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Relationship between TQM Dimensions and Organizational Performance

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Abstract

The maintenance and enhancement of organizational performance is a challenge for firms as they always try to sustain competitive advantage. This challenge may be convened through the principles of total quality management (TQM). The organizations ought to understand what dimensions of quality management system are more important for performance enhancement. This paper focuses on four TQM dimensions; customer focus, continuous improvement, employee involvement, top management support to identify the most critical quality dimensions as predictor of organizational performance. The results are based on the empirical data collected from a self-administrative survey from 90 organizations (270 managers) of textile sector in Pakistan. Multiple linear regression results reveal that continuous improvement and employee involvement are the most critical dimensions for predicting organizational performance. Whereas, customer focus and top management support has no statistical significance for predicting the performance. The research poses future directions along with implications for theory and practitioners.

Keywords: TQM dimensions; organizational performance; textile sector; Pakistan.

1. Introduction

Despite wide acceptability of TQM as a process intervention to maintain organizational performance, firms are still striving for continuous improvement in order to survive in a competitive and uncertain environment. For this type of organizational development, organizations use socio-technical system intervention as a means to increase productivity and employee satisfaction. Socio-technical system intervention lays emphasis on TQM, quality circles and self-directed work teams; the factors that determine the effectiveness of an organization.

TQM is an important philosophy and gains a high degree of attention in improving organizational effectiveness. It is a set of principles that represents the basis of a

continuous improvement in organization, where the organization is 'continuously improving in each aspect of every process, every level and every activity and could be the best objective at large' (Chang and Sun, 2007). TQM when successfully implemented helps in gaining sustainable competitive advantage (Prajogo and Sohal, 2004). Its guiding principles help the organizations to produce better quality products, reduces costs, increases customer and employee satisfaction and improves organizational performance (Easton and Jarrell, 1998). It is a critical factor that helps to increase the competitiveness of an organization. TQM is a broadly recognized management philosophy, and has become the key slogan as organizations endeavor for competitive advantage in markets (Sureshchandar et al., 2001).

In order to become more customer oriented through quality obsessed strategy, almost all the manufacturing firms adopt quality management principles. Many studies investigate the relationships between TQM and organizational performance. Powell (1995) examines TQM as a potential source of sustainable competitive advantage. Some empirical studies recommend that TQM implementation does have a significant positive effect on organizational performance, as evidenced in the case of small and medium enterprises (Huarng and Chen, 2002; Pinho, 2008), service firms (Agus, 2004; Brah et al., 2002) and across a range of manufacturing firms (Martinez-Costa and Jimenez-Jimenez, 2008). TQM and performance relationship has got much attention since mid-1980s. However, a comprehensive review of scientific literature on TQM and organizational performance reveals that the empirical evidences on the relationship between TQM and organizational performance are mixed (Hung, 2007; Kaynak, 2003; Nair, 2006). Some studies highlight the failure of TQM in enhancing performance. Dooyoung et al., (1998) report an estimate of 60-67% failure rate of quality management. Fredrickson (1984) finds that in highly unsound product market broad decision making in TQM negatively affects performance. These mix findings and the need for an in-depth investigation of the relationship gives us motivation. In order to dig this further, this study focuses on TQM dimensions to find their comparative role for organizational performance. There is scarcity of empirical examination that specifically identifies the critical dimensions of TQM as the predictor of organizational performance.

The local context in a very important sector gives us further motivation to identify the most critical dimensions of TQM in this regard. In contextual perspective, there has been no attempt to critically investigate the relationship of TQM dimensions and organizational performance in textile sector anywhere in the world, let alone Pakistan.

