

Exploring the Effect of Entrepreneurial Social Network on Human Capital and the Performance of Small and Medium Enterprises

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ABSTRACT

The paper was designed to examine the role of an entrepreneur's social network and human capital on Small and Medium Enterprises (SMEs) performance in Nigeria. This study tries to find out if human capital moderates the relationship between social network and the SMEs performance in the country. Self-administered questionnaires were used to source data from a sample of 283 SMEs firms spread across Kano state in North-western Nigeria. Partial Least Squares Structural Equation Modelling (PLS-SEM) was utilized to test the hypotheses. The results obtained indicated that an entrepreneurial social network and human capital have significant positive effects on SMEs performance. Correspondingly, human capital moderates the relationship between the entrepreneur's orientation and the performance of SMEs. The result implied that social network and human capital are essential drivers for firm performance. Finally, some of the study limitations include that the sample used in this study only involved SME's that are registered with SMEDAN in the Kano state. Future research should use other samples from other parts of the country. Thus, future study should include additional variables that are not included in the current study.

Keywords: SMEs, Social Network, Human Capital, Business Performance

1. INTRODUCTION

Although the significance of Small and Medium Enterprises (SMEs) in influencing economic growth is recognized, the performance of SMEs all over the world including Nigeria is unanticipated (Naala and Rosli, 2016; Ali, Hilman and Gorondutse, 2017). The low level of employment and contribution to the nation's Gross Domestic Product (GDP) indicates their low performance. Many researchers and practitioners have given so much attention to the significant contributions of SMEs to economic growth and the development in both developed and developing nations (Gorondutse, Ibrahim, Abdullwahab and Naalah, 2018; Naala Nordin and Omar, 2017; Naala, 2016; Eniola, 2014). However, the results of its contribution span in so many ways ranging from poverty reduction, employment creation, increasing supply of raw materials, and per capital increase. It also includes industrial capacity and utilization of rising in export earnings (Gorondutse and Hilman, 2017; Ibrahim and Rosli 2016; SMEDAN, 2012). One of the priorities of the policymakers/government in Nigeria before 2020 is to develop sound and well-performing SMEs but, with less than 2 years to the deadline, SMEs are still not productive enough and are facing many constraints (Gorondutse and Hilman, 2018; Ibrahim and Rosli 2016; SMEDAN 2012). In addition, the contribution of SMEs to the GDP in Nigeria is less than 46% compared to the SMEs contribution in other developing and developed nations

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(Naala, 2016; Ndumanya, 2013; SMEDAN, 2013). Presently, Nigeria is facing serious challenges and limitations in competition, human capital, marketing, social networking, and management skills (Global Competitiveness Report 2018; Aminu and Sherif, 2014).

Performance is among the most significant concept which explained the achievement of organizational outcome and goals. Performance covers all areas of management studies (Ibrahim and Mahmood, 2016; Obiwuru, Okwu, Akpa and Nwankwere, 2011; Richard *et al.*, 2008). Therefore, business performance assessment/evaluation and measurement are constantly used in many fields of business and or management science. Business performance has no accepted definition or meaning. However, the purpose of the concept depends on the field of study and specialties of the individual researcher. Thus, SMEs' performance is the ability of a firm to realize its targeted goals. It includes high profits margin, favorable financial outcomes, high-quality products, a considerable market share, and long-term organizational strength as well as utilizing proper strategies for effective business action. SMEs' performance indicates how firm accomplishes its stated objectives (Ibrahim and Mahmood, 2016; Ho, 2008).

Contemporary research on entrepreneurship has shown that human capital and entrepreneur social network played a significant role in entrepreneurial activities. The researchers argue that these endowments affect the rate of entrepreneurial success (Al Mamun, Kumar, Ibrahim and Yusoff, 2017; Ma, Zhu, Meng, and Teng, 2018; Li *et al.*, 2012), yet research on returnee entrepreneurs' human capital and entrepreneur social network and, in particular, how their overseas human capital and entrepreneur social network affect returnee entrepreneurs and their activities in their home countries is relatively limited (Ma, Zhu, Meng, and Teng, 2018; Zhou *et al.*, 2017).

Review of literature on SMEs' performance uses different organizational means to estimate its performance. Some of the factors include short-term debt, total quality management, social capital, and IT usage. It also consists learning orientation, social network, innovation, and entrepreneurial orientation (Colvin, Green and Slevin, 2006; Lucky and Minai, 2011; Witt, 2004; Bueno and Ordonez, 2004; Fornoni, Arribas and Vila, 2012; Al- Swidi and Mahmood, 2012; Augustine, Bhasi and Madhu, 2012; Ibrahim and Sherif, 2015; Naala, 2016).

