

Total Quality Management, Entrepreneurial Orientation, and Market Orientation: Moderating Effect of Environment on Performance of SMEs

Muzaffar Asad¹, Saralah Devi Mariamdarana Chethiyar², Ahsan Ali³

Foundation University Islamabad¹, University Utara Malaysia², Ca' Foscari University of Venice³

Cite this paper: Asad, M. Chethiyar, S. D. M. Ali, A. (2020). Total Quality Management, Entrepreneurial Orientation, and Market Orientation: Moderating Effect of Environment on Performance of SMEs. *Paradigms*, 14(1), 102-108.

The objective of this study was to examine the moderating effect of external environment on the relationships between total quality management, entrepreneurial orientation, market orientation, and performance of small and medium enterprises. The three variables; total quality management, entrepreneurial orientation, and market orientation were not investigated together within the context of small and medium enterprises. Data was collected from small and medium enterprises operating in Sialkot, Pakistan by using self-administered questionnaire. 260 questionnaires were distributed to the owner/managers of small and medium enterprises but only 186 of them were returned, giving a response rate of 71%. The finding showed that total quality management, entrepreneurial orientation, and market orientation were significant predictors of performance of small and medium enterprises. Furthermore, moderating effect of external environment on the relationships between total quality management, entrepreneurial orientation, market orientation, and performance was also found significant. The study is essential for practitioners, policy makers, and researchers in the field of small and medium enterprises. Finally, limitations of study and necessary recommendations for future research have been discussed.

Keywords: Total quality management, entrepreneurial orientation, market orientation, external environment, performance.

INTRODUCTION

Small and Medium Enterprises (SMEs) are main origin for employment generation (Asad, Haider, & Fatima, 2018). SMEs have been recognized globally as an engine of growth and development (Asad & Javaid, 2010; Ibrahim, Keat, & Abdul-Rani, 2016). The contribution of SMEs towards economic performance is now internationally accepted as significant (Kwamega, Li, & Ntiamoah, 2015). In Pakistan SMEs have significant concentration with 65.4% in Punjab. Estimated number of SMEs in Pakistan is 3.2 million with the share of 30% in total exports (Haider, Asad, Atiq, & Fatima, 2017). Due to growing market challenges over the last one-decade, top management of SMEs have been motivated to improve their effectiveness and re-evaluate their business strategies and management practices to satisfy their customers by providing high quality of products and services (Asad & Abid, 2018). Thus, satisfying the customer's needs and wants by providing them quality goods and services can create competitive advantage for organizations (Wanderi & Mberia, 2015). Applying TQM will enhance the overall quality and success of any business (Haque, Sarwar, Azam, & Yasmin, 2014). The critical factor behind such a poor growth are lack of Entrepreneurial Orientation (EO) (Asad, Shabbir, Salman, Haider, & Ahmad, 2018), lack of entrepreneurial networking (Asad, Sharif, & ALekam, 2016), access to finance (Asad, Shariff, & Haider, 2016), lack of skilled labor (Haider, Asad, Fatima, & Abidin, 2017), lack of Market Orientation (MO) (Asad, Sharif, & Hafeez, 2016), lack of government support to the sector (Asad & Javaid, 2010), and product quality (Shabbir, Asad, Faisal, & Salman, 2019).

The purpose of applying Total Quality Management (TQM) is to provide quality products or services to customers, which will decrease cost and increase productivity (Ahmad, et al., 2017). Similarly, the concept of entrepreneurship highlights over the

factors, which puts entrepreneurship in framework of management. EO has been studied in different kinds of organizations from micro firms to large with different kinds of structures (Haider, Asad, Atiq, & Fatima, 2017). Another important aspect is to adopt Market Orientation (MO) practices. MO is to implement the market culture which focuses on the market's competitiveness which increases customer satisfaction (Asad & Abid, 2018) and therefore, performance. Here the importance of environment cannot be ignored (Asad, Ahmad, Haider, & Salman, 2018). Environment is described as factors and situations that are effective and determine the performance of firms (Rogo, Shariff, & Hafeez, 2017).

Pakistan is famous for broad range and high quality of leather garments, leather jackets and leather gloves. In Punjab, Sialkot is the leading exporting city of Pakistan in leather and leather products (SMEDA, 2017). According to National Pakistan Tanneries association there are about 800 tanneries in Pakistan (Pakistan Tanneries Association, 2017). The leather industry of Pakistan has been facing a continuous decline in its share in international market. Furthermore, tanneries and leather sector has faced a decline from 1.2 Billion exports to 725 Million-dollar exports because export of leather jacket, gloves, and footwear has declined by 19% (Bhatti, Sheikh, Asgher, Mansha, & Zafar, 2016). Moreover, the leather sector has also shown decline of 6% (Zafar & Mustafa, 2017). Although many of researchers conducted several studies on the relationship between TQM, EO, and MO on the performance of SMEs however, yet there is a need to better understand the relationship with some moderating variable (Herath & Mahmood, 2013; Jabeen, Aliyu, & Mahmood, 2016; Hartanto, Wahyudi, & PH, 2017). Therefore, the objective of this research is to identify moderating effect of environment on the relationship between TQM, EO, MO, and performance SMEs in Pakistan.

