



***MEDIATING EFFECT OF NETWORK COMPETENCE ON RELATIONSHIP
BETWEEN TECHNOLOGY USAGE, HUMAN CAPITAL AND
ORGANIZATIONAL PERFORMANCE OF MEDIUM-SIZED ENTERPRISES
IN LAGOS STATE, NIGERIA***

EZUMA KINGSLEY EZE

FPP 2019 45



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By

EZUMA KINGSLEY EZE

**Thesis Submitted to the School of Graduate Studies, Universiti Putra
Malaysia, in Fulfilment of the Requirements for the Degree of
Doctor of Philosophy**

April 2019

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DEDICATION

This thesis is dedicated to my wife, Mrs. Onyinyechukwu Mary Ezuma and our children Chijioke, Obiagaeri, Seraphina and Amara-chukwu for their unending patience and encouragement. May God Almighty continue to protect and keep them in Jesus, Amen. iv



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UPM

Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the degree of Doctor of Philosophy

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April 2019

Chairman : Siti Rabaah Hamzah, PhD
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The review of past literature has shown that considerable attention has been given to organizational performance and its potential factors in various sectors. However, not much emphasis has been laid on the issue of human capital predictors such as management skill, leadership skill, knowledge creation, ICT usage and the mediating effect of network competence particularly in the medium-sized manufacturing enterprises in the Lagos state, Nigeria. Therefore, this study examines the mediating effect of network competence on the relationship between human capital practices and v

Organizational Performance of Manufacturing Medium Sized enterprises. Theories of human capital and resource based, were used to explain the variables in the study. This study was conducted based on 245 samples involving owners of manufacturing medium sized enterprises who were administered with structured questionnaire. Statistical Package for Social Sciences (SPSS) was used for descriptive analysis (mean values, frequencies and percentages) and Structural Equation Modelling (SEM) using AMOS was employed for inferential statistics. Additionally, SEM was applied to test and establish the existence of convergent validity and discriminant validity of the measured constructs. Prior to the utilization of the model, the measurement model confirmed the appropriateness of the data with $\chi^2(959) = 1434.521$; $P=0.000$; $\chi^2/DF=1.496$; $GFI=0.801$; $CFI=0.938$; $IFI=0.939$; $TLI=0.933$; $RMSEA = .045$. The descriptive analysis showed that organizational performance were practiced at high level while the other variables tested in this study were at moderate. Based on results from the structural model, it can be deduced that network competence partially and fully mediates the

relationship between human capital predictors and Organizational Performance, which could mean that improved network competency will positively impact on human capital predictors leading to an improved organizational performance in medium-sized manufacturing SMEs. This could also serve as a guiding principle for organizations to adopt human capital related to skills development of individuals and network competencies. The implications for practice is that the study will enable the adoption of an appropriate HRD approach that would involve development of skills for management and leadership concerns of enterprises through training, organizational development and career development. This study has shown that network competence is the mechanism through which human capital predictors influence the organizational performance of medium sized enterprises in Nigeria. However, there is no significant relationship between ICT usage, network competence and organizational performance of medium sized manufacturing enterprises in the context of Lagos state Nigeria. Therefore, more research is needed in the area of ICT adaptation and usage because advanced technology application is of great significance in most developed countries. vii

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia
sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

**KESAN PENGANTARAAN KOMPETENSI RANGKAIAN DALAM
HUBUNGAN ANTARA PERAMAL MODAL INSAN DENGAN PRESTASI
ORGANISASI PERUSAHAAN KECIL DAN BERSAIZ SEDERHANA DI
NEGERI LAGOS NIGERIA**

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Kajian literatur menunjukkan bahawa perhatian yang cukup telah diberikan kepada prestasi organisasi dan potensinya dalam pelbagai sektor. Walau bagaimanapun, tidak banyak penekanan diberikan kepada isu peramal modal insan seperti kemahiran pengurusan, kemahiran kepimpinan, kreativiti pengetahuan, penggunaan teknologi maklumat dan komunikasi dan kesan pengantaraan kecekapan rangkaian terutamanya dalam perusahaan kecil dan sederhana di negeri Lagos, Nigeria. Oleh itu, kajian ini mengkaji kesan pengantaraan kompetensi rangkaian terhadap hubungan antara amalan modal insan dengan prestasi organisasi perusahaan kecil dan sederhana. Teori modal insan, berasaskan sumber digunakan untuk menerangkan pemboleh ubah dalam kajian ini. Kajian ini dijalankan berdasarkan 245 sampel yang melibatkan pemilik perusahaan sederhana melalui tinjauan dengan borang soal selidik berstruktur. Pakej Statistik untuk Sains Sosial (SPSS), digunakan untuk analisis deskriptif (nilai min, kekerapan dan peratusan) dan Pemodelan Persamaan Struktur (SEM) menggunakan AMOS digunakan untuk statistik inferensi. Di samping itu, SEM telah digunakan untuk menguji dan membuktikan kewujudan keesahan konvergen dan keesahan diskriminan bagi pembinaan yang diukur. Sebelum penggunaan model, model pengukuran mengesahkan kesesuaian data dengan $\chi^2(959) = 1434.52$; $p = 0.000$, $\chi^2/DF = 1.496$; $GFI = 0.801$; $CFI = 0.938$; $IFI = 0.939$; $TLI = 0.933$; $RMSEA = .045$. Analisis deskriptif menunjukkan bahawa prestasi organisasi adalah pada tahap tinggi manakala pemboleh ubah lain dalam kajian ini adalah sederhana. Berdasarkan hasil daripada model struktur, dapat disimpulkan bahawa kecekapan jaringan memisahkan sebahagian hubungan antara peramal modal insan dengan Prestasi Organisasi yang boleh bermakna kecekapan rangkaian yang lebih baik akan memberi kesan positif

kepada peramal modal insan yang membawa kepada prestasi organisasi yang lebih baik dalam pengeluaran perusahaan kecil dan bersaiz sederhana. Ini juga boleh menjadi prinsip panduan bagi organisasi untuk menerima modal insan yang berkaitan dengan pembangunan kemahiran individu dan kompetensi rangkaian. Implikasi untuk amalan adalah bahawa kajian ini akan membolehkan penerapan pendekatan pembangunan modal insan yang sesuai yang akan melibatkan pembangunan kemahiran dan kepimpinan untuk keprihatinan perusahaan melalui latihan, pembangunan organisasi dan pembangunan kerjaya. Kajian ini menunjukkan bahawa kecekapan rangkaian adalah mekanisme peramal modal insan yang mempengaruhi prestasi organisasi perusahaan kecil dan sederhana di Nigeria. Walau bagaimanapun, tidak terdapat hubungan yang bermakna antara penggunaan teknologi maklumat dan komunikasi, kecekapan rangkaian dan prestasi organisasi perusahaan kecil dan bersaiz sederhana dalam konteks negeri Lagos Nigeria. Oleh itu, lebih banyak penyelidikan diperlukan dalam bidang penyesuaian dan penggunaan teknologi maklumat dan komunikasi kerana penerapan teknologi maju penting di kebanyakan negara maju .

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This thesis was submitted to the Senate of the Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Doctor of Philosophy. The members of the Supervisory Committee were as follows:

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LIST OF ABBREVIATIONS

AGFI	Adjusted Goodness-of-Fit
AMOS	Analysis of Moment Structures
AVE	Average Variance Extracted
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CMIN	Minimum Value of the Discrepancy Function, C
DEV	Development
EFCT	Effectiveness
EFCY	Efficiency
GFI	Goodness-of-Fit Index
INN	Innovation
LAST	Leadership Assessment Survey Tool
M	Mean
MSAI	Management skill Assessment Instrument
NC	Network Competence
NCQ	Network Competence Questionnaire
OP	Organizational Performance
PTKQ	Perceived Technology and Knowledge Questionnaire
QLT	Quality
RMSEA	Root Mean Square Error of Approximation
SATIS	Satisfaction
SEM	Structural Equation Modelling
TLI	Tucker – Lewis Index
TPCKS	Technological Pedagogical Content Knowledge Scale

CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter covers the background of study; research problem, aims and objective of the study, research question, the scope/limitation, significance and the definition of terms used in the study.

1.2 Background of the Study

The Nigeria post-independence national development plan and national budgets emphasize employment generation and promotion of gainful employment among their cardinal objectives (Tende & Obumneke, 2014; Bello, 2003). This includes the development of SMEs, as it relates to other developing and developed countries. This could be based on the belief that global economic growth and development are largely attributed to the performance of SMEs (Olatunji, 2013; Mahmud & Hilmi, 2014). Many countries across the world, including China, India, Malaysia and Thailand have identified SMEs as key contributors to their nation's economy (Torkkeli et al., 2016; Eze & Okpala, 2015). Specifically, Eze and Okpala (2015), reported that SMEs contributed more than 70 percent of these nations' export, alongside growth in other spheres and bounds. In Nigeria, 95% of the industries are SMEs, with average of 50% employment rate and industrial output respectively. The total GDP is below 10%, while total export merchandise from the SMEs is at 7.2% (Gbandi & Amisah, 2014; Ihugba, Okezie, Odii & Njoku, 2014). The aforementioned statements points to the fact that, despite the significant boost the contributions of SMEs add to certain countries' economies, some countries experience low growth. High growth could be attributed to workforce skill and human capital, which is a prerequisite for organizational performance (Siepel, Cowling & Coad, 2017; Sheehan & Shanahan, 2017).

Asah et al. (2015), pointed out that lack of education and experience have reduced management capacity to provoke high growth, indicating that the distinguishing features of a low-growth and a high-growth enterprise such as SMEs is associated with the level of education and experience of the high-ranking managers. This is in line with the studies of Parida et al. (2010), including Shariff and Peou (2008), whose findings indicates that managerial skills are measured by education, managerial experience, start-up experience and knowledge of the business. In other words any organization that its owners or managers, lacks managerial skills or expertise skills such as knowledge for creation, ICT usage and leadership skills at adolescence are likely to collapse even after high growth (Asah et al., 2015; Siepel et al., 2017). Taken together, shows that firms with the capacity to access these workforce

skills and specialization plays crucial roles in shaping the development and survival prospects of the firm as it progresses through its life course (Siepel et al., 2017).

Meanwhile, SMEs in Nigeria play a significant role to the development of the nation's economy, particularly the manufacturing sector (Eniola & Ektebang, 2014). Reports, from the federal office of statistics show that 97% of the entire industries in Nigeria have less than 100 employees. That is why the foremost definition of 97% of entire businesses in Nigeria is called SMEs (Eniola & Ektebang, 2014). Other literatures have averred that SMEs comprise 70% to 90% of the business formation in the manufacturing sector in Nigeria (Onyekenki & Ihediwa, 2016; Edoho, 2016). Consequently, SMEs provide over 90% of employment opportunities available in the manufacturing sector of the economy, which essentially accounts for about 70 % of aggregate employment created per annum (Eniola & Ektebang, 2014; Agwu & Emeti, 2014). These explain why the studies on the performances of the manufacturing enterprise are critical to the Nigerian economy to boost the economic activities. Hence, the need for the integration of Human resource development practices to improve skills such as management, leadership, knowledge creation, ICT usage and network competence. This is to enhance the behaviour and attitude of individuals assume the role of owners who are willing to effectively manage their enterprises to provoke performance (Sheehan & Shanahan, 2017; Tende, 2014).

Meanwhile, the total distribution of micro small medium enterprises (MSMEs) in the 36 states of Nigeria including the federal capital territory is 37,067,416, micro 36,994,578 small = 68,168 medium = 4,670. Specifically, the total distribution of MSMEs in Lagos state is 3,235,987, micro =3,224,324, small=11,044, medium =619. The figures show that Lagos State has the highest number of MSMEs in Nigeria with 17 % of the general figure, coupled with the workforce (SMEDAN, 2013). This shows that, Lagos state plays a dominant role in terms of contribution to the national economy. Regrettably, the MSMEs in Nigeria have underperformed. Despite the fact that the SMEs constitute more than 95% of Nigerian businesses, their contribution to the nation's GDP is below 10%. This very low contribution can be attributed to the following factors amongst others; unfriendly business environment, poor funding, low management skills and lack of access to modern technology (Etuk, Etuk & Michael, 2014; Gbandi & Amisah, 2014).

A study carried out by Subairu (2016) revealed that most SMEs collapsed within five years from their start-up date. He further argued that a smaller percentage experience shut down within the sixth to tenth year of existence; hence, only 10 % percent of these nascent enterprises succeed and grow to maturity. From the aforementioned statements, Subairu (2016) admitted that the performance and productivity of manufacturing SMEs in Nigeria, has declined steadily in recent times when compared to the rate at which they grew

over the past three decades. A separate study carried out by Manufacturers Association of Nigeria (MAN) found that about 80% of SMEs have folded up within the period of 'between" 2000 to 2009. Thus, throwing thousands of employees out of job to the already saturated labour market (Nkechi et al., 2012; Subairu, 2016).

This development is toxic and challenging to any country's economic growth and development. Moreover, some owners are aware of the necessity for human resource development but are biased towards investing funds to develop their managers, reason being that they believe after developing the manager or individual, the beneficiaries may demand for salary increments and better conditions of service, which if the owner are unable to provide, can make the manager, or individual worker leave the organization. This suggest that there are no performance supportive resources within the reach of SMEs in Nigeria over these years, which worsen the milieu that encourage SMEs performance (Edoho, 2015; Subairu, 2016). Based on the above cited literatures, there is need to study SMEs performance in the manufacturing sector through examination of all factors mentioned above which hinders the performance of SMEs and give recommendations.

However, within the enterprise, human resource development (HRD) is concerned with training and development to improve employees' potential and competencies, which is crucial to creating and strengthening human and social capital such as network competence through the integration of organizational development to ensure a healthy inter and intra network. This integration can assist group members to initiate and manage change that impact on the organization as a system thus leading to organizational performance of SMEs (Cumberland, Alagaraja, Shuck & Kerrick, 2018; Mclagan, 1989;Torkkeli et al., 2016; Tseng & Mclean, 2008).

Moreover, the recommendation given from the literature demonstrates that human capital is uniquely the trust for competitive edge over other firms, which is the ability of firms to develop through training and develop a value, which cannot be imitated by any other potential competing organization (Ogunyomi & Bruning, 2016). This means that the only unique way to achieve this sustainable fit is the development of the human capital with skill, knowledge and capabilities that has edge. If this is adequately maintained, the firm performance can viaduct the existing gap between SMEs in Nigeria and that of other societies to ensure integration and lead position among the twenty industrialized nations by the year 2020. The afore mentioned is predicated on the belief that understanding and identifying the factors that lead to deterioration or failure in SMEs performance can help policy makers to employ measures, such as studies, program and policies that can ensure that the SMEs are positioned on the right template to possess the right features that can actualize organizational performance.

Organizational performance is the concern of SMEs and larger organizations. This concern is necessary owing to the managers' desire to achieve the mission, vision, objectives or goals statements of which every organization are set up (Ogunyomi & Bruning, 2016). This means that every organization focuses on the performance of their company to maintain relevance and competitiveness. However, it is important to note that organizational performance, based on the interest of different areas of discipline, are viewed from different perspectives (unit of analysis and measures). This is dependent on the field of study because different disciplines such as economics, sociology, psychology, industrial engineering, human resource management and so on, are linked with particular indicators and key considerations that defines performance and performance improvement to fit each purpose and need (Swanson & Hilton, 2010). In this regard, The HRD disciplinary perspective on performance looks at the domains of performance and the analysis from the angle of levels: organization, process, individuals and measures of output in terms of quantity, time and quality features (Ahmad & Ramlan, 2008; Swanson & Hilton, 2010).

