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**Faculty of Economics and Business**

**An Investigation of the Determinants of Self-Employment:  
A Mediation of Entrepreneurial Motivation in  
Bauchi State, Nigeria**

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**Doctor of Philosophy  
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An Investigation of the Determinants of Self-Employment: A Mediation of  
Entrepreneurial Motivation in Bauchi State, Nigeria

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A thesis submitted

In fulfillment of the requirements for the degree of Doctor of Philosophy  
(Entrepreneurship)

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## **DECLARATION**

I Muhammad Adamu (15010007, Faculty of Economics and Business) hereby declare that the work entitled: An Investigation of the Determinants of Self-Employment: A Mediation of Entrepreneurial Motivation in Bauchi State, Nigeria is my original work. It is original and is the result of my work, unless otherwise indicated or acknowledged as referenced work. The thesis has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.

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In the name of Almighty Allah, the Sufficiently Beneficent, the Exceedingly Merciful. All praises were due to Allah, the Lord of this world and what it contains, whom has been lonely owed to be worshipped. May His abundant peace and blessings be upon the Prophet, Muhammadur Rasulullah (SAW). I cannot begin to remember the magnanimous, numerous and consistent contributions and guidance rendered to me by my supervisor, Dr Mahani Binti Mohammad Abdu Shakur toward making the achievement of my esteemed academic accolade an extreme reality. I feel obliged to thank Assoc. Prof. Dr. Rossazana Abdu Rahim for her numerous motivations as a postgraduate coordinator. Most especially, the supports and prayers done to me by my parents, my wife and my children at the very crucial period coupled with instant pressure and consistent academic challenges cannot be over-emphasized and so would continue to remain memorable. My special appreciation to the management of Bauchi State University, and former Dean FSMS, Professor Muhammad Bashir Jumare for their stewardship, courage and consistent motivation which have been so fundamental toward this journey to pursue a venerated academic crest.

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## ABSTRACT

Self-employment is becoming more dominant topic due to the persistent prevalence of unemployment issues in Nigeria. Thus, the aim of this research is to conduct an investigation of the determinants of self-employment and the mediating role of entrepreneurial motivation among potential entrepreneurs in Bauchi State, Nigeria. This study employed quantitative technique through a cross-sectional survey where questionnaires were distributed and primary data were collected for the study. Through the analysis using PLS-SEM, the study findings suggested that the independent variables namely; transformationality, resilience, autonomy, machinery/equipment, vocational training, ICT, taxation incentives, financing and entrepreneurial motivation as a mediating variable significantly influences self-employment. Hence, these stimulate the potential entrepreneurs to make persistent and intense efforts in their pursuit for the accomplishment of self-employment. This study incorporates some less-researched factors (some other dimensions of entrepreneurial traits, economic incentive factors and entrepreneurial motivation) that influence self-employment. Furthermore, this study theoretically incorporates three theories (i.e. the vroom expectancy motivation theory, the personality trait theory and the economic entrepreneurship theory) especially in developing the conceptual framework for the study. The novelty of this study lies in the merging of the selected theories to develop the research framework. Other than that, exploring the under- researched factors of self-employment determinants in the context of Nigeria also added value to self-employment literature.

**Keywords:** Self-employment, new business start-up, potential entrepreneurs, entrepreneurial traits, economic incentive factors, entrepreneurial motivation, Nigeria

***Penyelidikan dalam penentuan untuk bekerja sendiri: Pengantaraan motivasi  
keusahawanan di negeri Bauci, Nigeria***

**ABSTRAK**

Wiraswasta telah menjadi topik yang dominan disebabkan oleh isu-isu pengangguran yang berterusan di Nigeria. Justeru, matlamat penyelidikan ini adalah untuk menjalankan penelitian terhadap penentu wiraswasta dan peranan perantaraan motivasi keusahawanan dalam kalangan usahawan berpotensi di negeri Bauchi, Nigeria. Penyelidikan ini menggunakan teknik kuantitatif secara keratan rentas di mana soal selidik diedarkan dan data primer dikumpulkan untuk kajian ini. Melalui analisis yang menggunakan PLS-SEM, dapatan kajian mencadangkan pembolehubah bebas iaitu; transformasi, ketahanan, autonomi, jentera/peralatan, latihan vokasional, ICT, insentif percukaian, pembiayaan dan motivasi keusahawanan sebagai pemboleh ubah pengantara yang sangat mempengaruhi wiraswasta. Oleh itu, perkara ini telah merangsang usahawan yang berpotensi untuk meningkatkan usaha secara berterusan dan sengit agar usaha untuk menjadi wiraswasta tercapai. Kajian ini menggabungkan beberapa faktor yang kurang diteliti (beberapa dimensi ciri keusahawanan, faktor insentif ekonomi dan motivasi keusahawanan) dalam mempengaruhi wiraswasta. Tambahan pula, kajian ini secara teoretikalnya menggabungkan tiga teori (iaitu teori motivasi jangka pendek, teori keperibadian dan teori keusahawanan) terutamanya dalam membangunkan kerangka konseptual bagi kajian ini. Pembaharuan dalam kajian terletak pada penggabungan teori yang dipilih untuk membangunkan kerangka penyelidikan ini. Selain itu, meneroka faktor-faktor yang kurang dikaji berkaitan penentu wiraswasta dalam konteks Nigeria, akan memberi nilai tambah kepada literatur wiraswasta.

**Kata kunci:** *Wiraswasta, permulaan perniagaan baharu, usahawan yang berpotensi, ciri-ciri keusahawanan, faktor insentif ekonomi, motivasi keusahawanan, Nigeria*

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## **LIST OF ABBREVIATIONS**

|         |                                                               |
|---------|---------------------------------------------------------------|
| AVE     | Average Variance Extracted                                    |
| BSGN    | Bauchi State Government of Nigeria                            |
| CR      | Composite Reliability                                         |
| EET     | Economic Entrepreneurship Theory                              |
| EMV     | Entrepreneurial Motivation                                    |
| FIN     | Financing                                                     |
| FGN     | Federal Government of Nigeria                                 |
| ICT     | Information and Communication Technology                      |
| MEQ     | Machinery/Equipment                                           |
| PLS-SEM | Partial Least Square-Structural Equation Modeling             |
| PTT     | Personality Trait Theory                                      |
| RSL     | Resilience                                                    |
| SEM     | Self-Employment                                               |
| SPSS    | Special Package for Social Sciences                           |
| SMEDAN  | Small and Medium Enterprises Development Agency of<br>Nigeria |
| SS      | Sample Size                                                   |
| TAX     | Taxation                                                      |
| TRF     | Transformationality                                           |
| VEMT    | Vroom Expectancy Motivation Theory                            |
| VTR     | Vocational Training                                           |

## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 Introduction**

This chapter is organized into sections. The first section describes the background of the study, highlighting the basic elements upon which the research is focused to achieve thus provide the overall overview of the study in potential self-employment accomplishment. The second section provides the problem statement, which explains the main genesis and motivation for conducting the research, which seeks to be resolved through the established research questions, objectives and hypotheses testing. The third section highlights the research gaps that spring from the problem statement, which is expected to be filled and attain the objectives of the research. The fourth section defines the research objectives, stating the main objective, followed by the specific objectives thus are clear and attainable. Furthermore, the fifth section stated the research questions which entails the basic questions that the research seeks to provide answers, through hypotheses testing. The sixth section cited the conceptual framework of the study, which detailed the variables of the research and how they are linked in the framework for a hypothesized relationship. The seventh section highlights the significance of the study, which shows the worth and implication of the results of this research to various stakeholder. The scope of the study is provided in the eighth section that highlights the background of the study area and its characteristics. The ninth section shows the definition of terms for the constructs of this research, which is important in design of questionnaire items. Finally, the tenth section highlights the structure of the thesis in a diagrammatic countenance.

## **1.2 Background of the Study**

Today, the predicament of unemployment has been a major concern even among the developed nations, and especially the developing nations. For this ground, the need for employment creation becomes desirably crucial. However, universally, there is anxiousness among stakeholders such as governments and relevant stakeholders as to the result and justification of the investment that is being made continuously on self-employment (David & Chris, 2014; Idris, 2015). In this research, potential entrepreneurs are graduates of Universities, Polytechnics, Colleges and failed small business owners that are currently undertaking training at the entrepreneurship and skills acquisition centres in Bauchi State, Nigeria. The overreliance of the potential entrepreneurs to be employed in public or government organizations depressed them from having the passion and zeal to start a new business and become self-employed (Sozen & O' Neill, 2017). Thus, it is expected that with due interest in the potential and proper motivation from the stakeholders, the level and rate of unemployment can be reduced through embracing new business start-up by the potential entrepreneurs, despite the global financial crisis (Dawson, Henley & Latreille, 2009).