Nevertheless, studies have revealed that social network can influence the performance of SMEs (Ascigil and Magner, 2009; Partanen, Möller, Westerlund, Rajala and Rajala, 2008) while others found a mismatch between social network and performance in the organization (Rose, Kumar and Yen, 2006; Watson, 2007). Based on these contradicting findings, the association between social network and SMEs' performance is inadequate and unresolved. In order to fill this research gap, there is a need for further study. Thus, a moderating variable was introduced to see if the relationship can be strong or weak with the presence of the moderating variable. Baron and Kenny (1986) recommended the introduction of moderating variables wherever there are inconclusive/inconsistent findings. With today's globalization and technological advances, organizations are continuously changing. Therefore, a change in organizations not only affect the businesses but also the employees. Human resources/capital and their potential are key drivers of any firm's success (Tabibi *et al.*, 2011). Therefore, this study proposed a research model which integrates two individual related variables to predict SMEs performance with the moderating role of human capital.

The current study contributes to the existing literature by adding evidence from Nigeria SMEs on the influence of entrepreneurial social network and human capital by integration of human capital as a moderator which has also contributed to the Resource-based View (RBV) theory. The study contributes on the policy implications for Nigerian entrepreneurship regulatory agencies such as SMEDAN as it suggests a strategy towards increasing the performance of SMEs that will significantly benefit the agencies in charge of regulating the SMEs affair and policymakers. Similarly, the findings of this study have made meaningful contributions to SMEs

management by equipping the entrepreneurial managers, with first-hand information on how to develop a social network and human capital in their organizations.

The paper is classified into five sections, and this section is the introduction followed by the literature review in the next section. The third and fourth sections are the methodology as well as the result and discussions, respectively. Lastly, the paper provided a conclusion and suggested a direction for future research.

2. LITERATURE REVIEW

2.1 Business Performance

Numerous studies on business performance use a number of organizational resources to measure performance of SMEs (Lucky and Minai, 2011; Witt, 2004; Bueno and Ordonez, 2004; Fornoni *et al*, 2012; Al- Swidi and Mahmood, 2012; Augustine *et al.*, 2012; Ibrahim and Mohd, 2015). Richard, Yip, and Johnson (2008) defined organizational performance as a concept which consists of three distinct fields of organization issues namely, financial performance, product market performance, and the shareholder's return. Business performance has a dual estimated procedure such as quantitative or qualitative methods of estimation (Augustine *et al.*, 2012). In other words, it can be evaluated either by looking at economic or non-economic variables (Leitao and Franco, 2008).

2.2 Social Network

Social network and informal network in entrepreneurship research are used interchangeably (Birly, 1985). Today, business environments are vulnerable because social networks are recognized as a weapon to secure vital resources for SMEs (Bruderl and Preisendorfer, 1998). Studies on the social network have emerged as a critical field of inquiry within the area of entrepreneurship in the last thirty years. Therefore, the social network is the focal point used in explaining issues related to the entrepreneurship activities (Bhagavatula, 2009). According to Fombrum (1982), the social network is a mutual bond which links the entrepreneurs' (ego) and their (alter/s) to achieve their business goals. Carson, Cromie, McGowen, and Hill (1995) defined the entrepreneurial social network as an activity in which the owners build and manage personal relationships with specific individuals in their environments. The individuals may refer to friends, family, lawyers, bankers, other entrepreneurs, accountants, and government officials. The Social Network Theory offers a framework to study, analyze and evaluate the relational dimensions or structural and interactional of links. This theory is significant because networking activities are useful to entrepreneurship as indicated by prior studies. Entrepreneurs who are able to establish a relationship with other contacts will help facilitate them to access and receive more support and resources.

The social network was found to have a positive influence on SMEs' performance (Watson, 2012). Surin and Wahab (2013) carried out a study with the aim of exploring the influence of the social network on business performance. The result obtained yielded mixed findings with regards to the association between social network and firm performance. Manesh (2011) found a positive relationship between social networks and a company's international performance. In contrast, Musteen, Francis, and Datta (2010) proposed that regular reliance on individual contact deters a company's performance. Naudé *et al.* (2014) on the other hand, examined the influence of the network on the SMEs performance in Iran. The outcomes of their study indicated that network structure and external networking behavior jointly influenced the SMEs performance. However, this premise of a direct association between social network and business performance seems to be empirically inconclusive. Due to mixed results, the present study proposes the following:

H1: Entrepreneurial social network is positively related to business performance.

2.3 Human Capital Development

The literature review indicated that human capital is a significant factor which enhances the performance of a business (Colombo and Grilli, 2005). Some of the essential characteristics of human capital include educational qualifications, level of experience, and general knowledge which enables the worker to acquire a broad range of business opportunities (Writh, Smart, and McMahan, 1995; Davidsson & Honig, 2003). Literature discovered that scholars had debated on many definitions and measures of human capital, and its impacts on organizational performance for the past few decades (Samad, 2010). Most of these definitions focused on the individual skills, general knowledge, level of experience, and controlled by the entrepreneurs (Becker, 1975; Bruderl et al., 1992; Coleman, 1988; Palamida, et al., 2017; Sequeira and Rasheed, 2006; Markman and Baron, 2003; Pennings, Lee and Witteloostuijn, 1998). On the other side, Siegel, Siegel and McMillan (1993) argued that a firm-specific human capital model which consist of skills and knowledge might provide an advantage for business performance over its competitors. Bontis, Dragonetti, Jacobsen and Roos (1999) viewed human capital as a symbol of the human factor in an organization which has the joint skills, level of intelligence, and general expertise that provides the firm with unique features. For this reason, many academics and policymakers give extensive consideration for human capital as a potential moderator to SMEs' performance.