LITERATURE REVIEW

The study examines the effect of TQM, EO, and MO with external environment as a moderating variable on the performance of tanneries and leather SMEs of Sialkot in Pakistan. Moreover, this study aims to provide empirical evidence from the selected literature review to support a theoretical framework and for the development of hypotheses.

Performance is a basically measurement of how SMEs use their assets to make revenue (Keli, 2015). Performance may be defined as the outcome of the firm operations or achievement of firm's goal (Asad & Qadeer, 2014), efficient management of capital (Asad, 2011), satisfaction of employees (Shah & Asad, 2018) and customers (Asad, Ahmad, Haider, & Salman, 2018). Performance includes financial and non-financial performance (Mahmood, Qadeer, & Ahmed, 2015). Moreover, performance express overall profits and losses (Jaca & Psomas, 2015). Performance can be measured based on financial perspective, business process perspective, customer perspective, personnel commitment and learning and commitment perspective (Hidayat, Akhmad, & Mu'alim, 2015). As the major issue is decline in exports due to which financial performance is declining, therefore the study measured performance in term of financial performance, which is mainly affected by TQM, EO, and MO.

TQM is a process for providing quality of products and services to customers by improving the productivity. The concept of total quality control was first introduced by (Vallin, 1961) where he proposed a total system's approach to quality primarily emphasizing prevention-based rather than a corrective-based system. TQM process focuses on not only customers expectations but also decrease the cost by adopting a suitable quality management system (Majumdar, 2016). Thus, the discussion shows that importance of TQM cannot be ignored in getting high performance by SMEs.

In order to attain TQM firms, need to operate entrepreneurially. Entrepreneurship encloses uncertainty and risk taking. Entrepreneurship is economic creation including the characteristics of new established business activity of firms (Soininen, 2013). Entrepreneurial orientation may depend on the environment, when a firm engages in new entry and characterized by cultural differences it faces different challenges (Amin, Thurasamy, Aldakkhil, & Kaswuri, 2016). Similarly, it was indicated that enterprises with high EO surface their counterparts in term of performance (Kreiser, Marino, & Kuratko, 2013; Asad, Sharif, & ALekam, 2016). Thus, like TQM the importane of EO cannot be ignored.

Along with TQM and EO another important factor that influence performance of SMEs is Market Orientation. Market-orientation refers to generating and taking actions in response to market intelligence by the participation of variety of departments in the organization (Jabeen, Aliyu, & Mahmood, 2016). Market orientation is meant to attain customer satisfaction and to improve the performance of a firm (Asad, Sharif, & Hafeez, 2016). There is Positive and significant relationship between MO and firm performance (Herath & Mahmood, 2014). Market orientation and performance depends on the condition of

business environment of an organization (Rogo, Shariff, & Hafeez, 2017).

The external environment is outside factors of company that has the capacity to affect the company (Indris & Primiana, 2015). Organizations need to measure their internal and external environment to meet challenges in order to remain competitive in changing business environment (Faiz, 2015). The external environment has presented both challenges and opportunities for the industry (Ombaka, 2014). Some researchers have also studied the external environment as moderator with MO and performance relationship which focus more on competitive intensity and market turbulence (Abidemi, Halim, & Alshuabi, 2017; Milovanovic & Wittine, 2014). Furthermore, external environment has a strong impact on SMEs performance (Singh & Mahmood, 2014). External environment as a moderator successfully implement MO to achieve higher firm performance (Jabeen, Aliyu, & Mahmood, 2016). This study is also identifying the moderating role of environment.

In order to support the variable in the study, the study employed Resource Based View (RBV) which provides a comprehensive explanation on gaining competitive advantage that how firms can attain competitive advantage through their ability to utilize their resources and capabilities (Hitt, Carnes, & Xu, 2016). According to resource-based view, strategic capabilities i.e. TQM, EO, MO are a pool of internal resources that create competitive advantages (Gupta, Tan, Ee, & Phang, 2018). Therefore, this study examined the impact of TQM, EO, and MO on performance which is in line with the RBV theory and fill the gap in the body of knowledge by adding environment as a moderating variable in RBV. The literature discussed different variables that substantially moderate the relationship between different strategic orientations such as TQM, EO, MO, and performance. However, proper alignment between key organizational components with the context or environment leads to better results (Martin & Javalgi, 2016).