Textile sector is one of the major manufacturing industries of Pakistan, contributing 8.5% to the gross domestic product (GDP), employs over 40% workforce of the total labor force and 52% of the total exports of Pakistan are related to textile products (Government of Pakistan, 2013). That is why the current study particularly focuses on textile manufacturer in Pakistan where the international market is of extreme importance. TQM principles are considered more relevant to manufacturing firms as compared to service firms. Therefore, it is of further significance to investigate the importance of TQM dimensions on performance of this sector that may benefit the practitioners of textile as well as other manufacturing sectors to enhance their performance. This is the *maiden empirically investigation* on TQM-performance relationship in textile sector of a *developing country* like Pakistan.

This study aims at: a) investigating the relationship between TQM dimensions and organizational performance; b) identify which TQM dimension is a major predictor of performance of Pakistan's textile manufacturers. Such an empirical determination on the relationship of TQM dimensions and organizational performance in textile sector of Pakistan is likely to be useful for practitioners and academia. The paper attempts to extend the existing research by identifying critical dimensions of TQM with the help of empirical data to explain TQM-performance relationship.

2. Literature Review and Hypotheses Development

2.1 TQM Dimensions

Some of the researchers identify that the most influential dimensions of TQM are those that are intangible, behavioral and also known as the soft variables consisting of customer focus, human resource focus and leadership as these dimensions are invisible but have a direct impact on company's performance (Dow et al., 1999; Flynn et al., 1995; Powell, 1995). After comprehensive review of the literature we find that most of the researchers evaluate TQM through six dimensions; strategic planning, leadership, information and analysis, customer focus, process management and people management (Miranda, 2003; Prajogo and Hong, 2008; Prajogo and Sohal, 2003; Terziovski and Samson, 1999). According to Curkovic et al., (2000) the most successful dimensions of TQM are customer focus, employee empowerment and top management support.

Shenawy et al., (2007) argue that no research explicate the key dimensions of TQM. Due to this inconsistency in previous research it is difficult to identify the exact dimensions of TQM (Hoang et al., 2006). However, majority of the researchers agree that the most significant dimensions of TQM are *customer focus, continuous improvement, employee involvement and top management support* (McAdam and Armstrong, 2001; Prajogo and Sohal, 2003; Zairi, 1997). The current study uses these four most influential dimensions of TQM in order to investigate their relationship with organizational performance.

2.2 Organizational Performance

Generally, performance is the indication of attainment of organizational objectives. Organizational performance is defined as the output of the firm's operations or achievements of firm's goals. Venkatraman and Ramanujam (1986) divide the business performance in three dimensions; these are operational, financial and organizational effectiveness. Whereas operational or non-financial performance includes product quality, market share, market effectiveness and new product introduction; financial performance includes the profitability and sales growth; and organizational effectiveness is an extent to which organizations achieve their effectiveness.

According to Agarwal et al., (2003) and Guo (2002) organizational performance has two dimensions comprises of judgmental and objective performance. *Judgmental performance* covers the employees and customers perceptions such as service quality, customer satisfaction and retention. On the other hand, *Objective performance* includes financial and market based assessments such as sales growth, profit, market share and efficiency.

2.3 Customer Focus and Organizational Performance

Customer focus is the extent to which an organization continuously satisfies customer needs and expectations (Zhang, 2000). It refers to achieve long term organizational

objectives. It is considered as one of the basic dimensions of TQM (Bank, 2000). According to Hackman and Wageman (1995) one of the most frequently used TQM practices is obtaining information about customers. Sila (2007) and Brah et al., (2002) both claims that the success of any organization in near future would depend upon the satisfaction of its customers' needs efficiently and effectively on continuous basis. Customer focus is the basic principle of TQM which emphasizes on creating value for the customers which results in organization development (Juran, 1988; Mele and Colurcio, 2006; Woodruff, 1997). Proper implementation of TQM dimensions attains higher level of organizational performance. Customer focus is one of the major indicators of performance enhancement. Some scholars find that TQM implementation increases customer satisfaction (Lee et al., 2010; Liu et al., 2002) and improve organizational performance (Irani et al., 2004; Powell, 1995). In quality management settings, changing needs of the customers are identified and performance of the organization is measured against customers' requirements (Bullington et al., 2002; Deming, 1986; Hackman and Wageman, 1995). Asikhia (2010) find that customer orientation is positively associated with firm performance.