According to Surin *et al.* (2014), human capital has a significant positive relationship with the business performance of SME and suggests it as a potential moderator as shown in Figure 1. Gates and Langevin (2010) indicated that human capital is directly related to organizational performance. Augusto *et al.* (2014) evaluated the human capital, social capital, and SMEs' performance. He found that human capital strongly influenced social capital and human organizational performance. Hence, the following propositions are offered:

H2: Human capital is positively related to business performance.

H3: Human capital moderates the relationship between social network and business performance.

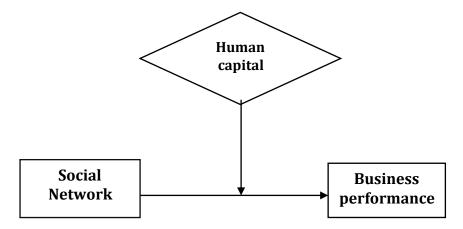


Figure 1. Proposed research framework.

2.4 Underpinning Theory

According to Eisenhart (1991), a theoretical framework or model was designed on the bases of practical problems, previous studies, and theories in the area in which a researcher wants to investigate. It also helps in clarifying the relationship that exists among concepts being studied (McGaghie, Bordage and Shea, 2001). Thus, the theoretical framework is formulated based on

the practical problem relating to non-performance of SMEs in Nigeria, the existing empirical evidence, and underpinning theories. Validation of this model would lead to a proposed practical model that will be a strategic guide for SMEs' operators. In the present study, Resource Based-View (RBV) was used with an emphasis on resources development of the firm and its effect on performance (Kamyabi and Devi, 2012). Thus, the RVB encourages the attainment of SMEs resources by connecting external resources with the measures of performance as a variable in this study. A literature review discusses published information in a particular subject area, and sometimes information in a particular subject area within a certain time period.

3. METHODS

Based on the recommendation of Churchill (1979), the present study adopted its variable measurements from previous research. For instance, organizational performance items were adopted from Suliyanto and Rahab (2012), and Vorhies and Morgan (2003), while human capital is adopted from the work of Naala (2018) and Bontis (1998). Participants were requested to point out their answers on a 5-point Likert type scale, ranging from '1' 'strongly disagree' to '5' 'strongly agree' on all items under study. The study used survey research and questionnaire method to obtain data from the sampled of SMEs. The population of the study consist of SMEs working in Kano state North-western Nigeria as listed by SMEDAN (2012).

The study employed a systematic random sampling technique to enable the researcher to generalize the population data collected from the sample of 283 SMEs in Kano, north-western Nigeria. Kano was selected because it has the most substantial number of SMEs in the whole northern part of Nigeria and also second to the Lagos state in the entire country (SMEDAN, 2014). Questionnaires were distributed to the SMEs in different locations based on the list. The effects of Common Method Variance (CMV) were reduced through the adoption of numerous remedial processes as recommended by Podsakoff and Organ (1986). In order to minimize appraisal anxiety during the process of filling out the questionnaire, all the respondents were assured that there are no right or wrong answers to the questions and the answers will be handled with utmost confidentiality. The respondents take about 9 to 16 minutes to fill up all the items in the questionnaire, and their responses to the questions would be randomly mixed to avoid personal identification of any instrument. This study used the Partial Least Squares-Structural Equation Modeling (PLS-SEM) due to its popularity as a research tool in most of the social sciences researches. PLS path modelling is also selected because of the interactions estimation between constructs or structural model and associations between indicators and their corresponding latent constructs concurrently (Hair Jr et al., 2014; Hair, Ringle, and Sarstedt, 2011; Gorondutse and Hilman, 2017). Lastly, to enhance the understanding of the items, the questionnaire was translated into the major language in Nigeria which is English and Hausa.

4. RESULTS AND DISCUSSION

Before the main analysis of the study, a preliminary analysis such as missing value, outliers, assumptions of linearity, normality, and multicollinearity has been undertaken (Gorondutse and Hilman, 2014; Tabachnick and Fidell, 2007; Hair, Black, Babin, and Anderson, 2010). Besides that, common method bias was examined using Harman's single factor test. After these assumptions remained satisfied, the path modeling was applied via Smart PLS 2.0 M3 software (Ringle *et al.*, 2005; Wold, 1974; Wold, 1985) in order to assess the hypothetical model. This research considers ethical considerations in management research (Bell and Bryman, 2007).

Additionally, convergent validity is the primary criterion used in PLS-SEM approach which lead to the assessment of measurement model (Gorondutse and Hilman, 2017; Hair Jr., *et al.*, 2013; Hulland, 1999; Ramayah, Lee, and In, 2011). In a PLS-SEM approach, the consistency is assess using Composite Reliability (CR). On the other hand, validity is examined using convergent validity all the way through Average Variance Extracted (AVE), and discriminant validity using Fornell-Larcker (1981) standard. Table 1 and Figure 2 show the loadings range of 0.81 – 0.87 indicating sufficient internal consistency reliability (Hair *et al.*, 2017; Nunnally and Bernstein, 1994). Furthermore, the result of composite reliability is above the recommended benchmark of 0.70 (Gorondutse and Hilman, 2017; Hair *et al.*, 2013).

