Mediating Role of Interaction Orientation on the Relationship between Strategic Orientation and Small Medium Enterprises Performance in North-East Nigeria

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ABSTRACT

This study was designed to find out the mediating role of interaction orientation in the relationship between strategic orientation and Small Medium Enterprises (SMEs) performance in northeastern Nigeria. Data was collected from a sample of 326 SME owner-managers in northeastern Nigeria using questionnaire. The analysis was done with inferential statistics on Partial Least Square Structural Equation Modelling (PLS-SEM) on Smart-PLS 3. The results revealed that interaction orientation mediates the relationship between each of entrepreneurial orientation, market orientation learning orientation, and technology orientation with SMEs' performance. Without taking proper training and orientation measures for SME owner-managers on the application of entrepreneurial, market orientation, and technology jointly with interaction orientation in Nigeria, the country will continue to suffer from poor SMEs' performance. It is recommended that special consideration should be given to interaction orientation because of its mediation effect on market orientation and SMEs performance.

Keywords: Entrepreneurial Orientation, Market Orientation, Learning Orientation, Technology Orientation, Interaction Orientation, Strategic Orientation and SMEs Performance.

I. INTRODUCTION

These contributions of the Small and Medium Enterprises (SMEs) are clear to the Nigerian economy as the sector contributed an average of 48% of the nation’s GDP from 2012 to 2017 (National Bureau of Statistics, 2019). Also in the area of employment generation, SMEs provide an average of 60% to 70% of total employment in Nigeria (International Council for Small Business (ICSB), 2019). Another advantage of SMEs in developing countries like Nigeria is in the area of relatively small capital and managerial expertise requirement which matches the limited size of capital for investment and managerial expertise obtainable in developing countries (Duru et al., 2018; Peng et al., 2019). To reap the maximum benefits of SMEs, successive administrations in Nigeria have formulated and implemented different policies and strategies to create an enabling environment for SMEs’ formation and growth.

However, SMEs sector in Nigeria has experienced a contraction of marketing performance in recent years (SMEDAN & NBS, 2010; SMEDAN & NBS, 2013; SMEDAN & NBS, 2017). SMEs in Nigeria are being faced with the problems of stagnated growth rate, business failure, and reduced employment capacity. The problem of the stagnated growth rate of SMEs in Nigeria is evident where the number of medium enterprises decreased by 62% (from 4,670 in 2013 to 1,793 in 2017) while the number of small enterprises increased by only 5% (68,168 in 2013 and 71,288 in 2017) (SMEDAN & NBS, 2017).

There is also a general perception that a better strategic orientation and educational development lead to better SMEs performance (Etmed, 2019). Most entrepreneurship and strategic management literature emphasized the importance of strategic orientation on SMEs performance (Grawe et al., 2009; Reulink, 2012; Nasir, 2013; Herath & Mahmood, 2014; Sarker & Palit, 2015; Aminu & Shariff, 2015; Espino-Rodríguez & Ramírez-Fierro, 2018). Researchers such as Reulink (2012), Herath and Mahmood (2014), Sarker and Palit (2015), Pett and Wolff (2015) viewed strategic orientation from the version of entrepreneurial, market, and interaction orientations. Nasir (2013) and Aminu and Shariff (2014) added technology and learning orientations. Therefore, strategic orientation has five types: entrepreneurial, market, interaction, technology, and learning orientations.

Ramani and Kumar (2008) suggested the use of interaction orientation as a mediator in strategic orientation studies for which Nasir (2013) and Mamun and Nasir (2017) attempted but failed to fill as a result of reliance on the segmentation approach. Thus, the interaction orientation will be tested as a mediator between the other types of strategic orientation and...
SMEs performance using a transmittal approach.

In line with the above research objective, the following research hypotheses were formulated in an alternate form to guide the study:

H1: Interaction orientation positively mediates the relationship between entrepreneurial orientation and SMEs’ performance in north-east Nigeria

H2: Market orientation and SMEs’ performance relationship is positively mediated by interaction orientation in north-east Nigeria

H3: Interaction orientation positively mediates the relationship between learning orientation and SMEs’ performance in north-east Nigeria

H4: Interaction orientation positively mediates the relationship between technology orientation and SMEs’ performance in north-east Nigeria

II. EMPIRICAL STUDIES

A. EO and SMEs’ Performance

Another issue about the study of strategic orientation and SMEs performance is that mixed findings between all the types of SO and SMEs performance in virtually all economies and continents. In Europe, studies such as Avlonitis and Salavou (2007) in Greece and Asemokha et al., (2019) in Finland, and Pett et al., (2019) in USA found a significant positive relationship between EO and SMEs performance. In contrast, EO relates negatively to SMEs performance in Iceland (Lechner & Gudmundsson, 2012).

