCPS	132	24.9
Foreign Degree	Yes	151	28.5
2 2	No	379	71.5

In order to verify the reliability of the questionnaire scales, Cronbach's Alpha score was calculated. Table 2 shows that alpha score for all the measures is above 0.7 which proves that the measures used are reliable (Bakemen and Gottman, 1986). The Table also exhibits mean scores and correlation coefficients among all the variables. It shows that all correlation coefficients are significant (p < 0.01) and have positive relationships.

Table 2. N	lean, a	ılpha	scores	and	corre	lation	analyses
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Variables	Mean	Alpha	LMC	ED	CF	TM	OC	JS	OGC
LMC	3.34	0.90	1						
ED	3.74	0.77	0.408**	1					
CF	3.45	0.84	0.501**	0.594**	1				
TM	4.03	0.72	0.271**	0.523**	0.516**	1			
OC	3.88	0.76	0.489**	0.574**	0.753**	0.670**	1		
JS	3.81	0.73	0.305**	0.402**	0.421**	0.457**	0.470**	1	
OGC	3.99	0.84	0.396**	0.470***	0.404**	0.590***	0.549**	0.424**	1

<sup>\*\*.</sup> Significant at the 0.01 level (2-tailed)

To assess the effects of all the independent variables on both the dependent variables - job satisfaction and organizational commitment - two separate regression analyses were performed. Table 3 shows the effects of all the TQM practices on job satisfaction.

**Table 3.** Regression of TQM practices on job satisfaction

Table 5. Regression of 1 QWI practices on job satisfaction	J11	
Variables	Beta	Sig.
Constant	1.672	0.000
Leadership and Top management commitment	0.083	0.060
Education and Training	0.113	0.022
Customer Focus	0.080	0.185
Team Work	0.237	0.000
Organizational Culture	0.146	0.028
$R^2$	0.282	
Adjusted R <sup>2</sup>	0.275	
F-Statistics	41.062	0.000

Results reveal that model is significant (F=41.062) which implies that TQM practices positively influence job satisfaction of healthcare professionals. This is in line with previously conducted studies (Sommer & Merritt, 1994; Guimaraes, 1996; Ooi et al., 2008). A similar study conducted in Pakistan also proves positive effect of TQM policies on job satisfaction in the employees of higher education sector (Khan et al., 2019). R2 value depicts that 28.2% variation in job satisfaction is described by the corresponding variations in all the five TMQ practices. The result is consistent with a similar study (Ooi et al., 2008) conducted with production workers which proves 32.8% variation in job satisfaction due to the changes in the same five TQM practices. Regression analysis proves significant and positive effects of education and training ( $\beta$  = .113,  $\rho$  < .05), team work ( $\beta$  = .237,  $\rho$  < .01) and organization culture ( $\beta$  = .146,  $\rho$  < .05) on job satisfaction of healthcare professionals. The study finds the greatest effect of team work ( $\beta$  = .237) on job satisfaction. A similar study (Ooi et al., 2008) also proves that teamwork exerts the strongest effect on job satisfaction. Likewise, Karia and Asaari (2006) proved that empowerment and team work is the most significant TQM practice to determine job satisfaction. However, the results do not reveal significant effects of customer focus and leadership & top management commitment on job satisfaction. This shows that hypotheses H1b, H1d and H1e are confirmed while H1a and H1c are not.

Positive effect of education and training is consistent with majority of earlier studies (Arsic et al., 2012; Arunachalam & Palanichamy, 2017; Bouranta et al., 2019; Karia & Asaari, 2006). However, Chang et al. (2010) prove a negative effect of training while Ooi et al. (2008) could not prove a substantial impact of training and education on job satisfaction. Possible reason for contrary result could be different definitions and scales used to measure the variables and the contexts wherein the studies were conducted. For instance, Chang et al.'s (2010) study revealed a negative effect because they investiged the outcome of training on employee satisfaction of government employees in Taiwan. Significant effect of team work on job satisfaction is in line with previous work (Ooi et al, 2008; Chang et al., 2010; Arsic et al., 2012; Karia & Asaari, 2006). Somehow, there are studies which prove negative effect of team work on job satisfaction (Addis et al., 2019; Arunachalam & Palanichamy, 2017). Probable reason for negative effect of teamwork on job satisfaction might be the context of those studies - conducted with production floor workers in large scale manufacturing organizations. Within these studies, work is done extensively on machines that may have rendered the teamwork less important. Current study also proves the positive effect of organization culture on job

