

Assessing The Moderated- Mediation Paradigm Of Organizational Performance In The Textile Sector Of Pakistan

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Abstract

Resilience is a subject that has obtained a lot of attention among those responsible for performance and wellbeing in organizations, as the work environment becomes increasingly challenging and uncertain. Despite its potential benefits in a wide range of circumstances, organizational resilience capacity received scant attention in relation to managing the various uncertainties in the global business environment. Entrepreneurial orientation and quality culture of organizations serve as antecedents of organizational resilience capacity and thus foster organizational performance, subsequently leading to the survival of organizations in the long run. Quantitative method of analysis has been applied and data have been collected by 308 managers from the textile sector. Data has been collected through systematic random sampling. The findings suggest that the role of entrepreneurial orientation and quality culture are essential in determining the organizational resilience capacity and business performance. The implications of this study will facilitate the managers for policy decision making in order to maintain organizational sustainability and continuity in the changing and instable environment. It further implicates guidelines and procedures for innovation and transformation. The study provides a quantitative measure of resilience capacity for the textile sector in order to assess the organization's capacity to survive in the face of stiff market competition that further provides preventive measures for corporate woes.

Keywords: Organizational Resilience Capacity, Entrepreneurial Orientation, Quality Culture, Organizational Performance, Business Strategy

1. Introduction

Organizational Performance refers to the realization, accomplishment and attainment of aspirations and intents based on a certain precision and outlay in a particular time frame (Ahmed, Kristal and Pagell, 2014). Performance of organizations embodies realization of endeavors, strategies, tactics and ideas into products and outcomes (Richard et al. 2009). It has been extensively utilized as a spotlight of research earlier (March and Sutton, 1997). It has also been gaged and reckoned in terms of exports, development, expansion, revenues, competence, and efficacy. Organizational Resilience Capacity (Lee at al, 2013; Lengnick-Hall and Beck, 2011), organizational quality culture and entrepreneurial orientation (Rauch, 2009) are likely to be deliberated and reckoned as critical contributing dynamics of organizational performance (Rahman and Ramli, 2015). As learning contributes to innovation therefore it is the responsibility of the entrepreneurs and top management to foster a culture and environment to continuously adapt to changes. Entrepreneurial Orientation (EO) appears to evolve from the theory and literature pertaining to strategic management (Mintzberg, 1976). Consistent with strategic management literature, entrepreneurial orientation epitomizes the dogmas and practices which deliver a foundation for business resolutions and assessments. Accordingly, EO may be viewed as the entrepreneurial strategy-making processes that key decision makers use to enact their firm's organizational purpose, sustain its vision, and create competitive advantage and thus lead to better business results (Rauch, 2009). As per the present international competitive setting, the cognizance of the significance and prominence of quality has augmented. In this day and age, due to the quality demanding customers and the fierce competition, companies are more concerned in adopting their own innovative strategies for quality excellence (Demirbag et al. 2006).

Organizational Quality Culture is signified as one of the most central management contrivance that supports administrations to tackle trials and reach great proportion of performance. Quality Culture refers to as an all-inclusive methodology and an unremitting improvement in the set-ups and maneuvers in the business in creating and providing extraordinary quality products and amenities to fulfill the altering requirements of the patrons (Al- Dhaafri, Al-Swidi and Yusoff, 2016). Resilience describes for the managerial as well as administrative

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capacities to vivaciously recreate corporate prototypes and approaches as environments and state of the affairs transform and revolutionize, thus to metamorphose afore any demand that happens to be urgently evident (Hamel and Valikangas, 2003). Moreover, explicitly in the corporate context, resilience is demarcated as the expertise to endure, acclimatize and develop at the time of inclement transformation. Management theoreticians and scholars are progressively ascertaining the prerequisite for resilience ability of firms (Hamel and Valikangas, 2003). Despite the fact that organizational resilience capacity refers to be a catchphrase as to how to deal with predicaments and emergencies, the denotation ascribed to this conception contrasts extensively amid researchers and experts in the field. This generally appears to have a dual sense or gist that is preserving the survival and the strength of an organization along with the revolution and makeover of the structure (Normandin and Therrein, 2016). It is relatively lately that this idea has been pragmatic to standard and established managerial situations so as to throw light to be able to manage hazard in the course of disturbances and disorders (Hollnagel et al., 2009). Conversely, 'organizational resilience capacity' poses to be an under-explored issue in the textile sector. Certainly, while substantiation proves that companies offer exceptional durability and endurance, the extant literature is reasonably limited with regards to the scrutiny of organizational resilience capacity specifically in the perspective of the textile segment of Pakistan (Khan, 2016). This probably will accommodate careful conformity to perform remarkably to direct and pass through current fast changing environment amid technology breakthroughs, governing variations and geo-political mayhems and disturbances (Hitt, Keats and DeMarie 1998; Patel, Messersmith and Lepak; 2013).

1.1 Research Problem

As indicated by State Bank of Pakistan (2015), the loss in exports has been reported to be -122 million US dollars in 2015, -121 million US dollars in 2014, -236 million dollars loss in 2012 which is a topic of severe apprehension for the once booming Pakistan Textile industry as the loss is monumental. These losses and decline in exports have led the textile sector on the verge of disruption. The reported decline in exports is due to number of factors like stiff regional competition, global recession, ongoing energy crisis, internal security concerns, depreciation of Pakistani rupee, rise in inflation rates, high production costs, higher taxes, deficiency in development of entrepreneurial orientation, organizational resilience capacity, quality culture and business strategy. Therefore it is important to inculcate entrepreneurial orientation, organizational resilience of external environment and to design and deliver effective work environment and boost performance for which there is still room for research.

2. LITERATURE REVIEW

2.1 Entrepreneurial Orientation:

Entrepreneurial Orientation appears to have materialized from the notion of entrepreneurship which tends to be an important zone of mounting concern of scholars in the field of business and management. Its origins are likely to be determined the strategic management literature (Mintzberg, 1976). This is a paradox which inclines to integrate forecasting, design, exploration, decision-making along with several other characteristics of culture and vision of an organization. Entrepreneurial orientation embodies the strategies, guidelines and practices which offer a foundation for business decisions and actions (Mintzberg, 1976). Thus, it is also regarded as the tactical strategy-making courses and manners which are employed by the policy makers in order to ordain their managerial resolution, withstand its idea and also to inculcate competitive gain. The business entrepreneurship is supposed to be an incorporation of structural and administrative struggles which call for managerial upkeep and assets to stimulate revolutionary undertakings in the creation, development and managerial level. It also happens to encourage the augmentation on the extant enterprises (Shafiq et al. 2017).