The result of EO-SMEs performance studies seems to be somehow consistent in Asia as Mahmood and Hanafi, (2013), Hosseini, Dadfar, and Brege (2014) in Iran, and Nur et al., (2014) in Indonesia all found that EO has a significant effect on SMEs performance. Also recently, Affendy et al. (2015) and AbuBakar et al., (2015), Ahmad et al., (2019) in Malaysia, Zhai et al., (2018) in China, and Gupta (2019) in India and Retnawati and Retnaningsih (2019), Syahdana et al., (2020), Arifin and Dewi (2020), Heng and Afifah (2020), Widokarti and Ginting, (2020) Dionysus and Arifin (2020) and Yasa et al., (2020) in Indonesia and Habib et al., (2021) in Bangladesh confirmed the significant positive relationship between EO and SMEs performance in Asia. So also Sajjad et al., (2020) and Asad et al., (2020) in Pakistan. Yet, it cannot be concluded that EO has a significant effect on SMEs’ performance in Asian economies as Jabeen et al., (2013) found an insignificant relationship between EO and SMEs performance in Yemen. But one important issue about this contradiction is that the economies where EO has a significant effect on SME’s performance are more educationally developed than the economy where EO is found to have an insignificant relationship SMEs performance (Yemen).

The findings in African economies are also contradictory. Unlike Asia and Europe where the result seems to be consistent in every particular economy, in Africa, the results appeared to be different within every particular economy. Sometimes significant positive relationships are found in Ghana while sometimes insignificant relationships between EO and SMEs performance are found in same Ghana (Bosu et al., 2016; Boohene, 2018). This is equally the case in South Africa where Venter (2014) presented a result with an insignificant relationship between EO and SMEs performance and Schachtbeck et al., (2019) found that EO positively and significantly affects SMEs performance. So also in Kenya EO positively and significantly affect SME performance (Diba & Omwenga, 2019; Abdalla & Mohamed, 2020).

Just like in other African countries where different studies reported different findings, in Nigeria also mixed finding was established. Ayinla (2009) in south-west Nigeria, Shehu and Mahmood in Kano north-west Nigeria, (2015), Abiodun and Kida (2016) in Abu, Kano and Lagos, Zainab et al., (2020) in Northcentral, Ibrahim et al., (2017), Mohammed et al., (2020) and Aliyu et al., (2022) in north-east all found a significant positive relationship between EO and SMEs performance. In contrast, Duru et al., (2018) in Abuja north central and Akpa and Falade (2020) in Lagos state Nigeria found an insignificant relationship between EO and SMEs performance. In this case, although the possible effect of educational level cannot be eradicated, the situation seems to be the same as that of Asian economies. The result from the highest developed and the least educationally developed zones seemed to be consistent (Ayinla, 2009; Ibrahim et al., 2017).

B. MO and SMEs’ Performance


In addition to inter-economy mix findings, MO and SMEs performance studies in Asia indicated intra-economy mix findings. Within the Malaysian economy, OM relates positively and significantly to SMEs’ performance in the studies by Mokhtar, Yusoff, and Ahmad (2014) and Nasir et al., (2017), Nasir et al., (2017) revealed insignificant relationships between MO and SMEs performance. Likewise within Indonesia, MO has a significant effect on SME performance in the studies of Mardiyono (2018), Zuflkik (2019) and Syahdana et al., (2020), Duwalang and Santika (2020), Dewantia et al., (2020), but Haryanto et al., (2017), Ismail et al., (2019) and Dionysus and Arifin (2020) all found that MO has no significant effect on SMEs performance in Indonesia. The same was the case in Iran where Darabi (2007) reported that MO has a significant positive effect on SMEs' performance but Alizadeh et al., (2013) MO has no significant relationship with SMEs’ performance. Also in Yemen, while Jabeen et al., (2013) found an insignificant relationship between MO and SMEs performance, Alhakimi, and Mahmoud (2020) found a significant relationship between MO and SMEs performance.
In African economies, there are cases of positives and negatives relationship between MO and SMEs performance. In Ghana, Asomaning and Abdullahi (2015) reported that MO has a significant positive effect on SME's performance while Kraa (2016) concluded that, MO is negatively related to SMEs performance. In South Africa and Kenya, Neneh (2016) and Diba and Omwenga (2019) discovered that MO has a significant positive effect on SMEs' performance but Akpa and Falade (2020) in Nigeria insignificant positive effect while Shehu and Mahmood (2014) established a negative relationship between MO and SME performance. Just as in the case of EO-SMEs performance relationship, there are cases of mixed findings in every environment in MO and SMEs performance relationship. Thus, the need arises for further study.

