

The Relationship between Entrepreneurial Orientation Dimensions and Performance of Small and Medium Enterprises in North Western States of Nigeria

Bello Abidemi T*
Bulus Bannah
Aisha Abdulmumin
Mansur Aliyu

Directorate of Academic Planning, Nigerian Institute of Leather and Science Technology Zaria, Kaduna State.

*Corresponding author

Abstract

The present paper investigated relationship that exists between entrepreneurial orientation dimensions on performance of Small and Medium enterprises in a period of pandemic (Covid -19). Data was collected from entrepreneurial managers operating in the north western part of Nigeria. A random sampling technique was used in gathering data from a total of 520 entrepreneurs and 463 entrepreneurs was retained in analyzing the data. PLS software was used in analyzing the data. The study explored five dimensions of EO namely proactiveness, autonomy, innovativeness, risk taking and aggressiveness. Except for proactiveness, all other dimensions of EO revealed significant positive effect on small and medium enterprises performance. The result of the study will guide entrepreneur on strategies to use in improving performance.

Keywords: Entrepreneurial orientation, Small and Medium Enterprises, Performance, Risk-taking, Innovativeness, autonomy

1. Introduction

Nations have seen the effects of COVID-19 pandemic universally. Most of the nations in African context particularly in Nigeria been a developing nation felt the effect of COVID-19 at all levels of the nation. Small and medium enterprises (SMEs) witnessed a number difficulties such as lack of raw materials, low demand for goods and services, low turnout of the labor force due to lockdown at both local and international levels and a host of other difficulties (Shafi, Liu, & Ren, 2020). Businesses never foresaw the effect of COVID-19 crisis since it was unexpected and they were not prepared to face such crisis (Bartik et al., 2020).

SMES are the pillar of any economy both developing and developed nations as they provide employment opportunities to its citizens (Khan et al., 2021). The COVID-19 pandemic also created an avenue for new businesses such as the delivery bike we see making deliveries to the door steps of customers and a host of other businesses such as the sales of face mask and hand sanitizers which previous existing businesses failed to tap into. The pandemic paved way for many SMEs to spring up and also existing businesses were able to key into opportunities that have been created by the COVID-19 pandemic thereby reaping their benefits.

Zafar and Mustafa (2017) stated that in developed nations, SMEs contributes 55% and 65% to a nations GDP and employment rate respectively. The researchers further stressed that in developing nations the contribution is higher between 60% and 70% respectively, while in middle income nations SMEs contributes between 70% and 95% to both gross domestic product and total employment respectively. However, SMEs in Nigeria contributed 48 % in 2015 (Biereenu-Nnabugwu & Abah, 2015).

SMEs have been defined differently from one nation to another, consequently, SMEs can be viewed in respect to number of staff, capital required in starting up among others. For instance,, International labour Organization (2015) stated that an SMEs is any organization having below 250 staff. The present study centers on small and medium enterprises where the number of employees ranges from 10 to 250. The reason for focusing on small and medium enterprises is due to the fact it is owned by one person where as large or medium enterprises have a structured managerial team (Peric, Durkin, & Vitezic, 2017). Research as shown that SMEs are faced with so many challenges such as unfriendly business environment , lack entrepreneurial orientation deficiencies, lack of competent management, poor market orientation, lack of financial support, low demand for product and service ,lack of training and experience, , and limited capacity for innovations, and lot of other factors (Kura, Abubakar, & Salleh, 2020).

Entrepreneurial orientation is one of the critical drivers of organizational performance which has been stated to have a significant effect on small and medium enterprise performance (Al Mamun & Fazal, 2018). EO has been conceptualized in a number of ways such as ability to take risks, been innovative, and been proactive, autonomous and competitive aggressiveness (Al Mamun & Fazal, 2018). It is also imperative to mention that most studies have conceptualize EO as a single latent construct, however, the present study intends to look at the contribution of each dimension of EO in determining the performance of SMEs in a period of pandemic. In other words, the present study is quite different and unique in this context.

It is a well-known fact that small and medium enterprises find it challenging and difficult to survive for a longer period of time compare to larger organizations due to basically lack of required entrepreneurial skills. Practically, the study of EO dimensions on performance of SMEs is of prime importance. EO dimensions helps firms in determining which of these components is important in the context of Nigeria. It will help identify these basic components since SMEs have be identified as the major drivers of any economy in both developing and developed nations.