Recently, the global financial crisis (economic downturns) has increased an adverse long-lasting consequence all over the world, resulting in job losses and rising unemployment (Naude, 2011; Garba, 2015; Idris, 2015). Unemployed individuals have found themselves in a particularly vulnerable position (Oppong & Paul, 2015). The losses of jobs increased more appreciation of self-employment as an alternative for individuals most particularly potential entrepreneurs. Subsequently, self-employment is expected to proffer a way to reduce poverty level, improve living standard as well as earn more income and have a better career for sustainable livelihood among potential entrepreneurs (Badal, 2010; Yusuf, 2013).

To achieve such sustainable livelihood, nations across the globe should encourage individuals to venture into self-employment as a way of earning a living and reducing cases of unemployment (Naude, 2011). However, venturing into self-employment may be successful through an effective motivation for the potential entrepreneurs. Potential entrepreneurs have to be motivated and supported in order to have a reasonable background to realize a successful self-employment (Ayodeji, 2015). To clearly identify these motivational factors, stakeholders are trying to identify the main determinants of self-employment, particularly factors from the environment such as economic incentive factors (Jagero et al., 2011; Ayyagari, Demircuc-Kunt & Maksimovic, 2014).

In order to create the right atmosphere for self-employment, the motivation of potential entrepreneurs can be understood from the context of the environmental factors (economic incentive factors). The motivations and support of all stakeholders involved would enhance the readiness of potential entrepreneurs and motivate them to start their own business (Sozen & O'Neill, 2017). Therefore, it might be of great importance that the support of these stakeholders (i. e., government and investors) would give more courage for the potential entrepreneur's self-employment realization. Against this backdrop, the provision of motivational support for potential entrepreneurs becomes essential in starting a successful self-employment (Kisker, 2016).

Likewise, the need for such motivational support and incentives might be crucial for potential entrepreneurs, in order to effectively engage in occupations that are acquired in the entrepreneurship and skills acquisition centres in the study area. Such occupations include computer maintenance and operation works, textile designing, tailoring, electrical installation and maintenance work, furniture making, soap making, shoemaking,

blacksmithing, horticulture and gardening, lotion and cream making, poultry farming, ceramic making, welding work, animal rearing, trading, carpentry and joinery, merchandising, and livestock/husbandry. However, for the potential entrepreneurs to effectively be integrated into such occupations, there must be some motivations and incentives for them to succeed. The motivational support and incentives may include ICT facilities, as well as skills acquisition such as vocational training provided by government and relevant stakeholders (Susanne, 2016). Other motivational support and incentives such as tax incentives and financing may support and motivates potential entrepreneurs in the new business start-up (Chowdhury, 2017).

In this context, as a study area for this research, Nigeria is a country in Africa with the largest population of more than 170 million people, and with an unemployment rate of 18.8% (NBS, 2017). Also, Bauchi State in Nigeria is among the ten states with the highest unemployment rate of 41.4% (NBS, 2016) and with a population of about 5 million people. Nevertheless, despite anxiousness by the various stakeholders over the result of their investment for job creation, entrepreneurs from the context of this study as a developing nation, are undoubtedly facing varieties of issues regarding the motivational factors and incentives for a successful self-employment realization (Idris, 2015). However, although the potential entrepreneurs mostly relied on government jobs, thus are reluctant to venture into a new business of their own, still these issues are still yet to be resolved. Such reluctance by the potential entrepreneurs may be reduced through the effective provision of motivational support such as the provision of machinery/equipment, ICTs, vocational training, taxation incentives and financing (Dike, 2013; Feyitimi et al., 2016; Taiwo, Temitope & Edwin, 2016; Ehinmowo & Fatuase, 2016; Mercy, 2017).

However, provision of the motivational supports supplementing a good self-employment start-up in the context of developing countries has been inadequate (Obamuyi, 2017). This prevails because the extent of intervention on entrepreneurship development that is expected to generate employment, increase income and reduce poverty has not been significantly supported. These have been as a result of flaws in the economic policies for the support and the motivations of the potential entrepreneurs (Ndubuisi & Oko, 2015). The funds that are budgeted for the sole purpose of supporting the entrepreneurship development, particularly the new business start-up were mismanaged (Garba, 2015). Such mismanagement of these funds rendered the provision of the motivational support for the potential entrepreneurs ineffective.

However, despite the mismanagement of these funds and flaws in economic policy, to ensure that all these issues are properly tailored for self-employment to be realized by potential entrepreneurs, the Federal Government of Nigeria continues to proffer a possible solution. The Nigeria Federal Government, apart from recent economic policy restructuring, also signed an international collaboration that served as a policy, which emphasized the compulsory study of entrepreneurship at all levels in all tertiary institutions in Nigeria known as Entrepreneurship Development Programme (SMEDAN, 2011).

Another part of the economic policy is the reduction in over reliance on the oil sector. In Nigeria, almost vast of the present economic problems have been because of relying on a particular sector of the economy, especially the oil sector. This resulted in the abandoning of the other sectors of the economy, including manufacturing, as well as agriculture, which are regarded as the major sectors the country was depending on before the discovery of crude oil (Ogbo & Nwachukwu, 2012).

The primary focus of government's plan and policies were centred on the creation of conditions favourable to a new business regime built on innovation and adaptability, as well as an accelerated development through entrepreneurship with incentives and programmes such as vocational training. The incentives would be provided for potential entrepreneurs' accessibility and utilization, to make an effective business start-up. Similarly, the vocational training was launched with the purpose of encouraging potential entrepreneurs to be well equipped and prepared for formally venturing into self-employment for self-reliance (SMEDAN, 2011). To encourage this effort, the Nigerian government in March 2017, has released a huge amount of ten billion Naira (N10, 000,000,000.00) to finance and support entrepreneurship (FGN, 2017).

Other policies to support entrepreneurship were channeled through some agencies by the Nigerian government, which includes Small and Medium Enterprises Development Agency of Nigeria (SMEDAN). This was meant for articulating and initiating policies, instruments and support services for the development and boosting of business start-up, micro, small and medium enterprises (MSME).

The Entrepreneurship Development Centers (EDCs) were similarly established in an effort to garner support for the development of entrepreneurship. Others include Youth Enterprise with Innovation in Nigeria (YouWIN) as one the recent efforts by the government to support entrepreneurship. This is aimed at job creation by supporting aspiring individuals to develop and execute business ideas that involve an innovative business strategy (YouWIN, 2013). Furthermore, the latest initiative by the Nigerian government is the N-Power project. The Jobs Scheme, known as 'N-Power', is one of the five initiatives of the Federal Government of Nigeria in its Entrepreneurship Development in May 2016.

The N-Power is designed to address the challenge of unemployment by providing a structure for large-scale and the relevant skills acquisition and development, while linking its core and outcomes to fixing and stimulating the larger economy (N-Power, 2017). The N-Power initiative is meant for potential entrepreneurs that would have the opportunity to engage in some occupations such as hardware service professionals, software developers, animators, building services professionals, graphic artists, artisans and architectural design. Furthermore, recently, the Federal Government of Nigeria re-boost and introduces some Social Investment Initiatives such as the Conditional Cash Transfer (CCT), the Government Enterprises and Empowerment Programme (GEEP), and the Anchor Borrowers Programme. Thus, the initiatives would assist young Nigerian potential entrepreneurs to become significant through self-employment at their individual level, and to the national and global community at large (N-Power, 2017).

### **1.3 Problem Statement**

Several studies were conducted in the field of entrepreneurship, but each with a particular focus as a reason or motivation for carrying out the research in order to examine a particular problem. The unemployment issue has remained a matter of concern among various stakeholders toward proffering a possible solution to the prevailing unemployment menace (Cooney, 2012; Ramoni, 2016). Collectively, there is a much apprehension and concern that investment on self-employment should be reciprocated and be justified for an enhanced new business start-up among potential entrepreneurs. This may bring improved earnings, improvement in living standard, reduction in poverty level and profitability for the potential entrepreneurs, but with effective motivation (Dawson et al., 2009; David & Chris, 2014; Garba, 2015).

The magnitude of desired pledge to motivation for potential entrepreneurs has adversely affected their motivation for new business start-up among varieties of occupations in self-employment practice. This is expected to trigger a potential entrepreneur with a sense of commitment. Likewise, relevant stakeholders on self-employment such as government and relevant stakeholders expect that after committing investments on new business start-up, the potential entrepreneurs can effectively absorb the support and motivations to start their own new business and become self-employed (Ramoni, 2016). However, with insufficient motivation and support in terms of some essential factors such as machinery/equipment, inadequate vocational training and lack of ICT facilities and usage, potential entrepreneurs' motivation to start a new business depletes (Lasisi et al., 2012; Dike, 2013; Mercy, 2017; Sozen & O'Neill, 2017). Besides, due to the worsen level of unemployment, many studies have confirmed that the expected utilization of such support and motivations on the potential entrepreneurs has not been effective (Renko et al., 2012; Moberg, 2014). Idris (2015) posits that stakeholders are still apprehensive that despite the commitments and investments for self-employment, yet the level of unemployment is still prevailing.