C. LO and SMEs’ Performance


D. TO and SMEs Performance

TO also receive less research attention despite the relevance of technology to modern business as only a few SO studies included TO as a variable (Duygu, 2019). Most TO-SME performance studies reported a significant positive relationship between TO and SMEs performance (Salavou, 2005; Kasim & Altinay, 2016; Rezazadeh et al., 2016; Ahmad et al., 2019; Syahdana et al., 2020; Dewantia et al., 2020). Likewise in In Africa, Odondo et al., (2017) in Kenya, Mohammad et al., (2017) in Nigeria, and Ibrahim et al., (2017) in north-east Nigeria all found a significant positive relationship between TO and SMEs performance. Yet Al-Ansari et al., (2012) in UAE reported an insignificant relationship between TO and SMEs performance. In a sharp breach of the consistency of results in the study of TO and SMEs performance, Dongzhe (2020) reported a significant negative relationship in China. Therefore, there is a case of mixed findings in TO and SMEs performance studies.

E. IO and SMEs Performance

The fifth type of SO which was grossly under-studied in the SMEs sector is IO. Most of the studies of IO and firm performance were carried out in LSEs, yet, the few that were carried out in SMEs reported mixed findings. Ramani and Kumar (2008) introduced the type to SMEs study and found a significant positive relationship between the variable and SMEs' performance. However, the study of IO together with EO and MO in a single framework by Nasir (2017) the type failed to confirm the significant positive relationship. At the same time, Ramani and Kumar (2008) made an early prediction that given the nature of IO, the type could mediate the relationship between SO and SMEs' performance. Although Ramani and Kumar's (2008) effort to confirm this prediction proved abortive, Nasir (2017) stopped at the direct relationship claiming that as the direct relationship is not significant with the available data, no mediating relationship should be investigated.

F. Research Framework

The research framework of the study is presented in Fig. 1. It shows how EO, MO, LO, TO, and IO are regressed against SMEs' performance. Fig. 1 also shows the mediating effect of IO in the relationship. Fig. 1 shows how EO, MO, LO TO and IO are hypothesized to affect SMEs performance. There are four mediated relationships with four hypotheses.
sample size to take care of unavoidable errors such as incorrect filling and failure of some respondents to return the questionnaire, 50% (161) was added to make it 483 in line with Abiodun and Kida (2016) suggestions. The instrument used for data collection in this study is questionnaire. The questionnaire was formatted in 5-point Likert scale. The items of the questionnaire were adapted from the previous studies as follows: Entrepreneurial Orientation from Nasir (2013) and Ibrahim et al., (2017); Market Orientation from Nasir (2013); Learning Orientation from Pesamia et al. (2015); Technology Orientation from Salavou (2005) and Ibrahim et al., (2017); Interaction Orientation from Nasir (2013) and SMEs Performance from Apolot (2012) and Ibrahim et al., (2017). The responses to sections A to F were taken on the 5-point Likert Scale because of the low cognitive nature of the respondents (Revilla et al., 2013). PLS-SEM was used to test the direct and moderating effect of educational level on the relationship between SO and SMEs’ performance in northeast Nigeria. The choice of PLS-SEM as a method is primarily informed by the objective of the research which is to test the powers of the independent variables on the dependent variable (Hair et al., 2014).

IV. RESULTS

A total of 483 copies of the questionnaire were distributed and 372 (77%) were retrieved. Data screening was carried out on 372 and 326 (88%) were found to have been correctly filled. Thus, the analyses are based on 326 correctly filled and returned questionnaires which represent 67% of the total questionnaires distributed. This number is sufficient for analysis and conclusion about the population as 326 is higher than the minimum sample size given by Krejcie and Morgan’s (1970) table that can represent the population.

A. Internal Consistency of the Indicators

The reflective variables were run on a path algorithm and Cronbach’s alpha was bench-marked as above 0.7 (Peng & Lai, 2012), as presented in Fig. 2.