Table 1 Indicator loadings, internal consistency reliability and convergent validity

| Latent variables and Items | Indicator's loadings | Composite reliability | AVE |
|----------------------------|----------------------|-----------------------|------|
| Business performance | | .846 | .524 |
| PER01 | .681 | | |
| PER02 | .700 | | |
| PER03 | .681 | | |
| PER04 | .781 | | |
| PER05 | .769 | | |
| Social Network | | .893 | .545 |
| SN01 | .710 | | |
| SN02 | .631 | | |
| SN03 | .713 | | |
| SN05 | .809 | | |
| SN06 | .768 | | |
| SN07 | .726 | | |
| SNO4 | .795 | | |
| Human capital | | .876 | .588 |
| HN01 | .824 | | |
| HN02 | .835 | | |
| HN03 | .792 | | |
| HN04 | .729 | | |
| HN05 | .637 | | |

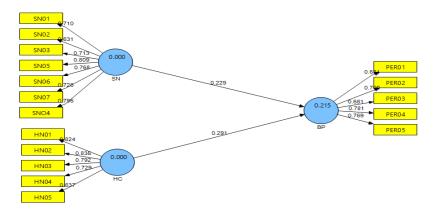


Figure 2. Measurement model.

The convergent validity as shown in Table 1 indicates that all AVE values exceed the threshold of 0.5, and this shows a good result of the outer model (Hair *et al.*, 2013). Lastly, two popular criteria were used for evaluating the constructs' discriminant validity. This consist of an examination of outer loadings and Fornell and Larcker (1981) criterion (Gorondutse and Hilman, 2017; Hair *et al.*, 2017). Table 2 indicates that, separately, the construct's square root of AVE must be higher than its correlation among all further variables in the model (Hair *et al.*, 2017). Additionally, it was discovered that no indicator loaded greater than any other variables (Hair *et al.*, 2017; Henseler *et al.*, 2009).

Table 2 Discriminant validity

| Latent Variables | BP | НС | SN |
|----------------------|------|------|------|
| Business Performance | 0724 | | |
| Human Capital | .425 | .767 | |
| Social Network | .398 | .582 | .738 |

4.1 Structural Model

Following the measurement model and based on the satisfactory result, the next stage is to assess the structural model. Initially, the hypothetical model associations were measured using Smart PLS-SEM software bootstrapping for the significance of the correlation. Based on PLS-SEM software bootstrapping the number of cases, 5000 sample was used to analyze structural analysis procedure (Gorondutse and Hilman, 2017; Hair *et al.*, 2013; Henseler *et al.*, 2009). The result in Figure 2 and Table 4 shows the association between the independent variables and the dependent variable.

Table 3 Path coefficients for hypotheses testing

| Hypotheses | Beta | SE | T Value | P value | Decision |
|-------------------|------|------|---------|---------|-----------|
| Direct effects | | | | | _ |
| HC -> BP | .291 | .067 | 4.348 | .000*** | Supported |
| SN -> BP | .229 | .069 | 3.333 | .000*** | Supported |
| moderation Effect | | | | | |
| SN*HC->BP | .374 | .270 | 1.385 | .084* | Supported |

Note. ***1%, **5% and *10% significance levels respectively

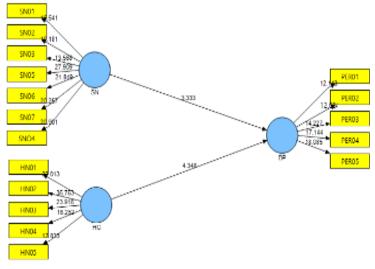


Figure 3. Structural model.

Precisely, the outcome of the structural model indicates that there is a significant positive relationship between social network and business performance (β = .291, t = 4.348, p = 0.000). Therefore, Hypotheses 1 (H1) remained strongly supported. This result is consistent with the results of Watson (2012) and Surin and Wahab (2013), which stated a significant and positive relationship between the entrepreneurial social network and business performance. Equally, Hypotheses 2 (H2) predicted that human capital has a significant positive relationship with business performance. The result shows that human capital affected business performance positively (β = .229, t = 3.333, p = 0.000). This result agree with Gates and Langevin (2010), who reported a significant and positive relationship between human and business performance. Thus, H1 and H2 are supported.

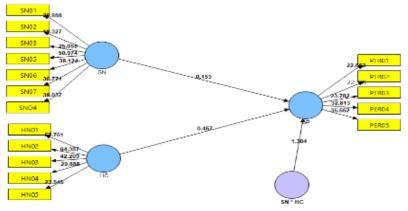
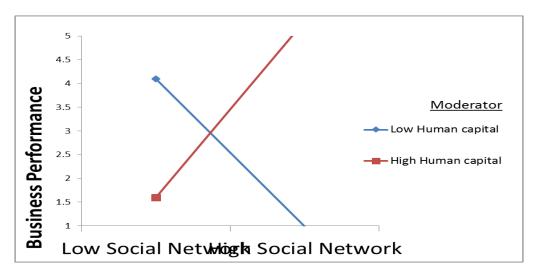


Figure 4. PLS-SEM mediation bootstrapping.