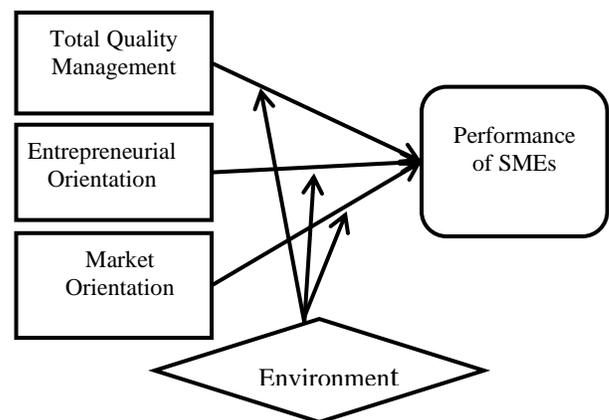


Figure 1: Framework

RESEARCH METHODOLOGY

The main aim of this study is to examine the moderating role of environment on the relationship between TQM, EO, MO, and performance of tanneries and leather sector SMEs of Sialkot, Punjab. Unit of analysis is firm. Target population of this study

was tanneries and leather sector SMEs of Sialkot, Punjab because of the significance as a source to generate employment and expanding labor force to provide attractive sustainability (Punjab Portal, 2017). Primary data has been collected from 260 out of 800 leather sector SMEs of Sialkot (National Tanneries of Pakistan, 2018) through survey technique using systematic sampling. The instrument of data collection was closed ended questionnaire. And response rate was 71%. PLS-SEM version 3.0 was used for analysis. In this TQM was measured in terms of leadership, customer focus, improvement, and process (Kaynak, 2003). Entrepreneurial orientation was measured by using innovativeness, pro-activeness, and risk taking (Haider, Asad, Fatima, & Abidin, 2017). Market orientation measured through customer orientation and competitor orientation (Asad, Shariff, & Hafeez, 2016). External environment measured through competitive intensity and market turbulence (Kohli, Jaworski, & Kumar, 1993). While dependent variable performance was measured through growth in sales, growth in number of employees and assets, and overall performance (Asad, Sharif, & Alekam, 2016; Haider, Asad, Atiq, & Fatima, 2017). 5-point Likert scale was used ranging from 1 “strongly disagree” to 5 “strongly agree” to measure the degree of agreement or disagreement of the respondent on each item.

DATA ANALYSIS

The Cronbach’s alpha was used to evaluate the reliability of instrument. After ensuring reliability convergent validity was measured which refers to the measurement of similar constructs that are relates and connected to each other’s (Jr, Sarstedt, Hopkins, & Kuppelwieser, 2014). The convergent validity was measured by examining Average Variance Extracted (AVE) value. Afterwards, there is need to ensure the internal consistency. Composite Reliability (CR) is used to measure the internal consistency. The reliability lies between 0 and 1, therefore, calculated value should not be less than 0.60 (Henseler, Ringle, & Sarste, 2015) but above 0.70 is considered more desirable.

Table 1: Reliability and validity

| Variables | Cronbach’s Alpha | (AVE) | CR |
|-----------|------------------|-------|-------|
| TQM | 0.880 | 0.734 | 0.917 |
| EO | 0.951 | 0.745 | 0.959 |
| MO | 0.900 | 0.667 | 0.923 |
| EE | 0.927 | 0.702 | 0.942 |
| PSMEs | 0.918 | 0.636 | 0.933 |

After ensuring the reliability of the instrument it is important to check the normality of the data. Values of Skewness and kurtosis are evaluated for normality of data. The Range of Skewness and kurtosis for all variables are acceptable which is <3 and <8. To identify the existence of multicollinearity issue among the variables this study used the tolerance value and Variance Inflation Factor (VIF).

Table 2: Skewness and kurtosis

| Variables | Mean | Std. Deviation | Skewness | Kurtosis | Tolerance | VIF |
|-----------|------|----------------|----------|----------|-----------|-------|
| TQM | 3.21 | 0.861 | -1.163 | -0.828 | 0.677 | 1.515 |
| EO | 3.43 | 0.590 | -1.713 | -0.852 | 0.982 | 1.708 |
| MO | 2.97 | 0.698 | 1.421 | 0.530 | 0.437 | 1.828 |
| E.E | 3.93 | 0.895 | 0.695 | 0.216 | 0.591 | 1.732 |
| PSMEs | 2.93 | 1.010 | 1.321 | -1.543 | 0.637 | 1.091 |

Measurement model (outer model) is first step of PLS-SEM analysis. This model deals with the measurement which depict that how indicators load theoretically and associate with construct.

Table 3: Outer loading

| Variables | Items | Loading | |
|-----------------------------|--------------------|---------|-------|
| TQM | TQM2 | 0.888 | |
| | TQM3 | 0.840 | |
| | TQM4 | 0.844 | |
| | TQM5 | 0.85 | |
| | TQM5 | 0.856 | |
| Entrepreneurial Orientation | EO1 | 0.795 | |
| | EO2 | 0.814 | |
| | EO4 | 0.887 | |
| | EO5 | 0.875 | |
| | EO6 | 0.913 | |
| | EO7 | 0.856 | |
| | EO9 | 0.865 | |
| | EO10 | 0.894 | |
| | Market Orientation | MO1 | 0.757 |
| | | MO5 | 0.779 |
| MO6 | | 0.769 | |
| MO7 | | 0.894 | |
| MO9 | | 0.825 | |
| MO10 | | 0.867 | |
| Environment | | EE1 | 0.930 |
| PSMEs | EE2 | 0.726 | |
| | EE3 | 0.867 | |
| | EE4 | 0.927 | |
| | EE5 | 0.848 | |
| | EE6 | 0.794 | |
| | EE8 | 0.747 | |
| | PSMEs1 | 0.796 | |
| | PSMEs2 | 0.778 | |
| PSMEs3 | 0.774 | | |
| PSMEs4 | 0.837 | | |
| PSMEs5 | 0.762 | | |
| PSMEs6 | 0.808 | | |
| PSMEs7 | 0.815 | | |
| PSMEs8 | 0.806 | | |

After choosing the items having factor loading above 0.7 it is necessary to ensure that the items of a variable are measuring the variable that the item is supposed to measure rather measuring any other variable. Discriminant validity means the ability to measure the only one variable (Voorhees, Brady, Calantone, & Ramirez, 2016).