Entrepreneurial Orientation is reckoned as the senior administration risk-taking pertaining to venture resolutions and tactical activities in the facade of improbability, the comprehensiveness and rate of recurrence of product modernization and the allied propensity en route for industrial governance and the ground-breaking kind of organization which appears to struggle with the opponents (Covin and Slevin, 1991). EO is also delineated as the procedures, methods along with decision-making accomplishments which escort to innovative right of entry (Lumpkin and Dess, 1996). Todorovic and Ma (2008) have perceived the purpose and meaning of entrepreneurial orientation in the direction of business repercussions that turned out to be positive. It is an integral part of a culture and norms of society. Entrepreneurial Orientation (EO) is considered as the most important internal resources that help organizations to achieve competitive advantages and build resilience capacity of firms. Corresponding to the



'resource-based outlook philosophy of organizations', it is the organizational resources which may possibly lead administrations to improve their performance and realize reasonable compensations over their rivals. Entrepreneurial activities are vital for organizations because of their positive effect on performance that in turn sustains benefits or gains over the rivals (Wiklund and Shepherd, 2003). It has been observed and assessed over an enormous cascade of research inquiries in the extant literature (Rauch et al., 2009). Entrepreneurial orientation turns out to be a significant and essential criterion for organizational performance, organizational survival and in an ever more dynamic and stimulating environment (Bojica et al. 2017).

2.2 Organizational Quality Culture

Quality culture is a set of group values that guide how improvements are made to everyday working practices and consequent outputs. A culture pertaining to quality is an arrangement of practices which tend to encapsulate the ideology of an organization centered on the view point of the Total Quality Management. Najmi et al. (2005) has reckoned the quality culture as a communal bonding and adhesive which assists in grasping an organization collectively. They have also advocated that this embraces way of communication and collaboration, molds, ceremonials, affiliation, configurations and control contrivances.

Mawra and Zairi (2008) have delineated the theory of quality culture as customs where all the members of the organization must be conscientious and responsible for sustaining quality. All the departments of the organization must be assiduous and dutiful in resolving quality concerns and issues.

An organizational quality culture initiative successfully fosters the resilience capacity and thus improves the performance of organizations (Marwa, 2008; Najmi et al. 2005; Neely, 2014; Norris et al. 2008). Demirbag et al. (2006) have deduced that quality culture establishes a robust outcome on the performance of SMEs. Besides, Easton and Jarrell (1998) have also drawn attention to the fact that a substantial connection exists between quality culture and performance of organizations. In addition, Chong and Rundus (2004) have probed the association between culture of quality and business results where the results have been acquired from managers working in manufacturing organizations in Australia. The results divulged that there appears to be a remarkable association amidst quality culture and performance because of the fierce market competitiveness.

Marwa and Zairi (2008) have ascertained that there happens to be an important correlation and link between quality culture and organizational performance because an organization may lead towards failure, downfall or termination if the aspect of quality is not taken into consideration. Therefore, quality culture also holds a substantial link with establishing resilience abilities of firms in order to be successful in future. In any strategic implementation initiative, the organization should be driven by the objective to seize an opportunity in the market and it also has the tolerance to have a risk. This logically implies that quality culture will have a great tendency to implement management strategies such as building organizational resilience capacity for long term survival and success of organizations (Al-Dhaafri, 2016).

Quality culture entails that the organization must work in a composed, unruffled, and organized manner for the attainment of organizational intent (Huq, 2005; Rad, 2006; Naqshbandi et al., 2015). There have been a number of studies that attempted to identify the cultural characteristics conducive to quality management implementation. Cameron and Quinn (1999) have put forward that organizational quality culture compels one organization to stand out from the other. Ever since the organizational quality culture is viewed to be as one of the critical issues in the efficiency and efficacy of organizations, therefore it appears to be imperative to be capable of assessing evaluating organizational quality culture. Accordingly, there are a variety of contrivances intended to determine and quantify organizational quality culture in the manufacturing, scholastic and services divisions in the past years (Oney-Yazici et al., 2007). The uncluttered literature review designates that quite scant work has been done in order to reconnoiter the putting into practice of quality or resilience programs in Pakistan's textile segment. A small number of research analyses and explorations such as that of Hussain, Akhtar and Butt (2009), Shafiq et al. (2017) are presented that tend to offer limited evidence and statistics with regards to the adoption of quality and business excellence theories in the textile businesses of Pakistan. In addition, the standing literature does not appear to provide complete details about the quality and performance perspectives in Pakistan in the context of bourgeoning resilience capacity (Shafiq et al. 2017).

2.3 Organizational Resilience Capacity

Fostering resilience capabilities is a concept that has gained considerable attention in the recent years (McPhearson, 2014). There is a need to ascertain quantitative measures to ensure sustainability and resilience of organizations (Saunders and Beckers, 2015). Based on the management sciences literature specifically in the literature pertaining to strategic management, organizational behavior as well as operations management, organizational resilience capacity has turned out to be an influential, eminent and notable construct (McManus, Seville, Vargo and Brunsdon, 2008). This generally means to be able to alter, bend, modify and adjust to the intrusions, commotions and disruption that could occur in the system and then making use of the available prospects in the environment. Developing organizational resilience capacity enables organizations to passionately retort to evolving circumstances (Lee et al., 2013). The requirement of comprehending resilience capacity is considered to be imperative in order to form resilient associations and constitutions (Orchitson, Prayag and Brown, 2016). Resilience capacity is deliberated to aid firms to enhance the flexibility of the whole system.

The fundamentals of such resilience management comprise of creating awareness regarding issues related to resilience and continuity of the system, the array of structural tools, assessing one's own vulnerability, arrangement of underpinning liabilities, responsibilities as well as obligations along with the fortification of adaptive proficiency (Seville et al., 2008). It is also often deliberated as the progressive aptitude of employees and the system so as to alter themselves subsequent to a disaster and crises either instigated by system failure due to power failure or a terrorist attack or such activities (Wieland and Wallenburg, 2013). Extant literature imparts differing perspectives on the connotation and implications of a firm's resilience capacity. One of the perspectives of resilience is the proficiency to recover from the unforeseen, demanding, unfavorable conditions (Sutcliffe and Vogus, 2003). The prominence is commonly on managing policies and a rapid aptitude to recommence probable performance echelons. On the other hand, this entails the improvement of novel competencies and an extended facility to generate innovative and different prospecs (Lengnickhall et al. 2011). Quality culture appears to be contributory in evolving the obligatory information, abilities as well as talents in appealing the suitable combined procedures and practices to produce resilience upshots. Lengnick Hall, Beck and Lengnick-Hall (2011) have projected that a firm's resilience capability and aptitude is established over dealing with the employees to make abilities which as soon as they are amassed at the structural, administrative and execute stages assist the firm to accomplish ways and means by which firms may retort resiliently in adversities.