Based on the above literature we expect that customer focus is one of the major dimensions of TQM and it is a key predictor of organizational performance. The empirical research on customer focus and organizational performance particularly in textile sector of Pakistan would further elaborate this relation. Accordingly we propose first hypotheses of the study.

- **H_1:** Customer focus positively affects organizational performance.

2.4 Continuous Improvement and Organizational Performance

Continuous improvement refers to the ways of avoiding from defects and making improvement in the procedure of converting inputs into outputs. Deming (1986) define continuous improvement as removing the defects and continuously improving the products features and service quality. Continuous improvement is a TQM dimension that directs a firm in its daily management, involving the continuous effort from every individual to achieve firm's goals of improved quality, satisfying customer's needs and ultimately enhancing the firm's performance (Ooi et al., 2006). In quality management settings work processes are constantly reviewed which reduces mistakes and waste of materials that improves the organizational effectiveness (Anderson et al., 1994; Spencer, 1994; Walton, 1986). Continuous commitment on the implementation of TQM does have a significant positive effect on firm performance. Continuous improvement endorsed by organizations stimulates organizational members for innovations and quality performance (Prajogo and Sohal, 2003). It is one of the most effective quality management initiatives to achieve significant improvement in organizational performance. From the above discussion it is observed that the literature supports the relationship between continuous improvement and organizational performance. Therefore, this study proposes the second hypothesis in a new context.

- **H_2:** Continuous improvement positively affects organizational performance.

2.5 Employee Involvement and Organizational Performance

Employees are the most important asset for any firm as they provide support in productivity and performance enhancement. In order to become competitive firms must train their employees to improve their abilities and skills which increases their

performance. Prajogo and Sohal (2001) propose that proper implementation of TQM dimensions in organizations foster employees for innovation and organizational effectiveness. Some scholars find that in quality management system optimal human resource strategies positively affects organizational performance (Delaney and Huselid, 1996; Delery and Doty, 1996). Similarly, Li (2000) find that employees training, their participation in decision making and information sharing are tools that enable the organization to use their resources effectively which in turn enhance the organizational performance. Training and development increases employee's loyalty and empower them to take active part in change process for continuous improvement that ultimately enhances organizational performance (Lorente, et al., 1999; Mertins et al., 1997). From the above literature generated in various parts of the world we expect that employee involvement would positively relate with organizational performance. This is as per the third hypothesis of the study.

- **H_3:** Employee involvement positively affects organizational performance.

2.6 Top Management Support and Organizational Performance

Top management commitment plays very important role for quality performance and success of organization. According to Deming (1982) committed and strong leadership is essential for successful and durable quality programs. Top management support enables the firm to facilitate quality management programs for effective performance (Gibson, 1990; Gryna, 1991). Top management commitment is accountable for setting the goals that directs the organization towards enhanced performance. Wang et al., (2010) find that leadership positively influences firm performance. Top management provides direction for achievement of quality related goals. In quality management system top management support provides basic atmosphere to enhance performance in organization. Spencer (1994) recommends that top management support is a broad way to improve the overall performance and quality of organizations. Based on the above literature we propose the fourth hypothesis in textile manufacturing sector of a developing country like Pakistan.

- **H_4:** Top management support positively affects organizational performance.