Nonetheless, in an effort to dichotomize the two construct of SMEs and large organizations, SMEs are generally viewed by certain practitioners, policy makers as well as researchers to be smaller organizations which can later grow into large organizations. This is with the view that whatever plan adopted to manage or handle a large business can also be applicable to small businesses such as the SMEs (Ogunyomi & Bruning, 2016). Scholars argued that SMEs could not be viewed or be equated to smaller replicates of large organizations, hence, refuted this notion. Saying that, large firms are evidently characterized by certain fundamental features that differentiate them from SMEs (Burns, 2001). These features are associated with newness and scope, the absence of economies of scale, smallness of liabilities, less endowment of human, material, and financial capital resources (Cardon & Stevens, 2004). All these put together among other silent reasons, have comparatively in a lesser level of endowment, differentiated the SMEs from the larger organizations (Baumann-Pauly, Wickert, Spence & Scherer, 2013; Ogunyomi & Bruning, 2016).

Based on these reasons of lesser endowment, for SMEs to survive and remain competitive, SMEs must be more often than not inevitably reliant on HRD to develop human capital experts with knowledge, skills and capabilities to ensure performance is achieved (Asah et al., 2015; Swanson & Hilton, 2010). Thus, investments in human resources development are expected to provoke significant differences in SMEs' performance over other competing organization, which do not consider work force skill necessary for firm performance as viewed and explained through the resource-based view. This suggest that resource based view considers specific HRD strategy to achieve competitive advantage through increased commitment and development of human capital that is difficult to imitate or substitute. This is consistent with certain HRD approach and practices linked with improved organizational

performance (Dobbs & Roberts, 2008; Alagaraja et al, 2015). For example, developing people with the right skill and matching it with the right job through career development, put together can guarantee workforce motivation that can improve level of productivity which is capable of lowering production costs (Katou, 2008; McLagan, 1986).

Building, from the above proposition, Baumann-Pauly et al. (2013) argued that SMEs are more likely to endure and sustain competitive advantage over larger organizations by increasing employees' satisfaction, which in turn reduces labour turnover, absenteeism and minimizes production costs. Moreover, Ogunyomi and Bruning, (2016) supported this position and proposed that a highly motivated and skilled workforce can support the ability of small business to remain competitive in the current turbulent and highly dynamic business environment yet achieve SMEs performance.

This confirms the notion as stressed by the following authors, Chen, Cheng and Tseng (2012); Fajana (2002) that human factors constitute the internal environment of enterprises. The authors further stated that human beings are the most difficult to manage, yet remain germane to the success of any organization. Therefore, based on the resource-based view of organization, human resources are the glue that bind and hold the other resources together of all resources available to organizations. These understanding needs extended to both SMEs and large organizations operating in developing countries, such as Nigeria for improved performance (Baumann-Pauly et al., 2013; Ogunyomi & Bruning, 2016).

However, while the number of citizens who need employment to earn a living and contribute to the economic development of the nation is increasing at a geometric rate in Nigeria, the number of industries that can provide employment is also decreasing at the same rate (Aghion, Akcigit & Hewitt, 2014; Banjoko, 2009). Therefore, it is important to research on the use of work force skills and specialization to improve organizational performance (Asah et al., 2015; Siepel et al., 2017). This research focuses specifically, on the organizational performance of medium sized manufacturing enterprises in Lagos state, Nigeria.

Consistence with the above reviewed studies shows that performance of SMEs has a positive direct influence on the development and growth of most countries economy (K Szabo, Šoltés, & Herman, 2013; Tarute & Gatautis, 2014). This means globally, that almost all the economic success story is as result of much emphasis and support, the benefiting nations offers to SMEs performance (Mahmud & Hilmi, 2014; Nkwe; 2012). Therefore, based on the perceived contributions to local and national economies across the globe, is imperative to study SMEs businesses. In addition, appraise some related factors that can lead to positive organizational performance of the SMEs and the idea behind the use of SMEs as a key construct for investigation.

Thus, this study is intended to investigate the mediating effect of network competence on the relationship between technology usage, human capital such as management skill, leadership skill, knowledge creation, ICT usage and organizational performance of SMEs. The output of this research shall be used to strategically, improve the performance of manufacturing medium sized enterprises (SMEs) in Lagos state Nigeria. In addition, this study can be useful in other relevant institutions and countries.

Human Capital

Human capital: Is the “accumulated stock of skills and talent that manifest itself in the educated and skilled work force in the region” (Mathur, 1999; cited in Asah et al., 2015). This implies that investment in education and/or training whether formal or informal does increase the level of human capital within the organization, region, nation and globally (Sheehan & Shanahan, 2017). Besides, there is a widespread consensus in the literature that training and in particular an organizations, investment in HRD is associated with increased firm performance (Aragon & Sanz-Valle, 2013), this fundamental postulation indicates that HRD does this by way of improving the level and quality of human capital (Sheehan & Shanahan, 2017). This assertion suggests that individuals rely on HRD opportunities to enhance their current skills and competencies and learn new ones (Sheehan & Shanahan, 2017). Therefore, organizations are human creation, which requires specialized human capabilities to perform effectively (Armstrong & Taylor, 2014; Norman, 2014; Swanson & Hilton, 2010).

This notion means that for organizations to thrive and succeed there must be corresponding specialized experts to handle and manage the firm in order to create value, thus, specialized human capital is vested with such responsibility (Armstrong & Taylor, 2014; Wiegmann & Shappell, 2017; Swanson & Hilton, 2010). This implies that the driving force for every economic activity is by developing the human potentials with the required knowledge, skill and capabilities through educational learning, training and experiences in order to enhance, work performance (Armstrong & Taylor, 2014; Martin, McNally & Kay, 2013; Kolb, 2014). This is critical to the success and performance of the SMEs as unskilled man cannot manage economic activities (Baines, Lightfoot & Smart, 2013; Chell, 2013; Mukumba, 2014).

In this regard and based on literature review, human capitals such as management skill, leadership skill, ICT usage, knowledge creation and the effect of variable of network competence can only mediate and predict on the criterion to define relationship among the variables, when the knowledge, expertise and skills gained through education and training are applied for improved performance (Armstrong & Taylor, 2014; Swanson & Hilton, 2010). This implies that a manager must be expert with the right skills and knowledge to perform the task of management in a context. The workforce or specialized

skills includes technical, conceptual, and human skills must be posed by the owner or manager to organize, plan and coordinate other factors of production such as land, labour and capital to achieve enterprise set objective (Hosseinpour et al., 2014; Ping, Mujtaba, & Jieqiong, 2012). In other words, organizations that fail to invest in workforce skill and human capital cannot perform at optimal level nor create competitive edge (Asah et al., 2015; Armstrong & Taylor, 2014). Therefore, organizations must imbibe the culture of investment on human capital to improve performance in the medium sized enterprises (Mahmud & Hilmi, 2014; Sheehan & Shanahan, 2017).

Similarly, skills such as leadership skill, which includes cognitive, interpersonal, business and strategic requirements are necessary for solving enterprise problems that can communicate positive change in the organization (Hayton, 2015; Mumford et al., 2007; Mahmud & Hilmi, 2014). Leadership skills, position a leader to influence others through persuasion in carrying out firms' objective (Cooper, 2018; Chell, 2013). Thus, improving the level and quality of leadership skill through HRD at the organizational levels is significant to SMEs performance (Cooper, 2018; Zafar, Hafeez, & Shariff, 2016). In the same vein, knowledge creation seeks to improve creative capabilities in the organization for enhanced performance (Sulaiman et al., 2015). This implies that the enhanced performance and survival of many organizations are based on the ability of the firm to enshrine policies that encourage training and development to improve individual's knowledge and skill to be creative (Purcarea, 2013; National research council, 2013; Sulaiman et al., 2015; Zafar, Hafeez, & Shariff, 2016).

However, Knowledge creation has to do with the generation of ideas and new knowledge and skills through internal or external sources training and development for the achievement of enterprise goal (Armstrong & Taylor, 2014; Martin, McNally & Kay, 2013). These developed capabilities are mostly imitable and cannot be substituted, therefore accounts for competitive advantage over other firms who do not put similar kind of knowledge creation into consideration (Armstrong & Taylor, 2014; Martin, McNally & Kay, 2013; Asah et al., 2015). This implies that knowledge creation, as an outcome of human capital development is strategically vital for the performance of SMEs (Chell, 2013; Mitra et al., 2011; Sheehan & Shanahan, 2017). Hence, firms that adopt the culture of acquiring knowledge for creativity can sustain and maintain competitive edge leading to performance (Asah et al., 2015; Siepel et al., 2017).

Building from the above, the importance of developed knowledge in supporting ICT usage is clearly demonstrated in the workforce skill while handling technology (Dalkir, 2013; Savery, 2015). Suggesting, that to make use of ICT, there is need for training and development to enable individual user have knowledge and skills about the methods, techniques and processes involved in the usage (National research council, 2013). Taken together, implies that

attitude towards the perceived use of technology such as ICT and technological powered machine in firms requires specific developed skills that can make production easy and fast (Brynjolfsson & McAfee, 2014; Christensen, 2013; Armstrong & Taylor, 2014). Essentially, consolidating on the benefits of HRD through learning can lead to performance of SMEs in manufacturing firm (Mahmud & Hilmi, 2014; Swanson and Hilton, 2010; National research council 2013; Savery; 2015).

More so, to carry out network competence task, there is need for network management qualification possessed by individual handling the enterprise collaborative competence (Ritter, 1999; Torkkeli, 2016). These suggests that there are prerequisites such as experience, knowledge, skills, and capabilities to perform a relationship-building task. By implication, these competencies must be developed using HRD tools of organizational development for improved capacity to handle network management task in the benefiting organization (Armstrong & Taylor, 2014; Cumberland et al., 2018; Torkkeli et al, 2016). Network management strategically places the firm in a position that makes it to collaborate with other firms in the areas where they lack strength or weakness to move forward (Ritter, 1999; Torkkeli, 2016). The above understanding justifies the need for competence-based networking among partner firms. This business behaviour among firms can provoke improved performance of SMEs, as organizations cannot exist in isolation (Torkkeli et al., 2016; Jagongo & Kinyua, 2013).

Network competence as mediator

Mediator variable explains how and why predictors variable influences the criterion variable, thus it is regarded as part of causal process. The mediator, clarifies how or why mediation occurs in the relationship between the independent variable and the dependent variable in which case it is called direct relationship and the relationship between the independent variable, the mediator and the dependent variable in which case it is called the indirect relationship (Levant, Jadaszewski, Alto, Richmond, Pardo, Keo-Meier & Gerdes, 2019). The resultant effect could translate to either direct relationship or indirect relationship (Baron and Kenny, 1986). Hence, mediation effect occurs when a third variable intervenes between two other related variables explaining the relationship between the two other variables (Hair et al., 2010). The resulting effects can cause full-mediation, partial-mediation or no mediation (Baron and Kenny, 1986). Based on the above notion, the study uses network competence as a mediators to explain how technology usage, human capital influences organizational performance of medium sized manufacturing enterprises in Lagos state, Nigeria.

Micro, Small, Medium Enterprises (MSMEs)

Micro, small, medium enterprises are categorized into micro, small, medium and large and are classified on the bases of number of employees and total cost including working capital but excluding land (Smedan and National Bureau of Statistics, 2013). In Nigeria, the asset base criterion are more commonly used (Etuk, 2014; Edoho, 2015). SMEs are characterized by their ability to respond quickly to the changing market conditions, which constitute competitive advantage. SMEs are also known to contribute to employment and economic performance (Carayannis, Popescu, Sipp & Stewart, 2006). There is an understanding that most SMEs lack technology adoption yet, have higher propensity for performance upon the use of ICT. In the study carried out by Smits (2000); cited in Carayannis et al. (2006) it shows that higher priority was placed on SMEs, most especially in political agendas owing to their critical nature as drivers of socio economic activities, such as innovation, economic growth and employment (Carayannis et al., 2006). Thus, this study shall use the Medium scaled SMEs because it is the most widely spread, with the higher employee in terms of labour, which by virtue of its stretch is adjudged fit and responsible for social economic development and constitute opportunities for competitive advantage which can lead to SMEs performance (Mahmud & Hilmi, 2014). This is a vital proof for justification and the use SMEs, with base on program policy framework (Smedan and National Bureau of Statistics, 2013).

Human Resource Development (HRD) can be defined as the integrated use of training and development, organizational development and career development to improve individual, group, and organizational effectiveness (Mclagan, 1989). HRD is a combination of all developmental practices in order to achieve a top level of individual and organizational effectiveness, which, however would not have been possible without such blend. In perspective, HRD is purposeful and instrumental to individual, group or organizational performance and goals. Organizations are entities created by human beings for a purpose. For these entities to operate in an effective and efficient manner there must be a corresponding integration of specialized experts in that entity to get it operationally effective, established, purpose driven, and goal oriented. Appreciative of this notion shows that organizations are vulnerable to changes, which can lead to either success or failure of businesses. Hence, organization's faith is critically dependent on HRD concerns (Swanson & Holton, 2010).

Thus, the development and maximization of human potentials to generate human capital experts for organizational performance are done through HRD process, for mutually short or longer term. However, it must be for the exclusive benefit of the sponsoring organization or individual through the integrated use of training and development, organizational development and career development. Further, HRD practices, can be uniquely used to enhance and improve performance, build a healthy inter-and intra-unit

relationship (networking) and create the best match of people and work, in line with the concerned variables in order to achieve organizational performance of manufacturing SMEs.

Training and development: Training is a calculated process aimed at imparting information and or instructions to improve performance of the recipient; it can also be seen as an attempt that has to do with attaining a required level of knowledge or skill competence (ILO, 2010; Mclagan, 1989; Nabi & Liñán, 2011). Training and skill development enhances both individual's capacities to work as well as their opportunities at the job, offering a broader scope for creativity and job satisfaction. In Pittsburgh (2009), G20 leaders agreed to support a robust effort towards training that would encourage strategic investment, sustainability and balanced development (ILO, 2010).

Training and skill development underscores and give meaning to real need for human existence, covering sequentially stages of life (ILO, 2010). The basic educational training, affords individuals the opportunity to develop their potentials and talent, thus building the foundation for future employability. Corporate organization and training institutions provides training to individuals for core work skill and competencies needed in manufacturing industries and professional based settings thus facilitating transition from education to the world of work (Chell, 2013). Orientation and access to the goals and principles of training will expand the labour market, create business opportunities, sustain existing skill and reduce social inequalities. To this end, training policies and programs must be aligned in the right proportion, conducive to influence SMEs performance and investment in basic education, health care and physical infrastructure (Edoho, 2015; ILO, 2010).

Organizational development; this is linked to relationship building, a focus towards ensuring a healthy inter and intra network that would assist group members initiate and manage change. Organizational development main emphasis is on relationships and process linkage among individuals and groups. And the main intervention is the influence on the relationship of individuals and groups, to effect impact on the organization as a system thus leading organizational performance of SMEs (Mclagan, 1989; Tseng & Mclean, 2008).

Career development: This is linked to the grouping of individual career planning and organizational career management processes to achieve a best possible match of individual and organizational needs. Its main concern is on the individual or a worker who perform and shapes his or her range of work roles. Career development intervenes to influence self-awareness and on a process that affects persons and organizations strength to create the finest match of people and work. Hence aligning the right crop of persons to the

organization, will be instrumental to SMEs performance (Mclagan, 1989; Mohamad bin Sulaiman, 2010; Mahmud & Hilmi, 2014).