The present study supported the moderating effect of human capital on the relationship between social network, and business performance indicated that human capital significantly moderates the relationship between social network and business performance (β = .374, t = 1.385, p = 0.084). Therefore, Hypotheses 3 (H3) is accepted. Consistent with the postulation of this study, the results showed that SMEs' owners/managers that have a high level of human capital would have more favorable social network than those with low level of human capital, which is in agreement with the study of Surin *et al.* (2014) who found that human capital can served as a moderator to SME performance.



Human capital strengthens the positive relationship between Social Network and Business Performance.

Figure 5. Strength of moderation.

After the impact of the hypothesized relation for the model has been deermined, the R-square values was then measured and relevance of the model was predicticted. Based on the PLS-SEM result, 21.5% of the total variance explained the independent variable to dependent construct. This suggests that the social network explained 21.5% of the variance in SMEs performance. Cohen (1988) classified three categories of R-square which is 0.26 substantial, 0.13 moderate and 0.02 weak. Thus, the measured R-squared of this study is moderate.

4.2 Predictive Relevance

The current study used adopted Stone–Geisser (1974) recommendation to test the predictive relevance of the research model by applying blindfolding techniques (Geisser, 1974; Stone, 1974). A cross-validated redundancy measure (Q2) was used to calculate the predictive relevance of the study model (Chin, 2010; Geisser, 1974; Hair *et al.*, 2013; Ringle *et al.*, 2012; Stone, 1974). These indices show how well the model can predict the data cases (Hair *et al.*, 2014). Based on the literature, Henseler *et al.* (2009) suggested the output with the value Q2 statistic(s) bigger than zero is considered to have the predictive relevance of the model. In this study, the value of the Q2 statistic is 0.108 for the latent dependent variable, which is above zero, this indicates power and relevancy of the model (Ringle *et al.*, 2012; Henseler *et al.*, 2009).

5. CONCLUSION

As stated in the objectives, this study examined the direct effect of entrepreneurial social network and human capital on the performance of SMEs in Kano, Nigeria. It also examined the moderating effect of human capital in the relationship between the entrepreneurial social network and SMEs' performance. Consequently, the findings of the study highlight the importance of entrepreneurial social network and human capital in increasing the performance of SMEs. Moreover, the performance of SMEs is positively affected by entrepreneurial social network and human capital. The current study also indicates that human capital moderates the relationship between the entrepreneurial social network and SMEs' performance.

5.1 Implications

The current study contributes to the existing literature by adding evidence from Nigeria on the influence of entrepreneurial social network and human capital on SMEs' performance. Theoretically, the integration of human capital as a moderator of entrepreneurial social network and SMEs performance has contributed to the theory of RVB. The findings could have policy implications for Nigerian entrepreneurship regulatory agencies such as SMEDAN as it suggests a strategy towards increasing the performance of SMEs through the entrepreneurial social network and human capital. The way human capital is measured in this study can also be improved. Human capital is not just experience; it refers to the skills, knowledge, and other factors that can hardly be parceled out according to the locations where these elements are acquired.

The findings will significantly benefit the field of management, agencies in charge of regulating the SMEs affairs, policymakers at all tiers of government, and also served as reference materials to prospective researchers. In addition, the findings of this study will broaden the scope of managers' knowledge which will, in turn, improve the performance of their firms. In general, the result of this study will also make meaningful contributions to SMEs management by equipping the entrepreneurial managers with first-hand information on how to develop a social network and human capital in their organizations.

This study is restricted by some limitations. First, the sample used in this study only concentrated in the Kano state using SMEDAN. Any future research should consider using samples from other parts of the country. Even though the sample is sufficient for this study, future studies should consider the enlargement of samples relative to the number of predictors to be used in their studies. The coefficient of determination is measured to be weak and consistent with Chin (1998) who implied that entrepreneurial social network and human capital explain only 21.6% of the variations in SMEs performance in Nigeria. Nevertheless, this can be improved through the assimilation of additional variables that are not included in the current study. This study is in the form of a cross-section which entails the sourcing of data from one distinct unit. Thus, future studies should conduct longitudinal research to find out if the effects would differ from the findings of this study.