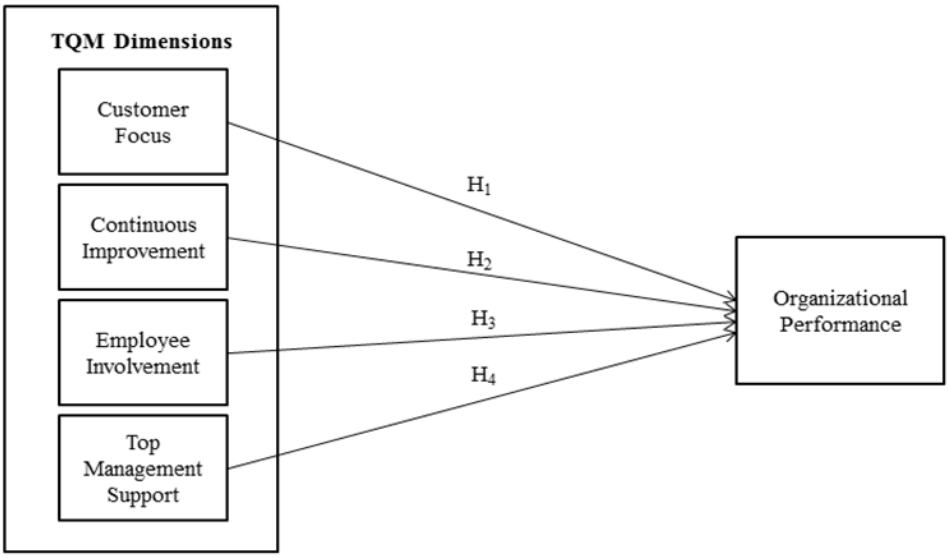

Figure 1: Research Framework

3. Methodology

3.1 Sample and Procedures

The target population is 396 textile manufacturing firms which are members of *All Pakistan Textile Mills Association.* Off the 396 member mills, we select 197 textile mills which are situated in territorial boundary of Punjab province only. We expect that the results based on this sample are likely to be generic for the target population. Out of the 197 textile mills 120 mills are ISO certified and the remaining 77 are non-ISO certified mills.

The data is collected through self-administrative survey questionnaires from two types of respondents. For this purpose we used two questionnaires. First questionnaire is designed for *quality related managers;* in case of ISO certified firms, management representative (MR) or deputy management representative (DMR) are the respondents; and for non-ISO certified firms, the input of senior official dealing with quality control or quality management is obtained. Second questionnaire is designed for *Top or middle level managers* other than MRs or quality related officials. In order to ensure the validation of the instruments, a pilot study is conducted to verify the language, clarity and relevancy of the measures used in the questionnaires. This Pilot study is conducted from four managers of textile sector, upon their suggestions and responses, five items are customized in both the questionnaires.

On our request, the secretary APTMA forwarded both the instruments with *his covering letter* to the chief executives officers of 197 member mills. In the covering letter the organizations are requested to get complete the first instrument from at least one quality related manager (MR/DMR/Quality mangers) and the second instrument from any two managers (at top or middle level) other than quality related officials. The organizations were requested to return the completed instruments to the researcher at the given contact details.

The emails sent to all CEOs with the covering letter of secretary APTMA proved helpful in establishing an effective contact with the member mills. Waiting for one week after the online distribution of the questionnaires, we receive only few responses. Then reminders are sent directly by the researcher to the remaining organizations. One week after this reminder, the researcher started telephonic pursuance. On this *telephonic follow-up* some of the organizations return the questionnaires online. Finally, the researcher personally visited most of the organizations to collect the questionnaires and continued the follow up. The whole process of data collection is completed in about two months.

Off the 197 member mills, after filtering out all textile organizations that could not provide 3 or more completed questionnaires (at least one of the participants must be a quality manager), 90 organizations (77.7 % ISO certified and 22.3% non-ISO certified) fulfill this aggregation criteria. This brings an overall response rate of 45.6%. The response rate of our study is closer to the two studies on Spanish firms Martinez-Costa and Jimenez-Jimenez (2008, 2009); the response rates in these two studies are 45.4% and 43.8% respectively. On the other hand the response rate of our survey research is favorably higher than other similar studies in TQM research where the response rate usually ranges from 9 to 28% with an average of 18% (Lok et al., 2005; O'Neill and Sohal, 1998; Zairi and Sinclair, 1995).