Acquaah et al (2011) studied that organizational resilience capability and business results tend to be affiliated and moderated through business strategy which is strongly associated with the survival and performance of firms. Their outcomes advise that for achieving resilience in business, organizations must be able to emphasize on the role of business strategy for enhancing resilience and firm performance. They also suggest that supplementary research is requisite in the subject are needed in this area exclusively in the developing world to comprehend the convention of applying and employing strategy and a culture of quality to build resilient capabilities and thus improved performance.

Abylaev et al. (2014) have contributed to the development of a cases study of Kyrgyz's textile sector's resilience in a transitional economy in which they studied reliance on worldwide trade systems and codes of practice. They prepared set-ups and situations to categorize and classify resilience resources of the textile industry. The upshots of the study provide recommendations for shareholders about improving resilience capabilities of the Kyrgyz textile sector. Akgün and Keskin (2014) have examined the role of organizational resilience capacity and business performance. After carrying out the study on 112 firms it was found that firm's resilience capacity was positively related to performance of organizations. The extant literature on the subject designates that resilience capability inspires and impacts the performance of organizations (Lengnick-Hall, Beck, and Lengnick-Hall 2011). However, certain scholars and investigators have also debated that organizations originate and develop economic compensations and mend their results by means of practicing and inculcating a culture of quality. Thus, it is suggested that organizational resilience capacity has an impact of firm performance via organizational quality culture. The rationale is that quality culture escalates the resilience capacity procedures and environment in improved performance of organizations (Searcy, 2011; Seville, 2008; Stokes et al. 2014).

2.4 Business Strategy

An organizations' strategy for performing and executing its business activities is generally reckoned as a plan or policy to produce pecuniary proceeds centered on low price, improved value or via innovative services and yields (Yang, Kueng and Hong, 2015). The exploration of business approach is accordingly at the juncture of struggle with



competitors along with an organization's determinations and exertions so as to getting hold of an obstinately and untiringly better performance by the use of reserves and speculations in healthier entrepreneurial capacity and thus developing resilient and sustainable capabilities of organizations. Yang, Kueng and Hong (2015) have analyzed the organizational policies, stratagems, and decision-making approaches by taking into account performance and innovation. Their examination highpoints that affiliation concerning corporate strategy has affirmatively been instigated and predisposed through firm performance. 'Resource Based Theory of the Firm' has also established cumulative recognition and approval midst policy investigators and scholars as a model for perceiving as to how corporate divisions exhaust the possibilities by the continuing profit on their venture capitals. 'Resource based theory' vetoes that an industry's aptitude to realize its revenue boosting objective is therefore a utility of its capacity and knack to bring together and organize apposite assets which will be responsible for seeking maintainable viable benefit in the market. Munizu (2013) reviews and considers the control of business schemes on dominant performance in the midst of sections of high-tech businesses operating in the United States and the European Union. The outcomes point out that the rapport amid strategy and performance is determined by the topographies the industry happens to function in. Kaya (2006) scrutinizes the association amongst business strategies and performance of a firm. The research exploration that was carried out in manufacturing companies in Gaziantep, discloses that the implementation of strategy is absolutely persuasive and dominant on performance of companies.

2.5 Organizational Performance

Business functioning is a dynamic and robust in nature. The recital collaborations need to be considered along with the structural and administrative revolutions. Thus, an approach or line of tactic is necessitated to adjust and become accustomed to these alterations in system and can support these processes. Performance of organizations entails management and methodical developments that empowers the firm to attain coveted and implored objectives (Frolick et al. 2006). It encompasses the concrete productivity or outcomes of a firm as appraised alongside its envisioned aims and goals. March and Sutton (2007) have described organizational performance in terms of profits, market share, rate of growth, stakeholder return and so on. They have also reflected on a firm's performance which is defined as an act or procedure of execution of a chore or operation perceived as to how effectively it has been implemented. Accordingly, an organization's performance tends to relate to the fact that how magnificently and productively employees achieve a certain task. Most important philosophies based on the 'management sciences research' such as the 'contingency theory' in particular takes account of "organizational performance" as a vital construct in their thoughts, judgments and estimations (Folke, 2006). Researchers are of the view that feedback contrivance is indispensable to assist the exact utilization of strategic and tactical objectives and must also address a framework to ensure the smooth flow of knowledge and information for the strategic decision making of businesses. It is vital to develop a measurement and analysis process for the business systems. The literature implies and puts forward that to realize viable corporate accomplishment, certain performance estimation techniques must be considered as different gauges recognized by scholars in the field of 'management'. Literature addresses that enhancing a firm's competence and business results is becoming crucial and fundamental for managers in the present day. It also highlights a significant aspect that it is the superlative and finest corporate strategies which tend to yield exceptional business performance and upshots. Literature submits that corporate and professional strategies play a progressive part in the organizational performance. Identifying and distinguishing the foundations of performance and improved results appear to be really essential exclusively in the standpoint of the contemporary worldwide predicaments and crunches for the reason that it supports a business to classify elements which ought to be led to mend and enrich performance of organizations. Henceforth, scholars endorse that organizations must implement and embrace certain suitable schemes and approaches which tend to enrich satisfactory and sufficient performance of organizations (Adegbuyi et al. 2015, Shafiq, 2017).

2.6 Hypothesis Development

In view of the above literature, the following hypothesis are postulated:

- H1: Entrepreneurial Orientation positively affects organizational performance.
- H2: Organizational Quality Culture positively affects organizational performance.
- H3: Entrepreneurial Orientation positively affects organizational resilience capacity.

H4: Organizational Quality Culture positively affects organizational resilience capacity.

H5 (a): Organizational Resilience Capacity positively affects organizational performance.

H5 (b): Organizational Resilience Capacity mediates the connection between 'entrepreneurial orientation', 'quality culture' and 'organizational performance'.

H6: Business Strategy moderates the association amid organizational resilience capacity and organizational performance.