Due to this prevalence of persistent unemployment menace, and taking into consideration of the current economic downturn and trends in technology surrounding the business environment, particularly the new business start-up, has propelled a reason for investigating various individual and environmental factors (Kumar, 2011; Kiragu & Sakwa, 2013; Wanyoko, 2013; Mokua & Memba, 2015; Ndubuisi, 2015; Alani, Rowland & Ezekiel, 2016). Prabhu et al. (2012) have acknowledged that the interaction between the entrepreneurial traits and the environment (economic incentives) create conditions that foster a higher entrepreneurship consciousness that influence the motivation for self-employment. In addition, as a direction for future research, Biavaschi et al. (2012) applauded that

conducting additional tests and examining multiple variable interactions may proffer a possible means to tackle issues concerning the business starting process.

Similarly, according to Susanne (2016), the elements affecting self-employment starting processes among potential entrepreneurs have been caused by inadequate training among potential entrepreneurs. Trainings such as vocational training that involves mostly applied and practical skills training for proficiency in manual and automated skills may enhance the business start-up (Maclean, Jagannathan & Sarvi, 2012). To this end, the vocational training would provide skills and expertise, which involve specific proficiency cutting across various types of occupations in self-employment (Scarpetta et al., 2010).

Furthermore, Silva & Ratnadiwakara (2010) in their investigations revealed that in the developed countries, technological progress from the context of ICT continues at a relentless speed. It is clear that ICTs offer higher benefit-to-cost ratios in all sectors, while simultaneously offering new ways to create value by better and more efficiently organizing the use of overall resources (McGregor & Kartiwi, 2010; Silva et al., 2010; Akande, 2013). Given the potential high returns that ICTs can provide in transforming well-being through self-employment, it remains challenging to commit the impact of ICTs in the new business start-up among the African nations and the developing countries (Mercy, 2016). Drawing a premise on another important factor is the entrepreneurial motivation. The entrepreneurial motivation has been considered as a driver that triggers and motivates the entrepreneur to exert a higher level of efforts for the achievement of his/her entrepreneurial goals (Darnihamedani, 2017). Therefore, taking into consideration the value attached to the entrepreneurial motivation, it is only if the entrepreneur is motivated that all other factors will be well executed to achieve success.

Moreover, empirical evidence from previous studies that examine and measure self-employment indicates lack of consensus from their findings (Kevin et al., 2010; Dunkelberg, 2013; Gulen & Mihai, 2013; Gholami & Birjandi, 2016; Miller & Breton-Miller, 2017; Fossen et al., 2017). For this reason, this study premise that entrepreneurial motivation might mediate in the relationship between entrepreneurial traits and economic incentive factors in measuring self-employment. Thus, according to Hair et al. (2015), whenever there are evidences of lack of consensus, contingencies and inconsistencies from empirical finding, then a mediator can be integrated to a framework upon which is expected to resolve such anomalies.

In Nigeria, due to lack of proper motivation, most unemployed individuals whom can be potential entrepreneurs, mostly rely on pursuance of government job to get employment, rather than becoming keen to venture into a new business and become self-employed (Idam, 2014; Oko & Ndubuisi, 2015). In addition, the recent global financial crisis and current trends in technology at different magnitudes facing various nations of the world, especially Nigeria, resulted in an increased in unemployment rate (Sozen & O'Neill, 2017). Since the occurrence of the economic downturns, organizations were reducing the number of their workforce, or even closing down some of their operations, which resulted in losses of jobs, particularly from the context of the present study (Garba, 2015; Idris, 2015). This deteriorates the current unemployment rate to some extent, and which might have adversely increased the vulnerable situation that trailed the position of the potential entrepreneurs as job seekers (Ayyagari et al., 2014).

Consequently, due to such persistence in the unemployment rate, the need for self-employment in the context of potential entrepreneurs in Bauchi State, Nigeria is imminent

to knowledge (Ahmad & Yusuf, 2011; Usman, 2015). This concludes that there is an ineffective and inadequate motivation and support for the potential entrepreneurs especially with regards to the factors highlighted above, and the lack of motivation from the aspect of such factors drains an effective potential self-employment. Hence, there is a need to conduct an investigation on these factors that may be considered to proffer a possible solution to this lingering issue. Based on given justification from prior studies, this study attempts to detail the problem statement in terms of the theoretical, conceptual, practical and contextual gaps.

#### **1.4 Research Gaps**

The research gaps of this study were summarized into theoretical/literature gaps, conceptual gap and contextual gap in the following sub-sections.

##### **1.4.1 Theoretical Gaps**

The extent of desired commitment to motivation for potential entrepreneurs has negatively affected their motivation for new business start-up among varieties of occupations in self-employment practice. This can offer a potential entrepreneur a sense of commitment. However, with insufficient machinery/equipment, inadequate vocational training and lack of ICT facilities and usage, potential entrepreneurs' motivation to start a new business depletes (Lasisi et al., 2012; Dike, 2013; Mercy, 2017; Sozen & O'Neill, 2017).

Explicitly, the Vroom's expectancy motivation theory (VET) upheld a notion on internal factors that influences the motivation of individuals in entrepreneurship on the concept of expectancy, instrumentality and valence. However, this research explored and integrated some external factors that may influences the motivation of potential entrepreneurs in a new business start-up. This is expected to contribute to the body of knowledge. In essence, this

study finds it rational to align the belief, perception and expectation upheld by the Vroom's expectancy motivation theory with other external factors such as vocational training, machinery/equipment and ICT's for an effective new business start-up among the potential entrepreneurs. Thus, holding such belief, perception and expectation by the potential entrepreneurs can be supplemented by these external factors to effectively realize new business start-up. In practice, the impact of these external factors will be of paramount importance in the realization of an effective venture creation, witnessing the current changes in customer demands and trends in technology. In essence, this research has employed the combined and relative impact of both the internal and the external factors to measure self-employment.

Furthermore, the economic entrepreneurship theory (EET) in its theoretical point of view (Papanek & Harris, 1972), acknowledged that it is important to emphasize motivational functions from the environment (economic incentive factors) for future attainment of new business start-up. Yet, the theory is either silent or partial in terms of other dimensions of some environmental factors (economic incentive factors) such as machinery/equipment, vocational training and ICT facilities and usage in which this study have carried out an investigation. This research contributes to knowledge by examining these environmental factors for a better understanding of an effective entrepreneurial motivation in the realization of a new business start-up.

Also, despite that the Landstrom (1988) personality trait theory (PTT) upheld the notion about the importance of entrepreneurial traits in entrepreneurship practice and success, traits such as transformationality and resilience were less-researched in the field of entrepreneurship (Georgianna et al., 2016; Bulmash, 2016). The current study went further

to carry out an investigation on these factors to measure a new business start-up among potential entrepreneurs.

Perhaps, this study could expand the entrepreneurship literature by adding potential entrepreneurs' perspectives from Nigeria. As this study was conducted in the Nigerian context and specifically on potential entrepreneurs in Bauchi State, the findings may substantiate the generalizability and applicability of the VEM Theory, the PTT theory, the EET theory, the Gallup entrepreneurship model and empirical findings in different entrepreneurship practice contexts.

Furthermore, a number of empirical evidences indicate that self-employment is being measured and considered employing these three theories separately (Hoffmann & Casnocha, 2012; Manolova et al, 2012; Wanyako, 2013; Ramoni, 2016;). The Vroom expectancy motivation theory measure self-employment in terms of beliefs and perception (Manolova et al, 2012; Hsu et al., 2014). The personality trait theory, measured self-employment in terms of traits of entrepreneurs (Coon, 2004; Simpeh, 2011; Hoffmann & Casnocha, 2012; Koomson, 2015; Romania, 2016), while the economic entrepreneurship theory stressed on economic incentive factors to measure self-employment (Papanek & Harris, 1972; Kumar, 2011; Kiragu & Sakwa, 2013; Wanyoko, 2013; Ndubuisi, 2015; Mokua & Memba, 2015). These theories are from two different domains; psychology and economics.

However, because these theories were applied to measure self-employment separately in previous studies by different scholars (Hoffmann & Casnocha, 2012; Wanyako, 2013; Hsu et al., 2014; Ramoni, 2016), there is a paucity of studies that examined their combined and relative contribution to measure self-employment. In this direction, due consideration should be given to these negligible and combine contributions of psychological and economic

determinants of entrepreneurship. Thus, according to Uyangoda (2011) & Dissanayake (2013; 2015), whenever theories were merged from different domain to measure a particular concept, such is a theoretical extension, and hence another theoretical contribution of this research.