To account for non-response bias and sample representativeness, we compare the participating firms with non-participating firms in terms of ISO certification status, number of year since establishment (age), number of employees (size), and regions (the location of the business offices). The results suggest that there is no methodical systematic response bias in this study. Common method variance (Podsakoff et al., 2003) is a problem in measurement of constructs that may influence the results of a research. This study adopts few points to minimize the common method biases. Participants' *anonymity* has been ensured, *different formats* are used for different sections of both the instruments. The anchoring of various scales uses unique categorization. We avoid *neutral scale* point because respondents some time tend to use these to avoid their true feelings. Single informant approach is often criticized in organizational level of analysis due to a potential source of management bias. Therefore, this study relies on *multiple raters* to aggregate score for organizations. Common rater affect may potentially produce biased results when independent and dependent variable are measured from the responses of same person. In this study the independent (TQM dimensions) and dependent (organizational performance) variables are measured from *two separate sources* i.e. from quality related managers and top/middle level managers respectively.

The respondents of the self-administrative survey are 270 managers of textile firms. Out of these 270 managers 90 are quality related managers and the remaining 180 are non-quality managers. The distribution of quality managers shows that MRs/DMRs are representatives of ISO certified firms and the quality managers are representatives of non-ISO certified firms. The non-quality managers are top or middle level managers form more than 8 different departments such as 31.7% respondents are from finance department. Incidentally, this tally from the marketing department is also 31.7%. The combined representation of administration and HRM is 14.4% and that of for accounts is 9.4%. The representations from the remaining other departments is less than 4%. The distributions of the non-quality managers in terms of their managerial levels in their respective firms show that off the 180 non-quality managers 20% are upper level

managers. The representation of middle level managers is 77% and only 3% of the participants report that they are lower level managers. The cross-tabulation of the managerial levels of the respondents by their departments shows that the lower level managers are only from marketing, operations and sales departments whereas the middle level managers are from all the departments except HRM department. Similarly the upper level managers are also from all departments except administration department.

3.2 Measurement

3.2.1 TQM Dimensions

TQM dimensions consists of four main elements which are customer focus, continuous improvement, employee involvement and top management support. Each of the four dimensions is measured through 5 items. All of the items are taken from the existing studies (Coyle-Shapiro, 2002; Fuentes et al., 2006; Hung et al., 2011; Lam et al., 2011; Lee et al., 2012; and Zeith et al., 1997) with and without further modifications with suitable changes in the wordings of items. One sample item for each TQM dimension is presented here: *'satisfying our customers and meeting their expectations is the most important thing we do'* (customer focus); '*our organization encourages continual study and improvement of all the products and processes*' (continuous improvement); '*people in this organization have a relatively high level of authority over their work-related decisions'* (employee involvement)*;* and *'top management actively participates in quality management and improvement process'* (top management support). These items are measured by using a 6-point scale (ranging, 1 = never to 6 = always).

This is important to mention here that these constructs have been *validated several times and are the most commonly applied scales* in academic studies of TQM (Fuentes et al., 2006; Hung et al., 2011; Lam et al., 2011; Lee et al., 2012; and Vanichchinchai, 2014). However, all the constructs (including organizational performance) are first time used in our context i.e. Pakistan's manufacturing sector. Hence, we conduct a pilot study (as mentioned above) to further ensure the validation of the instruments, items understandability or explore item ambiguity, if any. Thus no issue remains with the face and content validity of these constructs. Moreover, convergent and discriminant validity of constructs is assessed by observing the correlations between the four TQM dimensions (Table 2). The values of correlation coefficients of all TQM dimensions are above 0.25 which establish convergence with each of the dimension of the same higher order construct i.e. TQM and thus confirm the convergent validity. On the other hand, the values of the correlation coefficients of the TQM dimensions are less than 0.75 which confirm that all four TQM dimensions are distinct from each other and possess discriminant validity (Zikmund et al., 2010).