Table 4: Discriminant validity

| Variables | EO | EE | PSMEs | MO | TQM |
|-----------|-------|-------|-------|-------|-------|
| EO | 0.863 | | | | |
| EE | 0.633 | 0.838 | | | |
| PSMEs | 0.598 | 0.563 | 0.797 | | |
| MO | 0.621 | 0.875 | 0.535 | 0.817 | |
| TQM | 0.606 | 0.617 | 0.716 | 0.574 | 0.857 |

Results obtained by running PLS-SEM version 3.0:

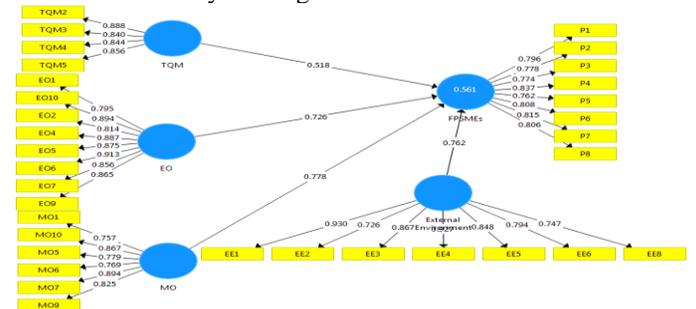


Figure 2: Measurement Model

To identify the significance of relationships PLS-SEM bootstrapping calculated with the help of Smart PLS3. The results of PLS-SEM direct relationships are shown in figure 3.

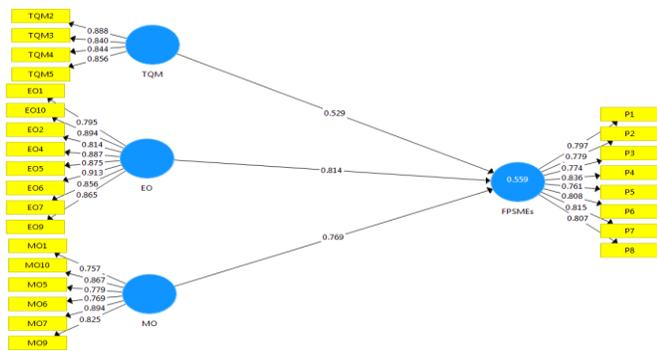


Figure 3: PLS Algorithm Direct Relationship

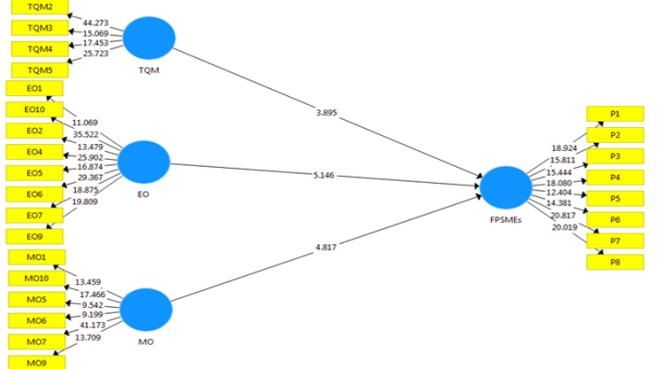


Figure 4: PLS-SEM Bootstrapping Direct Relationships

Table 5: Results of Hypothesis Testing of Direct Relationship

| Hypothesis/ Path | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics ((O/STDEV)) | P Values |
|------------------|---------------------|-----------------|----------------------------|--------------------------|----------|
| TQM-> PSMEs | 0.529 | 0.537 | 0.135 | 3.895 | 0.000 |
| EO -> PSMEs | 0.814 | 0.226 | 0.158 | 5.146 | 0.000 |
| MO -> PSMEs | 0.769 | 0.087 | 0.159 | 4.817 | 0.000 |

After introduction of the interaction term the moderation value presents the beta values of interaction term in figure 5. The moderation model presented in figure 5 and figure 6 tests whether the prediction about the performance of SMEs from TQM, EO, and MO can be affected when environment is introduced as a moderator.