1.3 Statement of the Problem

In this study, the researcher has identified the practical gap to explain the non-effective performance of SMEs. In Lagos State Nigeria, the performance of SMEs is plagued by myriad of challenges, which has in no small gauge affected the development of SMEs. Weak management and lack of access to modern technology, coupled with complexities embedded in specialization and professionalism have been identified as unruly attribute that make most SMEs fail within the period of five years from the start up (Gbandi & Amisah, 2014; Subairu, 2016). However, smaller percentage experience shut down within the period of sixth and tenth year; hence, only 10 % percent of these nascent enterprises succeed and grow to maturity (Subairu, 2016).

Manufacturing association of Nigeria (MAN) as cited in, Onuoha, 2013; officially declared in, 2009 that of its 2000 members, 30 percent mostly small and medium scale industries (SMIS) have closed down, 60 percent of them ailing while just 10 percent of them, notably the multinationals currently operate at sustainable level. Specifically (MAN) declared that almost 80 percent of SMEs have closed down in the past nine years between 2000 and 2008 (Subairu, 2016). This suggests that there is currently a high rate of failure among the SMEs in Lagos state Nigeria. Thus, the need to study SMEs performance in manufacturing sector, through the examination of factors that hinder performance and in response, provides recommendations to encourage SMEs performance.

Similarly, the literature gaps have been observed through review of previous literature. Reviews of previous literature on SMEs performance were mostly researched in the field of economics, management and business studies. For example, predicting the Impact of Intellectual Capital Management on the Performance of SMEs in Electronics Industry in Kuching, Sarawak Malaysia Khalique, Isa, Hassan, bin Shaari, & Abdul, (2013). The results reveal that Human Capital (HC) has the strongest relationship with Organizational Performance, followed by Spiritual Capital (SC), Technological Capital (TC) and Customer Capital (CC). In the same vain the findings of Augusto Felício, Couto, & Caiado, (2014) studied on Human capital, social capital and organizational performance the results shows that organizational performance is strongly influenced by human capital through the cognitive ability of the manager. Furthermore, Seleim, Ashour, & Bontis, (2007), researched on Human capital and organizational performance: a study of Egyptian software companies the results indicates that certain types of human capital indicators showed a positive and statistically significant relationship with firm performance.

However, all the above studies were not carried out in the field of HRD. Although, few studies have been carried out in the field of HRD. For example, the impact of HRD on business performance: An empirical analysis of manufacturing SMEs (Gamage, 2007); the findings shows that developing employee skills, attitude through HRD and motivation have a positive effect on firm performance. Meanwhile, the human capital variable in this study is the employee skills yet not a replicate of this study. Similarly, Katou (2008) researched on the impact of human resource development on organizational performance. The results support that HRD policies positively affect organisational performance of Greek manufacturing companies.

Specifically, the relationship between development and organisational performance is serially mediated through the HRD outcomes of skills, attitudes and behaviour, and is moderated by resourcing, organisational context and other contingencies, giving thus, empirical evidence for the basic causal pathway of Resourcing. Besides, studies relating to network competence have also been carried out. Mitrega, Forkmann, Zaefarian, & Henneberg, (2017), focused on Networking Capability in Supplier Relationships and its Impact on Product Innovation and Firm Performance: results show a positive influence of NC with respect to supplier relationships on firm product innovation, as well as overall firm performance; But not as network competence or a mediator. Moreover, Human & Naudé, (2009), worked on exploring the relationship between network competence, network capability, and firm performance: A resource based perspective in an emerging economy. The findings show that network capability has a significant relationship with subjective measures of firm performance, while network competence was not significant. However, the authors proposed network competence may well be treated as a moderating or mediating construct, yet was used as a mediator in the study. Elsewhere, Chaudhuri and Boer (2016) investigated the mediating effect of collaborative competence on new product development, a related study but not in the context of Nigeria medium sized SMEs. Taken together, studies such as predicting the Impact of Intellectual Capital Management on the Performance of SMEs in Electronics Industry in Kuching, Sarawak Malaysia by Khaliq, Isa, Hassan, bin Shaari, & Abdul, 2013; Human capital, social capital and organizational performance by, Augusto Felício, Couto, & Caiado, 2014; including studies by Seleim, Ashour, & Bontis, (2007) on Human capital and organizational performance: a study of Egyptian software companies did not include human capitals such as management skill, leadership skill, knowledge creation and ICT usage as a combined variable like in this present study, nor did they make use of network competence as a mediator. These studies, have contributed to the knowledge gap on the human resource development and organisational performance of SMEs. However, they have failed extensively to address the challenges facing the medium sized manufacturing SMEs in Lagos state Nigeria, which can be attributed to the role of human capital predictors and the mediating role of network competence.

Concerning the gap in theory, Augusto Felício, Couto, & Caiado, (2014) used human capital theory and social capital theory to explain organizational performance in SMEs. Katou (2008) espoused the use of resource based view, HRD performance linkage model as well as casual path ways model of HRD to explain organizational performance. In the same vein, Seleim, Ashour, & Bontis, (2007) used resource based view, knowledge based view and human capital theory to explain human capital and organizational performance. While, Khaliq, Isa, Hassan, bin Shaari, & Abdul, (2013) used intellectual capital theory to explain Predicting the Impact of Intellectual Capital Management on the Performance of SMEs. Moreover, Mitrega, Forkmann, Zaefarian, & Henneberg, (2017) used resource-based view of the firm, (Barney, 1991) and the relational view of the firm, (Dyer and Singh, 1998), to explain Networking Capability in Supplier Relationships and its Impact on Product Innovation and Firm Performance, further, in a related study also, Human & Naudé, (2009). Used resource based view in explaining the study on exploring the relationship between network competence, network capability, and firm performance: A resource based perspective in an emerging economy. Meanwhile, Gamage (2007) made use of theories which includes human capital theory, resource based theory and behavioural theory to explain the impact of HRD on SMEs business performance. Meanwhile, most of the theories used by previous scholars as identified above were used in explaining different phenomena and not the current study. For example, the resource based theory was used on the previous study on networking capability and network competence, according to Human and Naudé, (2009), but not as the mediating effect of network competence in the relationship between technology usage, human capital and organizational performance.

This study make use of theories of human capital and resource based theory, for the reason that these theories, explains the phenomena, with considerations to development of knowledge, skills and competencies through educational training and experience to improve performance. These, Includes, the usage of these knowledge, skills and capabilities as organizational resources to provoke organizational performance. Taken together, shows, there is no identified study particularly on the mediating effect of network competence on the relationship between technology usage, human capital and organizational performance of medium sized enterprises. This is a serious gap in knowledge for the enhancement of SMEs performance, particularly in Nigeria's manufacturing industrial sector. Therefore, based on this background, this research is intended to find out how the mediating effect of network competence can influence organizational performance of SMEs and also to determine the relationship between the variables and the indirect influence of the effect variable. The results of this study could serve as a baseline for other contributing sectors of the economy.

1.4 Research Objectives

The main objective of the study is to examine the mediating effect of Network competence on the relationship between human capital predictors and SMEs performance of the medium sized manufacturing SMEs in Lagos state Nigeria.

While the specific objectives are:

1. To determine the levels of organizational performance, management skill, leadership skill, knowledge creativity and technology usage in the medium -sized SMEs in Nigeria.
2. To determine the relationship between management skill, leadership skill, knowledge creativity and technology usage on SMEs performance.
3. To determine the mediating effect of network competence on the relationship between management skill, leadership skill, knowledge creativity and technology usage with organizational performance of the medium sized manufacturing SMEs.

1.5 Research Hypothesis

The following research hypotheses are formulated to guides this work.

H1. There is positive relationship between management skill and organizational performance of medium sized enterprises

H2: There is positive relationship between leadership skill and organizational performance of medium sized enterprises

H3: There is positive relationship between knowledge creation and organizational performance of medium sized enterprises

H4: There is positive relationship between ICT usage and organizational performance of medium sized enterprises

H5. There is positive relationship between management skill and network competence of medium sized enterprises

H6: There is positive relationship between leadership skill and network competence of medium sized enterprises.

H7. There is positive relationship between knowledge creation and network

Competence of medium sized enterprises

H8. There is positive relationship between ICT usage and network

Competence of medium sized enterprises.

H9. There is positive relationship between network Competence and organizational performance of medium sized enterprises

H10. Network competence mediates the relationship between management skill and organizational performance of medium sized enterprises

H11. Network competence mediates the relationship between leadership skill and organizational performance of medium sized enterprises

H12. Network competence mediates the relationship between technology usage and organizational performance of medium sized enterprises

H13. Network competence mediates the relationship between knowledge creativity and organizational performance of medium sized enterprises.

1.6 Significance of the Study

In this study, the integration of HRD for the development and maximization of human potentials alongside ICT usage, human capital such as management skill, leadership skill, knowledge creation and the mediating effect of network competence is vital for enterprise performance. Therefore, it is necessary for policy makers to accept the above integration as an effective and efficient standpoint to organizational performance of SMEs.

The introduction of the mediating effect of network competence into technology usage, human capital and organizational performance has offered a framework that helps unveils the important phase for collaborative adaptation behavior for sustainable organizational performance in the SMEs. The study serves as a helpful guild to HRD practitioners, on the need to develop strategies that will uphold the development of management skill, leadership skills, knowledge creation and ICT usage to improve organizational performance. The research also will aid the policy makers on the need to encourage, adopt and implement policies that are embedded with

collaborative competence drive among interdependence SMEs. The research will aid medium size enterprises and other sectors on the need to collaborate on the bases of competences.

Furthermore, the study will also trigger, the need for continuous training and development in order to develop the needed skill that can translate organizational performance. In addition, previous negative orientation about SMEs concerning HRD will be reduced since study has shown that management skill, leadership skill and knowledge creation was able to translate to organizational performance. Nevertheless, the adopted scales of non-financial measures have proven adequate to measure organizational performance in HRD, this was revealed by the fulfilled fit indices and Cronbach's alpha.

1.7 Scope of the Study

The scope of this study is centered on technology usage, human capital and the mediating effect of network competence on enterprise performance of the manufacturing medium sized enterprises in Lagos state Nigeria. It covers areas such as management skill, leadership skill, knowledge creation, ICT usage, organizational performance and the mediating effect of network competence in the manufacturing Medium sized enterprises. The medium sized, is the category of SMEs with fifty to one hundred and ninety-nine employees including fifty to five hundred million capital base, (asset) excluding land and building, domain in Lagos state Nigeria with a sample sized of 245 owners as respondents. Meanwhile, the scope also focused on the notion that if skills such as managerial skills, leadership skills, knowledge creation, network competence skills and ICT usage skills are developed using HRD it would lead lead to organizational performance.

1.8 Limitation of the Study

This study is limited to the manufacturing medium sized enterprises in Lagos state Nigeria. Medium sized manufacturing has the highest number of employee based on categorization of SMEs as well as total capital base (Edoho, 2015; Smedan, 2013).The respondents are limited to the owners of medium sized manufacturing enterprises in Lagos state Nigeria, who are aware of when or how their organization is performing. However, certain scholars have argued, that a broader standpoint of the entire workers would have been given this opportunities to offer their opinion rather than limiting the respondents to a few owners. This consequently limits the opinion of the entire stake holder's opinion response about the performances of the manufacturing medium sized enterprises. The study is also limited to non-financial level of measurement (Crucke & Decramer, 2016).

Non-financial level of measurement is all about measuring organizational performance from the perspective of human contributions to organization performance, excluding financial contributions. Consequently it is limited to only expertise human consideration which is denoted in this study through effectiveness, efficiency, satisfaction, development, innovativeness and quality resulting from HRD out comes (Katou, 2008), while, the basis for networking is limited to competency of the parties involved (Torkkeli et al., 2016). Taken together, the scope and limitations exist because previous studies were done in different field of study, besides few that were done in HRD but was done isolation as aforementioned in the problem statements; Augusto Felício, Couto, & Caiado, (2014); Khalique, Isa, Hassan, bin Shaari, & Abdul, (2013); Seleim, Ashour, & Bontis, (2007); Katou (2008); Mitrega, Forkmann, Zaefarian, & Henneberg, (2017); Chaudhuri and Boer (2016); Human and Naudé, (2009). This suggests that there is no study found on the mediating effect of network competence on the relationship between technology usage, human capital and organizational performance of medium sized manufacturing enterprises in Lagos state Nigeria.

1.9 Assumption of study

At the end of this study it is assumed that, the development of human elements such as owner or individual with specialist or expertise skills, such as management skill, leadership skill, knowledge for creativity, ICT usage and network competences would lead to organizational performance.

1.10 Definition of Terms

The definition of terms for this study is dimensioned into, the conceptual and operational definitions. The conceptual definitions are the conceptual meaning of a phenomenon as conceptualized by different authors. While, the operational definition are linked with the researcher's definitions and usage of concepts which must be in line with the theories or models used in the study. Based on this notion the following variables of the study are thus, defined respectively:

- A. **Management skill:** can be defined as the stock of competences, knowledge and personality attributes embodied in the ability to perform manual labour so as to produce economic value (O'Sullivan & Sheffrin, 2003). In this study management skill is referred to as the embodiment of developed managerial competencies which enable the owners or managers of a firm to plan, coordinate and organize other factors of production such as land, labour, capital to achieve firm performance.
- B. **Leadership skill:** can be defined as the leader's ability to motivate individuals to work, towards achieving common goals, it includes, influencing ordinary individuals to display extraordinary performance (Dobbins and Pettman (1997). In this study, leadership

skill can be defined as the attributes of a leader at different levels of an organization to influence, plan, control, delegate, or motivate the subordinates including management towards the achievement of the organizational set objective. They include interpersonal ability, cognitive acumen, business acumen and strategic ability.

- C. **Knowledge creation:** involves the application of internal and external resources of an organization to generate new ideas, knowledge and skills for the utmost achievement of organizational set objective (Gholami, Asli, Nazari-Shirkouhi, & Noruzy, 2013). In this study, knowledge creation is operationalized as the unleashing of human potentials and capabilities through training and development in order to have knowledge that can spark creativity towards realization of individual and enterprise goal.
- D. **ICT usage (ICT),** can be defined as enabling business processes electronically, whereby the internet and other related technologies represent an enabler of more effective and efficient business activity (Darch, & Lucas, 2002). In this study, ICT usage is operationalised as the process of developing individuals' skill or knowledge either on the job training or outside the organization with ICT usage, knowledge or skill to improve the recipient's skills to make use or manage ICT apparatus in task performance by extension increase organizational performance.
- E. **Network competence:** Ritter (1999) defines network competence as the "ability of a company to handle business relationships" and introduces a scale that measures network competence along two dimensions: first the company's degree of network management qualification, which includes social and specialist qualifications; and secondly, the execution of network management tasks, which includes planning, coordinative, adaptive and controlling activities. In this study, network competence can be operationalized as the capacity to initiate, manage, through the use of developed experts, such as skilled or knowledgeable individuals to handle overall position in a network, thus, supports a firm to obtain significant resources from its integrating network partners.
- F. **Organizational Performance of SMEs:** From the perspective of HRD, organizational or corporate performance was determined by using three measures; Return on assets, growth in sales and growth in stock values (Alagaraja, 2012). In this study, organizational performance can be operationalized as the level at which owners effectively meets its planned objective through the efficient utilization of its fewest available resources (tangible and intangible). Alongside, the development of its capacity to meet future opportunities and challenges of satisfying stakeholder needs through innovation of quality products for the achievement of organizational performance.