3.2.2 Organizational Performance

For *organizational performance*, we adopt the measures from the ten items scale developed by Venkatraman and Ramanujam (1986) and two items scale developed by Jaworski and Kholi (1993). These are *most widely used scales* in measuring organizational performance and validated several times by the scholars (Fuentes et al., 2006; Hung et al., 2011; Jiménez-Jiménez and Sanz-Valle, 2011; and Baird et al., 2011). We dropped one item and only use 11 items adopted for measuring this variable. Sample items include, '*level of customer satisfaction has increased'*, and *'our organization is capturing more market shares'*. These items cover the two aspects of organizational

performance namely *judgmental performance* and *objective performance*. Each of these items uses a six-point scale (ranging, 1 = not true to 6 = absolutely true).

3.2.3 Control Variables

The variation in the dependent variable (i.e. organizational performance) may be due to other organizational factors. From the previous studies we have identified the *age* of organization (number of year since its establishment) and *size* (number of permanent employees) as a control variables that may influence the performance of an organization. Therefore, the study attempts to find the additional variation in organizational performance (the dependent variable) over and above these control variables.

3.3 Data Analysis

We aggregate the data at the organizational unit of analysis. Data is analyzed by using SPSS and Excel. As per requirement various statistical tests are used. The study utilizes usual cross tabulations and descriptive statistics. Cronbach's Alpha is measured to test the scale reliability of all the measures. For testing the hypothesized relations, Pearson Correlations are estimated for bi-variate correlation and multiple liner regression is used for testing the proposed relationships.

4. Results and Interpretation

4.1 Data Normality and Multicollinearity Assumptions

Before running the regression models and testing the study hypothesis, we applied Kolmogorov-Smirnov test for data normality. The results for the numeric variables show that the data is normal for all the variables at a significance level of 0.05. An inspection of the bi-variate coefficients for the four dimensions of TQM in the correlation matrix reveals that these are *well less than unity* (range 0.428-0.649) and therefore, not linearly dependent; this simple measure rules out the chances of muticollinearity (Montgomery et al., 2009). It can also be observed from Table 2 that the values of correlation coefficients of TQM dimensions are less than 0.85 which also provides the evidence of discriminant validity (Hoang et al., 2006; Kline, 1998) and confirm that the problem of multicollinearity does not exist amongst the four dimensions of TQM (Jun et al., 2006; Sit et al., 2009). This may be mentioned here that being dimensions of the same construct, these are supposed to be correlated; accordingly the bi-variate correlations among the four dimensions are well above zero.

4.2 Descriptive Statistics and Correlation Analysis

The minimum, maximum, mean and standard deviations of all the variables (independent, dependent and two control variables) are aggregated at the organizational level for the 90 firms in the sample. It can be observed from Table 1 that the mean *age* of the organizations in our sample is about 25 years with a range of 6 to 47 years. The mean *size* of the sample organizations is 868. The range of the size of the organizations is 220 to 2928 employees. The mean scores of TQM dimensions such as customer focus, continuous improvement, employee involvement and top management support are 5.52, 5.27, 5.17, and 5.49 respectively and for organizational performance 4.49.

Table 1: Descriptive Statistics

Variables	Min	Max	Mean	SD
1. Age (No. of years)	6	47	25.38	11.24
2. Size (No. of employees)	220	2928	868	537.09
3. Customers Focus	4.20	6.00	5.52	0.45
4. Continuous Improvement	4.00	6.00	5.27	0.49
5. Employee Involvement	3.20	6.00	5.17	0.51
6. Top Management Support	3.60	6.00	5.49	0.48
7. Organizational Performance	3.00	5.37	4.49	0.47

The scale reliability and the correlations among the variables are presented in Table 2. According to Hair et al., (1998) the cutoff point for Cronbach's Alpha is greater than 0.60. It can be observed that the Alpha values of all the scales are greater than the minimum level of acceptance. The reliability coefficients for customer focus, continuous improvement, employee involvement, top management support and organizational performance are 0.636, 0.785, 0.675, 0.707 and 0.805 respectively. It shows that all the scales are reliable and acceptable.