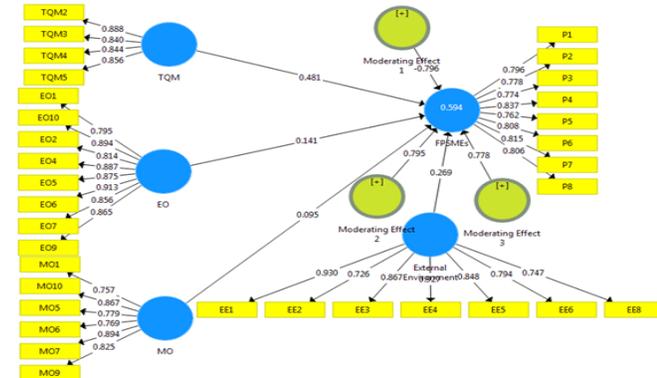


Figure 5: PLS-SEM Algorithm Moderators

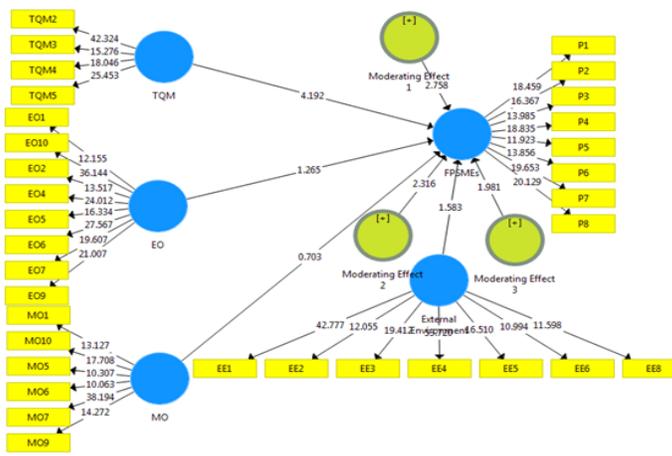


Figure 6: PLS-SEM Bootstrapping Moderator

Table 6: Path coefficients

| Hypothesis/ Path | Original Sample | Sample Mean | Standard Deviation | T Statistics ((O/STDEV)) | P Values |
|------------------|-----------------|-------------|--------------------|--------------------------|----------|
| EE -> PSMEs | 0.269 | 0.258 | 0.170 | 1.582 | 0.114 |
| ME1 -> PSMEs | -0.769 | -0.060 | 0.278 | 2.766 | 0.005 |
| ME2 -> PSMEs | 0.795 | 0.217 | 0.343 | 2.317 | 0.048 |
| ME3 -> PSMEs | -0.778 | -0.100 | 0.392 | 1.985 | 0.022 |

As reported in above in table 5 and 6, it can be concluded that there is significant positive relationship between TQM ($\beta=0.529$; $t=3.895$; $p=0.000$) and performance, thus, supporting the first hypothesis. The significant finding on the relationship of TQM and performance of SMEs is in line with Kaynak (2003). Similarly, findings from Table 5 shows that EO ($\beta=0.814$; $t=5.146$; $p=0.000$) has significant relationship with the performance. Hence, the second hypothesis related to these relationships is accepted. The relationship between MO and performance was found to be significant ($\beta=0.769$; $t=4.817$; $p=0.000$). This finding is consistent with the findings of Asad and Sharif (2016). The findings of moderation also supported hypotheses 4, 5, and 6. Different environmental factors effect on different organizations. This study found that environmental factors moderate the relationship between TQM, EO, MO, and performance of SMEs.

CONCLUSIONS

The theoretical framework of this study was developed within the assumption of Resource Based Value and contingency theory. The results revealed that TQM and MO are important drivers that contribute to higher performance in the context of SMEs in Pakistan. The foreign markets have a high concern for quality as well as and to meet their demands it is important to be market oriented. To be market oriented entrepreneurial orientation is compulsory because any firm cannot change with the changing demand of the market if the firm is not innovative. Hence the findings of the study supporting entrepreneurial orientation are in line with the practical scenario. Similarly, the findings of the study revealed that environment truly plays a moderating role. The environment of Pakistan is very dynamic and mostly challenging. The major reason behind instable performance of SMEs in Pakistan is the dynamic and challenging environment of business. The outcome of this study would assist

managers and policy makers to develop and implement strategies to develop and enhance the Performance of SMEs in the leather sector. This study also faced certain limitations which were tried to be catered by taking environment as a moderating variable, however, this can be further divided into political environment, legal environment, and market environment. Thus, future researchers are guided to take the different aspects of environment in their study so that proper guidelines may be given to the policy makers.