1.11 Summary of Chapter

The main objective of the study is to examine the relationship between technology usage, human capital and SMEs performance, thus shading some light on the mediating effect of network competence through which technology usage, human capital are translated into SMEs performance of the medium sized manufacturing enterprises in Lagos state Nigeria. In this study, both the dependent and the independent variables were constructed from the Likert - scale survey responses. Here, ICT usage human capitals are considered as the independent variables, while SMEs performance is considered as dependent variables. In line with the above statement on variables, it is presumed that human resource capital influences SMEs performance through four major aspects by developing (a) management skill (b) leadership skill (c) ICT usage (d) knowledge creation and the mediating effect of network competence. These variables mentioned are crucial components of human capital predictors found in previous studies thus, considered, good to predict the SMEs performance.

REFERENCES

- Aasheim, C. L., Li, L., & Williams, S. (2009). Knowledge and skill requirements for entry-level information technology workers: A comparison of industry and academia. *Journal of Information Systems Education*, 20(3), 349.
- Abbasi, M. S., Tarhini, A., Elyas, T., & Shah, F. (2015). Impact of individualism and collectivism over the individual's technology acceptance behaviour: A multi-group analysis between Pakistan and Turkey. *Journal of Enterprise Information Management*, 28(6), 747-768.
- Abubakar, H. H., & Bambale, A. J. (2016). The Mediating Effect of Proactive Market Orientation on Entrepreneurial Proclivity and Small Scale Business Performance. *Journal of Marketing & Management*, 7(1).
- Acemoglu, D., & Restrepo, P. (2019). *The Wrong Kind of AI? Artificial Intelligence and the Future of Labor Demand* (No. w25682). National Bureau of Economic Research.
- Ahmad, N., & Hoffmann, A. (2008). *A framework for addressing and measuring entrepreneurship OECD statistics* (No. 2). Working paper.
- Agwu, E. M., & Murray, P. J. (2015). Empirical study of barriers to electronic commerce uptake by SMEs in developing economies. *International Journal of Innovation in the Digital Economy (IJIDE)*, 6(2), 1-19.
- Agwu, Mba Okechukwu and Cletus Izunwanne Emeti. (2014) "Issues, challenges and prospects of small and medium scale enterprises (SMEs) in Port-Harcourt city." *European Journal of Sustainable Development* 3.1: 101-114.
- Aghion, P., Akcigit, U., & Howitt, P. (2014). What do we learn from Schumpeterian growth theory? In *Handbook of economic growth* (Vol. 2, pp. 515-563). Elsevier.
- Aiginger, K. (2014). *Industrial Policy for a sustainable growth path* (No. 469). wIFO working Papers.
- Ajay, S., & Micah, B. (2014). Sampling techniques & Determination Of Sample Size In Applied Statistics Research : An Overview, *II*(11), 1–22.
- Akinjare, O. A., Oloyede, S. A., Ayedun, C. A., & Oloke, C. O. (2011). Price Effects of Landfills on Residential Housing in Lagos, Nigeria. *International journal of marketing studies*, 3(2), 64-72.
- Alagaraja, M. (2012). National human resource development in practice: an interview with MV Subbiah. *Human Resource Development International*, 15(4), 515-524.

- Alagaraja, M., Cumberland, D. M., & Choi, N. (2015). The mediating role of leadership and people management practices on HRD and organizational performance. *Human Resource Development International*, 18(3), 220–234. <http://doi.org/10.1080/13678868.2014.997139>
- Albert, J. M. (2008). Mediation analysis via potential outcomes models. *Statistics in medicine*, 27(8), 1282-1304.
- Altınay, L., Madanoğlu, M., De Vita, G., Araslı, H., & Ekinci, Y. (2016). The interface between organizational learning capability, entrepreneurial orientation, and SME growth. *Journal of Small Business Management*, 54(3), 871-891.
- Amaeshi, U. F. (2005). Entrepreneurship, Enugu. *Publishers Ltd.*
- Aminayi, M., Ebrahimabad, A., Javad, M., Azadi, M., & Soltani Shal, R. (2015). Reliability and validity of Farsi version of Parsian and Dunning spirituality questionnaire. *Journal of Fundamentals of Mental Health*, 17(3), 129-134.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological bulletin*, 103(3), 411.
- Anderson, N., Potočník, K., & Zhou, J. (2014). Innovation and creativity in organizations: A state-of-the-science review, prospective commentary, and guiding framework. *Journal of management*, 40(5), 1297-1333.
- Armstrong, M., & Taylor, S. (2014). *Armstrong's handbook of human resource management practice*. United Kingdom: Kogan Page Publishers.
- Armstrong, D. (2018). Emotions in organizations: disturbance or intelligence?. In *Working below the surface* (pp. 11-27). Routledge
- Appuhami, B. R. (2007). The impact of intellectual capital on investors' capital gains on shares: An empirical investigation of Thai banking, finance & insurance sector. *International Management Review*, 3(2), 14-25.
- Ary, D., Jacobs, LC, & Sorensen, C. (2010). *Introduction to research in education* (8thEd.). California: Wadsworth.
- Ary, D., Jacobs, L. C., Sorensen, C., & Walker, D. A. (2013). *Introduction to research in education* (9th Ed.). California: Wadsworth
- Aragon, I. B., & Valle, R. S. (2013). Does training managers pay off? *The International Journal of Human Resource Management*, 24(8), 1671-1684.

- Augusto Felício, J., Couto, E., & Caiado, J. (2014). Human capital, social capital and organizational performance. *Management Decision*, 52(2), 350-364
- Asah, F., Fatoki, O. O., & Rungani, E. (2015). The impact of motivations, personal values and management skills on the performance of SMEs in South Africa. *African Journal of Economic and Management Studies*, 6(3), 308-322.
- Aziz, R., Abdullah, M., Tajudin, A., & Mahmood, R. (2013). The effect of leadership styles on the business performance of SMEs in Malaysia. *International Journal of Economics Business and Management Studies*, 2(2), 45-52
- BA Tende, S., & Obumneke, E. (2014). Impact of Petroleum on Smes Growth in Nigeria. *International Journal of Entrepreneurial Knowledge*, 2(2), 4–14.
- Bacon, D. R., Sauer, P. L., & Young, M. (1995). Composite reliability in structural equations modeling. *Educational and Psychological Measurement*, 55(3), 394-406.
- Bager, T. E., Jensen, K. W., Nielsen, P. S., & Larsen, T. A. (2015). Enrollment of SME managers to growth-oriented training programs. *International Journal of Entrepreneurial Behavior & Research*, 21(4), 578–599. <http://doi.org/10.1108/IJEER-12-2014-0224>
- Bagozzi, R. P., Yi, Y., & Phillips, L. W. (1991). Assessing construct validity in organizational research. *Administrative science quarterly*, 421-458
- Bhattacharjee, A., & Lin, C. P. (2015). A unified model of IT continuance: three complementary perspectives and crossover effects. *European Journal of Information Systems*, 24(4), 364-373.
- Baines, T., Lightfoot, H., Smart, P., & Fletcher, S. (2013). Servitization of manufacture: Exploring the deployment and skills of people critical to the delivery of advanced services. *Journal of Manufacturing Technology Management*, 24(4), 637-646.
- Bailetti, T. (2012). Technology entrepreneurship: overview, definition, and distinctive aspects. *Technology Innovation Management Review*, 2(2), 5.
- Becker, G. (1964). S. Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education.
- Balthazard, P. A., Waldman, D. A., Thatcher, R. W., & Hannah, S. T. (2012). Differentiating transformational and non-transformational leaders on the basis of neurological imaging. *The Leadership Quarterly*, 23(2), 244-258

- Baker, W. E., & Faulkner, R. R. (2002). Interorganizational networks. *The Blackwell Companion to Organizations*, 520–540.
- Bamberger, P. A., Meshoulam, I., & Biron, M. (2014). *Human resource strategy: Formulation, implementation, and impact*. New York: Routledge.
- Banjoko, S. A. (2009). The Nigerian Manufacturing Sector: Bumpy Past and Shaky Future—What Options for Survival?. *University of Lagos Inaugural Lecture Series*, 24-27.
- Baptista, G., & Oliveira, T. (2015). Understanding mobile banking: The unified theory of acceptance and use of technology combined with cultural moderators. *Computers in Human Behavior*, 50, 418-430.
- Baumann-Pauly, D., Wickert, C., Spence, L. J., & Scherer, A. G. (2013). Organizing corporate social responsibility in small and large firms: Size matters. *Journal of Business Ethics*, 115(4), 693-705.
- Barney, J. B. (1991). 'Firm resources and sustained competitive advantage', *Journal of Management*, 17, pp. 99-120.
- Barney, J., Wright, M., & Ketchen Jr, D. J. (2001). The resource-based view of the firm: Ten years after 1991. *Journal of Management*, 27(6), 625–641.
- Baron, R. M., & Kenny, D. A. (1986). The moderator--mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173.
- Bayo-Moriones, A., Billón, M., & Lera-López, F. (2013). Perceived performance effects of ICT in manufacturing SMEs. *Industrial Management & Data Systems*, 113(1), 117-135
- Becker, G. S. (1993). Nobel lecture: The economic way of looking at behavior. *Journal of Political Economy*, 101(3), 385–409.
- Becker, B., & Gerhart, B. (1996). The impact of human resource management on organizational performance: Progress and prospects. *Academy of management journal*, 39(4), 779-801
- Benítez, J. L. (2012). Salvadoran transnational families: ICT and communication practices in the network society. *Journal of Ethnic and Migration Studies*, 38(9), 1439-1449
- Berman, E. (2015). *Performance and productivity in public and nonprofit organizations*. New York: Routledge.

- Bello, T. (2003). Attacking unemployment hurdles in the fragile economies of the Sub-Saharan Africa: the experience of Nigeria. In *A Paper Presented At the-Economics for the Future--Conference*.
- Bishop, D. (2015). Small firms and the failure of national skills policies: adopting an institutional perspective. *International Journal of Training and Development*, 19(1), 69-80.
- Bilgihan, A., & Wang, Y. (2016). Technology induced competitive advantage: a case of US lodging industry. *Journal of Hospitality and Tourism Technology*, 7(1), 37-59.
- Bosma, N., Van Praag, M., Thurik, R., & De Wit, G. (2004). The value of human and social capital investments for the business performance of startups. *Small Business Economics*, 23(3), 227-236
- Blessing, L. T., & Chakrabarti, A. (2009). *DRM, a design research methodology*. London: Springer Science & Business Media.
- Bloodgood, J. M., & Salisbury, W. D. (2001). Understanding the influence of organizational change strategies on information technology and knowledge management strategies. *Decision support systems*, 31(1), 55-69
- Bokhari, N., Razali, A., Yusof, F. M., & Zakaria, N. (2015). Role of Uniform Bodies in Inculcating Leadership Skills. *Procedia - Social and Behavioral Sciences*, 204(November 2014), 343–351. <http://doi.org/10.1016/j.sbspro.2015.08.164>
- Boyd, N. G., & Vozikis, G. S. (1994). The influence of self-efficacy on the development of entrepreneurial intentions and actions. *Entrepreneurship Theory and Practice*, 18, 63.
- Burns, P., 2001. *Entrepreneurship and small business*. Palgrave, Basingstoke.
- Burns, P. (2010). *Entrepreneurship and Small Business: Start-up. Growth and Maturity*. Palgrave Macmillan.
- Butkovic, L. L. (2018). Managerial Skills for Improving Professional Performance: A Perspective from Engineers in Construction. In *Economic and Social Development (Book of Proceedings)*, 27th International Scientific Conference On Economic And Social (P. 869).
- Buonanno, G., Faverio, P., Pigni, F., Ravarini, A., Sciuto, D., & Tagliavini, M. (2005). Factors affecting ERP system adoption: A comparative analysis between SMEs and large companies. *Journal of Enterprise Information Management*, 18(4), 384-426

- Brown, L., Murphy, E., & Wade, V. (2006). Corporate eLearning: Human resource development implications for large and small organizations. *Human Resource Development International*, 9(3), 415-427
- Brynjolfsson, E., & McAfee, A. (2014). *The second machine age: Work, progress, and prosperity in a time of brilliant technologies*. New York: WW Norton & Company
- Brüderl, J., Preisendörfer, P., & Ziegler, R. (1992). Survival chances of newly founded business organizations. *American sociological review*, 227-242.
- Byrne, B. M. (2013). *Structural equation modeling with LISREL, PRELIS, and SIMPLIS: Basic concepts, applications, and programming*. New York: Psychology Press.
- Byrne, B. M. (2010). *Structural equation modelling with Amos: basic concepts, application and programming (2nd Ed.)*. New York: Taylor and Francis Group.
- Cameron, K. S., & Whetten, D. A. (Eds.). (2013). *Organizational effectiveness: A comparison of multiple models*. London: Academic Press.
- Candiotti, L. V., De Zan, M. M., Camara, M. S., & Goicoechea, H. C. (2014). Experimental design and multiple response optimization. Using the desirability function in analytical methods development. *Talanta*, 124, 123-138
- Capaldo, A. (2014). Network governance: A cross-level study of social mechanisms, knowledge benefits, and strategic outcomes in joint-design alliances. *Industrial Marketing Management*, 43(4), 685-703.
- Cardon, M. S., & Valentin, S. D. (2017). 16 Training and Development in Small and Medium Enterprises. *The Cambridge Handbook of Workplace Training and Employee Development*, 363.
- Cardon, M. S., & Stevens, C. E. (2004). Managing human resources in small organizations: What do we know?. *Human resource management review*, 14(3), 295-323.
- Carayannis, E. G., Samara, E. T., & Bakouros, Y. L. (2015).
- Carayannis, E. G., Popescu, D., Sipp, C., & Stewart, M. (2006). Technological learning for entrepreneurial development (TL4ED) in the knowledge economy (KE): case studies and lessons learned. *Technovation*, 26(4), 419-443.

- Ceci, F., & Iubatti, D. (2012). Personal relationships and innovation diffusion in SME networks: A content analysis approach. *Research Policy*, 41(3), 565–579.
- Chan, K. H. (2009). Impact of intellectual capital on organisational performance: An empirical study of companies in the Hang Seng Index (Part 1). *The Learning Organization*, 16(1), 4-21.
- Chaplowe, S. G., & Cousins, J. B. (2015). *Monitoring and Evaluation Training: A Systematic Approach*. United States of America: SAGE Publications.
- Chaudhuri, A., & Boer, H. (2016). Journal of Engineering and Technology Management The impact of product-process complexity and new product development order winners on new product development performance : The mediating role of collaborative competence. *Journal of Engineering and Technology Management*, 42, 65–80. <http://doi.org/10.1016/j.jengtecman.2016.10.002>
- Chege, S. M., Wang, D., & Suntu, S. L. (2019). Impact of information technology innovation on firm performance in Kenya. *Information Technology for Development*, 1-30.
- Chell, E. (2013). Review of skill and the entrepreneurial process. *International Journal of Entrepreneurial Behaviour & Research*, 19, 6–31. <http://doi.org/10.1108/13552551311299233>
- Chen, L. C. (2015). Building extra-regional networks for regional innovation systems: Taiwan's machine tool industry in China. *Technological Forecasting and Social Change*, 100, 107–117. <http://doi.org/10.1016/j.techfore.2015.07.014>
- Chen, C. W., Chang, M. L., & Tseng, C. P. (2012). Retracted: Human factors of knowledge-sharing intention among Taiwanese enterprises: A model of hypotheses. *Human Factors and Ergonomics in Manufacturing & Service Industries*, 22(4), 362-371
- Chen, Y., Cook, W. D., Li, N., & Zhu, J. (2009). Additive efficiency decomposition in two-stage DEA. *European Journal of Operational Research*, 196(3), 1170-1176
- Choi, B., & Lee, H. (2002). Knowledge management strategy and its link to knowledge creation process. *Expert Systems with applications*, 23(3), 173-187
- Christensen, C. (2013). *The innovator's dilemma: when new technologies cause great firms to fail*. Harvard Business Review Press.
- Chirico, F. (2008). Knowledge accumulation in family firms evidence from four case studies. *International Small Business Journal*, 26(4), 433–462.