Table 2: Correlation Matrix

Variables	Alpha	1	2	3	4	5	6
1. Age (No. of years)	-	1					
2. Size (No. of employees)	-	0.372**	1				
3. Customers Focus	0.636	0.338**	0.143	1			
4. Continuous Improvement	0.785	0.228*	-0.082	0.561**	1		
5. Employee Involvement	0.675	0.205	0.147	0.558**	0.629**	1	
6. Top Management Support	0.707	0.025	-0.048	0.474**	0.538**	0.428**	1
7. Organizational Performance	0.805	-0.116	-0.176	0.116	0.265*	0.220*	0.176

* $p < 0.05$; ** $p < 0.01$

It can be further observed from Table 2 that two TQM dimensions namely; continuous improvement (coefficient = 0.265, $p < 0.05$) and employee involvement (coefficient = 0.220, $p < 0.05$) are significantly positively correlated with organizational performance.

However, the other two dimensions of TQM, customer focus and top management support have no significant correlation with organizational performance.

4.3 Hypotheses Testing

We run multiple linear regression models to test the hypothesized relationships. The control variables (age and size of the organization) do not significantly associate with the organizational performance (Table 3). The results also reveal that the relationship of customer focus and top management support with organizational performance is statistically insignificant. Hence, H_1 and H_4 are not supported for our data. Whereas continuous improvement significantly and positively affect organizational performance ($\beta = 0.319$, $p < 0.01$; $R^2 = 0.157$). Thus, there is strong support for H_2. The regression results show that the relationship of employee involvement with organizational performance is also positive and statistically significant (coefficient = 0.347, $p < 0.01$; $R^2 = 0.174$). Thus, there is strong support for H_3.

Table 3: Regression Results

Variables	**Organizational Performance**				**Remarks**
	Std. Error	**β**	**t**	**R^2**	
Age (No. of years)	0.005	-0.116	-1.048	0.014	-
Size (No. of employees)	0.000	-0.176	-1.399	0.031	-
Customer Focus	0.156	0.031	0.215	0.061	Not supported
Continuous Improvement	0.132	0.319**	2.461	0.157	Supported
Employee Involvement	0.123	0.347**	2.696	0.174	Supported
Top Management Support	0.118	0.211	1.618	0.104	Not supported

* $p < 0.05$; ** $p < 0.01$

5. Discussion

The main aim of this paper was twofold; to empirically examine the impact of TQM dimensions, such as customer focus, continuous improvement, employee involvement and top management support on organizational performance; and to determine which TQM dimensions are major predictor of organizational performance in textile sector of Pakistan. The findings show that two of the four dimensions of TQM i.e. continuous improvement and employee involvement have positive and significant impact on organizational performance, whereas the other two dimensions; customer focus and top management support have insignificant relation with organizational performance.

5.1 Customer Focus

Customer focus is not significantly related with organizational performance within textile firms of a developing country like Pakistan. This result is consistent with Prajogo and Sohal (2001), they report that a customer orientation restrain the organizations to become a broad minded which stop their ability to innovate and prevent them to become a market leader. According to Prajogo and Sohal (2001) highly customer focused organizations bear high cost and associated risks which have adverse impact on their performance. On the other hand, our results are not consistent with the other studies where scholars find

that TQM elements such as customer focus and customer satisfaction positively affects organizational performance (Agus, 2004; Brah et al., 2002; Fotopoulos and Psomas, 2010). Therefore management of the organizations should take appropriate measures to retain their customers. The management should also incorporate the quality related complaints of the customers so that their overall performance may be improved.