#### **1.4.2 Conceptual Gap**

The Gallup (2012) entrepreneurship model focuses on some factors as predictors of self-employment such as the role of government (regulation), access to markets, access to information, social capital, culture, and experience while remaining silent on some environmental factors such as taxation incentives, machinery/equipment, ICTs', and vocational training. These factors are vital in motivating potential entrepreneurs to achieve self-employment (Robertson, 2010; Dike, 2013; Dereje, 2014; Mercy, 2017). However, there is dearth of studies that combined the relative contributions of these factors together through entrepreneurial motivation to effect and measure self-employment (Hoffmann & Casnocha, 2012; Wanyako, 2013; Ramoni, 2016). Thus, the combined strength of these factors that were investigated, fills the conceptual gap of the present study.

In addition, empirical evidences from previous studies that examine and measure self-employment indicates lack of consensus from their findings (Kevin et al., 2010; Dunkelberg, 2013; Gulen & Mihai, 2013; Gholami & Birjandi, 2016; Miller & Breton-Miller, 2017; Fossen et al., 2017). For this reason, this study premise that entrepreneurial motivation might mediate in the relationship between entrepreneurial traits and economic incentive factors in measuring self-employment. The mediation of entrepreneurial motivation which has been much relevant to the present study (new business start-up) enhances the Gallup model, thereby filling another conceptual gap of this study.

### **1.4.3 Contextual Gap**

A number of studies were conducted on determinants of self-employment. However, most of these studies were conducted in Europe (Dawson et al. 2009; Kerr & Nanda, 2011; David et al., 2014), in United States of America (USA) (Moberg, 2014; Davis, 2015; Airgeadais, 2015; Sozen et al., 2018) and Asia (Wu, 2009; Uddin & Bose, 2013; Yushuai et al., 2014; Nakagawa, 2014). However, due to the economic, political and socio-cultural differences, and despite the wide body of literature that has empirically studied the impact of many antecedents of self-employment, there is a paucity of knowledge of the determinants of self-employment in the context of potential entrepreneurs in Nigeria. Hence, this research conducts an investigation on the determinants of self-employment through the mediating role of entrepreneurial motivation to complement the potential entrepreneur's realization of self-employment objective. This fills the contextual gap of this study.

### **1.5 Research Questions**

The research questions of this study are formed in a manner to make an answerable investigation into the specific concern or issue raised from the problem statement of this research. There is an ineffective and inadequate motivation and support for the potential entrepreneurs, especially with regards to the factors highlighted in the problem statement, and the lack of motivation from the aspect of such factors drains an effective potential self-employment. The following are the research questions of this study:

**RQ1:** What is the impact of entrepreneurial traits and economic incentive factors in influencing entrepreneurial motivation among potential entrepreneurs in accomplishing self-employment?

**RQ2:** Does entrepreneurial traits and economic incentive factors enhance entrepreneurial motivation among potential entrepreneurs in realization of self-employment?

**RQ3:** To what extent does government commits the provision of entrepreneurial motivation and support in the development of entrepreneurship?

## **1.6 Research Objectives**

The objectives of this study are clear and concise statements that provide the researcher with a direction to investigate the variables of the study, as well as stating clearly what the study intends to achieve. Based on the research gaps and issues, accordingly, the following objectives are formulated:

### **1.6.1 General Objective**

The main objective of this research is to conduct an investigation on the determinants of self-employment and to determine a mediating role of entrepreneurial motivation of potential entrepreneurs in Bauchi State, Nigeria.

### **1.6.2 Specific Objectives**

The specific objectives of this study are the breakdown of the overall objective that reflects the specific target that this study wants to achieve. Thus, these specific objectives are formulated on the ground to systematically and clearly address the various research questions and objectives in order to achieve the main purpose of the study. The specific objectives are as follows:

- i. To identify the main entrepreneurial traits and economic incentive factors impacting an effective self-employment start-up;

- ii. To assess the extent that entrepreneurial traits and economic incentive factors play in influencing an effective entrepreneurial motivation;
- iii. To extend a model/framework for entrepreneurial motivation towards potential self-employment in Nigeria;
- iv. To examine the extent that government commits in the provision of entrepreneurial motivation and support in the development of entrepreneurship

### **1.7 Contribution of this Research**

The aim of this study in the field of entrepreneurship has been an investigation of the determinants of self-employment through the mediating role of entrepreneurial motivation of potential entrepreneurs. The unemployment issue has remained a matter of concern among various stakeholders toward proffering a possible solution to the prevailing unemployment menace. Collectively, there is a much apprehension and concern that investment on self-employment should be reciprocate and be justified towards enhanced new business start-up among potential entrepreneurs. Thus, it is essential for this research to conduct an investigation on entrepreneurial traits and economic incentive factors to reveal its influence on the potential entrepreneur's self-employment start-up.

This study will contribute to the overall practices of entrepreneurship through better understanding of both decisive and factors that influence self-employment (new business start-up). Thus, it will provide a blueprint for stakeholders in determining and identifying potential entrepreneurs' motivational elements in utilization and harnessing the resources committed in self-employment start-up. The study would also serve as a guide for the stakeholders in entrepreneurship to decrease factors that do not enhance entrepreneurial

motivation towards successful entrepreneurial activities despite recent economic downturn and trends in technology.

Additionally, with regards to the past literature on entrepreneurship, this study is expected to empirically contribute to the body of knowledge (self-employment) in order to redress the inadequacies and inconsistencies found by examining the mediating role of entrepreneurial motivation on entrepreneurial traits and economic incentive factors in effecting self-employment. Moreover, this study expand the entrepreneurship literature by adding potential entrepreneurs' perspectives from Nigeria. In addition, as this study was conducted in the Nigerian context and specifically on potential entrepreneurs in Bauchi State, the findings may substantiate the generalizability of the VEM theory, the PTT theory, the EET theory, the Gallup entrepreneurship model and empirical findings in different entrepreneurship practice contexts.

Furthermore, it is imperative for stakeholders in entrepreneurship to recognize the magnitude of entrepreneurial motivation in ensuring positive self-employment start-up. Hence, this research work will serve as an essential parameter to stakeholders in entrepreneurship for enhancing the environmental munificence factors and the potential entrepreneurs' sense of motivation and responsibility towards achieving the overall goals of the self-employment realization.

### **1.8 Novelty of this Research Work**

The main objective of this present research is to examine the roles of entrepreneurial traits and economic incentive factors, through the mediation of entrepreneurial motivation to measure self-employment among potential entrepreneurs. However, many research works were conducted in the field of entrepreneurship, but most of these studies focused on

investigating aspects of existing businesses, such as the context of business performance, business sustainability and business growth, while others focused on measuring students' intention.

The recent global financial crisis, the economic downturn and trends in technology resulted in some losses of jobs, which further worsens the menace of unemployment. For this reason, this current research focused on the aspect of a new business start-up among potential entrepreneurs. Remarkably, it has been a maiden time that investigation was carried out in the study area, through which this study examined and measured the opinions of potential entrepreneurs on some important determinants of new business start-up across the study area.

In addition, the three theories guiding this research work were employed by prior studies separately. This study employed the combined and relative strengths of these theories to measure self-employment. Essentially, the recent economic downturn and trends in technology might pose an adverse effect on the new business start-up. For this purpose, maintaining an extent of a required trait by the potential entrepreneurs, as well as the effective provisions of the economic incentive factors by relevant bodies is essential. Thus, this will facilitate and results in an effective self-employment realization among the potential entrepreneurs. In this direction, this research utilized the combined and relative contributions of the Vroom expectancy motivation theory, the economic entrepreneurship theory and the personality trait theory to carry out the investigation.

### **1.9 Scope of the Study**

The scope of this study is Bauchi State, Nigeria. With a population about 5 million, according to the 2006 census, Bauchi state has gone through a tremendous transformation since it was created. During the colonial era up to independence, it formed part of the Bauchi-Plateau of

the then Northern Region, until the 1976 state creation exercise, when the Bauchi, Borno, and Adamawa provinces constituted the former North-Eastern State. Bauchi State lies between 9.30 and 12.30 north of the equator, and 8.50 and 110 east of the Green Which Meridian.