The study updates the literature on entrepreneurship and SMEs performance which is not just restricted to developed nations but also developing nations. The study investigates the relationship that exists between EO dimensions which is five dimensions. The study will also help beginner's small medium enterprises and also existing enterprises on how to improve and increase the performance of their firms (Wahga, Blundel, & Schaefer, 2015). The enquiry also gives an insight on the use of Partial least square in examining the objectives of the study.

2. Literature Review

Entrepreneurship is one of the most important aspects been discussed in research and business. The study investigates the link between entrepreneurship orientation dimensions and performance. On this note, it is observed that the closest theory that links this relationship is resource based theory (RBV). RBV is included because it talks about organizational resources weather it is intangible or tangible, rare, valuable, cannot be easily copied and organization (Barney, 2001). Entrepreneur orientation dimensions can refer to

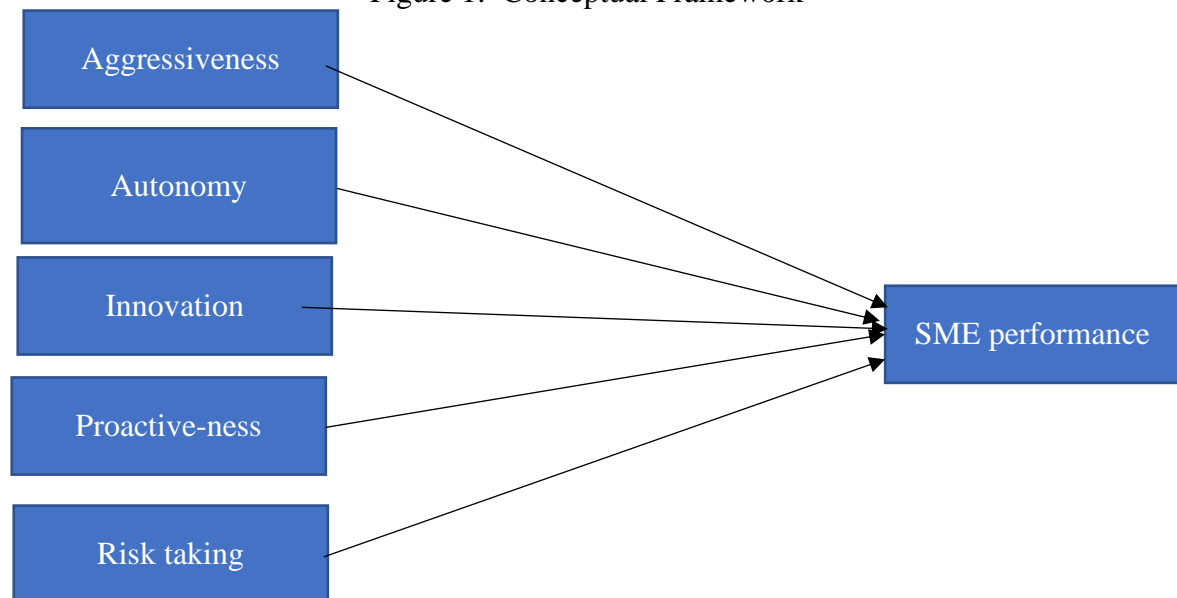
human skills or human capital which competitors cannot imitate (Tehseen, Sajilan, Ramayah, & Gadar, 2015).

2.1. Entrepreneurial orientation dimensions

The literature as indicated a number of dimensions of entrepreneur orientation. Entrepreneur orientation has a number of dimensions which include been a risk taker, been autonomous, innovativeness, proactive-ness and competitive aggressiveness (Bolton & Lane, 2012). Some studies made use of three dimensions of EO, some utilized four dimensions, while some utilized five dimensions of EO (Al Mamun & Fazal, 2018). The present study is in line with (Al Mamun & Fazal, 2018) that made use of five dimensions in measuring EO on SME performance.