- Chuah, S. H. W., Rauschnabel, P. A., Krey, N., Nguyen, B., Ramayah, T., & Lade, S. (2016). Wearable technologies: The role of usefulness and visibility in smartwatch adoption. *Computers in Human Behavior*, 65, 276-284.
- Ciabuschi, F., Dellestrand, H., & Martín, O. M. (2015). Internal embeddedness, headquarters involvement, and innovation importance in multinational enterprises. In *Knowledge, Networks and Power* (pp. 284-317). Palgrave Macmillan, London
- Clark, B. H. (2000). Managerial perceptions of marketing performance: efficiency, adaptability, effectiveness and satisfaction. *Journal of Strategic Marketing*, 8(1), 3-25.
- Clem, A. H., & Mujtaba, B. G. (2010). Infusing value: application of historical management concepts at a modern organization. *Journal of Management and Marketing Research*, 4, 1.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Erlbaum
- Cooper, J. N. (2018). "The Influence of Emotional Intelligence and Personality Traits on Effective Leadership". Human Resource Development Theses and Dissertations. Paper 30. <http://hdl.handle.net/10950/1165>
- Cooper, A. C., Gimeno-Gascon, F. J., & Woo, C. Y. (1994). Initial human and financial capital as predictors of new venture performance. *Journal of business venturing*, 9(5), 371-395
- Collett, L., & Mora, C. (1996). *MOM Data Analysis*.
- Combs, J. G., & Ketchen, Jr, D. J. (1999). Explaining interfirm cooperation and performance: toward a reconciliation of predictions from the resource-based view and organizational economics. *Strategic management journal*, 20(9), 867-888.
- Connelly, M. S., Gilbert, J. A., Zaccaro, S. J., Threlfall, K. V., Marks, M. A., & Mumford, M. D. (2000). Exploring the relationship of leadership skills and knowledge to leader performance. *The Leadership Quarterly*, 11(1), 65-86.
- Cragg, P., Caldeira, M., & Ward, J. (2011). Organizational information systems competences in small and medium-sized enterprises. *Information & Management*, 48(8), 353-363
- Creswell, J.W (2008). *Educational research: Planning, conducting and evaluating quantitative and qualitative research*. Upper Saddle River, NJ: Pearson.

- Crema, M., & Nosella, A. (2014). Intangible assets management and evaluation: Evidence from SMEs. *Engineering Management Journal*, 26(1), 8-20
- Croce, G., di Porto, E., Ghignoni, E., & Ricci, A. (2017). Agglomeration and workplace training: knowledge spillovers versus poaching. *Regional Studies*, 51(11), 1635-1651.
- Croteau, A. M., & Bergeron, F. (2001). An information technology trilogy: business strategy, technological deployment and organizational performance. *The journal of strategic information systems*, 10(2), 77-99
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297-334.
- Crucke, S., & Decramer, A. (2016). The Development of a Measurement Instrument for the Organizational Performance of Social Enterprises. *Sustainability*, 8(2), 161. <http://doi.org/10.3390/su8020161>
- Cumberland, D. M., Alagaraja, M., Shuck, B., & Kerrick, S. A. (2018). Organizational Social Capital: Ties Between HRD, Employee Voice, and CEOs. *Human Resource Development Review*, 17(2), 199-221.
- Dahou, K., & Hacini, I. (2018). Effect of Human Capital Management on Firm Performance via Balanced Scorecard. *Management and Economics Review*, 3(1), 1-13.
- d'Armagnac, S. (2015). Issues in the management of embedded knowledge in project-based organizations: the project actor's role. *Knowledge Management Research & Practice*, 13(4), 446-462
- Dai, G., Yii Tang, K., & De Meuse, K. P. (2011). Leadership competencies across organizational levels: A test of the pipeline model. *Journal of Management Development*, 30(4), 366-380
- Dalkir, K. (2013). *Knowledge management in theory and practice*. Routledge.
- Dalziel, P. (2010). Leveraging Training: Skills Development in SMEs-An Analysis of Canterbury Region, New Zealand: *OECD Local Economic and Employment Development (LEED) Working Papers*, No. 2010/03, OECD Publishing, Paris.
- Darch, H., & Lucas, T. (2002). Training as an e-commerce enabler. *Journal of workplace learning*, 14(4), 148-155.
- Darcy, C., Hill, J., McCabe, T. J., & McGovern, P. (2014). A consideration of organizational sustainability in the SME context: A resource-based view and composite model. *European Journal of Training and Development*, 38(5), 398-414.

- Davidson, M. C. G., Timo, N., & Wang, Y. (2010). How much does labour turnover cost? A case study of Australian four-and five-star hotels. *International Journal of Contemporary Hospitality Management*, 22(4), 451–466.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: a comparison of two theoretical models. *Management Science*, 35(8), 982–1003.
- Day, D. V., Fleenor, J. W., Atwater, L. E., Sturm, R. E., & McKee, R. A. (2014). Advances in leader and leadership development: A review of 25 years of research and theory. *The leadership quarterly*, 25(1), 63-82.
- Dean, M. R. (2012). BSN Students' Computer Anxiety Prevalence and Test Score Outcomes. Thesis (M.Nurse), Collage of Nursing. Washington State University. Thesis and dissertation paper 3.0, <http://hdl.handle.net/237613787>
- Dess, G. & Robinson, D. (2003). Measuring organizational performance in the absence of objective measures: The case of the privately held firm in conglomerate business unit. *Strategy Management Journal*, 5(3), 265-273.
- de Sousa Batista, P. C., de Oliveira Lisboa, J. V., Augusto, M. G., & de Almeida, F. E. B. (2016). Effectiveness of business strategies in Brazilian textile industry. *Revista de Administração*, 51(2), 225-239.
- Delaney, J. T., & Huselid, M. A. (1996). The impact of human resource management practices on perceptions of organizational performance. *Academy of Management journal*, 39(4), 949-969
- DeVon, H. A., Block, M. E., Moyle-Wright, P., Ernst, D. M., Hayden, S. J., Lazzara, D. J., & Kostas-Polston, E. (2007). A psychometric toolbox for testing validity and reliability. *Journal of Nursing scholarship*, 39(2), 155-164.
- Dimov, D. P., & Shepherd, D. A. (2005). Human capital theory and venture capital firms: Exploring “home runs” and “strike outs.” *Journal of Business Venturing*, 20(1), 1–21. <http://doi.org/10.1016/j.jbusvent.2003.12.007>
- Din, B. H., Anuar, A. R., & Usman, M. (2016). The Effectiveness of the Entrepreneurship Education Program in Upgrading Entrepreneurial Skills among Public University Students. *Procedia - Social and Behavioral Sciences*, 224(August 2015), 117–123. <http://doi.org/10.1016/j.sbspro.2016.05.413>
- Dobbins, R., & Pettman, B. O. (1997). Self-development: the nine basic skills for business success. *Journal of management development*, 16(8), 521-667

- Dobbs, R. L., Sun, J. Y., & Roberts, P. B. (2008). Human capital and screening theories: Implications for human resource development. *Advances in Developing Human Resources*, 10(6), 788-801
- Drost, E. A. (2011). Validity and reliability in social science research. *Education Research and perspectives*, 38(1), 105.
- Duh, M. (2014). Family business succession as knowledge creation process. *Kybernetes*, 43(5), 699–714. <http://doi.org/10.1108/K-08-2013-0172>
- Edoho, M. F. (2015). Entrepreneurship and socioeconomic development. *African Journal of Economic and Management Studies*, 6(2), 127–147. <http://doi.org/http://dx.doi.org/10.1108/JEIM-07-2014-0077>
- Edoho, F. M. (2016). Entrepreneurship paradigm in the new millennium: A critique of public policy on entrepreneurship. *Journal of Entrepreneurship in Emerging Economies*, 8(2), 279-294.
- Eniola, A. A., & Ektebang, H. (2014). SME firms performance in Nigeria: Competitive advantage and its impact. *International journal of Research studies in management*, 3(2), 75-86.
- Etuk, R. U., Etuk, G. R., & Michael, B. (2014). Small and medium scale enterprises (SMEs) and Nigeria's economic development. *Mediterranean Journal of Social Sciences*, 5(7), 656.
- Etzioni, A. (1964). *Modern organizations*, 1964. NJ: Englewood Cliffs
- Eze, T. C., & Okpala, C. S. (2015). Quantitative Analysis of the Impact of Small and Medium Scale. Enterprise on the Growth Nigerian Economy. *International Journal of Development and Emerging Economics*, 3(1), 26–38.
- Fajana, S. (2002). *Human resource management: An introduction*. Lagos: Labofin and Company
- Farrell, A. M. (2010). Insufficient discriminant validity: A comment on Bove, Pervan, Beatty, and Shiu (2009). *Journal of Business Research*, 63(3), 324-327.
- Fayol, H. (2016). *General and industrial management*. Cambridge, England: Ravenio Books.
- Fernández-Esquinas, M., van Oostrom, M., & Pinto, H. (2017). Key issues on innovation, culture and institutions: implications for SMEs and micro firms.

- Ford, J. D., & Schellenberg, D. A. (1982). Conceptual issues of linkage in the assessment of organizational performance. *Academy of Management Review*, 7(1), 49-58.
- Forkuoh, S. K., & Li, Y. (2015). Electricity Power Insecurity and SMEs Growth : A Case Study of the Cold Store Operators in the Asafo Market Area of the Kumasi Metro in Ghana, (July), 312–325.
- Forth, J., & Bryson, A. (2018). The impact of management practices on SME performance. IZA Discussion Paper No. 11399. Available at SSRN: <https://ssrn.com/abstract=3153363>
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of marketing research*, 382-388
- Foss, N. J., & Weber, L. (2016). Moving opportunism to the back seat: Bounded rationality, costly conflict, and hierarchical forms. *Academy of Management Review*, 41(1), 61-79.
- Fraenkel, L., Falzer, P., Fried, T., Kohler, M., Peters, E., Kerns, R., & Leventhal, H. (2012). Measuring pain impact versus pain severity using a numeric rating scale. *Journal of general internal medicine*, 27(5), 555-560.
- Furnham, A. (2016). *The elephant in the boardroom: The causes of leadership derailment*. New York, NY 100101: Palgrave Macmillan.
- Gay, L. R., & Airasian, P. (2003). Educational research: Consequences for analysis and applications. Upper Saddle River, NJ: Pearson.
- Gamage, A. (2007). Impact of HRD Practices on Business Performance: An empirical analysis of manufacturing SMEs in Japan. *Meijo Review*, 8(3), 85-109.
- Ganotakis, P. (2012). Founders' human capital and the performance of UK new technology based firms. *Small Business Economics*, 39(2), 495-515.
- Garson, G. D. (2008). Structural Equation Modelling. Statnotes: Topics in Multivariate Analysis.
- Gbandi, E. C., & Amisah, G. (2014). Financing options for small and medium enterprises (SMEs) in Nigeria. *European Scientific Journal, ESJ*, 10(1).
- Gberevbie, D. E. (2012). Impact of Human Resource Development and Organizational Commitment on Financial Sector Employees in Nigeria. *Annals of the Alexandru Ioan Cuza University - Economics*, 59(2), 29–41. <http://doi.org/10.2478/v10316-012-0030-9>

- Gedro, J. (2017). *Identity, Meaning, and Subjectivity in Career Development: Evolving Perspectives in Human Resources*. Rochester, New York, USA : Palgrave Macmillan.
- Gholami, M. H., Asli, M. N., Nazari-Shirkouhi, S., & Noruzy, A. (2013). Investigating the influence of knowledge management practices on organizational performance: an empirical study. *Acta Polytechnica Hungarica*, 10(2), 205-216.
- Gellweiler, C. (2018). Cohesion of RBV and industry view for competitive positioning. *Strategic Management*, 23(2), 3-12.
- Gillen, D., & Carroll, S. J. (1985). Relationship of managerial ability to unit effectiveness in organic vs mechanistic units. *Journal of Management Studies*, 22, 351-59.
- Graham, H. (1983). Caring: a labour of love. *A Labour of Love: Women, Work and Caring*, 13–30.
- Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, 91(3), 481–510.
- Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology*, 78(6), 1360–1380.
- Grissom, R. J., & Kim, J. J. (2005). *Effect sizes for research: A broad practical approach*. Lawrence Erlbaum Associates Publishers.
- Groover, M. P., Weiss, M., Nagel, R. N., & Odrey, N. G. (1986). *Industrial robotics: technology, programming, and applications* (Vol. 12). New York: McGraw-Hill.
- Groen, A. J., & Walsh, S. T. (2013). Introduction to the field of emerging technology management. *Creativity and Innovation Management*, 22(1), 1–5.
- Gupta, P., Guha, S., & Krishnaswami, S. (2013). Firm growth and its determinants. *Journal of Innovation and Entrepreneurship*, 2, 15. <http://doi.org/10.1186/2192-5372-2-15>
- Hair, J.F., Black, WC., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis (7th Ed.)*. Englewood Cliffs: Prentice Hall International Inc.
- Hair, J. F., Black, WC., Babin, B. J., Anderson, R. E, & Tatham, RL (2006), *Multivariate Data Analysis (6th Ed)*
- Haladyna, T. M. (1999). *A complete guide to student grading*. Boston, United States: Allyn and Bacon.

- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of management review*, 9(2), 193-206.
- Harness, D., Ranaweera, C., Karjaluoto, H., & Jayawardhena, C. (2018). The role of negative and positive forms of power in supporting CSR alignment and commitment between large firms and SMEs. *Industrial Marketing Management*, 75, 17-30
- Hassan, T. M. R. T., Yaacob, M. R., & Abdullatiff, N. K. (2014). Sustaining SMEs wood-based product manufacturing through best practices–The case of indigenous entrepreneurs in Kelantan. *Procedia-Social and Behavioral Sciences*, 115, 221-234.
- Haseeb, M., Hussain, H. I., Ślusarczyk, B., & Jermisittiparsert, K. (2019). Industry 4.0: A solution towards technology challenges of sustainable business performance. *Social Sciences*, 8(5), 154.
- Hayton, J. (2015). Leadership and Management Skills in SMEs : Measuring Associations with Management Practices and Performance Non-technical report, (No 211), 40. Retrieved from <https://www.gov.uk/government/publications/leadership-and-management-skills-in-small-and-medium-sized-businesses>
- Hayter, C. S. (2016). Constraining entrepreneurial development: A knowledge-based view of social networks among academic entrepreneurs. *Research Policy*, 45(2), 475-490.
- Hayes, M. H. (2009). Statistical digital signal processing and modelling. New Jersey, United States: John Wiley & Sons
- Hayes, A. F. (2013). Introduction to mediation, moderation, and conditional process analysis. A regression-based approach. New York: Guilford Press.
- Hanafizadeh, P., Behboudi, M., Ahadi, F., & Ghaderi Varkani, F. (2012). Internet advertising adoption: a structural equation model for Iranian SMEs. *Internet Research*, 22(4), 499-526.
- Hawn, O., & Ioannou, I. (2016). Mind the gap: The interplay between external and internal actions in the case of corporate social responsibility. *Strategic Management Journal*, 37(13), 2569-2588.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the academy of marketing science*, 43(1), 115-135
- Hickman, C. R., & Silva, M. A. (2018). *Creating excellence: Managing corporate culture, strategy, and change in the new age*. New York: Routledge.