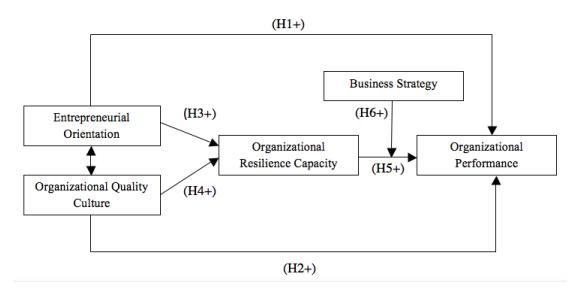


Figure 1 – Theoretical Framework

3. Research Methodology

3.1 Demographics

The managers of the textile sector of Pakistan were the respondents of the study. The second section of the survey questionnaire catalogues the demographic delineations of the respondents of the study. The items listed in the demographic section were assessed on a nominal scale where gender was marked as 1 for male and 0 for female, Age was indicated as 1 for 20-29 years, 2 for 30 to 39 years, 3 for 40 to 49 years, 4 for 50 to 59 years; organizational age was assigned 1 for less than 5 years, 2 for 5 to 10 years and 3 for above 10 years; education was ascribed as 1 for Graduation, 2 for Masters and 3 for M.Phil and 4 for Ph.D, Similarly, experience of the respondents was classified as 1 for one to five years, 2 for six to ten years, 3 for eleven to fifteen years, 4 for sixteen to twenty years, 5 for 21 to 25 years and 6 for experience over 25 years. The organizational size was also dispensed as 1 for 50 to 100 employees, 2 for 100 to 200 employees, 3 for 200 to 300 employees and 4 for more than 300 employees.

3.2 Research Design

The research scales have been adopted from the previous research studies. A five-point likert scale has been used for the data collection. The reliability of the Likert scales is usually determined by employing proper reliability estimate such as Cronbach alpha. Because the Likert scales have multiple entries, therefore they may be apprehended as interval scales in order to harness descriptive statistics long with the correlation analysis, factor analysis, analysis of variance and other modus operandi. Research scholars are frequently apprehensive regarding the variances among the scales of assessment considering their propositions and inferences in order, to make a judgment as to which pertinent statistical analyses were to be applied aptly for every respective item. The instrument is designed in English language.



3.3 Sample Size

The sampling frame of Pakistan textile industry includes textile organizations that are registered with the following groups like All Pakistan Textile Mills Association (APTMA) and Pakistan Ready Made Garments Manufacturers Exports Association (PRGMEA). The membership list of these groups was obtained mainly from their head offices and some from Lahore Chamber of Commerce and Industry. Three hundred and seventy-six companies are registered with APTMA whereas there are almost 1100 companies registered with PRGMEA. It is evidenced that if the size of the total population turns out to be near to 1500 which is 1476 in our case of textile mills then the sample size required should be around 310 at a confidence interval of 95% and a margin error of 5% (Krejcie and Morgan, 1970). In the present research study, the population is 1476 both of APTMA and PRGMEA and the sample size N = 308 which is adequate and satisfactory to realize at a confidence interval of 95% with a margin of error at 5%.

4. Data Analysis and Discussion:

4.1 Reliability

The version of SPSS which was employed to analyze the data is 20th edition. The total number of survey items in the questionnaire were 68 pertaining to the five variables that have been contrived in order to acquire and procure the data for the research variables. In general, the overall reliability is found to be 0.82 which tends to be approvingly reasonable. The reliability of the particular variables was also ascertained to be more than 0.70 which is also within the acceptable limits as substantiated by Murphy et al. (1989). The reliability of Entrepreneurial Orientation is found to be 0.8, whereas the reliabilities of Organizational Quality Culture, Organizational Resilience Capacity, Business Strategy and Organizational Performance were corroborated to be 0.7, 0.9, 0.8 and 0.9 respectively as shown in the following table. As the reliability values of the constructs tend to be more than 0.70, hence it means that they fall under the acceptable range (Nunally and Bernstein, 1978).

Variables	Cronbach's Alpha	Number of items
Entrepreneurial Orientation	0.8	8
Quality Culture	0.7	7
Organizational Resilience Capacity	0.9	29
Business Strategy	0.8	11
Organizational Performance	0.9	13

Table 1 Reliability Analysis

4.2 Confirmatory Factor Analysis

Confirmatory Factor Analysis may be employed for the assessment of convergent validity of the data. Thus, convergent validity is generally determined and ascertained if the factor loadings tend to possess values that turn out to be significant to their relevant constructs (Shafiq et al. 2017). Every item was assessed to be above the criteria stated for the factor loadings which is greater than 0.5, therefore the notions of the factor analysis were justified and accepted. The unstandardized approximations or estimates of the model are given below:

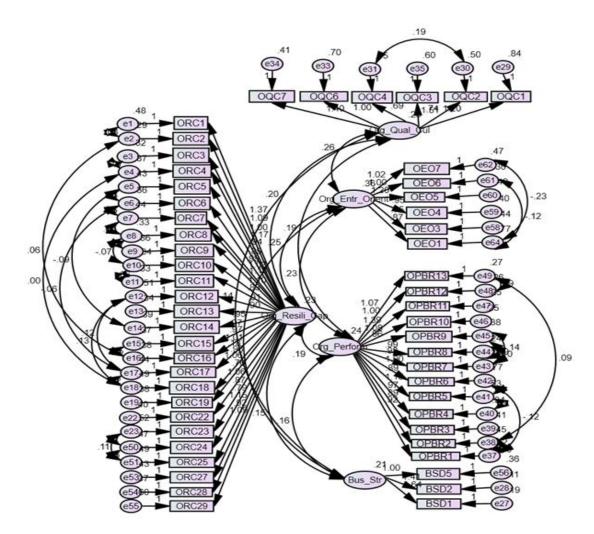


Figure 2 Unstandardized Estimates of the Model

Table 2 -	Fit Statisti	cs for CFA
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Critaria	Values
RMR	0.043
Relative Chi-square	2.275
CFI	0.809
TLI	0.8
NFI	0.7

As the value of relative chi-square is 2.275 which tends to be generally acknowledged and accepted (Lomax and Schumacker, 2004). As the value of RMR in this case appears to be 0.043 which is less than 0.05, hence it is apprehended to be recognized by researchers as acceptable. The value of CFI is 0.809 which is close to 1 therefore the model tends to be adequate and satisfactory. The CFI accordingly characterizes the magnitude to which the prototypical model of concern tends to be fit and thorough than the independence standard model. Values of CFI



which are close or near to 1 specify an adequate and satisfactory fit (Moss, 2009). The value of TLI appears to be 0.8 which is tends to be within the acceptable demarcated limits. The NFI and TLI value must be within the limit of zero to one with cut-off point depicts an appropriate model (Hu & Bentler, 1999). Here, the value of the NFI appears to be 0.707 which tends to be within the demarcated bound and precincts. Accordingly, this tends to exemplify an appropriate model.