satisfaction which confirms the result of Ooi et al. (2008). The study fails to prove a significant effect of leadership and top management commitment which is consistent with Ooi et al.'s (2008) finding. On the contrary some earlier studies have proved positive effect of top management commitment on job satisfaction (Addis et al., 2019; Arsic et al., 2012; Arunachalam & Palanichamy, 2017) and employee satisfaction (Chang et al., 2010). Effect of top management commitment was proved when participants were first-line governmental employees (Chang et al., 2010) or regular shop floor employees in manufacturing firms (Addis et al., 2019; Arsic et al., 2012; Arunachalam & Palanichamy, 2017). The current study does not show significant effect of leadership commitment because it investigates the phenomenon amongst healthcare professionals for whom professional ethics may exert strong influence than the expectations and commitment of top management. The study also fails to find a significant effect of customer focus on job satisfaction which is consistent with some earlier studies (Addis et al., 2019; Arunachalam & Palanichamy, 2017; Karia & Asaari, 2006; Ooi et al., 2008). As, current study was conducted within hospitals where focus on patients' needs may make the situation more stressful for service providers that is why no relationship was established between job satisfaction and customer focus of healthcare professionals.

Table 4 shows the impact of TQM practices on organizational commitment. F value proves that overall model is significant and R2 value depicts that 43.8% of the variation in organizational commitment is explained due to the respective changes in all the five TMQ practices.

**Table 4.** Regression effect of TQM practices on organizational commitment

Variables	Beta	Sig.
Constant	1.373	0.000
Leadership and Top management commitment	0.197	0.000
Education and Training	0.149	0.001
Customer Focus	-0.147	0.006
Team Work	0.390	0.000
Organization Culture	0.216	0.000
$\mathbb{R}^2$	0.438	
Adjusted R <sup>2</sup>	0.432	
F-Statistics	81.534	0.000

The Table reveals significant and positive effect of leadership and top management commitment ( $\beta$  = .197,  $\rho$  < .01), education and training ( $\beta$  = .149,  $\rho$  < .01), organization culture ( $\beta$  = .216,  $\rho$  < .01) and team work ( $\beta$  = .39,  $\rho$  < .01) on organizational commitment. The Table shows the highest beta value for teamwork (.39) which implies that teamwork experts the greatest effect in increasing organizational commitment of healthcare professionals. In the same vein, Karia and Asaari (2006) proved that out of four TQM practice, empowerment and team work exerts the greatest effect on organizational commitment. Current study proves that customer focus exerts a significant negative effect ( $\beta$  = -.147,  $\rho$  < .01) on organizational commitment. This shows that hypotheses H2a, H2b, H2d and H2e are proved while H2c is not.

Current study proves significant positive effects of leadership and top management on organizational commitment which is consistent with similar studies (Chih & Lin, 2009; Arunachalam & Palanichamy, 2017). Similarly, positive effect of education and training has been proved in other studies (Arunachalam & Palanichamy, 2017; Karia & Asaari, 2006). In a similar context, Araujo and Figueiredo (2019) established psositve influence of training and development on organizational commitment of nursing staff. Positive effect of team work on organizational commitment is consistent with previous work (Chih & Lin, 2009; Karia & Asaari, 2006; Ooi et al., 2006). However, Arunachalam & Palanichamy's (2017) work proves a negative effect of teamwork on organizational commitment of manufacturing employees. This study proves negative effect of customer focus on organizational commitment which is not consistent with extant literature. Few earlier studied (Arunachalam & Palanichamy, 2017; Karia & Asaari, 2006) could not prove a significant effect of customer focus on organizational commitment. Participants of the current study are healthcare professionals for whom focus on patients concerns and needs is a stressful work demand which may yield negative effect of customer focus on organizational commitment.