REFERENCES

- Al Mamun, A. Kumar, Naresh, Ibrahim, M. D. & Yusoff, H. (2017). Establishing a Valid Instrument to Measure Entrepreneurial Knowledge and Skill, *Business Perspective and Research*, 6(1), 13-26.
- Ali, G. A., Hilman, H., & Gorondutse, A. H. (2017). The effect of entrepreneurial orientation, market orientation, total quality management and organizational culture on the SMEs performance: A theoretical framework. *Journal of Business and Retail Management Research*, 12(1).
- Al-Swidi, A. K. & Mahmood, R. (2012). TQM and organizational performance: The role of organizational culture. *African Journal of Business Management*, *6*(13): 4717-4727. DOI: 10.5897/AJBM11.2016
- Aminu, I. M. & Shariff, M. N. M. (2014). Mediating role of access to finance on the relationship between strategic orientation and SMES performance in Nigeria: A proposed research framework. *International Journal of Management Research and Reviews*, 4(11), 1023.
- Aminu, I. M. & Shariff, M. N. M. (2015). Influence of Strategic Orientation on SMEs Access to Finance in Nigeria. *Asian Social Science*, *11*(4), p298.
- Ascigil, S. F. & Magner, N. R. (2009). Business incubators: leveraging skill utilization through social capital. *Journal of Small Business Strategy*, *20*(1), 19–34.
- Augustine, B., Bhasi, M. & Madhu, G. (2012). Linking SME performance with the use of forecasting planning and control: Empirical findings from Indian firms. *European Journal of Scientific Research*, 73(1), 86-105.
- Augusto Felício, J., Couto, E. & Caiado, J. (2014). Human capital, social capital and organizational performance. *Management Decision*, *52*(2), 350–364.
- Baron, R. A. & Markman, G. D. (2003). Beyond social capital: The role of entrepreneurs' social competence in their financial success. *Journal of Business Venturing*, 18(1), 41-60.
- 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*, 1173-1182.
- Becker, G. S. (1975). *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education* (2nd ed.). New York: NBER
- Bell, E. & Bryman, A. (2007). The ethics of Management Research: An exploratory Content Analysis. *British Journal of Management*, *18*(1), 63-77.
- Bhagavatula, S. (2009). Managing networks for entrepreneurial success: academic perspective. *IIMB Management Review*, *21*(1), 52-58.
- Birley, S. (1985). The role of networks in the entrepreneurial process. *Journal of Business Venturing*, 1(1), 107-117.
- Bontis, N., Dragonetti, N. C., Jacobsen, K. & Roos, G. (1999). The knowledge toolbox: A review of the tools available to measure and manage intangible resources. *European Management Journal*, 17(4), 391-402.

- Brüderl, J. & Preisendörfer, P. (1998). Network support and the success of newly founded business. *Small Business Economics*, 10(3), 213-225.
- Bueno, E., Ordonez de Pablos, P. & Salmador Sanchez, M. P. (2004). Towards an integrative model of business, knowledge and organisational learning processes. *International Journal of Technology Management*, *27*(6-7), 562-574.
- Carson, D., Cromie, S. & McGowan, P. J. Hill (1995). *Marketing and Entrepreneurship in SMEs: An Innovative Approach*. London: Prentice Hall.
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research*, 295(2), 295-336.
- Chin, W. W. (2010). How to write up and report PLS analyses. In *Handbook of partial least squares* (pp. 655-690). Springer Berlin Heidelberg.
- Churchill Jr, G. A. (1979). A paradigm for developing better measures of marketing constructs. *Journal of marketing research*, 64-73.
- Coleman, J. (1988). Foundations of Social Theory. Cambridge: Belknap Press, USA.
- Colombo, M. G. & Grilli, L. (2005). Founders' human capital and the growth of new technology-based firms: A competence-based view. *Research Policy*, *34*(6), 795-816.
- Covin, J. G., Green, K. M. & Slevin, D. P. (2006). Strategic process effects on the entrepreneurial orientation sales growth rate relationships. *Entrepreneurship Theory and Practice*, 30(1), 57-81.
- Davidsson, P. & Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, 18(3), 301-331.
- Eniola, A. A. (2014). The role of SME firm performance in Nigeria. *Arabian Journal of Business and Management Review*, *3*(12), 33-47.
- Falk, R. F. & Miller, N. B. (1992). A primer for soft modeling. University of Akron Press.
- Fombrun, C. J. (1982). Strategies for network research in organizations. *Academy of Management Review*, 7(2), 280-291.
- Fornell, C. & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *18*, 39-50.
- Fornoni, M., Arribas, I. & Vila, J. E. (2012). An entrepreneur's social capital and performance: The role of access to information in the Argentinean case. *Journal of Organizational Change Management*, *25*(5), 682–698.
- Gates, S. & Langevin, P. (2010). Human capital measures, strategy, and performance: HR managers' perceptions. *Accounting, Auditing and Accountability Journal*, 23(1), 111–132.
- Geisser, S. (1974). A predictive approach to the random effect model. *Biometrika*, 61(1), 101-107.
- Gorondutse, A. H. & Hilman, H. (2017). Influence of differentiation strategy on performance of Hotels: A moderating role of environmental munificence. *Journal of Business and Retail Management Research*, 11(4), 150-162.
- Gorondutse, A. H., Ibrahim, G., Abdullwahab, H. I. & Naalah, M. N. I. (2018). Founder's Syndrome and Firm Performance of Small and Medium Scale Enterprises in Nigeria. *Journal of Health Management and Informatics*, *5*(1), 1-8.
- Hair, J. F. Black, WC, Babin, BJ & Anderson, RE (2010). *Multivariate data analysis*, 7th ed.). Upper Saddle River, NJ: Prentice Hall.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., and Sarstedt, M. (2014). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Thousand Oaks, CA: SAGE.
- Hair, J. F., Ringle, C. M., and Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 18, 139-152.
- 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., Matthews, L.M., Matthews, R.L. & Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which method to use. *International Journal Multivariate Data Analysis*, 1(2), 107–123.