- Hill-Briggs, F. (2003). Problem solving in diabetes self-management: a model of chronic illness self-management behavior. *Annals of Behavioral Medicine*, 25(3), 182–193.
- Hill, C. W. L., Jones, G. R., & Schilling, M. A. (2014). *Strategic management: theory: an integrated approach*. Cengage Learning.
- Hills, A. (2009). Succession planning - or smart talent management? *Industrial and Commercial Training*, 41(1), 3–8.
<http://doi.org/10.1108/00197850910927697>
- Hill, R., & Stewart, J. (2000). Human resource development in small organizations. *Journal of european industrial training*, 24(2/3/4), 105-117.
- Hinkin, T. R. (1995). A review of scale development practices in the study of organizations. *Journal of management*, 21(5), 967-988.
- Ho, R. (2006). *Handbook of univariate and multivariate data analysis and interpretation with SPSS*. New York: Chapman and Hall/CRC.
- Hornsby, J. S., & Kuratko, D. F. (1990). Human resource management in small business: Critical issues for the 1990's. *Journal of small business management*, 28(3), 9.
- Hornsby, J. S., & Kuratko, D. F. (2003). Human resource management in US small businesses: A replication and extension. *Journal of developmental entrepreneurship*, 8(1), 73.
- Horst, E. V. D. (2016). Innovation in SMEs; Strategic human resource practices and innovation performance: The mediating role of employees' innovative work behaviour. Radboud universiteit, Nijmegen: Thesis.
- Hsiao, Y. C., Chen, C. J., & Chang, S. C. (2011). Knowledge management capacity and organizational performance: the social interaction view. *International Journal of Manpower*, 32(5/6), 645-660.
- Hooijberg, R., Hunt, J. G. J., & Dodge, G. E. (1997). Leadership complexity and development of the leaderplex model. *Journal of Management*, 23(3), 375–408.
- Hosseini, Z., & Kamal, A. (2012). Questionnaire to Measure Perceived Technology Integration Knowledge of Teachers (TPCK). *IJITCS Journal*, (February), 1–3.
- Hosseinpour, M., Tamimi, L., Hosseinpour, N., Hashami, K., & Jafarzadeh, S. (2014). Study the Relationship between Principals' Management Skills and their Effectiveness in Karaj 4th District Primary Schools. *Journal of Educational and Management Studies*, 4(1), 113-7.

- Howard, G. R. (2016). *We can't teach what we don't know: White teachers, multiracial schools*. New York: Teachers College Press.
- Human, G., & Naudé, P. (2009). Exploring the relationship between network competence, network capability and firm performance: A resource-based perspective in an emerging economy. *Management Dynamics: Journal of the Southern African Institute for Management Scientists*, 18(1), 2-14
- Huffman, R. C., & Hegarty, W. H. (1993). Top management influence on innovations: Effects of executive characteristics and social culture. *Journal of Management*, 19(3), 549–574.
- Huggins, R., & Thompson, P. (2015). Entrepreneurship, innovation and regional growth: a network theory. *Small Business Economics*, 45(1), 103–128.
- Hung, S. Y., Tsai, J. C. A., Lee, W. T., & Chau, P. Y. (2015). Knowledge management implementation, business process, and market relationship outcomes: An empirical study. *Information Technology & People*, 28(3), 500-528.
- Ibidunni, A. S., Salau, O. P., Falola, H. O., & Igbinoba, E. E. (2016) Exploring the Role of Human Capital Management on Organizational Success: Evidence from Public Universities.
- Idogho, P. O., & Augustine, B. A. E. (2011). Entrepreneurship education and small-scale business management skill development among students of Auchi Polytechnic Auchi, Edo State, Nigeria. *International Journal of Business and Management*, 6(3), 284.
- Ihugba, Okezie A., Alex Odii, and A. C. Njoku. "Theoretical analysis of entrepreneurship challenges and prospects in Nigeria." *International Letters of Social and Humanistic Sciences* 5 (2014): 21-34.
- ILO. (2010). *A Skilled Workforce for Strong, Sustainable and Balanced Growth*. Geneva, Switzerland: International Labour Office.
- Isaga, N., Masurel, E., & Van Montfort, K. (2015). Owner-manager motives and the growth of SMEs in developing countries: Evidence from the furniture industry in Tanzania. *Journal of Entrepreneurship in Emerging Economies*, 7(3), 190-211.
- Ishida, J. (2016). Optimal promotion policies with the looking-glass effect. In *Behavioral Interactions, Markets, and Economic Dynamics* (pp. 543-563). Tokyo: Springer.
- Jack, S. L. (2005). The role, use and activation of strong and weak network ties: A qualitative analysis. *Journal of Management Studies*, 42(6), 1233–1259.

- Jacobs, T. O., & Jaques, E. (1987). Leadership in complex systems. *Human productivity enhancement*, 2, 7-65. Praeger New York
- Jagongo, A., & Kinyua, C. (2013). The Social Media and Entrepreneurship Growth (A New Business Communication Paradigm among SMEs in Nairobi). *International Journal of Humanities and Social Science*, 3(10), 213–227.
- Jaoua, F., & Radouche, T. (2014). The moderating role of leader skills on the relationship between strategic management and global performance: An empirical study. *International Business Research*, 7(8), 59.
- Jain, A. K., & Moreno, A. (2015). Organizational learning, knowledge management practices and firm's performance: an empirical study of a heavy engineering firm in India. *The Learning Organization*, 22(1), 14-39.
- Jiang, J. Y., & Liu, C. W. (2015). High performance work systems and organizational effectiveness: The mediating role of social capital. *Human Resource Management Review*, 25(1), 126-137.
- Jing, F. F., & Avery, G. C. (2008). Missing links in understanding the relationship between leadership and organizational performance. *International Business & Economics Research Journal (IBER)*, 7(5).
- Jones, P., Simmons, G., Packham, G., Beynon-Davies, P., & Pickernell, D. (2014). An exploration of the attitudes and strategic responses of sole-proprietor micro-enterprises in adopting information and communication technology. *International Small Business Journal*, 32(3), 285-306.
- Jones, J. T. (2005). The determinants of training in Australian manufacturing SMEs. *Education + Training*, 47(8/9), 605–615. <http://doi.org/10.1108/00400910510633143>
- Karriker, J. H., Madden, L. T., & Katell, L. A. (2017). Team Composition, Distributed Leadership, and Performance: It's Good to Share. *Journal of Leadership & Organizational Studies*, 24(4), 507-518
- Kaiser, R. B., & Craig, S. B. (2011). Do the behaviors related to managerial effectiveness really change with organizational level? An empirical test. *The Psychologist-Manager Journal*, 14(2), 92–119.
- Khaliq, M., Isa, M., Hassan, A., bin Shaari, N., & Abdul, J. (2013). Predicting the Impact of Intellectual Capital Management on the Performance of SMEs in Electronics Industry in Kuching, Sarawak. *IUP Journal of Knowledge Management*, 11(4).

- Khan, A. (2014). The SME Missing Middle Problem in Developing Countries and its Link to Lack of Financing: The Case of Bangladesh.
- Kimberlin, C. L., & Winterstein, A. G. (2008). Validity and reliability of measurement instruments used in research. *American Journal of Health-System Pharmacy*, 65(23), 2276-2284.
- Kaiser, R. B., Craig, S. B., Overfield, D. V, & Yarborough, P. (2011). Differences in managerial jobs at the bottom, middle, and top: A review of empirical research. *The Psychologist t-Manager Journal*, 14(2), 76–91.
- Kanungo, R. N., & Misra, S. (1992). Managerial resourcefulness: A reconceptualization of management skills. *Human Relations*, 45(12), 1311-1332.
- Kaplan, R. S., & Norton, D. P. (1996). Using the balanced scorecard as a strategic management system
- Katz, D., & Kahn, R. L. (1978). *The social psychology of organizations* (Vol. 2, p. 528). New York: Wiley
- Katz, R.L. (1974). Skills of an effective administrator. *Harvard Business Review*, 52(5), 90-102.
- Katz, R. (1955). Skills of an effective administrator. *Harvard BusinessReview*, Jan-Feb
- Katou, A. A. (2008). Measuring the impact of HRM on organizational performance. *Journal of Industrial Engineering and Management*, 1(2), 119-142..
- Katou, A. A. (2012). Investigating reverse causality between human resource management policies and organizational performance in small firms. *Management Research Review*, 35(2), 134-156.
- Kerzner, H., & Kerzner, H. R. (2017). *Project management: a systems approach to planning, scheduling, and controlling*. New Jersey, U.S.A: John Wiley & Sons.
- Kirk, R. E. (1996). Practical significance: A concept whose time has come. *Educational and psychological measurement*, 56(5), 746-759
- Kline, R. B. (2005) *Principle and Practice of structural equation modelling* Guilford. New York. 366
- Kline, R. B. (2011). Principles and practice of structural equation modelling (3rd ed.) New York, NY: The Guilford Press
- Kolb, D. A. (2014). *Experiential learning: Experience as the source of learning and development*. Upper Saddle River, New Jersey U.S.A: FT press.

- Kopp, D. M. (2018). *Famous and (Infamous) Workplace and Community Training a Social History of Training and Development*. New York: Palgrave Macmillan.
- Kothari. C. R. (2004). *Research Methodology Methods and Techniques*. New Age International Publishers, New Delhi.
- Lai, Y., Saridakis, G., Blackburn, R., & Johnstone, S. (2016). Are the HR responses of small firms different from large firms in times of recession?. *Journal of Business Venturing*, 31(1), 113-131
- Lee, D. Y., & Tsang, E. W. K. (2001). The effects of entrepreneurial personality, background and network activities on venture growth. *Journal of Management Studies*, 38(4), 583–602.
- Lee, K. W. (2016). Skills training by small and medium-sized enterprises: Innovative cases and the consortium approach in the Republic of Korea. ADBI Working Paper 579. Tokyo: Asian Development Bank Institute
- Leigh, N. G., & Blakely, E. J. (2016). *Planning local economic development: Theory and practice*. United States of America: SAGE publications.
- Leitch, S. (2006). *Prosperity for all in the global economy - world class skills.Final Report*. Norwich.
- Levant, R. F., Jadaszewski, S., Alto, K., Richmond, K., Pardo, S., Keo-Meier, C., & Gerdes, Z. (2019). Moderation and mediation of the relationships between masculinity ideology and health status. *Health Psychology*, 38(2), 162
- Levie, J., & Lichtenstein, B. B. (2010). A terminal assessment of stages theory: Introducing a dynamic states approach to entrepreneurship. *Entrepreneurship Theory and Practice*, 34(2), 317–350.
- Lewin, A. Y., & Minton, J. W. (1986). Determining organizational effectiveness: Another look, and an agenda for research. *Management science*, 32(5), 514-538
- Lowik, S., Kraaijenbrink, J., & Groen, A. J. (2017). Antecedents and effects of individual absorptive capacity: A micro-foundational perspective on open innovation. *Journal of knowledge management*, 21(6), 1319-1341.
- Lynch, D. (2016). Improving teaching through coaching, mentoring and feedback: a review of literature. *MIER Journal of Educational Studies, Trends and Practices*, 4(2).

- Luo, X., Kanuri, V. K., & Andrews, M. (2014). How does CEO tenure matter? The mediating role of firm-employee and firm-customer relationships. *Strategic Management Journal*, 35(4), 492-511.
- Mahdi, O. R., Nassar, I. A., & Almsafir, M. K. (2019). Knowledge management processes and sustainable competitive advantage: An empirical examination in private universities. *Journal of Business Research*, 94, 320-334.
- Mahmud, N., & Hilmi, M. F. (2014). TQM and Malaysian SMEs Performance: The Mediating Roles of Organization Learning. *Procedia - Social and Behavioral Sciences*, 130, 216–225. <http://doi.org/10.1016/j.sbspro.2014.04.026>
- MacKinnon, D. P., Fairchild, A. J., & Fritz, M. S. (2007). Mediation analysis. *Annu. Rev. Psychol.*, 58, 593-614
- MacKinnon, D. P., & Luecken, L. J. (2008). How and for whom? Mediation and moderation in health psychology. *Health Psychology*, 27(2S), S99.
- Manz, C. C., & Pearce, C. L. (2017). *Twisted Leadership: How to Engage the Full Talents of Everyone in Your Organization*. Palmyra, USA: Maven House Press.
- Marangunić, N., & Granić, A. (2015). Technology acceptance model: a literature review from 1986 to 2013. *Universal Access in the Information Society*, 14(1), 81-95.
- Marlow, S., & Patton, D. (1993). Managing the employment relationship in the smaller firm: possibilities for human resource management. *International Small Business Journal*, 11(4), 57-64
- Marta, S., Leritz, L. E., & Mumford, M. D. (2005). Leadership skills and the group performance: Situational demands, behavioral requirements, and planning. *The Leadership Quarterly*, 16(1), 97–120.
- Martin, B. C., McNally, J. J., & Kay, M. J. (2013). Examining the formation of human capital in entrepreneurship: A meta-analysis of entrepreneurship education outcomes. *Journal of Business Venturing*, 28(2), 211-224.
- Martin, G., & Staines, H. (2008). *Managerial competencies in small firm. A scoping study Burundi*: Acts Press
- Martín-Rojas, R., García-Morales, V. J., & Bolívar-Ramos, M. T. (2013). Influence of technological support, skills and competencies, and learning on corporate entrepreneurship in European technology firms. *Technovation*, 33(12), 417–430. <http://doi.org/10.1016/j.technovation.2013.08.002>

- Mazzei, M. J., Flynn, C. B., & Haynie, J. J. (2016). Moving beyond initial success: Promoting innovation in small businesses through high-performance work practices. *Business Horizons*, 59(1), 51-60.
- McCann, P., & Ortega-Argilés, R. (2016). Smart specialisation, entrepreneurship and SMEs: issues and challenges for a results-oriented EU regional policy. *Small Business Economics*, 46(4), 537-552..
- McCann, J. E. (1991). Patterns of growth, competitive technology, and financial strategies in young ventures. *Journal of Business Venturing*, 6(3), 189–208.
- McClelland, D. C. (1987). Characteristics of successful entrepreneurs. *The Journal of Creative Behavior*, 21(3), 219–233.
- McLagan, Patricia A. (1989). Models for HRD practice. *Training & Development Journal*, 43(9), 49–60.
- Metcalf, H., Walling, A. and Fogarty, M. (1994), Individual Commitment to Learning Employers' Attitudes, Policies Studies Institute, Employment Department, Research Series No. 40
- Miah, M. K. (2014). Theorization of People First to Achieve Organization Competitive Advantage. Retrieved from google scholar: https://s3.amazonaws.com/academia.edu.documents/32928886/Theorization_of_People_First_to_Achieve_Organization_Competitive_Advantage_-_A_Case_Study.pdf?AWSAcc
- Miles, S. J., & Van Clieaf, M. (2017). Strategic fit: Key to growing enterprise value through organizational capital. *Business Horizons*, 60(1), 55-65.
- Miles, J. A. (2012). *Management and organization theory: A Jossey-Bass reader* (Vol. 9). San Francisco, US: John Wiley & Sons.
- Miller, E. J., & Rice, A. K. (2013). *Systems of organization: The control of task and sentient boundaries*. London: Routledge.
- Millan, J. M., Congregado, E., Roman, C., Van Praag, M., & Van Stel, A. (2014). The Value of Educated Population for an Individuals Entrepreneurship Success. *Journal of Business Venturing*, 29, 612–632.
- Mills, A. M., & Smith, T. A. (2011). Knowledge management and organizational performance: a decomposed view. *Journal of knowledge management*, 15(1), 156-171.
- Miner, J. B., & Raju, N. S. (2004). Risk propensity differences between managers and entrepreneurs and between low-and high-growth entrepreneurs: a reply in a more conservative vein.