4.3 Correlation Analysis

Findings from the correlation analysis suggest that there exists a positive relationship among all variables. As it can be seen from the above table, there happens to be a positive correlation between organizational quality culture and entrepreneurial orientation (r = 0.675). The correlation between organizational resilience capacity and quality culture turns out to be a strong linear association (r = 0.718). The correlation between organizational resilience capacity and entrepreneurial orientation also tends to be strongly associated (r = 0.755). The correlation value between quality culture and organizational performance tends to be 0.675 which means that there exists a significantly positive association between the two variables. Similarly, it can be observed from the table that the correlation value between entrepreneurial orientation and organizational performance appears to be 0.700 and the value of correlation coefficient between the variables organizational resilience capacity and organizational performance is 0.726 which means that there exists an influentially strong association between the variables; hence, it would be beneficial for the managers in the textile sector to make use of the resilient practices in order to uplift and enhance performance of organizations. However, it can be comprehended from the above table that the correlation values of quality culture, entrepreneurial orientation, organizational resilience capacity and organizational performance are indicated to be 0.563, 0.602, 0.641 and 0.659 in terms of business strategy which means that there occurs to be a moderate relationship among the variables.

4.4 Difference between Correlation and Regression Analysis

The correlation analysis simply gives the correlation coefficients of the variables which portray whether there exists a straight or direct relationship between the variables or not ranging from -1 to 1. However, the regression analysis is eminently employed to envisage and analyse the association among more variables and to classify as to which of the variables (x) may account for the dependent or corollary variable (y).

4.5 Regression Analysis

4.5.1. Mediation Analysis

Application of Multiple Regressions to Analyse Mediation in the Model

There are certain directions or guidelines for the mediation which are given below:

- If the path c' is insignificant, then full mediation exists within the model.
- If all the paths a, b, c, and c' are significant, then it means that the model has partial mediation.
- If any of the paths such as a, b and c appears to be insignificant, then there is no mediation within the model.

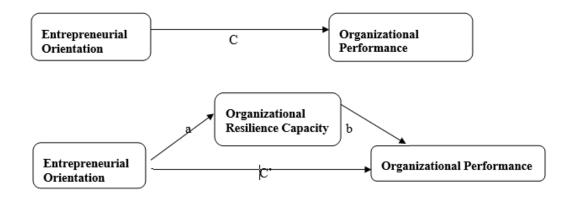


Figure 3 - Multiple Regression Paths for the model

The four steps presented by Barron and Kenny (1986) are applied in order, to assess the influence of mediators between the variables. These steps imply that partial or full mediation exists in case all the steps are fulfilled in the light of the given rules.

Path	Coefficients	S.E	Т	Sig. Value
c(YX)	0.5905	0.345	17.1375	.0000
a(MX)	0.6004	0.0290	20.7242	.0000
b(YM.X)	0.4942	0.0619	7.9780	.0000
c'(YX.M)	0.2938	0.0487	6.0364	.0000

Table 3 Path Analysis

X= Entrepreneurial Orientation (Independent variable), Y= Organizational Performance (Dependent variable), M= Organizational Resilience Capacity (Mediator)

The above table shows that entrepreneurial orientation is a significant conjecturer of organizational performance after regression analysis is done. It is also seen that the entrepreneurial orientation has a significant association with organizational resilience capacity and further, organizational resilience capacity appears to have a significant association with organizational performance. This reflects that partial mediation exists between entrepreneurial orientation, organizational resilience capacity as well as organizational performance because all the paths (variables) display a substantial and meaningful nexus with each other. All the steps and rearrangements for simple mediation have been steered via SPSS Macro established and designed by Preacher and Hayes (2004).

Table 4 Model summary

Ν	Iodel Sumn	nary			
R-sq	Adj R-sq	F	df1	df2	Р



0.5778 0.5751 208.7357 2.0000 305.0000 0.0000

From the above table, it can be ascertained that the R square value is 0.5778 and the adjusted R square value appears to be 0.5751 which denotes that 57.51% variability in organizational performance is shared and contributed by the mediating variable i.e. organizational resilience capacity and the independent variable. i.e. entrepreneurial orientation. This model summary depicts that there exist high levels of significance between the variables and it throws light on the fact as to how adequately and fairly a dependent variable might be envisaged and calculated.

4.5.2. Sobel Test

After it has been substantiated by the Barron and Kenny steps that there exists mediation in the model, then there is another test known as the Sobel test which is applied to assess the mediation within the model and to check the significant or insignificant association of the mediator. The results of the sobel test are shown in the following table:

Table 5 - Sobel Test

	Test Statistic (Z)	Std. Error	p-value
Sobel Test	7.4378	0.0399	.0000

The above table reflects that there appears to be an indirect significant mediation between the independent and the dependent variables. This means that organizational resilience capacity mediates the relationship between the entrepreneurial orientation and organizational performance.

Table 6. Full Model Summary

R	R-Square	MSE	F	df1	df2	р
0.7793	0.6073	0.1133	117.1642	4.0000	303.0000	0.0000

It can be projected from the above table that overall model turns out to be significant statistically. The R square value is 0.7793 and the adjusted R square value appears to be 0.6073 which signifies that 60.73% variability is shared amongst the independent and dependent variables. This model summary depicts that there exist high levels of significance between the variables and it explains as to how adequately and fairly a dependent variable might be envisaged and estimated. Since the value of mean squared error is near to zero, therefore it suggests a sound model fit.

4.5.3. Mediation Test for Quality Culture, Organizational Resilience Capacity and Organizational Performance

The test for mediation was also conducted to assess the mediating role of organizational resilience capacity with regards to 'organizational quality culture' as an independent variable and 'organizational performance' as a dependent variable. The paths are shown below:

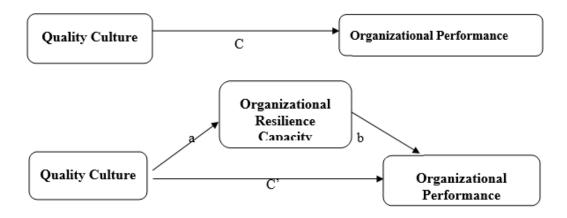


Figure 4. Multiple Regression Paths for the model

The four steps presented by Barron and Kenny (1986) are applied in order, to assess the influence of mediators between the variables. These steps imply that partial or full mediation exists in case all the steps are fulfilled in the light of the given rules.