5.2 Continuous Improvement

Continuous improvement is significantly associated with organizational performance. This result is consistent with previous studies where researchers find that the continuous improvement in quality standards has positive impact on different types of performance (Fuentes et al., 2006; Rahman and Bullock, 2005; Sadikoglu and Zehir, 2010). Keeping in view the importance of continuous improvement in TQM implementation makes quality management more relevant for manufacturing firms. This may be a reason that most of the previous studies in this field have selected the manufacturing contexts for testing of their hypotheses. However, particularly textile sector has rarely been contextualized for this purpose. This finding in the context of the present study (i.e. textile manufacturers of a Pakistan) suggests a convergence trends on the phenomenon understood and predicted through this result.

5.3 Employee Involvement

Employee involvement is significantly associated with organizational performance. This result is consistent with the study of Abdullah et al., (2010) which finds that soft TQM elements such as supplier relationships, people management and training and education positively influence the firm performance. This finding is also consistent with Lorente et al., (1999) where they suggest that well trained employees are open to bring novel ideas for innovations and performance enhancement. Employee involvement is a key dimension for successful TQM implementation and it has great importance in textile manufacturing firm, where the international market is of extreme importance and therefore TQM implementation through various quality standards certifications is often demanded. This result is as per expectations, teamwork and supportive employee management techniques increases efficiency and problem solving abilities of employees that ultimately accumulate into organizational performance.

5.4 Top Management Support

Top management support is not significantly associated with organizational performance. This finding is consistent with previous studies of Choi and Eboch (1998) and Kannan and Tan (2005). These studies find that one of TQM practice namely leadership has non-significant relationship with quality performance and financial performance. However, our finding is not consistent with previous studies of Arumugam et al., (2008), they find positive relationship between top management support and quality performance. According to Simatupang and White (1998) top management support serve as a positive foundation for the company's whole processes that ultimately affect organizational performance. In Pakistan's textile manufacturing context, the top management should promote effective decision making in quality implementation and maintenance for effective enhancement of performance.

Based on the above discussion we can conclude that the current study accomplishes its main objectives. The study reveals the importance of TQM dimensions and organizational performance in Pakistan's textile sector. In response of the twofold

objectives of the study, the analytical results confirm the significant and positive association of two off the four TQM dimensions (continuous improvement and employee involvement) with organizational performance. Furthermore, it is empirically determined that TQM dimensions such as continuous improvement and employee involvement are major predictors of performance of textile sector in Pakistan.

6. Limitations and Future Directions

We highlight some limitations of this study that should be considered for future improvements. First, it is a cross-sectional study as the data is collected at one point of time may suffer from response biases. Second, this study focuses only on textile manufacturing sector; hence its results may not be generalized to all other sectors such as service sector. The third limitation of the study is that, although the source of data for the TQM dimensions (independent variable) is different from that of the organizational performance (dependent variable), both variables are measured on the perceptional data provided by the managers. However, the aggregation of responses of two or more managers for each of the study variable mitigates this problem.

In Future, in order to transform quality certifications into performance enhancement, changes should be monitored with several times of data (longitudinal study). Future research should be conducted out on some other industries in manufacturing sector as well as service organizations. Future research should attempt to investigate the mediators such as *organizational learning capability* and *market orientation* in order to understand TQM- performance relation. In future, for better understanding of TQM and performance relationship, the mediating mechanism may be tested with the help of structural equation modeling (SEM).

7. Implications

Such an empirical examination of the relationship between TQM dimensions and organizational performance in textile manufacturing sector of Pakistan is likely to be useful for academia and practitioners in our context. From theoretical perspective, the study provides a comprehensive understanding of TQM dimensions to enhance organizational performance within textile sector of Pakistan. The study provides a theoretical framework that will help the academicians to formulate the strategies for maximizing the influence of TQM dimensions for enhancing organizational performance.

For managerial perspective, the study suggests that managers of manufacturing firms who intend to achieve higher organizational performance through the implementation of TQM must focus on continuous improvement and employee involvement. The current study empirically proves that two TQM dimensions such as continuous improvement and employee involvement are key predictors of organizational performance. Thus, the practitioners of manufacturing organizations should give more concentration to these two dimensions of TQM while implementing and managing TQM to attain better performance.

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