- Mitra, J., Abubakar, Y. A., & Sagagi, M. (2011). Knowledge creation and human capital for development: the role of graduate entrepreneurship. *Education + Training*, 53(5), 462–479. <http://doi.org/10.1108/00400911111147758>
- Mitrega, M., Forkmann, S., Zaefarian, G., & Henneberg, S. C. (2017). Networking capability in supplier relationships and its impact on product innovation and firm performance. *International Journal of Operations & Production Management*, 37(5), 577-606
- Mitrega, M., Forkmann, S., Ramos, C., & Henneberg, S. C. (2012). Networking capability in business relationships - Concept and scale development. *Industrial Marketing Management*, 41(5), 739–751.
- Mohamad, M., Silong, A. D., & Hassan, Z. (2009). Participative and effective community leadership practice in Malaysia. *Journal of Human Resource and Adult Learning*, 5(1), 139–147.
- Mohamad bin Sulaiman. (2010). the Development of K-Workers Through the Implementation of National Dual Training System (Ndts) in Malaysia 1. *Ministry Of Human Resources*, 1–10.
- Mohamed, Z., Rezai, G., Nasir Shamsudin, M., & Mu'az Mahmud, M. (2012). Enhancing young graduates' intention towards entrepreneurship development in Malaysia. *Education+ Training*, 54(7), 605-618.
- Mujtaba, B.G., and Kaifi, B. A. (201 1). Management skills of Afghan respondents: A comparison of technical, human and conceptual differences based on gender. *Journal of International Business and Cultural Studies*, 4, 1-14.
- Mujtaba, B.G., and Preziosi, R. C. (2006). *Adult Education in Academia: Recruiting and Retaining Extraordinary Facilitators of learning* (2nd Edition). Information Age Publishing. Greenwich, Connecticut.
- Mumford, M. D., Todd, E. M., Higgs, C., & McIntosh, T. (2017). Cognitive skills and leadership performance: The nine critical skills. *The Leadership Quarterly*, 28(1), 24-39.
- Mumford, M. D., Marks, M. A., Connelly, M. S., Zaccaro, S. J., & Reiter-Palmon, R. (2000). Development of leadership skills: Experience and timing. *The Leadership Quarterly*, 11(1), 87–114.
- Mumford, T. V., Campion, M. A., & Morgeson, F. P. (2007). The Leadership Skills Strataplex: Leadership Skill Requirements Across Organizational Levels. *Leadership Quarterly*, 18, 154–166.
- Mukumba, T. (2014). Overcoming SMES Challenges Through Critical Success Factors: A Case Of SMES In The Western Cape Province, South Africa. *Economic & Business Review*, 16(1), 19-38.

- Nabi, G., & Liñán, F. (2011). Graduate entrepreneurship in the developing world: intentions, education and development. *Education + Training*, 53(5), 325–334
- Najim, N., El-refae, G., & Alnaji, L. (2013). The Impact of the Key Dimensions of Entrepreneurship on Opportunities for the Success of New Ventures in the Greater Amman Municipality. *European Journal of Business and Management*, 5(4), 159–173.
- Napitupulu, D., Syafrullah, M., Rahim, R., Abdullah, D., & Setiawan, M. I. (2018, April). Analysis of user readiness toward ICT usage at small medium enterprise in south tangerang. In *Journal of Physics: Conference Series* (Vol. 1007, No. 1, p. 012042). IOP Publishing.
- National Research Council. (2013). *Education for life and work: Developing transferable knowledge and skills in the 21st century*. Washington, D.C: National Academies Press.
- Ndedi, A. A. (2013). Challenges and perspectives facing the development of entrepreneurship education and training in South Africa. *World Journal of Entrepreneurship, Management and Sustainable Development*, 9 (2/3), 126-132.
- Nicolaides, V. C., LaPort, K. A., Chen, T. R., Tomassetti, A. J., Weis, E. J., Zaccaro, S. J., & Cortina, J. M. (2014). The shared leadership of teams: A meta-analysis of proximal, distal, and moderating relationships. *Leadership Quarterly*, 25(5), 923–942. <http://doi.org/10.1016/j.leaqua.2014.06.006>
- Niebel, T. (2018). ICT and economic growth—Comparing developing, emerging and developed countries. *World Development*, 104, 197-211
- Nkwe, N. (2012). Role of SMES in Botswana. *American International Journal of contemporary research*, 2(8), 29-37.
- Nkechi, A., Emeh, I. E. J., & Okechukwu, U. F. (2012). Entrepreneurship development and employment generation in Nigeria: Problems and prospects. Universal. *Journal of Education and General Studies*, 1(4), 88–102
- Noe, R. A., Hollenbeck, J. R., Gerhart, B., & Wright, P. M. (2017). *Human resource management: Gaining a competitive advantage*. New York, NY: McGraw-Hill Education
- Norman, D. (2014). *Things that make us smart: Defending human attributes in the age of the machine*. New York: Diversion Books.
- Nolan, C. T., & Garavan, T. N. (2016). Human resource development in SMEs: a systematic review of the literature. *International Journal of Management Reviews*, 18(1), 85-107.

- Nolan, C. T., & Garavan, T. N. (2016). Problematizing HRD in SMEs: A “critical” exploration of context, informality, and empirical realities. *Human Resource Development Quarterly*, 27(3), 407-442.
- Nyberg, A. J., Moliterno, T. P., Hale Jr, D., & Lepak, D. P. (2014). Resource-based perspectives on unit-level human capital: A review and integration. *Journal of Management*, 40(1), 316-346.
- Oduor, O. G. (2018). Talent Development Strategy and Employees' Productivity in Private Sugar Companies in Kakamega County, Kenya. *Int. J. of Multidisciplinary and Current research*. Vol 6, 463-469
- Ogunyomi, P., & Bruning, N. S. (2016). Human resource management and organizational performance of small and medium enterprises (SMEs) in Nigeria. *The International Journal of Human Resource Management*, 27(6), 612-634.
- Ojokuku, R. M. (2012). Human resources management demands and challenges in small and medium scale enterprises. *International Journal of Economic Development Research and Investment*, 3(3), 1-10
- Okundaye, K., Fan, S. K., & Dwyer, R. J. (2019). Impact of information and communication technology in Nigerian small-to medium-sized enterprises. *Journal of Economics, Finance and Administrative Science*, 24(47), 29-46.
- Oladipo, J., & Abdulkadir, D. (2011). Strategic HRM and Organizational Performance in the Nigerian Manufacturing Sector: An Empirical Investigation. *International Journal of Business and Management*, 6(9).
- Olaniyan, D., & Okemakinde, T. (2008). Human capital theory implication for educational development. *Pakistan Journal of Sciences*, 5(5), 479–483.
- Olatunji, T. . (2013). The Impact of Accounting System on the Performance of Small and Medium Scale Enterprises in Nigeria-A Survey of SME's in Oyo State-Nigeria. *International Journal of Business and Management Invention*, 2(9), 13–17.
- Onuoha, B. C. (2013). Factors militating against the global competitiveness of manufacturing firms in Nigeria. *American international Journal of contemporary research*, 3(4), 54-63.
- Onyeken, A. U., & Ihediwa, N. C. (2016). Mobilizing the Rural Poor in Nigeria through Microfinance. *Cogito (2066-7094)*, 8(3).
- Onwuegbuzie, A. J., Daniel, L. G., & Collins, K. M. (2009). A meta-validation model for assessing the score-validity of student teaching evaluations. *Quality & Quantity*, 43(2), 197-209.
- O'sullivan, A., & Sheffrin, S. M. (2003). *Economics: Principles in action*.

- Owualah, S. L. (1999). Tackling youth unemployment through entrepreneurship. *International Small Business Journal*, 17(3), 49–59.
- Oyemomi, O., Liu, S., Neaga, I., Chen, H., & Nakpodia, F. (2019). How cultural impact on knowledge sharing contributes to organizational performance: Using the fsQCA approach. *Journal of Business Research*, 94, 313-319
- Parida, V., Westerberg, M., Ylinenpää, H., & Roininen, S. (2010). Exploring the effects of network configurations on entrepreneurial orientation and firm performance: an empirical study of new ventures and small firms. *Annals of Innovation & Entrepreneurship*, 1(1), 5601.
- Parida, V., & Örtqvist, D. (2015). Interactive effects of network capability, ICT capability, and financial slack on technology-based small firm innovation performance. *Journal of Small Business Management*, 53, 278-298.
- Parida, V., Oghazi, P., & Cedergren, S. (2016). A study of how ICT capabilities can influence dynamic capabilities. *Journal of Enterprise Information Management*, 29(2), 179-201.
- Park, H., Yoo, J. Y., Moon, S. H., Yoo, H. S., Lee, H. S., Kwon, T. H., & Hahn, H. (2019). Effect of Technology and Market Dynamism on the Business Performances of SMEs by Supporting Services. *Science, Technology and Society*, 24(1), 144-160
- Parnell, J. A., Lester, D. L., Long, Z., & Köseoglu, M. A. (2012). How environmental uncertainty affects the link between business strategy and performance in SMEs: Evidence from China, Turkey, and the USA. *Management Decision*, 50(4), 546-568.
- 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.
- Peña, I. (2002). Knowledge networks as part of an integrated knowledge management approach. *Journal of Knowledge Management*, 6(5), 469–478. <http://doi.org/10.1108/13673270210450423>.
- Peterson, T. O., & Van Fleet, D. D. (2004). The ongoing legacy of R . L . Katz An updated typology of management skills, 42(10), 1297–1308. <http://doi.org/10.1108/00251740410568980>
- Peng, Stage, & John, (2002). The use and interpretation of logistic regression in higher education journals: 1988–1999. *Research in higher education*, 43(3), 259-293

- Pfeffer, J. (2014). Business and the spirit: Management practices that sustain values. In *Handbook of workplace spirituality and organizational performance* (pp. 43-59). New York: Routledge.
- Ping, H., Mujtaba, B. G., & Jieqiong, C. (2012). Management skills' structure in Chinese small and medium-sized enterprises. *SAM Advanced Management Journal*, 77(1), 13.
- Plimmer, G., Bryson, J., Donnelly, N., Wilson, J., Ryan, B., & Blumenfeld, S. (2017). The legacy of New Public Management (NPM) on workers, management capabilities, and organisations. *New Zealand Journal of Employment Relations*, 42(1), 19.
- Poutziouris, P., Wang, Y., & Chan, S. (2002). Chinese entrepreneurship: the development of small family firms in China. *Journal of Small Business and Enterprise Development*, 9(4), 383–399.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior research methods*, 40(3), 879-891
- Preacher, K. J., & Kelley, K. (2011). Effect size measures for mediation models: quantitative strategies for communicating indirect effects. *Psychological methods*, 16(2), 93.
- Psacharopoulos, G. (n.d.). and M. Woodhall, 1997. Education for Development: An Analysis of Investment Choice. New York: Oxford University Press.
- Purcarea, I., Benavides, M., Andreea, E., Purcarea, I., & Benavides, M. (2013). Innovation and knowledge creation: perspectives on the SMEs sector. <http://doi.org/10.1108/MD-08-2012-0590>
- Purcell, J., & Hutchinson, S. (2007). Front-line managers as agents in the HRM-performance causal chain: theory, analysis and evidence. *Human Resource management journal*, 17(1), 3-20
- Racela, O. C., & Thourmrunroje, A. (2019). Enhancing Export Performance through Proactive Export Market Development Capabilities and ICT Utilization. *Journal of Global Marketing*, 1-18.
- Rahayu, R., & Day, J. (2017). E-commerce adoption by SMEs in developing countries: evidence from Indonesia. *Eurasian Business Review*, 7(1), 25-41.
- Rahman, M., & Fatima, N. (2011). Enterprise Development Entrepreneurship and urban growth: Dimensions and empirical models. *Journal of Small Business and Enterprise Development*, 18(3), 755–764. <http://doi.org/10.1108/14626001111155736>

- Ramírez, A. M., Morales, V. J. G., & Rojas, R. M. (2011). Knowledge creation, organizational learning and their effects on organizational performance. *Engineering Economics*, 22(3), 309-318.
- Ratten, V. (2016). Female entrepreneurship and the role of customer knowledge development, innovation outcome expectations and culture on intentions to start informal business ventures. *International Journal of Entrepreneurship and Small Business*, 27(2-3), 262-272.
- Ratinho, T., Harms, R., & Walsh, S. (2015). Structuring the Technology Entrepreneurship publication landscape: Making sense out of chaos. *Technological Forecasting and Social Change*, 100, 168–175. <http://doi.org/10.1016/j.techfore.2015.05.004>
- Rea, L. M., & Parker, R. A. (2014). *Designing and conducting survey research: A comprehensive guide*. John Wiley & Sons.
- Ritter, T. (1999). The Networking Company and Networks Effectively, 479, 467–479.
- Ritter, T., Wilkinson, I. F., & Johnston, W. J. (2002). Measuring network competence: some international evidence. *Journal of Business & Industrial Marketing*, 17(2/3), 119–138.
- Romer, P. M. (1990). Human capital and growth: theory and evidence. In *Carnegie-Rochester conference series on public policy* (Vol. 32, pp. 251–286).
- Rosen, L. D., Whaling, K., Carrier, L. M., Cheever, N. A., & Rokkum, J. (2013). Author's personal copy Computers in Human Behavior The Media and Technology Usage and Attitudes Scale : An empirical investigation Author's personal copy, 29, 2501–2511
- Rothwell, W. J., & Sredl, H. J. (1992). *The ASTD reference guide to professional human resource development roles and competencies* (Vol. 2). Human Resource Development
- Rothwell, W. J., Jackson, R. D., Ressler, C. L., Jones, M. C., & Brower, M. (2015). *Career Planning and Succession Management: Developing Your Organization's Talent—for Today and Tomorrow: Developing Your Organization's Talent—for Today and Tomorrow*. Santa Barbara, California: Praeger-ABC-CLIO.
- Rua, O., França, A., & Fernández Ortiz, R. (2018). Key drivers of SMEs export performance: the mediating effect of competitive advantage. *Journal of Knowledge Management*, 22(2), 257-279.
- Ruiz-Ortega, M. J., & García-Villaverde, P. M. (2008). Capabilities and competitive tactics influences on performance: Implications of the moment of entry. *Journal of Business Research*, 61(4), 332-345.