Risk taking deals with the ability of an entrepreneur to invest a reasonable amount in resources which might generate a like hood of either failure or success (Altinay & Wang, 2011). Organizations that have propensity to take higher risks usually obtain improved growth and superior profit in the long run (Wang & Poutziouris, 2010). Innovation is the act of been creative and the act of coming up with intriguing ideas which leads to the creation and facilitation of new technologies, process and opportunities for business to tap into (Runyan, Huddleston, & Swinney, 2006). Small and medium enterprises can tap into these innovative ideas in achieving superior organizational performance (Runyan et al., 2006). Proactive-ness establishes an organization vision or the act of anticipating demand for a particular product which leads to competitive edge against competing products. Proactive-ness organizations are able to make the first move and dominate the market distribution channel (Zahra & Covin, 1995). Aggressiveness can be described as the act in which an organization responds to the activities of its rivals (Runyan et al., 2006). Scholars have also attributed aggressiveness to organizations that are been aggressive in an unfriendly environment (Covin & Covin, 1990). Aggressiveness can also be said to be an organization penchant to straighten challenges in order to surpass competing firms. Autonomy refers to a person's independent action and self-direction in searching for a new opportunity (G. Lumpkin & Dess, 1996). Scholars have also demonstrated a positive relationship between autonomy and organizational performance (Rauch et al. 2009).

Figure 1: Conceptual Framework



3. Discussion of Findings

The present study ensured assumptions pertaining to normality, linearity and multicollinearity of the data prior to performing the main analysis (Mahmoud, Muharam, & Mas' ud, 2015). Upon successful achievement of these assumptions, we employed partial least squares (PLS) path modelling approach (Wold, 1985) in conjunction with Smart PLS 2.0 M3 software (Ringle, Wende, & Will, 2005). The PLS path modelling is a statistical procedure that is 'meant to estimate a network of causal relationships, defined according to a theoretical model, linking two or more latent complex concepts, each measured through a number of observable indicators' (Vinzi, Trinchera, & Amato, 2010). This modelling approach is viewed most appropriate for numerous reasons ranging from its relationship estimation potential to predictive capability (Ahmed, Kura, Umrani, & Pahi, 2020). Moreover, PLS path modelling is also termed as a vital multivariate technique in social sciences (Hair, Ringle, & Sarstedt, 2013).

Pertaining to the model validation and assessment, the current study adopted a two-stage process for evaluation, as recommended by (Henseler, Ringle, & Sinkovics, 2009). This includes assessment of measurement model and assessment of structural model (Sarstedt, Ringle, Henseler, & Hair, 2014).

Measurement Model Assessment

This stage aims to assess the psychometric properties of the scales the present study adopted. Therein, individual item reliability, internal consistency and discriminant, and convergent validity are examined (Henseler, 2018). Individual item reliability was examined through assessing outer loadings of each of construct's measure (Akhtar, Hongyuan, Iqbal, & Ankomah, 2020). Some of the prominent authors have suggested that models with measures weighing outer loadings of 0.70 or above are to be considered more reliable (Gallardo-Vázquez & Sanchez-Hernandez, 2014). As a result, a single item was deleted out of the total items of 22 items. The remaining 21 items loadings was between 0.653 and 0.967. Table 1 provides further details in this regard. Furthermore, composite reliability coefficient was assessed to ascertain internal consistency reliability of the employed measures. For this, the rule of thumb provided by (Bagozzi & Yi, 1988) was

considered which suggests that composite reliability coefficient should be no less than 0.70.

The present study has responsively achieved adequate level of internal consistency, as composite reliability coefficients for all the latent constructs are ranged in between 0.773 and 0.941. Accordingly, for convergent validity, the present study assessed average variance extracted (AVE) scores, following the recommendations of (Fornell & Larcker, 1981). As per the authors, the convergent validity is better assessed through AVE scores, whereby (Chin, 1998) has suggested that each of the latent construct should value 0.50 or above.