Path	Coefficients	S.E	Т	Sig(two)
c(YX)	0.5840	0.0362	16.1331	.0000
a(MX)	0.5756	0.0319	18.0258	.0000
b(YM.X)	0.5308	0.0574	9.2541	.0000
c(YX.M)	0.2785	0.0460	6.0536	.0000

Table 7- Path Analysis

X= Quality Culture (Independent variable)

Y= Organizational Performance (Dependent variable)

M= Organizational Resilience Capacity (Mediator)

4.5.3.1. Sobel Test

After it has been substantiated by the Barron and Kenny steps that there exists mediation in the model, then there is another test known as the Sobel test which is applied to assess the mediation within the model and to check the significant or insignificant association of the mediator. The outcomes of the sobel test are shown in the following table:

Table	8.	Sobel	Test
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	Test Statistic (Z)	Std. Error	p-value
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Sobel Test	8.2225	0.0372	.0000
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Table 9. Full Model Summary

R-square	Adjusted R- Square	F	df1	df2	р
0.5781	0.5753	208.9554	2.00000	305.0000	0.0000

It can be projected from the above table that overall model turns out to be significant statistically. The R square value is 0.5781 and the adjusted R square value appears to be 0.5753 which signifies that 57.53% variability is shared amongst the independent and dependent variables. This model summary depicts that there exist high levels of significance between the variables and it explains as to how adequately and fairly a dependent variable might be envisaged and estimated. Since the value of mean squared error is near to zero, therefore it suggests a sound model fit.

4.6. Moderation Analysis

The findings of the moderation analysis are discussed below.

Table 10 Path	Analysis
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Variables	Coefficients	s.e.	Т	Sig(two)
Constant	1.4609	0.5353	2.7289	.0067
Organizational Resilience Capacity	0.1792	0.1549	1.1574	.2480
Entrepreneurial Orientation	0.2301	0.0474	4.8520	.0000
Business Strategy	0.0182	0.1586	0.1146	.9089
Int_1	0.0549	0.0418	1.3130	.1902

From the above table, it can be clearly illustrated and portrayed that the results for the moderation analysis appear to be highly insignificant statistically as p=0.1902 is greater than 0.05.

Table 11. Model Summary

R	R-Square	MSE	F	df1	df2	Р
0.7889	0.6224	0.1090	124.8179	4.0000	303.0000	0.0000

It can be projected from the above table that overall model turns out to be significant statistically. The R square value is 0.7889 and the adjusted R square value appears to be 0.6224 which signifies that 62.24% variability is shared amongst the independent and dependent variables. This model summary depicts that there exist high levels of significance between the variables and it explains as to how adequately and fairly a dependent variable might be envisaged and estimated. Since the value of mean squared error is near to zero, therefore it suggests a sound model fit.

Variables	Coefficients	s.e.	Т	Sig(two)
Constant	1.5033	0.5327	2.8219	.0051
Organizational Resilience Capacity	0.1603	0.1545	1.0378	.3002
Quality Culture	0.2290	0.0443	5.1712	.0000
Business Strategy	0143	0.1582	-0.0906	.9279
Int_1	0.0648	0.0416	1.5591	.1200

From the above table, it can be clearly illustrated and portrayed that the results for the moderation analysis appear to be highly insignificant statistically as p=0.1200 is greater than 0.05.

Table13	-	Model	Summary
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R Square	Adjusted R- Square	MSE	F	df1	df2	Р
0.7913	0.6261	0.1079	126.8432	4.0000	303.0000	0.0000

It can be projected from the above table that overall model turns out to be significant statistically. The R square value is 0.7913 and the adjusted R square value appears to be 0.6261 which signifies that 62.61% variability is shared amongst the independent and dependent variables. This model summary depicts that there exist high levels of significance between the variables and it explains as to how adequately and fairly a dependent variable might be predicted and estimated. Since the value of mean squared error is near to zero, therefore it suggests a sound model fit.

5. Conclusion and Implications:

This study brings into contemplation that there are certain necessary principles and dynamics which may boost the performance of textile organization of Pakistan that entails quality culture and organizational resilient practices within an organization. This research study primarily explored and probed the impact of quality culture and organizational resilience capabilities on the performance of textile organizations in Pakistan by employing the projected and recommended schematic representation contributed in this piece of composition. The researcher has



also taken into account the mediating role of organizational resilience capacity on the performance of textile syndicates.

The conclusions and results drawn from this pragmatic and explorative research study have highlighted that quality culture has a significant causative upshot on the textile sector's performance. The findings thus advocate the fact that organizations possessing these potentials and aptitudes are likely to endure any sort of adversities and subsequently their performance convalesces as well as recuperates which suggests that it is better for managers to instigate and execute these structural, managerial and administrative fundamentals within their organizations by developing a culture where quality is taken care of.

This piece of manuscript also gives practical information and guidance for the managers working in the textile sector to employ these practices of enhanced resilient competencies to attain improved results which have been dwindling in the previous years. This implies that managers must focus on building up the strengths of their respective organizations by inculcating and fostering the attributes of quality culture and resilient methods and behaviours.

This particular research work contributes to the extant management literature by providing observed and experiential substantiation from the textile association of Pakistan which is an emerging economy from one of the developing countries. The results of this study are consistent with the findings of surveys from the developed countries. It is urged that in order to sustain and improve its performance the textile sector of Pakistan must focus on the implementation of courses of action that include developing and maintain a quality culture and resilient practices; hence meeting the criterions and hallmarks of the international arcade.

5.1 Limitations and Directions For Further Research

This research study has manifold limitations. Since the focus of this research work was limited to the textile industry of Pakistan only therefore the results and discoveries of this piece of writing may not reflect and streamline with the other manufacturing and services divisions both in the international and the national perspectives. It is also important to note that the data collected for this research was cross-sectional, therefore other researchers may take into account longitudinal evaluation and examination in the future. This research model may also be protracted and simulated in different other industries, corporations and spheres of interest to the other scholars. Likewise, the researcher has applied correlation and regression analysis including factor analysis; on the contrary other investigators may apply other statistical analysis and techniques to obtain further acumens and discernments pertaining to the research model. In addition, future research may also consider other factors or variables that may give further validations to the organizational performance models. The hypothetical and conceptual model may also be applied in different industries and settings to attain a generalized speculation of this research model.

References

- Adger, W. N. (2000). Social and ecological resilience: are they related? *Progress in human geography*", 24(3), 347-364.
- Adegbuyi, O. A. and Oke, Adunola Oluremi and Worlu, Rowland E.K. and Ajagbe, Akintunde M. (2015) Archival Review of the Influence of Organizational Strategy on Organizational Performance. In: *International Conference on African Development Issues (CU-ICADI) 2015*: Social and Economic Models for Development Track, African Leadership Development Centre, Covenant University Canaanland, OtaOgun State, Nigeria.
- Akgün, A. E., Keskin, H., Byrne, J. C., & Ilhan, Ö. Ö. (2014). "Complex adaptive system mechanisms, adaptive management practices, and firm product innovativeness. *R&D Management*", 44(1), 18-41.
- Alipour, F., &Karimi, R. (2011). Mediation role of innovation and knowledge transfer in the relationship between learning organization and organizational performance. *International Journal of Business and Social Science*, 2(19).