The State is bordered by eight States, namely; Kano, Jigawa, Plateau, to the west; Adamawa, Taraba, Yobe and Gombe to the North East; and Kaduna to the North West. The state has a land area of 549,260 sq. kilometers, which is about 5.3% of Nigeria's total land mass (Nigeria Galleria, 2017). With the creation of Bauchi state in 1976, then comprising present Bauchi and Gombe states, it included 16 Local Government Areas. The number of Local Government Areas in the then Bauchi state was increased to 20 and later to 23. However, in 1997 when Gombe state was created out of Bauchi and additional local governments were created in the country, Bauchi state was left with 20 Local Government Areas. Bauchi state has a total of 55 tribal groups in which include Hausa, Fulani, Gerawa, Sayawa, Jarawa, Bolewa, Karekare, Kanuri, Fa'awa, Butawa, Warjawa, Zulawa, and Bada were the main tribes. Figure 1.2 shows the map of Bauchi State, Nigeria, showing its geographical location



**Figure 1.1:** Map of Bauchi State, Nigeria, showing its geographical location

Sources: Bauchi State Government of Nigeria (2017). <https://www.bauchistate.gov.ng>  
Nigeria Galleria (2017). <https://nigeriagalleria.com>

According to tradition, it was named for a hunter known as Baushe, who settled in the region before the arrival of Yakubu, the first traditional ruler of the Bauchi emirate (founded 1800–10). There are cultural similarities in the people’s language, occupational practices, festivals, dress and there is a high degree of ethnic interaction, especially in marriage and economic existence (BSGN, 2017).

As part of self-employment practices traditionally, Bauchi State is known for its arts and crafts which include beautiful embroidered caps and gowns (known as babbanriga), fibre craft, and decorated calabashes. It is also very versatile in the production of metal works (such as weaponry), agricultural tools, pottery, and leather works. The leather works include the production of sitting poufs, bags, and footwear. Mat weaving is also a common craft in several Local Government Areas like Zaki, Ningi, Misau, etc. The outstanding festivals include Durbar whose main feature is horse riding.

The durbar features the parade of horses from the Eid-prayer ground to the palace of the traditional rulers where the horse-riding and other display of horsemanship takes place (Nigeria Galleria, 2017). There are about six entrepreneurship and skills acquisition centres, which were created across the three geographical/political zones in the state. The respondents for this research cover all registered participants/apprentices of these six entrepreneurship and skills acquisition centres in Bauchi State, Nigeria. These skills acquisition centres are M. A. Empowerment and Vocational Training Initiatives, Future Assured Women and Youth Empowerment Centre, Azare Skills Acquisition Centre, Dambam Skills Acquisition Centre, Alkalari Entrepreneurship and Skills Development

Centre and Ningi Skills Acquisition Centre which were defined by the researcher as clusters, in which data were collected. The respondents are graduates from Universities, Polytechnics, Colleges and failed small business owners in Bauchi State, Nigeria.

## **1.10 Operational Definitions of Terms**

The operational definition of the terms of this study has defined the specific terms or concepts in a way it can be thoroughly measured in achieving the objectives of this study. The following are the terms that were defined, which have been relevant to the context of the study:

### **1.10.1 Transformationality**

Transformationality is defined as an essential trait of an entrepreneur through which he/she enhances the morale, inspires change driven, mobilizes resources and challenges the status quo in self-employment (Georgianna, Müller, Schermelleh-Engel & Petersen, 2016).

### **1.10.2 Resilience**

Resilience is defined as a key trait of an entrepreneur that enables him to bounce back, recover easily from setbacks, including risks that may be encountered in the process of his/her self-employment realization (Bulmash, 2016)

### **1.10.3 Autonomy**

Autonomy is defined as a trait in which entrepreneurs reflects a tendency towards being free of the influence, authority, and control of others, whether in relation to authoritative personal dependency, or procedural constraints in self-employment (Edelman et al. 2010).

#### **1.10.4 Information and Communication Technology**

Information and communications technology is defined as a technology which designs, develops, supports or manages internet and computer-based information systems for presence, advertising, online sales, showcasing, and pricing of goods and services for business purposes (Mercy, 2017).

#### **1.10.5 Vocational Training**

Vocational training involves the creation and sustenance of career-enhancing education and training programmes that are responsive to the current and future desire in entrepreneurship practices (Sharmila et al., 2016).

#### **1.10.6 Taxation Incentives**

Taxation incentives is defined as a key component of fiscal policy within the scope of industrial policy, that has been set out as a plan on what taxes, governments choose to levy, in what amounts, that an entrepreneur is expected to incur and the effect that taxes can have on the business (Chatterji et al., 2013).

#### **1.10.7 Financing**

Financing is defined as a means that addresses key questions which challenge all entrepreneurs with regard to how much money can and should be raised; when should it be raised and from whom, the value and resource allocation applied to new ventures as well as the reasonable valuation of the self-employment start-up (Gichuki et al., 2014).

#### **1.10.8 Machinery/Equipment**

Machinery/equipment is a physical capital that is used as a motivation in the operations of a business conducted across different varieties of occupations/trades to manufacture a product, provide a service or use to sell, store and deliver merchandise by entrepreneurs in self-employment (Kabir et al., 2012).

#### **1.10.9 Entrepreneurial motivation**

Entrepreneurial motivation is defined as the process that activates and motivates the entrepreneur to exert a higher level of efforts for the achievement of his/her entrepreneurial goals in self-employment (Darnihamedani, 2017).

#### **1.10.10 Self-Employment**

Self-employment is defined as the process of earning a living and income through using own capital or borrowed funds by utilizing own knowledge and intelligence to harness all resources efficiently and effectively (Evans et al., 2009; Jagero et al., 2011).

### **1.11 Structure of the Thesis**

The structure of this thesis shows the overall contents of this thesis as it has been systematically arranged in the order of the chapters contained Such that each chapter is preceded with the next chapter relevant with the thesis structure.

The structure of the thesis is presented in Figure 1.2.

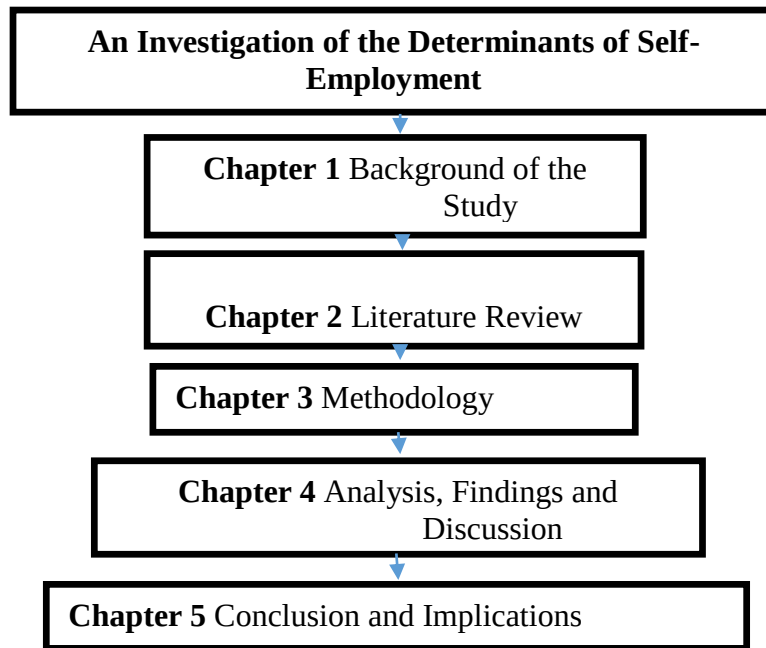


**Figure 1.2:** Structure of the Thesis

The contents of this research are categorized into five chapters. The first chapter discussed on the background of the study, problem statement, and the conceptual framework of the research. The objectives of the study were also stated, as well as the hypotheses of the research and the research questions. The significance of the research was explained, the definitions of terms were provided and the scope of the research as well as the structure of the thesis was outlined. The overall objectives of this research work are to examine the impact of the determinants of self-employment which are the constructs entrepreneurial traits (i. e., transformationality, resilience, and autonomy), the economic incentive factors (i. e., ICTs, vocational training, taxation incentives, financing and machinery/equipment), and self-employment. Furthermore, the research has assessed the mediating role of entrepreneurial motivation between the determinants to measure self-employment.

The second chapter reviewed related literatures regarding the preceding empirical studies and past theories. The literature review was conducted on related thesis, journal articles and textbooks. In this chapter issues that are relevant to the concept of self-employment were discussed to explain the support and argue about the relationships between entrepreneurial motivation, the constructs of entrepreneurial traits and economic incentive factors to evaluate self-employment. In addition, previous studies were also identified and discussed. This is with a view to formulate the hypotheses and conceptual framework of the current study. In other words, the reviews of studies that are relevant were done, in order to ascertain the conceptual frameworks for this study. Past literatures were thoroughly reviewed thus the scope and directions of the present study were identified, background and concepts of this study were elaborated, the empirical bases of the research were provided, the hypothesized relationship between the proposed variables were clarified. These served as evidences which further strengthened the suggested role of entrepreneurial motivation as a mediator in the relationship between the constructs of entrepreneurial traits and economic incentive factors in measuring self-employment.