Figure 2: Measurement Model Approach

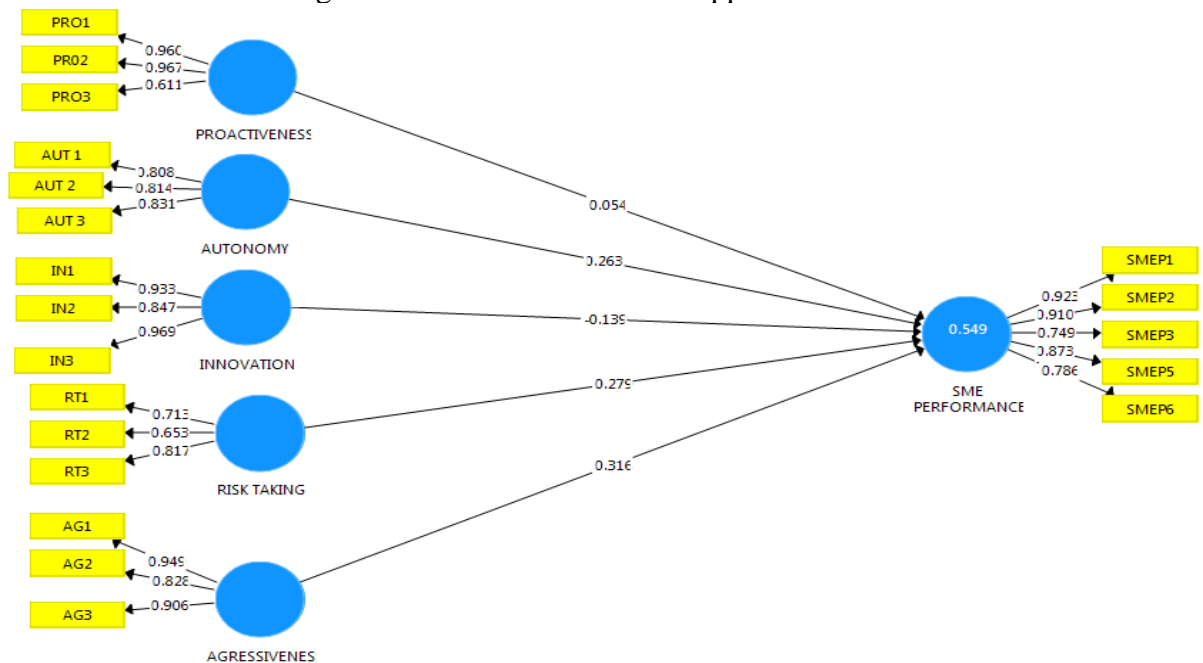


Table 1. Loadings, Composite Reliability (CR) and Average Variance Extracted (AVE)

Construct	Items	Loadings	AVE	CR
Aggressiveness	AG1	0.949	0.803	0.924
	AG2	0.828		
	AG3	0.906		
Autonomy	AUT1	0.808	0.669	0.858
	AUT2	0.814		
	AUT3	0.831		
Innovation	IN1	0.933	0.842	0.941
	IN2	0.847		
	IN3	0.969		
Proactive-ness	Pro2	0.967	0.743	0.893
	Pro1	0.960		
	Pro3	0.611		
Risk taking	RT1	0.713	0.534	0.773
	RT2	0.653		
	RT3	0.817		
SME performance	SMEP1	0.923	0.724	0.929
	SMEP2	0.910		
	SMEP3	0.749		
	SMEP5	0.873		
	SMEP6	0.786		

Source: The authors' compilation.

Structural Model Assessment

The affirmation of measurement model takes the analysis to the next stage of PLS path modelling, whereby the structural model is assessed. The first component in the structural model assessment relates with the testing of theorized relationships (Hair Jr, Sarstedt, Hopkins, & Kuppelwieser, 2014). Thus, at first, the significance of path coefficients of the main model was examined through applying bootstrapping procedures with 5,000 bootstrap samples on 388 cases to outline path coefficient's significance level of the direct theorized relationships at the first instance (Sarstedt et al., 2014). Bootstrapping results in Figure 2 and Table 3 showcase that aggressiveness positively enhances SMEs performance (T= 4.738, p = 0.000), thus supporting our first theoretical postulation. The findings is consistent with (Akbar, Bon, Alshaikh, & Wadood, 2021). The study agrees with our conclusion of competitive aggressiveness and state that the organisation that shows aggressive behaviour in the market can compete with their counterparts. Similarly, we theorized that autonomy is positively SMEs performance (T= 4.548, p = 0.000) which is consistent with (G. T. Lumpkin, Cogliser, & Schneider, 2009).