- Al-Dhaafri, H. S., & Al-Swidi, A. (2016). The impact of total quality management and entrepreneurial orientation on organizational performance. *International Journal of Quality & Reliability Management*, 33(5), 597-614.
- Ahmed, M. U., Kristal, M. M., &Pagell, M. (2014). Impact of operational and marketing capabilities on firm performance: Evidence from economic growth and downturns. *International Journal of Production Economics*, 154, 59-71.
- Annarelli, A., &Nonino, F. (2016). Strategic and operational management of organizational resilience: Current state of research and future directions. Omega, 62, 1-18.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51(6), 1173.
- Bojica, A. M., del Mar Fuentes-Fuentes, M., & Fernández Pérez, V. (2017). Corporate entrepreneurship and codification of the knowledge acquired from strategic partners in SMEs. *Journal of Small Business Management*, 55, 205-230.
- Bonanno, G. A. (2004). Loss, trauma, and human resilience: have we underestimated the human capacity to thrive after extremely aversive events? *American psychologist*, 59(1), 20.
- Callaway, D. S., Newman, M. E., Strogatz, S. H., & Watts, D. J. (2000). Network robustness and fragility: Percolation on random graphs. *Physical review letters*, 85(25), 5468.
- Cameron, K. S., & Quinn, R. E. (1999). Diagnosing and changing organisational culture. Reading: Addison-Wesley.
- Covin, J. G., & Slevin, D. P. (1991). A conceptual model of entrepreneurship as firm behavior. *Entrepreneurship* theory and practice, 16(1), 7-26.
- Demirbag, M., Tatoglu, E., Tekinkus, M., & Zaim, S. (2006). An analysis of the relationship between TQM implementation and organizational performance: evidence from Turkish SMEs. *Journal of manufacturing technology management*, 17(6), 829-847.
- Fiksel, J. 2006. A framework for sustainable materials management. Journal of Materials58(8):15–22.
- Flint-Taylor, J., & Robertson, I. (2013). Enhancing well-being in organizations through selection and development. The fulfilling workplace: *The organization's role in achieving individual and organizational health*, 165-186.
- Folke, C. (2006). Resilience: The emergence of a perspective for social-ecological systems analyses. *Global* environmental change, 16(3), 253-267.
- Hamel, G. and Valikangas, L. 2003. The quest for resilience. Harvard Business Review, 81(9): 52-63.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling: a multidisciplinary journal*, 6(1), 1-55.
- Huq, Z. (2005). Managing change: a barrier to TQM implementation in service industries. *Managing Service Quality: An International Journal*, 15(5), 452-469.
- Hussain, T., Akhtar, N. A., & Butt, N. S. (2009). Quality management: a case from Pakistan cotton yarn Industry. Journal of Quality and Technology Management, 5(1), 1-23.



- Kaya, N. (2006). The impact of human resource management practices and corporate entrepreneurship on firm performance: evidence from Turkish firms. *The International Journal of Human Resource Management*, *17*(12), 2074-2090.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. Educational and psychological measurement, 30(3), 607-610.
- Lee, A. V., Vargo, J., & Seville, E. (2013). Developing a tool to measure and compare organizations' resilience. *Natural hazards review*, 14(1), 29-41.
- Lengnick-Hall, C. A., & Beck, T. E. (2011). "Resilience capacity and strategic agility: prerequisites for thriving in a dynamic environment". UTSA, College of Business.
- Lomax, R. G., & Schumacker, R. E. (2004). A beginner's guide to structural equation modeling. psychology press.
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of management Review*, 21(1), 135-172.
- Patel, P. C., Messersmith, J. G., &Lepak, D. P. (2013). Walking the tightrope: An assessment of the relationship between high-performance work systems and organizational ambidexterity. Academy of Management Journal, 56(5), 1420-1442.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. Behavior research methods, 36(4), 717-731.
- Rad, A. (2006). The impact of organizational culture on the successful implementation of total quality management. *The TQM Magazine*, 18(6), 606-625.
- Raheem, A., Abbasi, S. A., Memon, A., Samo, S. R., Taufiq-Yap, Y. H., Danquah, M. K., & Harun, R. (2016). Renewable energy deployment to combat energy crisis in Pakistan. *Energy, Sustainability and Society*, 6(1), 16.
- Shafiq, M., Lasrado, F., &Hafeez, K. (2017). The effect of TQM on organisational performance: empirical evidence from the textile sector of a developing country using SEM. *Total Quality Management & Business Excellence*, 1-22.

State Bank of Pakistan, Annual Reports (2015).

- Shah, F. T., Shamail, S., & Ahmad Akhtar, N. (2015). Lean quality improvement model for quality practices in software industry in Pakistan. *Journal of Software: Evolution and Process*, 27(4), 237-254.
- Shahbaz, M. (2015). Measuring Economic Cost of Electricity Shortage: Current Challenges and Future Prospects in Pakistan.
- Starr, R., Newfrock, J., & Delurey, M. (2003). Enterprise resilience: managing risk in the networked economy. Strategy and Business, 30, 70-79.
- Marwa, S., & Zairi, M. (2008). An exploratory study of the reasons for the collapse of contemporary companies and their link with the concept of quality. *Management Decision*, 46(9), 1342-1370.
- Marwa, S., & Zairi, M. (2008). Towards an integrated national quality award in Kenya. *The TQM journal*, 20(3), 249-264.
- McManus, S., Seville, E., Brunsden, D., & Vargo, J. (2007). Resilience management: a framework for assessing and improving the resilience of organisations.