- Henseler, J., Ringle, C. M. & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. *Advances in International Marketing (AIM)*, 20, 277-320.
- Ho, L. A. (2008). What affects organizational performance?: The linking of learning and knowledge management. *Industrial Management and Data Systems, 108*(9), 1234-524.
- Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. *Strategic Management Journal*, *20*, 195-204.
- Ibrahim, N. M. N. & Mahmood, R. (2016). Mediating role of competitive advantage on the relationship between entrepreneurial orientation and the performance of small and medium enterprises. *International Business Management*, 10(12), 2444-2452.
- Ibrahim, N. M. N. & Mahmood, R. (2016). Mediating Role of Competitive Advantage on the Relationship between Entrepreneurial Orientation and the Performance of Small and Medium Enterprises. *International Business Management*, 10(12), 2444-2452.
- Kamyabi, Y. & Devi, S. (2012). The impact of advisory services on Iranian SME performance: An empirical investigation of the role of professional accountant. *S African Journal of Business management*, 43(2), 61-72.
- Leitão, J. & Franco, M. (2008). Individual entrepreneurship capacity and performance of SMEs. *Available at SSRN 1118257*.
- Li, H., Zhang, Y., Li, Y., Zhou, L.A. & Zhang, W. (2012), Returnees versus locals: who perform better in China's technology entrepreneurship? *Strategic Entrepreneurship Journal*, *6*(3), 257-272.
- Lucky, E. I., Minai, M. S. & Isaiah, A. O. (2011). A conceptual framework of family business succession: bane of family business continuity. *International Journal of Business and Social Science*, *2*(18), 106-113
- Lucky, E. I., Minai, M. S. & Isaiah, A. O. (2011). A conceptual framework of family business succession: bane of family business continuity. *International Journal of Business and Social Science*, *2*(18), 106-113.
- Ma, Z Zhu, J.Meng, Y. Teng, Y. (2018). The impact of overseas human capital and social ties on Chinese returnee entrepreneurs' venture performance, *International Journal of Entrepreneurial Behavior & Research*.
- Manesh, S. M. Z. E. (2011). *International entrepreneurship in emerging economies: A meta-analysis.* Unpublished manuscript, Department of Business Economics Universidad Autónoma de Barcelona, Barcelona, Spain.
- Martinette, L. A. & Obenchain-leeson, A. (2012). Of Competitive Advantage A Service Organization Perspective. *Journal of Service Science*, *5*(1), 43–58.
- McGaghie, W. C., Bordage, G. & Shea, J. A. (2001). Problem statement, conceptual framework, and research question. *Academic Medicine*, 76(9), 923-924.
- Musteen, M., Francis, J. & Datta, D. K. (2010). The influence of international networks on internationalization speed and performance: A study of Czech SMEs. *Journal of World Business*, 45(3), 197-205.
- Naala, M. I. N., Nordin, N. & Omar, W. A. W. (2017). Innovation Capability and Firm Performance Relationship: a Study of Pls-Structural Equation Modeling (Pls-Sem). *International Journal of Organization & Business Excellence*, 2(1), 39-50.
- Naala, M. N. I. (2016). Moderating and mediating roles of human capital and competitive advantage on entrepreneurial orientation, social network and performance of SMEs in Nigeria (Doctoral dissertation, Universiti Utara Malaysia).
- Naala, M. N. I. Moderating and mediating roles of human capital and competitive advantage on entrepreneurial orientation, social network and performance of SMEs in Nigeria, Ph. D. dissertation, Universiti Utara Malaysia 2016.
- Naudé, P., Zaefarian, G., Najafi Tavani, Z., Neghabi, S. & Zaefarian, R. (2014). The influence of network effects on SME performance. *Industrial Marketing Management*, 43(4), 630–641.
- Ndumanya, N. (2013). Why SMEs' contribution to the nation's GDP is poor. *Business Day. Lagos Nigeria*.