REFERENCES

- Abidemi, B. T., Halim, F. B., & Alshuabi, A. I. (2017). Market orientation and organizational performance: A proposed model on the moderating effect of technological turbulence. *Asian Journal of Multidisciplinary Studies*, 5(6), 1-7.
- Ahmad, M. F., Yin, J. C., Wei, C. S., Rahman, A., Nor, A. N., Hisyamudin, N., . . . Hashim, F. A. (2017). The Relationship between TQM practices with TQM tools and techniques in Small and Medium Enterprise (SMEs). *MATEC Web of Conferences*, 135(0004), 1-8. doi:10.1051/mateconf/201713500044
- Amin, M., Thurasamy, R., Aldakkhil, A. M., & Kaswuri, A. H. (2016). The effect of market orientation as a mediating variable in the relationship between entrepreneurial orientation and SMEs performance. *Nankai Business Review International*, 7(1), 39-59. doi:10.1108/NBRI-08-2015-0019
- Asad, M. (2010). Perception of Trader towards international trade: A diagnostic study. *Paradigms A Journal of Commerce, Economics, and Social Sciences*, 4(1), 48-63. doi:10.24312/paradigms040103
- Asad, M. (2011). Working capital management and corporate performance of textile sector in Pakistan. *Paradigms: A Research Journal of Commerce, Economics and Social Sciences*, 6(1), 100-114. doi:10.24312/paradigms060101
- Asad, M. (2019). Microfinance and empowerment: A case study on beneficiaries of a community development program. *8th Asian Management Research and Case Conference*. Al Ain: United Arab Emirates University.
- Asad, M., & Abid, U. (2018). CSR practices and customer's loyalty in restaurant industry: Moderating role of gender. *NUML International Journal of Business & Management*, 13(2), 144-155.
- Asad, M., & Qadeer, H. (2014). Components of working capital and profitability: A case of fuel and energy sector of Pakistan. *Pardigms A Journal of Commerce, Economics, and Social Sciences*, 8(1), 50-64. doi:10.24312/paradigms08010
- Asad, M., & Sharif, M. N. (2016). Entrepreneurial orientation market orientation and performance of SMEs: Moderating effect of network ties. *2nd International Conference on Business Management*. Jakarta.
- Asad, M., Ahmad, I., Haider, S. H., & Salman, R. (2018). A critical review of islamic and conventional banking in digital era: A case of Pakistan. *International Journal of Engineering & Technology*, 7(4.7), 57-59.
- Asad, M., Haider, S. H., & Fatima, M. (2018). Corporate social responsibility, business ethics, and labor laws: A qualitative analysis on SMEs in Sialkot. *Journal of Legal, Ethical and Regulatory Issues*, 21(3), 1-7.
- Asad, M., Haider, S. H., Akhtar, M. B., & Javaid, M. U. (2011). Human Resource Practices and Enterprise Performance in Small and Medium Enterprises of Pakistan. *First International Conference on Contemporary Issues of Business* (pp. 1-18). Lahore: Comsats.
- Asad, M., Rizwan, A., Shah, M., & Munir, A. (2018). Impact of innovation practices on sustainable performance of SMEs. *Herald National Academy of Managerial Staff of Culture and Arts*, 3, 537-546.
- Asad, M., Shabbir, M. S., Salman, R., Haider, S. H., & Ahmad, I. (2018). Do entrepreneurial orientation and size of enterprise influence the performance of micro and small enterprises? A study on mediating role of innovation. *Management Science Letters*, 8(10), 1015-1026. doi:10.5267/j.msl.2018.7.008
- Asad, M., Sharif, M. N., & Alekam, J. M. (2016). Moderating role of entrepreneurial networking on the relationship between access to finance and performance of micro and small enterprises. *Paradigms A Research Journal of Commerce, Economics, and Social Sciences*, 10(1), 1-13. doi:10.24312/paradigms100101
- Asad, M., Sharif, M. N., & ALekam, J. M. (2016). Moderating role of entrepreneurial networking on the relationship between entrepreneurial orientation and performance of MSEs in Punjab Pakistan. *Science International*, 28(2), 1551-1556.
- Asad, M., Sharif, M. N., & Hafeez, M. (2016). Moderating effect of network ties on the relationship between entrepreneurial orientation, market orientation, and performance of MSEs. *Paradigms: A Research Journal of Commerce, Economics, and Social Sciences*, 10(2), 69-76. doi:10.24312/paradigms100207
- Asad, M., Shariff, M. N., & Haider, S. H. (2015). Moderating effect of social networking on the relationship between access to finance, entrepreneurial orientation and performance of micro and small enterprises in Punjab Pakistan. *International Conference on Rural Development and Entrepreneurship (ICORE2015)*. Hebei: University Utara Malaysia.
- Asad, M., Shariff, M. N., & Haider, S. H. (2016). Moderating effect of entrepreneurial networking on the relationship between access to finance, entrepreneurial orientation and performance of micro and small enterprises; A proposed framework. *International Journal of Management Studies*.
- Bashir, A., & Asad, M. (2018). Moderating effect of leverage on the relationship between board size, board meetings and performance: A study on textile sector of Pakistan. *American Scientific Research Journal for Engineering, Technology, and Sciences (ASRJETS)*, 39(1), 19-29.
- Bhatti, M. S., Sheikh, M. U., Asgher, D., Mansha, N., & Zafar, F. (2016). Current trends and identification of critical factors that are hindrance in the progress of leather industry in Pakistan. *International Journal of Multidisciplinary and Current Research*, 4, 1176-1180.
- Chethiyar, S. D., Asad, M., Shaari, A. B., Rathakrishnan, M. a., & Sivamani, T. (2018). The moderating role of stress management on the relationship between information overload