- McPhearson, T., Hamstead, Z. A., & Kremer, P. (2014). Urban ecosystem services for resilience planning and management in New York City. *Ambio*, 43(4), 502-515.
- Mintzberg, H., Raisinghani, D., & Theoret, A. (1976). The structure of "unstructured" decision processes. *Administrative science quarterly*, 246-275.
- Moss, S. (2009). Fit indices for structural equation modeling. Website: http://www. psych-it. com. au/Psychlopedia/article. asp.
- Murphy, K. M., Shleifer, A., &Vishny, R. W. (1989). Industrialization and the big push. Journal of political economy, 97(5), 1003-1026.
- Munizu, M. (2013). The Impact of Total Quality Management Practices towards Competitive Advantage and Organizational Performance: Case of Fishery Industry in South Sulawesi Province of Indonesia. *Pakistan Journal of Commerce & Social Sciences*, 7(1).
- Naqshbandi, M. M., Kaur, S., Sehgal, R., &Subramaniam, I. D. (2015). Organizational culture profile of Malaysian high-tech industries. Asia-Pacific Journal of Business Administration, 7(1), 2-19.
- Najmi, M., Rigas, J., & Fan, I. S. (2005). A framework to review performance measurement systems. *Business Process Management Journal*, 11(2), 109-122.
- Neely, D. (2014). Enhancing community resilience: What emergency management can learn from Vanilla Ice. Australian Journal of Emergency Management, The, 29(4), 55.
- Normandin, J. M., &Therrien, M. C. (2016). Resilience Factors Reconciled with Complexity: The Dynamics of Order and Disorder. *Journal of Contingencies and Crisis Management*.
- Norris, F. H., Stevens, S. P., Pfefferbaum, B., Wyche, K. F., &Pfefferbaum, R. L. (2008). Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. *American journal of community psychology*, 41(1-2), 127-150.
- Oney-Yazici, E., Giritli, H., Topcu-Oraz, G., & Acar, E. (2007). Organizational culture: the case of Turkish construction industry. *Engineering, Construction, and Architectural Management*, 14(6), 519-531.
- Orchiston, C., Prayag, G., & Brown, C. (2016). Organizational resilience in the tourism sector. Annals of Tourism Research, 56, 145-148.
- Patel, P. C., Messersmith, J. G., &Lepak, D. P. (2013). Walking the tightrope: An assessment of the relationship between high-performance work systems and organizational ambidexterity. Academy of Management Journal, 56(5), 1420-1442.
- Prajogo, D. I., & McDermott, C. M. (2005). The relationship between total quality management practices and organizational culture. *International Journal of Operations & Production Management*, 25(11), 1101-1122.
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate behavioral research*, 42(1), 185-227.
- Rahman, S. U. (2001). A comparative study of TQM practice and organisational performance of SMEs with and without ISO 9000 certification. *International Journal of Quality & Reliability Management*, 18(1), 35-49.



- Rauch, A., Wiklund, J., Lumpkin, G. T., & Frese, M. (2009). Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. *Entrepreneurship* theory and practice, 33(3), 761-787.
- Real, J. C., Roldán, J. L., & Leal, A. (2014). From entrepreneurial orientation and learning orientation to business performance: Analysing the mediating role of organizational learning and the moderating effects of organizational size. *British Journal of Management*, 25(2), 186-208.
- Rogers, P., Lawry, J., Dragisic, J., & Mills, C. (2016). Collaboration and communication: building a research agenda and way of working towards community disaster resilience. *Disaster Prevention and Management: An International Journal*, 25(1).
- Saunders, W. S. A., & Becker, J. S. (2015). A discussion of resilience and sustainability: Land use planning recovery from the Canterbury earthquake sequence, New Zealand. *International Journal of Disaster Risk Reduction*.

Schein, E. H. (2006). "Organizational culture and leadership" (Vol. 356). John Wiley & Sons.

- Seay, S. S. (2015). How Incorporating a Sustainable Business Model Creates Value. Business Studies Journal, 7(1).
- Searcy, C. (2011). Updating corporate sustainability performance measurement systems. *Measuring Business Excellence*, 15(2), 44-56.
- Seligman, M. E. (2011). Building resilience. Harvard Business Review, 89(4), 100-6.
- Seville, E., Brunsdon, D., Dantas, A., Le Masurier, J., Wilkinson, S., &Vargo, J. (2008). Organisational resilience: Researching the reality of New Zealand organisations. *Journal of business continuity & emergency planning*, 2(3), 258-266.
- Skriver, J. (2007, July). Trials and Tribulations: The Building of a Resilient Organization. In Proceedings of the Resilience Engineering Workshop; 25-27 June; 2007; Vadstena; Sweden (No. 023, pp. 43-50). Linköping University Electronic Press.
- Siddiqui, R., Jalil, H. H., Nasir, M., Malik, W. S., & Khalid, M. (2011). The cost of unserved energy: evidence from the industrial sector of Pakistan. *PIDE Working Paper*, (75).
- Shafiq, M., Lasrado, F., &Hafeez, K. (2017). The effect of TQM on organisational performance: empirical evidence from the textile sector of a developing country using SEM. *Total Quality Management & Business Excellence*, 1-22.
- Shah, F. T., Shamail, S., & Ahmad Akhtar, N. (2015). Lean quality improvement model for quality practices in software industry in Pakistan. *Journal of Software: Evolution and Process*, 27(4), 237-254.
- Shahbaz, M. (2015). Measuring Economic Cost of Electricity Shortage: Current Challenges and Future Prospects in Pakistan.
- Smit, B., &Wandel, J. (2006). Adaptation, adaptive capacity and vulnerability. *Global environmental change*, *16*(3), 282-292.
- Somers, S. C. (2007). Building organizational resilience potential: An adaptive strategy for operational continuity in crises. Arizona State University.
- Sousa-Poza, A., Nystrom, H., &Wiebe, H. (2001). A cross-cultural study of the differing effects of corporate culture on TQM in three countries. *International Journal of Quality & Reliability Management*, 18(7), 744-761.

State Bank of Pakistan, Annual Reports (2015).

Starr, R., Newfrock, J., & Delurey, M. (2003). Enterprise resilience: managing risk in the networked economy. *Strategy and Business*, 30, 70-79.

Stephenson, A. V. (2010). Benchmarking the resilience of organisations.

- Stern, D. I. and Cleveland, J. C. (2004). Energy and economic growth. *Rensselaer Working Papers in Economics*, 1-42.
- Stokes, P., Moore, N., Moss, D., Mathews, M., Smith, S., and Liu, Y. P. (2014), "The Micro- Dynamics of Intra-Organizational and Individual Behaviour and Their Role in Organizational Ambidexterity Boundaries" Human Resource Management, forthcoming.
- Sutcliffe, K. M., & Vogus, T. J. (2003). Organizing for resilience. Positive organizational scholarship, 94-110.
- Todorovic, Z. W., & Ma, J. (2008). Entrepreneurial and market orientation relationship to performance: The multicultural perspective. *Journal of Enterprising Communities: People and Places in the Global Economy*, 2(1), 21-36.
- Wieland, A., & Marcus Wallenburg, C. (2013). The influence of relational competencies on supply chain resilience: a relational view. *International Journal of Physical Distribution & Logistics Management*, 43(4), 300-320.
- Wiklund, J., & Shepherd, D. (2003). Knowledge-based resources, entrepreneurial orientation, and the performance of small and medium-sized businesses. *Strategic management journal*, 24(13), 1307-1314.
- Yang, M. J., Kueng, L., & Hong, B. (2015). Business strategy and the management of firms (No. w20846). National Bureau of Economic Research.
- Zimmerman, M. A., & Brouthers, K. D. (2012). Gender heterogeneity, entrepreneurial orientation and international diversification. *International Journal of Gender and Entrepreneurship*, 4(1), 20-43.