Table 2. Discriminant Validity

	Discriminat Validity		Fronker Laker		Risk	Sme
	Agressiven	Autono	Innovati	Proactiven	taking	performance
	ess	my	on	ess		
Agressiveness	0.896					
Autonomy	0.309	0.818				
Innovation	0.155	-0.436	0.918			
Proactiveness	0.121	0.249	-0.122	0.862		
Risk taking	0.73	0.377	0.056	0.593	0.731	
Sme performance	0.586	0.54	-0.196	0.34	0.633	0.851

Source: The authors.

Note: Bold face scores represents square root of AVE of every latent construct

Results (Table 3 and Figure 2) reveals that innovation is positively related to SMEs performance (T= 2.974, p = 0.001). This finding is consistent with that of (Cannavale & Nadali, 2019), who state that innovation is the main appropriate dimension of EO to positively affect performance.

The introduction of new developments in the market helps companies to gain and understand competition. However, we theorized that proactive-ness is related to SMEs performance, based on the result our hypothesis is rejected (T= 0.729, p = 0.233). Similarly, we postulated that risk-taking is positively related to SMEs performance. From the result our hypothesis is accepted with (T= 2.662, p = 0.004). The risk-taking findings agree with many studies (Akbar et al., 2021) that greater risk conditions will result in higher financial performance. The willingness of companies to invest resources in high-risk, high-return projects will have the advantage of increasing resources.

The findings of our research agree with the current literature (Akbar, Khan, Wadood, & Bon, 2020) that risk-taking and innovativeness have a unique attraction in sustaining the furniture business, among other industries.

Figure 3: PLS Structural Model Approach

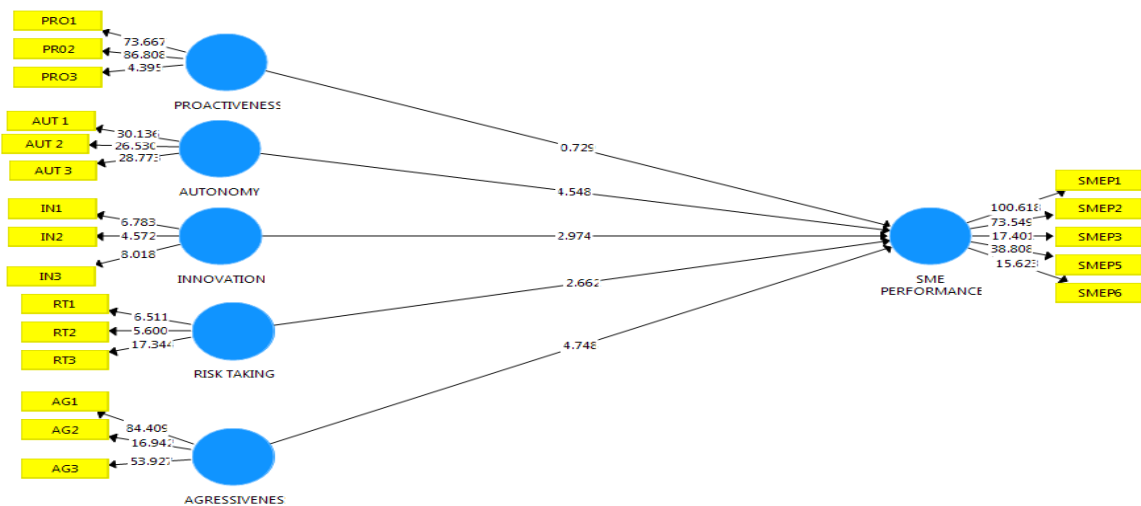


Table 3: Outcome of Structural Model Approach

Hypothesis	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Agressiveness -> SME Performance	0.316	0.311	0.066	4.748	0
Autonomy -> SME Performance	0.263	0.261	0.058	4.548	0
Innovation -> SME Performance	-0.139	-0.142	0.047	2.974	0.001
Proactiveness -> SME Performance	0.054	0.056	0.074	0.729	0.233
Risk Taking -> SME Performance	0.279	0.282	0.105	2.662	0.004