- Nunnally, J. C. & Bernstein, I. H. (1994). The assessment of reliability. *Psychometric theory*, *3*, 248-292.
- Obiwuru, T. C., Okwu, A.T., Akpa, V. O. & Nwankwere, I. A. (2011). Effects of leadership style on organizational performance: A survey of selected small scale enterprises in Ikosi-Ketu Council Development area of Lagos State, Nigeria', *Australian Journal of Business and Management Research*, 1(7), 100-11.
- Palamida, E. Xanthopoulou, D. & Papagiannidis, S. Stamati, T. (2017). Exploring Intentions towards human, social, and financial capital investments in turbulent economic environment. *The international Journal of Entrepreneurship and Innovation*, 18(2), 79-90.
- Partanen, J., Möller, K., Westerlund, M., Rajala, R. & Rajala, A. (2008). Social capital in the growth of science-and-technology-based SMEs. *Industrial Marketing Management*, *37*(5), 513-522.
- Pennings, J. M., Lee, K. & Van Witteloostuijn, A. (1998). Human capital, social capital, and firm dissolution. *Academy of Management Journal*, 41(4), 425-440.
- Podsakoff, P. M. & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of management*, *12*(4), 531-544.
- Ramayah, T., Lee, J. W. C. & In, J. B. C. (2011). Network collaboration and performance in the tourism sector. *Service Business*, *5*(4), 411-428.
- Richard, P, Devinney T., Yip, G, Johnson, G. (2008). Measuring Organizational Performance as a Dependent Variable: Towards Methodological Best Practice. From: http://ssrn.com/abstract=814285 (Retrieved May 10, 2010).
- Ringle, C. M., Sarstedt, M. & Straub, D. W. (2012). A critical look at the use of PLS-SEM in MIS Quarterly. *Management Information Systems Quarterly*, 36(1), iii-xiv.
- Ringle, C. M., Sarstedt, M. & Straub, D. W. (2012). A critical look at the use of PLS-SEM in MIS Quarterly. *Management Information Systems Quarterly*, 36(1), iii-xiv.
- Ringle, C. M., Wende, S. & Will, S. (2005). SmartPLS 2.0 beta. University of Hamburg, Germany. Retrieved from https://www.smartpls.com/#downloads.
- Rose, R. C., Kumar, N. & Yen, L. L. (2006). Entrepreneur's success factors and escalation of small and medium-sized enterprises in Malaysia. *Journal of Social Sciences*, 2(3), 74.
- Samad, S. (2013). Assessing the contribution of human capital on business performance. *International Journal of Trade, Economics and Finance, 4*(6), 393–397.
- Sequeira, J. M. & Rasheed, A. A. (2006). Start-up and growth of immigrant small businesses: the impact of social and human capital. *Journal of Developmental Entrepreneurship*, 11(04), 357-375
- Siegel, R., Siegel, E. & Macmillan, I. C. (1993). Characteristics distinguishing high-growth ventures. *Journal of Business Venturing*, 8(2), 169-180.
- SMEDAN (2012). Survey report on Micro, Small, and Medium Enterprises (MSMEs) in Nigeria. Abuja: Small and Medium Enterprises Development Agency of Nigeria.
- Stone, M. (1974). Cross-validatory choice and assessment of statistical predictions. *Journal of the Royal Statistical Society. Series B (Methodological), 36,* 111-147.
- Suliyanto, S. & Rahab, R. (2012). The role of market orientation and learning orientation in improving innovativeness and performance of small and medium enterprises. *Asian Social Science*, 8(1), 134.
- Surin, E. F., and Wahab, I. A. (2013). The Effect of Social Network on Business Performance in Established Manufacturing Small and Medium Enterprises (SMEs) in Malaysia, 55–60.
- Surin, E. F., Wahab, I. A., Hafez, N., Halil, A. & Timothy, O. (2014). Social Network Structure Human Capital and Business Performance of Malaysian SMEs, 46–51.
- Tabachnick, B. G. & Fidell, L. S. (2007). Using multivariate statistics (5th ed.). Boston, MA: Allyn and Bacon.
- Tabibi, S. J., Vatankhah, S., Nasiripour, A. A., Vahdat, S. & Hessam, S. (2011). Factors affecting planned human resource development in the Iranian social security organization's hospitals. *International Journal of Management and Business Research*, 1(2), 47-52.
- Vorhies, D. W. & Morgan, N. A. (2003). A configuration theory assessment of marketing organization fit with business strategy and its relationship with marketing performance. *Journal of Marketing*, *67(1)*, 100-115.

- Watson, J. (2007). Modeling the relationship between networking and firm performance. *Journal of Business Venturing*, 22(6), 852-874.
- Watson, J. (2012). Networking: Gender differences and the association with firm performance. *International Small Business Journal*, 30(5), 536-558.
- Watson, J. (2014). Networking: Gender differences and the association with firm performance. *International Small Business Journal*, *30*(5). 536–558
- Witt, P. (2004). Entrepreneurs' networks and the success of start-ups. *Entrepreneurship and Regional Development*, *16*(5), 391-412.
- Witt, P. (2004). Entrepreneurs' networks and the success of start-ups. *Entrepreneurship and Regional Development*, *16*(5), 391-412.
- Wold, H. (1985). Partial least squares. *Encyclopedia of statistical sciences*. In S. Kotz and N. L. Johnson (Eds.), Encyclopedia of statistical sciences 6 (581-591). New York, NY: Wiley.
- World Economic Forum. Executive survey. *Global competitiveness report 2018. Geneva,* Switzerland: World Economic Forum, 2018. http://reports.weforum.org/global-competitiveness-report-2018/
- Writh, P., Smart, D. & McMahan, G. (1995). Matches between human resources and strategy among NCAA basketball teams. *Academy Management Journal*, *39*, 441-463.
- Zhou, L., Chan, E. & Song, H. (2017). Social capital and entrepreneurial mobility in early-stage tourism development: a case from rural China, *Tourism Management*, 63, 338-350.