The third chapter presented the methodology used in conducting this research. The chapter described the philosophical stance of the research, the research design has outlined and described the population and sample of the study, procedures for data collection, instruments, pre-test, pilot study, and procedures for data analysis. Explicitly, the cluster sampling method was utilized for the data collection, and the study employed cross-sectional survey in collecting the data through a survey questionnaire.

The fourth chapter discussed about the findings of this study. The chapter contained the data screening and preliminary analysis, demographic profile of the respondents, and the

hypothesized model of the research. The results of measurement model tests were presented to signify the validity and reliability of the instruments used. Partial Least Squares – Structural Equation Modeling (PLS-SEM) was applied to test the research hypotheses and thereafter analyzed the collected data. The analysis of the direct effects and the analysis of mediation effects were also presented in this chapter.

The fifth chapter is concerned with the conclusion, implications recommendations for future studies. The essential findings of this study are concluded in this chapter. Furthermore, the implications of this research to theory, empirical implications, implications for methodology, and the practical implications were discussed. In addition, the limitations of this research and a number of recommendations for future studies are also discussed.

## **1.12 Concluding Remarks**

In conclusion, descriptions and explanations have been made in the sections and sub-sections contained in the chapter. This comprises the background of the study, the problem statement and the research gaps. It also highlighted the objectives of the study, the research questions, and the conceptual framework of the study. Finally, the significance/contributions of the study, the scope and limitations, as well as the definition of terms were presented. Chapter 2 will provide the empirical reviews and the hypotheses development on the variables and constructs of this study, the theoretical perspectives and the theoretical underpinnings guiding this research. This led and guided the development of the conceptual model of this study.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The contents of this chapter are organized into five sections. The first section discusses the concept of unemployment with relevant literatures and findings regarding the nature of the concept. The second section contains empirical literature on self-employment, highlighting the background of the self-employment. The second section elaborates on the concept of entrepreneurial motivation and finding explaining the nature of the influence of entrepreneurial motivation in entrepreneurship. The theories underpinning this research are highlighted in the third section, which explains the theoretical framework and background of this research. The fourth section discusses the hypotheses development, upon which the hypotheses tested in this research were established for a subsequent statistical testing. The fifth section shows the PLS-SEM model of the study, which demonstrate how the hypotheses of the research are interrelated. The sixth section highlights the summary of the hypotheses of the research, while the last section provides concluding remarks on the chapter.

#### **2.2 Unemployment**

The concept of unemployment dates from the end of the 19th century and is closely associated with the rise of industrialized wage economies. Before that time, persons without work were indiscriminately described as unemployed, regardless of the reason. The downturn in the world economy that began in the 1870s and continued until the mid-1890s forced a large number of workers into idleness; such conditions eventually led to a new approach to unemployment, one that emphasized its involuntary nature (Carolynne, 2016).

The statistic on unemployment rate is one of the most prominent indicators of how well an economy is performing because of the perceived difficulty to finding a job, especially during periods of recession. Thus, according to Arulampalam & Papini (2017), the knowledge of factors that influences unemployment rate could be a veritable platform to designing and adopting appropriate policy strategy aimed at achieving inclusive growth and welfare. Although unemployment applies to all resource inputs used in production process, the term is however, used in relation to labour unemployment in economic circles. The reason is that the bizarre movements in self-employment also translate directly to employment outcomes of other important factor inputs as basic determinants.

While some developing countries and developed countries are experiencing higher rate unemployment, some are at the moderate/lower level. Shepherd & Patzelt (2018) in their investigation found that in the United Kingdom, the current statistics postulates that the number of jobless youth between 16 and 24 years old is now 1.02 million. Also, Delmar, Davidsson & Gartner (2013) confirmed from the results of their research that there were a total of 2.62 million unemployed people in the quarter, the highest total which left the unemployment rate at a higher than expected 8.3 percent.

There is an overwhelming consensus that, to attain higher economic prosperity in any nation, improved welfare, increased earnings and expected reduction at the poverty level, the need to curtail unemployment is important. According to Binder & Coad (2013) and Arulampalam & Papini (2017), the inadequate employment opportunities have a number of socio-economic, political and moral consequences. Low productivity, social devices and chronic poverty are among such consequences. Unemployment and perennial poverty, low earnings, dilapidated welfare and low productivity are so intertwining to the extent that every country

that is faced with such adversity may find it difficult to grasp the wave of development (Afolabi, 2013). According to Idris (2015), recent statistics show that unemployment rate in Nigeria has increased to 23.9 percent during the first half of the year 2014. In addition, to the already daunting statistics of over 43 million unemployed youths, an additional 1.8 million people joined the long queue. This was attributed to fresh entrants to the job market and worker layoffs across all sectors of the economy.

In Nigeria, according to Carolynne (2016), the national unemployment rate, rose from 11.4 percent in 2011 to 18.8 percent in 2018. The high rate of unemployment observed was attributed largely due to the global financial crisis and economic downturns. Specifically, the economic downturn led to the implementation of stabilization measures, which included restriction on exports, which caused import dependency of most Nigerian manufacturing enterprises, which in turn resulted in operation of many companies below their installed capacity (Afolabi, 2013). This development led to the close down of many industries while the survived few were forced to retrench a large proportion of their workforce. This indicated that unemployment has been a major problem in most countries in the world including Nigeria.

### **2.3 Self-Employment**

Individuals seeking a new or better career have considered self-employment as a viable option to sustain a means of livelihood (Jagero et al., 2011). The emergence of interest in self-employment is evident, as it is receiving more attention from researchers all over the world (Huelva, 2009; Livanos, 2009). Self-employment is considered important, which translate into wealth creation, improvement in living standard as well as an overall expected reduction in poverty level (Huelva, 2009). The practice of self-employment has been in an

increase across the globe. It was initially trade-by-barter, which is the exchange of goods for goods or services was solely the practice (Henley, 2007).

As a result of this consequently, trade by barter transaction was replaced by the use of tangible money or cash, which brings new insight into self-employment development (Nicks, 2008). This process brings about specialization among producers due to the later transformation of the system into a trade of goods and services. Later, societies came to realize the areas of production that they are best specialized and put more attention, and concentration on it. This resulted into engagement in production that subsequently brings about the self-employment practice (Nicks, 2008; Raimi & Towobola, 2011). Subsequently, various governments embrace the establishment of entrepreneurship development that are mainly skills acquisition in nature as part of many nations government interventions. Such effort was meant to encourage unemployed potential entrepreneurs to be self-employed by owning a business (Ezekiel, 2016). The entrepreneurship development programmes were seen as programmes that may provide support and motivation to have a favourable and conducive atmosphere for entrepreneurship development in practice among potential entrepreneurs.

According to Cahna (2008), with such entrepreneurship development programmes, to attain an achievable reality of self-employment among nations, priority support has to be given to potential entrepreneurs for self-employment opportunities. With such employment opportunities, the larger number of unemployed potential entrepreneurs will get jobs, and which will increase income within a society. Most governments apparently believe that motivating an entrepreneur to gain an enterprising behaviour results in job creation and may likely promote economic growth (Dawson et al., 2009).

Subsequently, after gaining an enterprising behaviour, Fátima (2012) considered considers the potential entrepreneurs to be capable of forming their business or as individuals who earn from their own efforts, by exercising much determination and derive their income from their self-employment practice. Such enhanced enterprising behaviour may results in growing interest in self-employment, which can be translated by the fact that academic studies on the motivation for self-employment have steadily been increasing over time (Thurik, Carree, Stel, & Audretsch, 2008). Taking this into consideration, entrepreneurial motivation for the potential entrepreneurs becomes indispensable.

## **2.4 Entrepreneurial Motivation**

Motivation refers to the initiation, intensity, direction and persistence of behaviour. The motivations may be considered as the spark that transforms a latent intention into real action and therefore, bridging the link between intentions and actions in the particular setting of self-employment (Carsrudand & Brannback, 2011). The drive that activates and motivates the entrepreneur to exert a higher level of efforts for the achievement of entrepreneurial goals is known as entrepreneurial motivation (Darnihamedani, 2017). In addition, Sozen & O'Neill (2017), believed that entrepreneurial motivation stands as a force or drives within an entrepreneur that affect the direction, intensity, and persistence of voluntary behaviour as an entrepreneur. At this point, a motivated entrepreneur is expected to be willing to exert a particular level of effort to attain self-employment.

Such motivation sparks the interest of the potential entrepreneurs to be more intensified being the initial stage during the prior to new business start-up. According to de Jong (2013), having the intention to be involved in entrepreneurial activity does not automatically induce entrepreneurial behaviour. Thus, it is interesting to understand what triggers the decision of

individuals to assign time, effort and resources to accomplish what they intend to accomplish through the venture they pursue (Lee, Wong, Foo & Leung, 2011). Thus, entrepreneurial motivation might be a prior antecedent that influences the extent of efforts exert by potential entrepreneurs in the realization of the self-employment target (Braunerhjelm et al., 2010).