- Sajilan, S., & Tehseen, S. (2019). Network competence and firm performance: The mediating role of entrepreneurial innovativeness among Malaysian Chinese entrepreneurs of wholesale businesses. *Asian Academy of Management Journal*, 24(1), 187-201.
- Sakamoto, A., & Powers, D. A. (1995). Education and the dual labor market for Japanese men. *American Sociological Review*, 222–246
- Saks, A. (2015). *Managing Performance through Training & Development*, (Canadian ed.). Ontario, Canada: Nelson Education.
- Scott, L. (2016). Four ways HR can improve business productivity: Practical advice for HR professionals. *Strategic HR Review*, 15(6), 273-274.
- Sapienza, H. J., Autio, E., George, G., & Zahra, S. A. (2006). A capabilities perspective on the effects of early internationalization on firm survival and growth. *Academy of Management Review*, 31(4), 914–933.
- Saravanan, A., Gupta, P. and Ghatak, S. (2008). SME Scenario around the World. Retrieved June 20 2012, from <http://eindia.blogspot.com/2008/07/sme-scenario-around-world.html>.
- Senge, P. M. (2014). *The fifth discipline fieldbook: Strategies and tools for building a learning organization*. London: Crown Business.
- Savery, J. R. (2015). Overview of problem-based learning: Definitions and distinctions. *Essential readings in problem-based learning: Exploring and extending the legacy of Howard S. Barrows*, 9, 5-15.
- Schmidt, D., Baran, E., Thompson, A., Koehler, M.J., Shin, T, & Mishra, P. (2009, April). Technological Pedagogical Content Knowledge (TPACK): The Development and Validation of an Assessment Instrument for Preservice Teachers. Paper presented at the 2009 Annual Meeting of the American Educational Research Association. April 13-17, San Diego, California
- Schultz, T. W. (1961). Investment in human capital. *The American economic review*, 1-17.
- Schultz, T. W. (1971). Investment in Human Capital. The Role of Education and of Research.
- Schuler, R. S., & Jackson, S. E. (1999). Linking competitive strategies with human resource management practices. *Strategic human resource management*, 159-176.
- Schumpeter, J. (1942). Creative destruction. *Capitalism, socialism and democracy*, 825, 82-85

- Seleim, A., Ashour, A., & Bontis, N. (2007). Human capital and organizational performance: a study of Egyptian software companies. *Management Decision*, 45(4), 789-801.
- Shariff, M. N. M., & Peou, C. (2008). The relationship of entrepreneurial values, firm financing and the management and growth performance of small-medium enterprises in Cambodia. *Problems and Perspectives in Management*, 6(4), 55-64.
- Sheehan, M., & Shanahan, V. (2017). IHRD: investment in human capital and performance: Context, Processes and People. In *Handbook of International Human Resource Development*. Cheltenham, UK: Edward Elgar Publishing
- Sheehan, M., Grant, K., & Garavan, T. (2018). Strategic talent management: A macro and microanalysis of current issues in hospitality and tourism. *Worldwide Hospitality and Tourism Themes*, 10(1), 28-41.
- Siepel, J., Cowling, M., & Coad, A. (2017). Non-founder human capital and the long-run growth and survival of high-tech ventures. *Technovation*, 59, 34-43.
- Smedan (2013) Survey Report on Micro, Small and Medium Enterprises In Nigeria; Small and Medium Enterprise Development Agency of Nigeria Report and Findings (Online Resource) Retrieved From on 27/5/2016.
- Small and Medium Enterprise Development Agency of Nigeria and National Bureau of Statistics (2013). Collaborative Survey: Small and Medium Enterprise In Nigeria. Abuja FGN.
- Smits, R. J. H. (2000). 11. EU Research for Industrial Competitiveness. *Industry and the European Union: Analysing Policies for Business*, 263.
- Smallbone, D., Supri, S., & Baldock, R. (2000). The implications of new technology for the skill and training needs of small-and medium-sized printing firms. *Education & Training*, 42(4/5), 299–308. Retrieved from http://search.proquest.com/docview/237067700?accountid=12217%5Cnhttp://link.periodicos.capes.gov.br/sfxlcl41?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:journal&genre=article&sid=ProQ:ProQ:abiglobal&atitle=The+implications+of+new+technology+for+th
- Sousa, M., & Costa, E. (2014). Game based learning improving leadership skills. *EAI Endorsed Transactions on Serious Games*, (3).
- Sousa, M. J. (2017, December). Leadership Skills for Workforce Engagement. In *European Conference on Management, Leadership & Governance* (pp. 467-472). Academic Conferences International Limited

- Sousa, M. J., & Rocha, Á. (2019). Leadership styles and skills developed through game-based learning. *Journal of Business Research*, 94, 360-366
- Spiegel, M., & Marxt, C. (2011). Defining technology entrepreneurship. *IEEE International Conference on Industrial Engineering and Engineering Management*, 1623–1627. <http://doi.org/10.1109/IEEM.2011.6118191>
- Spooren, P., Brockx, B., & Mortelmans, D. (2013). On the validity of student evaluation of teaching: The state of the art. *Review of Educational Research*, 83(4), 598-642.
- Stam, W., Arzlanian, S., & Elfring, T. (2014). Social capital of entrepreneurs and small firm performance: A meta-analysis of contextual and methodological moderators. *Journal of Business Venturing*, 29(1), 152-173.
- Steedman, H. (2015). Promoting safe work and quality apprenticeships in small and medium-sized enterprises: Challenges for developed and developing economies. *International Labour Office, Geneva*.
- Stewart, J., & McGoldrick, J. (Eds.). (1996). *Human resource development: Perspectives, strategies and practice*. London: Pitman
- Straub, D., Boudreau, M. C., & Gefen, D. (2004). Validation guidelines for IS positivist research. *Communications of the Association for Information systems*, 13(1), 24.
- Strobl, A., & Kronenberg, C. (2016). Entrepreneurial networks across the business life cycle: the case of Alpine hospitality entrepreneurs. *International Journal of Contemporary Hospitality Management*, 28(6), 1177-1203.
- Storey, D. (1994) *Understanding the Small Business Sector*, London: Routledge.
- Subairu, H. T. (2016). Analysis of Relationship between SME's Employment Growth and Firm Specific Characteristics. *Arabian Journal of Business and Management Review (OMAN Chapter)*, 5(8), 30–39.
- Sullivan, Gail M., and Richard Feinn. "Using effect size—or why the P value is not enough." *Journal of graduate medical education* 4, no. 3 (2012): 279-282
- Sung, S. Y., & Choi, J. N. (2014). Multiple dimensions of human resource development and organizational performance. *Journal of Organizational Behavior*, 35(November), 851–87. <http://doi.org/10.5465/AMBPP.2013.14133abstract>

- Sunindijo, R. Y. (2015). Project manager skills for improving project performance. *International Journal of Business Performance Management*, 16(1), 67-83.
- Sulaiman, I. F., Hashim, C. N., Hassan, S. S. S., Ibrahim, M. B., & Oluwatosin, O. S. (2015). Innovativeness of Creative Thinking for Value Creation. *Journal of Education and Social Policy*, 1-12.
- Singh, A. S., & Masuku, M. B. (2013). Fundamental of applied research and sampling techniques. *Int J Med Appl Sci*, 2(4), 123-124.
- Swanson, R. A., Holton, E., & Holton, E. F. (2001). *Foundations of human resource development*. Berrett-Koehler Publishers.
- Swanson, R. A., & Holton, E. . F. (2010). *Foundations of Human Resource Development*. San FrancisBerrett-koehler publishers Inc.
- K Szabo, Z., Šoltés, M., & Herman, E. (2013). Innovative capacity & performance of transition economies: comparative study at the level of enterprises. *Technická Univerzita v Liberci*.
- Tam, S., & Gray, D. E. (2016). Organizational learning and the organizational life cycle: the differential aspects of an integrated relationship in SMEs. *European Journal of Training and Development*, 40(1), 2-20.
- Tarutė, A., & Gatautis, R. (2014). ICT impact on SMEs performance. *Procedia-Social and Behavioral Sciences*, 110(0), 1218-1225
- Tatoglu, E., Bayraktar, E., Golgeci, I., Koh, S. L., Demirbag, M., & Zaim, S. (2016). How do supply chain management and information systems practices influence operational performance? Evidence from emerging country SMEs. *International Journal of Logistics Research and Applications*, 19(3), 181-199.
- Taylor, A., & Taylor, M. (2014). Factors influencing effective implementation of performance measurement systems in small and medium-sized enterprises and large firms: a perspective from Contingency Theory. *International Journal of Production Research*, 52(3), 847-866.
- Tehseen, S., Qureshi, Z. H., & Ramayah, T. (2018). Impact of network competence on firm's performances among Chinese and Indian entrepreneurs: A multigroup analysis. *International Journal of Entrepreneurship*, 22(2).
- Tehseen, S., Ahmed, F. U., Qureshi, Z. H., Uddin, M. J., & Ramayah, T. (2019). Entrepreneurial competencies and SMEs' growth: the mediating role of network competence. *Asia-Pacific Journal of Business Administration*.

- Tende, S. (2014). Government initiatives toward entrepreneurship development in Nigeria. *Global Journal of Business Research*, v. 8 (1) p. 109-120, 2014.
- Tende, S. B., & Obumneke, E. (2014). Impact of Petroleum on Sme's Growth in Nigeria. *International Journal of Entrepreneurial Knowledge*, 2(2), 4-14
- Taherdoost, H., & Lumpur, K. (2016). Validity and Reliability of the Research Instrument ; How to Test the Validation of a Questionnaire / Survey in a Research. *International Journal of Academic Research in Management (IJARM)*, 5(3), 28–36
- Thoman, D., & Lloyd, R. (2018). A Review of the Literature on Human Resource Development: Leveraging HR as Strategic Partner in the High Performance Organization. *Journal of International & Interdisciplinary Business Research*, 5(1), 147-160.
- Thominathan, S., & Ramayah, T. (2015). Ensuring Continued Usage of an E-Government Service in Malaysia: The Role of Perceived Usefulness and User Satisfaction. In *Public Affairs and Administration: Concepts, Methodologies, Tools, and Applications* (pp. 1546-1562). Hershey, USA: IGI Global.
- Thornton, S. C., Henneberg, S. C., & Naudé, P. (2014). Conceptualizing and validating organizational networking as a second-order formative construct. *Industrial Marketing Management*, 43(6), 951–966. <http://doi.org/10.1016/j.indmarman.2014.05.001>.
- Thompson J.D (1967). *Organization in action*. New York: McGraw-Hill
- Tomlinson, P. R., & Fai, F. M. (2013). The nature of SME co-operation and innovation: A multi-scalar and multi-dimensional analysis. *International Journal of Production Economics*, 141(1), 316–326.
- Torkkeli, L., Kuivalainen, O., Saarenketo, S., & Puumalainen, K. (2019). Institutional environment and network competence in successful SME internationalisation. *International Marketing Review*, 36(1), 31-55.
- Torkkeli, L., Kuivalainen, O., Saarenketo, S., & Puumalainen, K. (2016). Network competence in Finnish SMEs : implications for growth. *Baltic Journal of Management*, 11(2), 207–230. <http://doi.org/10.1108/BJM-02-2015-0032>
- Torkkeli, L., Puumalainen, K., Saarenketo, S., & Kuivalainen, O. (2012). The effect of network competence and environmental hostility on the internationalization of SMEs. *Journal of International Entrepreneurship*, 10(1), 25–49.

- Tseng, C.-C., & Mclean, G. N. (2008). Strategic HRD practices as key factors in organizational learning. *Journal of European Industrial Training* *Journal of European Industrial Training Iss Journal of European Industrial Training Iss Journal of European Industrial Training*, 32(1), 418–432. <http://doi.org/10.1108/03090590810886544>
- Triguero Sánchez, R., Peña Vines, J. D. C., & Guillen, J. (2016). The mediator role of hierarchical distance on social processes-HRM practices: An empirical analysis of Spanish firms. *International Journal of Organizational Leadership*, 5(3), 172-190.
- Twyford, D., Alagaraja, M., & Shuck, B. (2016). Human resource development in small business: an application of brethower's performance principles to on the job training. *New Horizons in Adult Education and Human Resource Development*, 28(4), 28-40.
- Upadhye, N., Deshmukh, S. G., & Garg, S. (2010). Lean manufacturing in biscuit manufacturing plant: a case. *International Journal of Advanced Operations Management*, 2(1-2), 108-139.
- Vacha-Haase, T., & Thompson, B. (2004). How to estimate and interpret various effect sizes. *Journal of counseling psychology*, 51(4), 473
- Vandenberg, P., & Trinh, L. Q. (2016). Is there a size-induced market failure in skills training? ADBI Working Paper 598. Tokyo: Asian Development Bank Institute. Available: <https://www.adb.org/publications/there-size-induced-market-failure-skills-training>
- Vandenberghe, C. (1999). Organizational culture, person–culture fit, and turnover: A replication in the health care industry. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 20(2), 175-184.
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 46(2), 186–204.
- 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.
- Watts, L. L., Ness, A. M., Steele, L. M., & Mumford, M. D. (2018). Learning from stories of leadership: How reading about personalized and socialized politicians impacts performance on an ethical decision-making simulation. *The Leadership Quarterly*, 29(2), 276-294.
- Wang, I. K., Qian, L., & Lehrer, M. (2017). From technology race to technology marathon: A behavioral explanation of technology advancement. *European Management Journal*, 35(2), 187-197.

- Walter, A., Auer, M., & Ritter, T. (2006). The impact of network capabilities and entrepreneurial orientation on university spin-off performance. *Journal of Business Venturing*, 21(4), 541–567.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171–180.
- Westhead, P., & Storey, D. J. (1997). *Training Provision and the Development of Small and Medium-Sized Enterprises. Research Report No. 26.* ERIC.
- Witt, U. (1998). Imagination and leadership--the neglected dimension of an evolutionary theory of the firm. *Journal of Economic Behavior & Organization*, 35(2), 161–177.
- Wickson-Griffiths, A., Kaasalainen, S., Ploeg, J., & McAiney, C. (2014). Revisiting Retrospective Chart Review: An Evaluation of Nursing Home Palliative and End-of-Life Care Research. *Palliat Med Care*, 1(2), 8.
- Wieland, A., Durach, C. F., Kembro, J., & Treiblmaier, H. (2017). Statistical and judgmental criteria for scale purification. *Supply Chain Management: An International Journal*, 22(4), 321-328.
- Wilson, J. P. (2014). International human resource development: Learning, education and training for individuals and organisations. *Development and Learning in Organizations*, 28(2).
- Xhaufclair, V., & Pichault, F. (2014). Towards Sustainable Employment Schemes at the Inter-Organizational Level. *Management and Organization of Temporary Agency Work*, 87-99.
- Yahaya, T., Idris, K., Suandi, T., & Ismail, I. (2018). Adapting instruments and modifying statements: The confirmation method for the inventory and model for information sharing behavior using social media. *Management Science Letters*, 8(5), 271-282.
- Yang, L. R., Huang, C. F., & Hsu, T. J. (2014). Knowledge leadership to improve project and organizational performance. *International Journal of Project Management*, 32(1), 40-53
- You, H., & Bie, C. (2017). Creative class agglomeration across time and space in knowledge city : Determinants and their relative importance. *Habitat International*, 60, 91–100. <http://doi.org/10.1016/j.habitatint.2016.12.010>.
- Yildiz Durak, H. (2019). Modeling of relations between K-12 teachers' TPACK levels and their technology integration self-efficacy, technology literacy levels, attitudes toward technology and usage objectives of social networks. *Interactive Learning Environments*, 1-27.

- Yuchtman, E., & Seashore, S. E. (1967). A system resource approach to organizational effectiveness. *American sociological review*, 891-903.
- Zacca, R., & Dayan, M. (2018). Linking managerial competence to small enterprise performance within the dynamic capability logic. *Journal of Small Business and Enterprise Development*, 25(2), 256-276.
- Zaccaro, S. J. (2001). *The nature of executive leadership: A conceptual and empirical analysis of success*. Washington, D.C. US: American Psychological Association
- Zafar, H., Hafeez, M. H., & Shariff, M. N. M. (2016). Relationship between market orientation, organizational learning, organizational culture and organizational performance: mediating impact of innovation. South East Asia Journal of Contemporary Business. *Economics and Law*, 9(2), 40-56.
- Zhao, X., Chen, S., & Xiong, C. (2016). Organizational attention to corporate social responsibility and corporate social performance: the moderating effects of corporate governance. *Business Ethics: A European Review*, 25(4), 386-399
- Zhou, T., & Li, H. (2014). Understanding mobile SNS continuance usage in China from the perspectives of social influence and privacy concern. *Computers in Human Behavior*, 37, 283-289.
- Zainudin, Awang. (2015). SEM made simple: A gentle approach to learning Structural Equation Modeling. Bangi: MPWS Publication Sdn Bhd.
- Zerfass, A., & Viertmann, C. (2017). Creating business value through corporate communication: a theory-based framework and its practical application. *Journal of Communication Management*, 21(1), 68-81