Fig. 2 shows that the loading for all the indicators is above 0.7. This was achieved by excluding any indicator with less than 0.7 as its loading. The exclusion was done by identifying the indicator with the least loading for each construct and deleting it. The process was repeated several times until all the loadings are above 0.7 (Sekaran & Bougie, 2010).

B. Construct Reliability and Validity

Reliability is a measure of the internal consistency of the data while validity measures the fit between the data and the theory used for the study. Reliability was tested using Cronbach’s Alpha and Composite Reliability and both have 0.70 as the threshold (Hair et al., 2014). The result is presented in Table I.

Table I shows the loading of the items and the reliability coefficients in the forms of Cronbach’s Alpha and Composite Reliability of above 0.70 for all the constructs. Therefore, all the coefficients have met the accepted threshold for research (Hair et al., 2014). So also the loading of the items. These reliability coefficients appeared to be consistent with those obtained in the pilot study. Also, the convergent validity on the same Table I appeared within the accepted threshold of 0.5. The AVEs for all the constructs are above 0.5. Thus, the data fit in the theoretical underpinning of all the constructs.
C. Structural Model

Fig. 3 shows the mediating effect of IO in the relationship between each of the other four independent variables of the study (EO, MO, LO, and TO) and the dependent variable (SP).

The hypotheses were formulated in alternate forms and tested at a 1.65 t-value and 5% (0.05) level of significance. The test was done on the indirect path only based on a segmented approach (Memon et al., 2018). The decision rule is that any hypothesis with a t-value less than 1.65 and a p-value greater than 0.05 will be rejected and if the has t-value of 1.65 or greater and a p-value of 0.05 or lesser, the hypothesis would be accepted.

Table II shows a mediation (EO -> IO -> SP: t-stat: 3.124 & p < 0.05) of IO in the relationship between entrepreneurial orientation and SMEs’ performance. Therefore, the first hypothesis (H1) which stated that Interaction orientation has a positive mediating effect on the relationship between entrepreneurial orientation and SMEs’ performance is accepted. Table II also shows of a mediation (MO -> IO -> SP: t-stat: 2.760 & p < 0.05) of IO in the relationship between market orientation and SMEs’ performance. Thus, the second hypothesis (H2) which stated that market orientation and SMEs’ performance relationship are positively mediated by interaction orientation is accepted. The same Table II shows an absence of mediation (LO -> IO -> SP: t-stat: 0.048 & p > 0.05) of IO in the relationship between entrepreneurial orientation and SMEs’ performance. For this, the third hypothesis (H3) which stated that Interaction orientation positively mediates learning orientation and SMEs’ performance relationship rejected. It can also be observed that there is mediation (TO -> IO -> SP: t-stat: 1.968 & p < 0.05) of IO in the relationship between technology orientation and SMEs’ performance. Therefore, the fourth hypothesis (H4) which stated that Interaction orientation has a positive mediating effect on the relationship between technology orientation and SMEs’ performance is accepted.

D. Discussion

The objective of this study was to be achieved through the four hypotheses. The hypotheses are on analyzing the mediating effect of IO in the relationship between each of the EO, MO, LO, and TO with SMEs’ performance. The discussion of the mediation hypotheses is as follows:

The result in Table II indicated that interaction orientation has a positive mediating effect on entrepreneurial orientation and SMEs’ performance relationship. This finding justified the contradiction in the findings of Zainab et al., (2020), Ibrahim et al., (2017), Duru et al., (2018) and Akpa and Falade (2020) in Nigeria where Ayinla (2009), Shehu and Mahmood (2015), Abiodun and Kida (2016), Zainab et al., (2020) and Ibrahim et al., (2017) who reported significant relationship and Duru et al., (2018) and Akpa and Falade (2020) who reported insignificant relationship. Therefore, the missing link between entrepreneurial orientation and SMEs performance in a few studies that led to mixed findings in the area could be explained by the mediation effect of interaction orientation.