- syndrome and performance of SAPSP lecturers. *Seminar Antarabangsa & Pertandingan Inovasi Psikologi & Kaunseling* (pp. 157-167). Negara: Kreativiti dalam Hubungan Menolong.
- Faiz, G. A. (2015). The mediating effect of market orientation on the relationship between total quality management, entrepreneurial orientation and the performance of banks in Libya. *Doctoral dissertation*. Universiti Utara Malaysia.
- Gupta, G., Tan, K. T., Ee, Y. S., & Phang, C. S. (2018). Resource-Based View of information systems: Sustainable and transient competitive advantage perspective. *Australasian Journal of Information Systems*, 22.
- Haider, S. H., Asad, M., & Almansour, A. Z. (2015). Factors influencing growth of cottage industry in Punjab, Pakistan: Cottage industry owners' perspective. *Paradigms: A Research Journal of Commerce, Economics, and Social Sciences*, 9(1), 78-87. doi:10.24312/paradigms090105
- Haider, S. H., Asad, M., & Aziz, A. (2015). A survey on the determinants of entrepreneurial training effectiveness among micro finance institutions of Malaysia. *Mediterranean Journal of Social Sciences*, 6(6 S4), 396-403. doi:10.5901/mjss.2015.v6n6s4p396
- Haider, S. H., Asad, M., & Fatima, M. (2017). Entrepreneurial orientation and business performance of manufacturing sector small and medium scale enterprises of Punjab Pakistan. *European Business and Management*, 3(2), 21-28. doi:10.11648/j.ebm.20170302.12
- Haider, S. H., Asad, M., & Fatima, M. (2017). Responsibility of global corporations towards human resource to attain competitive advantage: A review. *Journal of Research in Administrative Sciences*, 6(2), 9-12.
- Haider, S. H., Asad, M., Atiq, H., & Fatima, M. (2017). Mediating role of opportunity recognition between credit, savings and performance of micro and small enterprises in Pakistan. *Journal of Advanced Research in Business and Management Studies*, 7(2), 91-99.
- Haider, S. H., Asad, M., Fatima, M., & Abidin, R. Z. (2017). Microfinance and performance of micro and small enterprises: Does training have an impact. *Journal of Entrepreneurship and Business Innovation*, 4(1), 1-13. doi:https://doi.org/10.5296/jebi.v4i1.10566
- Haider, S. H., Fatima, M., Asad, M., & Ahmad, A. Z. (2016). A study on the issues of employment contracts and practices of employment contracts in UAE. *Paradigms: A Journal of Commerce, Economics, and Social Sciences*, 10(1), 58-64. doi: 10.24312/paradigms100105
- Haque, A., Sarwar, A., Azam, F., & Yasmin, F. (2014). Total quality management practices in the islamic banking industry : Comparison between Bangladesh and Malaysian islamic banks. *International Journal of Ethics in Social Sciences*, 2(1), 1-18.
- Hartanto, W., Wahyudi, S., & PH, J. S. (2017). Analysis the effect of entrepreneurial orientations and adaption of external enviroment to SMEs performance with competitive advantages as intervening variables(stuy of SMEs fashion sector in semarang). *Masters thesis*, 1-13. Diponegoro University.
- Henseler, J., Ringle, C. M., & Sarste, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135. doi:10.1007/s11747-014-0403-8
- Herath, H., & Mahmood, R. (2013). Strategic orientation based research model of SME performance for developing countries. *Review of Integrative Business and Economics Research*, 430.
- Herath, H., & Mahmood, R. (2014). Strategic orientations and SME performance: Moderating effect of absorptive capacity of the firm. *Asian Social Science*, 10(13), 95. doi:10.5539/ass.v10n13p95
- Hidayat, R., Akhmad, S., & Mu'alim. (2015). Effects of environmental factors on corporate strategy and performance of manufacturing industries in Indonesia. *Journal of Industrial Engineering and Management*, 8(3), 763. doi:10.3926/jiem.1326
- Hitt, M. A., Carnes, C. M., & Xu, K. (2016). A current view of resource based theory in operations management: A response to Bromiley and Rau. *Journal of Operations Management*, 41(10), 107-109. doi:10.1016/j.jom.2015.11.004
- Indris, S., & Primiana, I. (2015). Internal and external environment analysis on the performance of Small and Medium Enterprises (SMEs) in Indonesia. *International Journal of Scientific & Technology Research*, 4(4), 188-198.
- Jabeen, R., Aliyu, M. S., & Mahmood, R. (2016). The moderating effect of external environment on the relationship between market orientation and business performance: A quantitative approach. *International Post Graduate Business Journal*, 8(1), 16-25.
- Jaca, C., & Psoimas, E. (2015). Total quality management practices and performance outcomes in Spanish service companies. *Total Quality Management & Business Excellence*, 26(9-10), 958-970. doi:10.1080/14783363.2015.1068588
- Jr, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial Least Squares Structural Equation Modeling (PLS-SEM) An emerging tool in business research. *European Business Review*, 26(2), 106-121. doi:10.1108/EBR-10-2013-0128
- Kaynak, H. (2003). The relationship between total quality management practices and their effects on firm performance. *Journal of Operations Management*, 405-435.
- Keli, S. N. (2015, November). The effect of total quality management programmes on financial performance of listed manufacturing firms in Kenya. 1-62. University of Nairobi.
- Khalil, R., Asad, M., & Khan, S. N. (2018). Management motives behind the revaluation of fixed assets for sustainability of entrepreneurial companies. *International Journal of Entrepreneurship*, 22(Special), 1-9.
- Kohli, A., Jaworski, B., & Kumar, A. (1993). Markor: A measure of market orientation. *Journal of Marketing Research*, 467-477.
- Kwamega, M., Li, D., & Ntiamoah, E. B. (2015). Role of Total Quality Management (TQM) as a tool for performance