Previous empirical research on the role of the motivation of entrepreneurs has acknowledged the importance of such motivation. Scholars such as (Yushuai et al., 2014; Isa & Muhammad, 2015; Awruk & Staniewski, 2015; Kisker, 2016) who looked critically at the importance of the motivation of potential entrepreneurs in their empirical research emphasized the essence of such motivation for self-employment realization. The authors define business creation as the identification of business opportunities and access to appropriate resources for entrepreneurs. Sozen et al. (2017) emphasize that limited empirical research on the motivation of entrepreneurs is not an indication of the lack of relevance of entrepreneurial motivation as a research area.

The researchers invoked for the influence of human motivation in the process of self-employment/business creation on developing a more realistic explanation of entrepreneurial motivation (Awruk & Staniewski, 2015). The motivation of entrepreneurs is an important research field to explain the development of new ventures based in the field of entrepreneurship (Yushuai et al., 2014; Kisker, 2016). Moreover, according to Sozen et al. (2017), in order to offer a motivation for job creation by creating the right environment for self-employment, the motivation of potential entrepreneurs must be understood to promote them in the environmental context. The motivation of potential entrepreneurs to start their own business, which have a high probability to establish a successful business, supposed to be determined by the given support for self-employment within a nation's programme

(Shane et. al., 2012). The support of the government and relevant stakeholders would be of paramount importance to promote the motivation of potential entrepreneurs to start their own businesses. Thus, through effective motivation, the potential entrepreneurs may have the courage to exert a desired degree of effort, which may subsequently result in an effective realization of their self-employment objective (Kisker, 2016).

## **2.5 Theoretical Underpinnings**

From the theoretical perspectives, many scholars have employed and utilized different theories to understand the underlying determinants of self-employment (Dawson, Henley & Latreille, 2009). Currently, some of these theories that were used to understand the antecedents and determinants of self-employment include; social capital theory (Kumar, 2011; Chowdhury, 2017), push and pull theory (Nicolas & Acosta, 2010), resource-based theory (Johannsen, 2012; Airgeadais, 2015), the theory of planned behaviour (Mercy, 2014; Ajagbe et al., 2016), human capital entrepreneurship theory (Hayward et al., 2010; DeAngelis, 2011), job shopping theory (Kurtz, 2010; Melia, Perez & Dobon, 2010) Schultz Approach theory (Moore et al., 2013; Song, 2016), the discovery and opportunity theory of entrepreneurship (Caliendo et al., 2012; Aziz et al., 2013), Knight's Approach (Johannsen, 2012), the theory of entrepreneurship (Dike, 2013; Elebute & Shagaya, 2016), Need of achievement theory (Biavaschi et al., 2012; Sharmila et al., 2016), McClelland's theory of motivation (Sozen & O'Neill, 2017), and opportunity-based entrepreneurship theory (Carsrud & Brännback, 2011). One reason for using different theories to measure and understand the underlying determinants of self-employment is the complexity, multi-dimensionality and nature of factors that determine self-employment.

Consequently, due to the aforementioned theoretical perspectives, this research will be guided by the Vroom's Expectancy Motivation Theory (Vroom, 1964; 1974), the Personality Trait Theory (Landstrom, 1988) and the Economic Entrepreneurship Theory (Papanek & Harris, 1972). Empirical evidences indicate that self-employment is being measured and considered by the Vroom's expectancy motivation theory, the personality trait theory and the economic entrepreneurship theory separately (Manolova et al., 2012; Gatewood et al., 2012; Hoffmann & Casnocha, 2012; Wanyako, 2013; Ramoni, 2016).

The personality trait theory, measured self-employment in terms of traits of entrepreneurs (Coon, 2004; Mukherjee, 2010; Simpeh, 2011; Koomson, 2015; Romania, 2016), while the economic entrepreneurship theory, measured self-employment in terms of economic incentives (Papanek & Harris, 1972; Saleemi, 2009; Kumar, 2011; Kiragu & Sakwa, 2013; Wanyoko, 2013; Ndubuisi, 2015; Mokua & Memba, 2015; Alani, Rowland & Ezekiel, 2016). These theories are from two different domains; psychology and economics. Thus, the combined and relative strength of these theories may contribute to the body of knowledge.

However, in view of the fact that these theories have been employed to investigate self-employment by different scholars separately, there seems to exist a dearth of comprehensive studies that examined their combined and relative contributions in entrepreneurship context. These negligible impacts of psychological and economic factors that may influence entrepreneurial motivation may bind knowledge from their influences in self-employment. Despite that the entrepreneurial traits were upheld by several scholars as basic determinants of self-employment, hence the necessity for incorporating economic incentives to make the self-employment ambition a reality.

Consequently, according to Uyangoda (2011) & Dissanayake (2013), theories can be used to establish relationships between variables to measure a certain concept from a different context. Such theories can be combined together as a theory extension, to have a clearer appreciation of the concept. This demonstrates how the theoretical extension is executed with the objective of producing new knowledge by incorporating two domains (Dissanayake, 2015). Therefore, the present study merged Vroom's expectancy motivation theory, the personality trait theory and the economic entrepreneurship theory together in order to bridge this applicability and practical problem.

The role of entrepreneurial traits and the economic incentive factors in arousing entrepreneurial motivation towards self-employment can be explained from the perspectives of the Vroom's expectancy motivation theory (Vroom, 1964), the personality trait theory (Landstrom, 1988) and the economic entrepreneurship theory (Papanek & Harris, 1972) as theories underpinning this research.

### **2.5.1 Vroom Expectancy Motivation Theory**

Vroom's Expectancy Motivation Theory emphasizes a process regarding a choice and interest in the alignment of rewards with individual's wants and the connections among expected behaviours, rewards and goals. Accordingly, Vroom (1964) defines motivation as a product of an individual's expectancy that a certain effort will lead to the intended performance, the instrumentality of this performance in achieving a certain result and the desirability of this result for the individual, known as valence. He introduces the concepts of Expectancy (increased effort will lead to increased results), Instrumentality (if you perform well you will receive a valued outcome) and Valence (value placed on the expected outcome).

Victor Vroom's doctoral dissertation "Some Personality Determinants of the Effects of Participation," dealt with the moderating effects of two personality variables; authoritarianism and need for independence on reaction to participation in decision-making won a Ford Foundation award and was published as a book. Vroom took inspiration from this and worked on a general formulation of a theory dealing with the interaction of individual differences and situational variables. The result was his creation of the VIE Theory (Valence, Instrumentality, Expectancy) or "expectancy theory" as published in *Work and Motivation* (Vroom 1964). He decided to restrict himself to problems of individual behavior. This fit well with Vroom's training as a psychologist of focusing on a single person.

Vroom expectancy theory application in the field of entrepreneurship has been based on why do individuals start new businesses? A possible thought process behind one's commitment to starting up can be, for example, something like this: I have no job, or I have now been working in this industry for ten years. All this time, I have worked for other people's companies. But I believe I could do much better if I actually started my own firm providing needed products or services to customer. I know it will take a lot of work, but I also believe that if I work hard, I can successfully start my own new venture. Running my own business will lead to financial rewards for myself and my family. This, again, will allow me to save money for retirement and pay my children's way through good colleges, both of which are important goals in my life right now.

The brief description above contains the key elements of expectancy theory (Vroom 1964). It predicts that an individual will act in a certain way based on the expectation that the act will be followed by a given outcome (e.g., starting a firm will lead to financial success) and

on the attractiveness of that outcome to the individual (e.g., “Financial success is important for me”). Simply put, the theory states that the actions of an individual are driven by expected consequences. Deciding among behavioral options, an individual is likely to select an option with the greatest motivation forces (MF), which Vroom (1964) expressed by the following equation:

$$MF = \text{expectancy} \times \text{instrumentality} \times \text{valence}$$

In the equation, expectancy is the probability (belief) that one’s effort will result in the attainment of desired goals (“If I work hard, I can start my own business”). A person must believe that exerting a given amount of effort can result in the achievement of a particular level of performance (the effort–performance relationship). However, even if expectancies change based on direct and indirect experience or other beliefs, those changes may not be followed by corresponding changes in actual behavior, like effort or performance (Gatewood et al. 2012). Indeed, Vroom (1964) VIE model suggests that, in addition to expectancies, valence and instrumentality are central to understanding motivation. Instrumentality, for its part, is the belief that, if one meets performance expectations, he or she will receive a greater reward. For example, an individual starting a firm may think along the lines of “If I start my own business, financial rewards will follow”. In other words, starting one’s own business is the instrument to gaining financial rewards. Valence is the value that an individual centered on this reward: “How important is financial success to me?” The reward or outcome should be attractive in order for people to be motivated to attain it (valence). An individual would remain unmotivated if the benefit or satisfaction associated with the reward or outcome was not high enough (Gatewood et al., 2012).