Source: Authors’ compilation

Conclusion

The present study as confirmed that entrepreneur orientation dimensions contribute significantly to the performance of small and medium enterprises. As seen from the analysis, entrepreneur orientation dimensions contributes to the success of small and medium enterprises if properly aligned. That is to say that during the pandemic period such as Covid-19, small and medium enterprises that effectively utilize the dimensions of entrepreneur orientation can perform better in the market place. In other words, it is important for policy makers and stakeholders to know that it is not just the ability of an entrepreneur to take risk that guarantees success in the market place but he/she as to be innovative, aggressive, and autonomous to succeed in the market place. The study also shows that entrepreneurs should have the needed skills, abilities and knowledge to succeed. The researchers also suggest that stakeholders and policy makers should not only give grants such as that of Covid-19 loan been offered by the CBN to young entrepreneurs, they should also put in place mechanism for training young and previous entrepreneurs towards entrepreneurship especially for small and medium enterprises in order to contribute significantly to the GDP of Nigeria. The study as contributed to the literature by stating that small and medium enterprises has to align its resources and capabilities towards entrepreneur orientation dimensions for better and improves performance.

Though this study finds to be a good fit for enhancing the enterprise performance through entrepreneurial orientation and entrepreneurial competencies, there are few limitations of the study as well. The study does not highlight strategies for enhancing EO

or ECs, moreover, the dimensions reflecting EO are not exhaustive despite of being relatively highly cited in the literature.

This study only examined three state out of the thirty-six states in Nigeria, as a result other scholars can consider conducting similar studies in other states in Nigeria, this is because, similar studies have not been conducted for many states in Nigeria and the few that has been conducted for some few states focus on three or five dimensions of EO.

References

- Ahmed, U., Kura, K. M., Umrani, W. A., & Pahi, M. H. (2020). Modelling the link between developmental human resource practices and work engagement: The moderation role of service climate. *Global Business Review*, 21(1), 31-53.
- Akbar, F., Bon, A. T. B., Alshaikh, M. E., & Wadood, F. (2021). Mediating effects of Inbound Open Innovation on Entrepreneurial Orientation and Firm Performance. *Review of International Geographical Education Online*, 11(5), 519-541.
- Akbar, F., Khan, R. A., Wadood, F., & Bon, A. T. B. (2020). Entrepreneurial orientation dimension affects firm performance: A perspective from the Malaysian furniture industry. *Entrepreneurial Business and Economics Review*, 8(4), 157-181.
- Akhtar, S., Hongyuan, T., Iqbal, S., & Ankomah, F. Y. N. (2020). Impact of need for achievement on entrepreneurial intentions; Mediating role of self-efficacy. *Journal of Asian Business Strategy*, 10(1), 114-121.
- Al Mamun, A., & Fazal, S. A. (2018). Effect of entrepreneurial orientation on competency and micro-enterprise performance. *Asia Pacific Journal of Innovation and Entrepreneurship*.
- Altinay, L., & Wang, C. L. (2011). The influence of an entrepreneur's socio-cultural characteristics on the entrepreneurial orientation of small firms. *Journal of Small Business and Enterprise Development*.
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the academy of marketing science*, 16(1), 74-94.
- Barney, J. B. (2001). Resource-based theories of competitive advantage: A ten-year retrospective on the resource-based view. *Journal of management*, 27(6), 643-650.
- Bartik, A. W., Bertrand, M., Cullen, Z. B., Glaeser, E. L., Luca, M., & Stanton, C. T. (2020). *How are small businesses adjusting to COVID-19? Early evidence from a survey*. Retrieved from
- Biereenu-Nnabugwu, M., & Abah, N. C. (2015). Reflections on the Realities and Challenges of Income Tax Administration in Nigeria. *Journal of Policy and Development Studies*, 9(4), 71-80.
- Bolton, D. L., & Lane, M. D. (2012). Individual entrepreneurial orientation: Development of a measurement instrument. *Education+ Training*.
- Cannavale, C., & Nadali, I. Z. (2019). Entrepreneurial orientations and performance: A problematic explanatory approach in the Iranian knowledge-based industry. *The Journal of Entrepreneurship*, 28(1), 68-93.
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research*, 295(2), 295-336.
- Covin, J. G., & Covin, T. J. (1990). Competitive aggressiveness, environmental context, and small firm performance. *Entrepreneurship theory and practice*, 14(4), 35-50.

- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics: Sage Publications Sage CA: Los Angeles, CA.
- Gallardo-Vázquez, D., & Sanchez-Hernandez, M. I. (2014). Measuring Corporate Social Responsibility for competitive success at a regional level. *Journal of Cleaner Production*, 72, 14-22.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long range planning*, 46(1-2), 1-12.
- Hair 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*.
- Henseler, J. (2018). Partial least squares path modeling: Quo vadis? *Quality & Quantity*, 52(1), 1-8.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing *New challenges to international marketing*: Emerald Group Publishing Limited.
- Khan, M. A., Zubair, S. S., Rathore, K., Ijaz, M., Khalil, S., & Khalil, M. (2021). Impact of entrepreneurial orientation dimensions on performance of small enterprises: do entrepreneurial competencies matter? *Cogent Business & Management*, 8(1), 1943241.
- Kura, K. M., Abubakar, R. A., & Salleh, N. M. (2020). Entrepreneurial orientation, total quality management, competitive intensity, and performance of SMEs: A resource-based approach. *Journal of Environmental Treatment Techniques*, 8(1), 61-72.
- Lumpkin, G., & Dess, G. G. (1996). Enriching the Entrepreneurial Orientation Construct- A Reply to " Entrepreneurial Orientation or Pioneer Advantage" (pp. 605-607): JSTOR.
- Lumpkin, G. T., Cogliser, C. C., & Schneider, D. R. (2009). Understanding and measuring autonomy: An entrepreneurial orientation perspective. *Entrepreneurship theory and practice*, 33(1), 47-69.
- Mahmoud, M. A., Muharam, F. M., & Mas' ud, A. (2015). Factors that influence the entrepreneurial intention of Nigerian postgraduates: Preliminary analysis and data screening. *Asian Social Science*, 11(4), 180.
- Peric, M., Durkin, J., & Vitezic, V. (2017). The constructs of a business model redefined: A half-century journey. *Sage Open*, 7(3), 2158244017733516.
- Ringle, C. M., Wende, S., & Will, A. (2005). SmartPLS 2.0 (beta): Hamburg.
- Runyan, R. C., Huddleston, P., & Swinney, J. (2006). Entrepreneurial orientation and social capital as small firm strategies: A study of gender differences from a resource-based view. *The International Entrepreneurship and Management Journal*, 2(4), 455-477.
- Sarstedt, M., Ringle, C. M., Henseler, J., & Hair, J. F. (2014). On the emancipation of PLS-SEM: A commentary on Rigdon (2012). *Long range planning*, 47(3), 154-160.
- Shafi, M., Liu, J., & Ren, W. (2020). Impact of COVID-19 pandemic on micro, small, and medium-sized Enterprises operating in Pakistan. *Research in Globalization*, 2, 100018.

- Tehseen, S., Sajilan, S., Ramayah, T., & Gadar, K. (2015). An Intra-Cultural Study of Entrepreneurial Competencies and SMEs Business Success in Whole Sale and Retail Industries of Malaysia:-A Conceptual Model. *Review of Integrative Business and Economics Research*, 4(3), 33.
- Vinzi, V. E., Trinchera, L., & Amato, S. (2010). PLS path modeling: from foundations to recent developments and open issues for model assessment and improvement. *Handbook of partial least squares*, 47-82.
- Wahga, A., Blundel, R., & Schaefer, A. (2015). Human capital and environmental engagement of SMEs in Pakistan: A comparative analysis of the leather industry.
- Wang, Y., & Poutziouris, P. (2010). Leadership styles, management systems and growth: Empirical evidence from UK owner-managed SMEs. *Journal of enterprising culture*, 18(03), 331-354.
- Wold, H. (1985). Factors influencing the outcome of economic sanctions. *Trabajos de Estadística y de Investigación Operativa*, 36(3), 325-338.
- Zafar, A., & Mustafa, S. (2017). SMEs and its role in economic and socio-economic development of Pakistan. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 6(4).
- Zahra, S. A., & Covin, J. G. (1995). Contextual influences on the corporate entrepreneurship-performance relationship: A longitudinal analysis. *Journal of business venturing*, 10(1), 43-58.