- measurement in Small and Mediumsized Enterprise (SMEs) in Ghana. *British Journal of Economics, Management & Trade*, 10(3), 1-10. doi:10.9734/BJEMT/2015/20806
- Mahmood, S., Qadeer, F., & Ahmed, A. (2015). The role of organizational learning in understanding relationship between total quality management and organizational performance. *Pakistan Journal of Commerce and Social Sciences*, 9(1), 282-302.
- Martin, S. L., & Javalgi, R. (. (2016). Entrepreneurial orientation, marketing capabilities and performance: The moderating role of competitive intensity on Latin American international new ventures. *Journal of Business Research*, 69(6), 2040–2051. doi:10.1016/j.jbusres.2015.10.149
- Milovanovic, B. M., & Wittine, Z. (2014). Analysis of external environment's moderating role on the entrepreneurial orientation and business performance relationship among Italian small enterprises. *International Journal of Trade, Economics and Finance*, 5(3), 224. doi:10.7763/IJTEF.2014.V5375
- National Tanneries of Pakistan. (2018, March). *Leather Products, Leather Garments, Leather Products*. Retrieved from National Tanneries of Pakistan (Pvt) Ltd: <http://www.nationaltanneriesofpakistanpvtltd.enic.pk/>
- Ombaka, B. E. (2014). Resources, external environment, innovation and performance of insurance companies in Kenya. *Organizational Resources, Corporate Governance Structures and Performance*. University of Nairobi.
- Pakistan Tanneries Association. (2017, March). *Leather Industry: At an Edge*. Retrieved from Pakistan Tanneries Association(PTA): <http://www.pakistantanners.org/>
- Punjab Portal. (2017, march). *Punjab portal all about punjab at one place*. Retrieved from key industries: https://www.punjab.gov.pk/sialkot_key_industry
- Rogo, H. B., Shariff, M. M., & Hafeez, M. H. (2017). Moderating effect of access to finance on the relationship between total quality management, market orientation and SMEs performance: A proposed framework. *International Review of Management and Mark*, 7(1), 119-127.
- Shabbir, M. S., Asad, M., Faisal, M., & Salman, R. (2019). The relationship between product nature and supply chain strategy: An empirical evidence. *International Journal of Supply Chain Management*, 8(2), 654-658.
- Shabbir, M. S., Shariff, P. D., Asad, M., Salman, R., & Ahmad, I. (2018). Time-frequency relationship between innovation and energy demand in Pakistan: Evidence from Wavelet Coherence Analysis. *International Journal of Energy Economics and Policy*, 8(5), 251-258.
- Shah, M., & Asad, M. (2018). Effect of motivation on employee retention: Mediating role of perceived organizational support. *European Online Journal of Natural and Social Sciences*, 7(2), 511-520.
- Singh, H., & Mahmood, R. (2014). Manufacturing strategy and export performance of small and medium enterprises in Malaysia: Moderating role of external environment. *International Journal of Business and Commerce*, 3(5), 37-52.
- SMEDA. (2017). *State of SMEs in Pakistan*. Retrieved from Small and Medium Enterprises Development Authority : https://smeda.org/index.php?option=com_content&view=article&id=7:state-of-smes-in-pakistan&catid=15
- Soininen, J. (2013). Entrepreneurial orientation in small and medium-sized enterprises during economic crisis. *Doctoral Dissertation*. Acta Universitatis Lappeenrantaensis.
- Vallin, F. A. (1961). *Total quality control: engineering and management, the technical and managerial field for improving product quality, including its reliability, and for reducing operating cost and losses*. New York: McGraw Hill Book.
- Voorhees, C. M., Brady, M. K., Calantone, R., & Ramirez, E. (2016). Discriminant validity testing in marketing: An analysis, causes for concern, and proposed remedies. *Journal of the Academy of Marketing Science*, 119-134.
- Wanderi, E. E., & Mberia, H. D. (2015). Evaluation of factors influencing total quality management implementation in rawdan constructon companies: case of fair construction company. *European Journal of Business and Social Sciences*, 4(3), 14-28.
- Zafar, A., & Mustafa, D. S. (2017). SMEs and its role in economic and socio-economic development of Pakistan. *International Journal of Academic Research in Economics and Management Sciences*, 7(4), 195-205. doi: 10.6007/IJARAFMS/v7-i4/3484
- Zahra, K., Majeed, K., Mahmood, A., & Asad, M. (2012). Impact assessment of community participation in solid waste management projects in selected areas of Faisalabad city. *Journal of Urban Planning and Development*, 138(4), 319-327. doi:10.1061/(ASCE)UP.1943-5444.0000127