<table>
<thead>
<tr>
<th>Path</th>
<th>Beta (β)</th>
<th>T Statistics</th>
<th>P Values</th>
<th>Confidence Interval</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>EO-&gt;IO-&gt;SP</td>
<td>0.062</td>
<td>3.124</td>
<td>0.002</td>
<td>0.029-0.107</td>
<td>Supported</td>
</tr>
<tr>
<td>MO-&gt;IO-&gt;SP</td>
<td>0.051</td>
<td>2.760</td>
<td>0.006</td>
<td>0.022-0.098</td>
<td>Not Supported</td>
</tr>
<tr>
<td>LO-&gt;IO-&gt;SP</td>
<td>-0.000</td>
<td>0.048</td>
<td>0.962</td>
<td>-0.025-0.021</td>
<td>Supported</td>
</tr>
<tr>
<td>TO-&gt;IO-&gt;SP</td>
<td>0.040</td>
<td>1.968</td>
<td>0.047</td>
<td>0.007-0.094</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Source: Field Survey
The result also revealed that interaction orientation has a positive mediating effect on the relationship between market orientation and SMEs’ performance. This finding justifies the contradictions between the findings of Asomaning and Abdullai (2015), Kraa (2016), Neneh (2016), Diba and Omwenga (2019), and Akpa and Falade (2020) and Shehu and Mahmood (2014) on the relationship between MO and SMEs performance. Asomaning and Abdullai (2015), Neneh (2016), and Diba and Omwenga (2019) reported that MO has a significant positive effect on SMEs’ performance; Akpa and Falade (2020) found an insignificant positive effect while Shehu and Mahmood (2014) and Kraa (2016) concluded that, MO is negatively related with SMEs performance.

Although there are cases of mixed findings between LO and SMEs performance, the result in Table II indicated that interaction orientation has no positive mediating effect on learning orientation and SMEs’ performance relationship. This finding failed to justify the contradiction between the finding of Hussain et al. (2018), Daryani and Karimi (2017), Sawaeana and Ali (2020), Kittikunchotiwit (2020) who found a significant positive association between LO and SMEs performance on one hand and Sarker and Palit (2015) and Phorncharoen (2020) who found an insignificant relationship on the other hand.

Lastly, the result indicated that interaction orientation has a positive mediating effect on technology orientation and SMEs’ performance relationship. This finding supports the proposition that RBT should be reviewed to consider how the best resource should be arranged to deliver maximum firm performance. The finding also justifies the contradiction between Odondo et al., (2017) and Ibrahim et al., (2017) who found a significant positive relationship between TO and SMEs performance, and Al-Ansari et al., (2012) who reported an insignificant relationship between TO and SMEs performance as well as Dongzhe (2020) who reported significant negative relationship. This indicates that the missing link between technology orientation and SMEs performance in a few studies that accounted for mixed findings in the area is explained by partial mediation of interaction orientation.

V. CONCLUSION AND RECOMMENDATIONS

A. Conclusion

The result of the mediation test indicated that interaction orientation mediates the relationship between each entrepreneurial orientation, market orientation, and technology orientation with SMEs’ performance but does not mediate the relationship between learning orientation and SMEs’ performance. Upon this basis, it is concluded that interaction orientation is the factor behind mixed findings in entrepreneurial orientation, market orientation, technology orientation, and SMEs’ performance studies. Hence, the relationship between entrepreneurial orientation, market orientation, technology orientation, and SMEs’ performance could be enhanced through interaction orientation.

B. Recommendations

The study discovered that entrepreneurial orientation, learning orientation, and technology orientation are being practiced at an average level and are significantly related to SMEs' performance. As such, an increase in the practice of entrepreneurial orientation, learning orientation, and technology orientation will lead to an increase in SMEs' performance. Thus, it is recommended that SME owners-managers and related MDAs should increase the application of entrepreneurial orientation, market orientation, and technology orientation to realize increased SMEs performance. This could be done through workshops, seminars, and orientations for SME owner-managers.

SME owner-managers in Nigeria are encouraged to make the best combination of organizational capital (internal resources) in the form of entrepreneurial orientation, market orientation, and technology orientation to realize higher SMEs performance. This recommendation is also based on the finding that entrepreneurial orientation, technology orientation, and interaction orientation have a direct effect on SMEs' performance.

This study found that market orientation has an insignificant direct effect on SMEs' performance and SMEs in the north-east Nigeria practice market orientation more than all other types of strategic orientation. Thus, it is recommended that special consideration should be given to interaction orientation because of its mediation effect on market orientation and SMEs performance. This consideration would not only take care of market orientation but also entrepreneurial orientation and technology orientation as their effects on SMEs' performance vary with interaction orientation.

Limitation and Suggestion for Future Studies

The limitation of this study is that it solely relied on quantitative research design. Qualitative method may re-explore or prove some issues around strategic orientation and SMEs performance addressed in this research. As such, qualitative research may be designed if any issue is raised that may be peculiarly addressed by qualitative design.

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