#### 5. IMPLICATIONS

From theoretical standpoint, the current study advances the preceding research in the ssame area conducted on soft TQM practices and job attitudes in developed countries to the job attitudes of healthcare professionals in a developing country. The study proves significant positive effects of soft TQM practices on job satisfaction and commitment which recommends the need of holistic application of TQM practices to improve attitudes of healthcare professionals (Anil & Satish, 2019; Change et al., 2010). The study also recommends hospital administration to

implement soft TQM practices to enhance the job satisfaction and commitment of healthcare professionals (Change et al., 2010). It can also be concluded that if the professionals' satisfaction and commitment touches the higher levels, this may deliver as an advantage over other companies in attracting and holding talented workforce. Teamwork was found as the greatest determinant of satisfaction and organizational commitment which implies that management of the hospitals should firstly focus on teamwork (Ooi et al., 2008). Healthcare is a team focused profession therefore top management should design team based work to improve the quality of healthcare delivery.

#### 6. LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

Reliance on self-reported data, which was collected from a single source – healthcare professionals – could be considered as the first limitation of the study, which may implicate the social desirability bias. Second limitation is the design of the study that is survey research based on cross sectional data that may question the validity of causal relationships ascertained. Data were collected from hospitals so results may not be equally applicable to other service industries. Focus of the study was three ISO certified hospitals from where data were collected. Therefore, generalizability of the results is also limited.

Future researchers should conduct research by collecting data through ability based measures from multiple sources like boss, patients and attendants to counter social desirability and common method variance. To prove causal effects of TQM practices, further studies may be conducted by designing experimental research. Current study presents some results which are not consistent with available literature. To ascertain the exact nature of the relationships, some qualitative research designs may be adopted like case study and ethnography. This study confirms the strong effects of teamwork on employee attitudes but multiple factors in teamwork scenario still remain unexplored. Therefore, future studies may examine the influence of factors like composition of teams, level of trust and knowledge of contribution of coworkers on employee attitudes (Change et al., 2010). The study at hand examined the effects of only soft TQM practices on job satisfaction and organizational commitment. Future studies may investigate the effect of hard or other soft (employee participation, employee empowerment, employment security, reward and recognition) TQM practices on employee attitudes. To validate the results, future studies may be conducted by collecting large sample sizes from other industries like banking, higher education, airline, and retailing.

#### 6.1 Conclusion

The study verifies overall positive effect of TQM practices on job satisfaction (Karia & Asaari, 2006; Khan et al., 2019; Ooi et al., 2008) and organizational commitment (Ooi et al., 2008) of healthcare professionals. The study concludes that out of five TQM practices, teamwork exerts the strongest effect on job satisfaction and organizational commitment of healthcare professionals. This asserts that TQM identifies and highlights the status of team work to facilitate healthcare professionals' capability to work like a team to accomplish a job (Ooi et al., 2008). It also confirms significant positive effects of team work, education and training, and organization culture on job satisfaction. Moreover, the study proves significant and positive effects of leadership and top management commitment, education and training, organization culture and team work on organizational commitment. Surprisingly, this study confirms significant negative effect of customer focus on organizational commitment. For healthcare professionals, customer focus means being considerate for patients' needs and concerns which becomes a stressful work demand. This results in emotional exhaustion of the professionals which ultimately decreases their commitment with the organization. On the same token, current study could not prove any significant effect of customer focus on job satisfaction. The study also concludes no effect of leadership and top management commitment on job satisfaction. Probably, the reason may be the presence of strong professional ethics for healthcare staff. This may cancel the influence of expectations and commitment of top management on job satisfaction.

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