Even though expectancy theory has mainly been a topic of research in the field of work motivation and organizational behavior (Karimi, Biemans, Mahdei, Lans, Chizari & Mulder, 2017), some recent studies talk about expectancy theory in the context of entrepreneurial behavior. Manolova et al. (2012) conceptualize new venture creation as a process based on the effort-performance-outcome model of entrepreneurial expectancies. In other words, entrepreneurial motivation would depend on three elements; expectancy, instrumentality and valence. Shepherd & Patzelt (2018) found that entrepreneurs, who believe in their skills and abilities, are motivated to exert the necessary effort.

Manolova et al. (2008) conceptualize new venture creation as a process based on an effort–performance–outcome model, and find that the model explains differences between men and women with respect to their motivations in starting new businesses. Edelman, Brush, Manolova & Greene (2010) offer a model where the choice to pursue entrepreneurship is based on a person's utility function, which reflects perceptions about anticipated income, the anticipated amount of work effort to achieve this income, the risk involved, plus other factors such as the person's desired attitudes for independence and perceptions of the anticipated environment.

As pointed out by Manolova et al. (2008) implicitly suggest that perceived utility is a function of an individual's perception of the likelihood that personal abilities and efforts in entrepreneurial activity will be successful (expectancy) and that the outcomes will be of value (instrumentality and valence). As Fernández-Serrano & Romero (2012) acknowledged, the phenomenon of entrepreneurship is of particular interest when governments realize that the state alone is unable to ensure adequate levels of production and employment, thereby

resulting in high unemployment, thus this explains why the topic of self-employment is so important.

In the same vein, authors such as Klyver et al. (2013) and Shapiro (2014) has found a certain relationship between the degree of unemployment and the growth rate of self-employment, which implies that the latter increases when salary-based employment opportunities are limited. Following Manolova et al. (2012), the predictive power of the expectancy model extends beyond entrepreneurial motivation since it supposes a decision-making process.

Expectancy motivation theory assumes that action (e.g. new venture formation) will be taken when an individual believes himself or herself to be sufficiently able and motivated for his/her action (Hopp & Sonderegger 2015). Earlier, Hsu et al. (2014) also indicated that enough empirical evidence asserts the positive correlation between an individual's level of execution/action and their motivation and ability.

Figure 2.1 shows the Vroom (1964) expectancy motivation model:

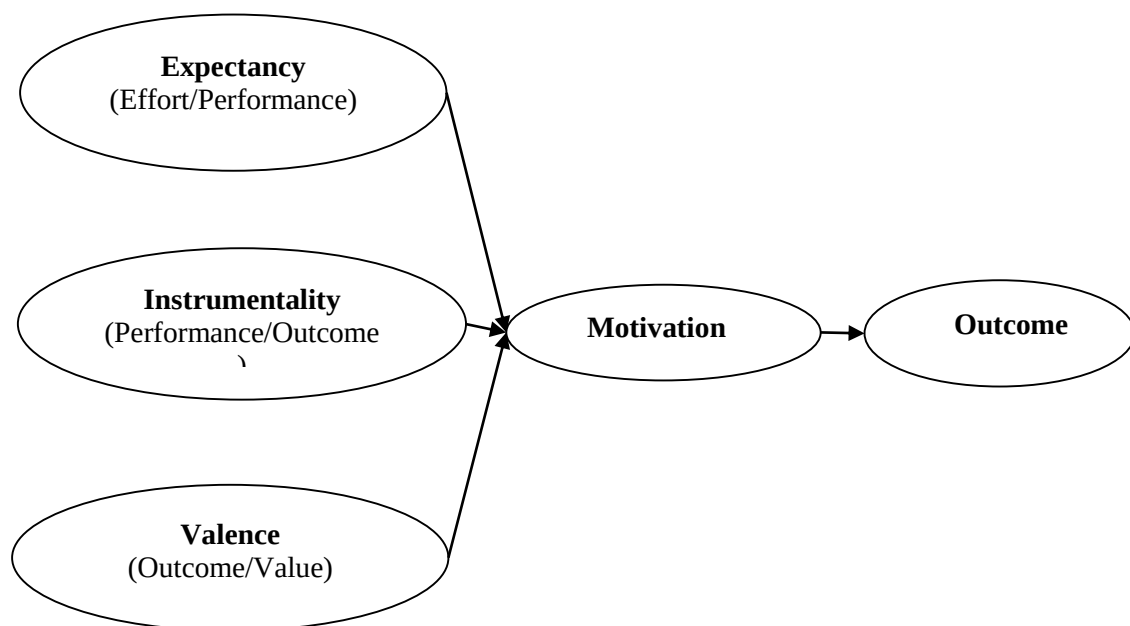


**Figure 2.1:** Vroom (1964) Expectancy Motivation model

### **2.5.2 Personality Trait Theory**

Landstrom (1988) is the proponent of the personality trait theory. Coon (2014) defines personality traits as “inborn characters and stable qualities that in most situations a person displays and potentials that makes such individual naturally an entrepreneur”. Personality trait theory emphasized personal characteristics that define entrepreneurship, and the personality trait theory like any other psychological theories, the level of analysis is the individual (Landstrom, 1998). The insight into these traits or inborn qualities is uncovered by this theory through the identification of the characteristics associated with an entrepreneur (Coon, 2014; Koomson, 2015). The theory believed that the pattern of behaving, thinking and expression of feelings or ideas is unique to a particular individual (Coon, 2014). Each day individual interacts with unique and different persons that possess trait and qualities that are personally distinctive which constitutes their personality.

The personality trait theory is primarily interested in the measurement of traits, which can be said as habitual patterns of behavior, thought, and emotion. According to this perspective, traits are relatively stable over time, differ across individuals and influence behavior (Kassin, 2013). According to a personality theorist, Gordon Allport (1998), the trait approach to personality is one of the major theoretical areas in the study of individual’s qualities and behaviours. The personality trait theory suggests that individual personalities are composed of broad dispositions (Landstrom, 1988). A trait can be thought of as a relatively stable characteristic that causes individuals to behave in certain ways. Unlike many other theories of personality, such as psychoanalytic or humanistic theories, the personality trait theory approach to personality is focused on differences between individuals (Koomson, 2015). The

combination and interaction of various traits forms a personality that is unique to each individual.

The personality trait theory is focused on identifying and measuring these individual personality characteristics (Ramoni, 2016). The personality trait theory gives some insight into traits as inborn qualities by identifying the characteristics associated with the entrepreneur (Simpeh, 2011). These characteristics give the clue or an understanding of these traits or inborn potentials. Some of the characteristics or behaviors associated with entrepreneurs include the tendency to be more opportunity driven; taking calculated risks, pro-activeness and tolerance to ambiguity. Entrepreneurs also demonstrate high level of creativity and innovativeness, high level of management skills and business expertise (Kuratko 2008). They have also been found to be optimistic, (they see the cup as half full than as half empty), emotionally resilient and have mental energy, they are hard workers, show intense commitment and perseverance, thrive on competitive desire to excel and win, tend to be dissatisfied with the status quo and desire improvement (Landstrom, 1988). Entrepreneurs are also transformational in nature, are lifelong learners and use failure as a tool and springboard. They also believe that they can personally make a difference, are individuals of integrity and above all visionary (Kuratko, 2008).

While Caliendo et al. (2014) pinpoint that no single trait induces individuals to establish a new venture and that the decision is rather affected by a combination of several traits (Miller, 2016). Estay, Durrieu & Akhter (2013) acknowledged that due to the abundance and diversity of traits, it is not possible to give a complete picture of personal characteristics that increase the chance of one's being an entrepreneur. In this regard, Estay et al. (2013) emphasize that, investigations should concentrate on the personality characteristics needed

to cope with founders' entrepreneurial tasks. In this sense, among the large body of scientific literature on this topic, scholars ascribe some specific characteristics to start-up entrepreneurs.

Similarly, in an effort to synthesize with this theory and investigate the impact of personality traits as it may influence the motivation of potential entrepreneur in self-employment start-up, a number of researchers have investigated such influences. These include Mary (2010), Mukherjee (2010), Atkinson (2010), Islam (2011), Mallya (2011), and Hoffmann & Casnocha (2012). Their findings indicate that personality trait exert a significant influence in composing entrepreneurial motivation among the entrepreneurs for the realization of the self-employment objective.

### **2.5.3 Economic Entrepreneurship Theory**

Papanek & Harris (1972) are the proponents of this theory. Economist's view on entrepreneur and entrepreneurship have been a point of interest to economics as early as 1755. The term entrepreneur has been introduced into economics by Cantillon (1755), but the entrepreneur was first accorded prominence in the late 1960's. It was variously translated into English as merchant, an adventurer and an employer, though the precise meaning is the undertaker of a project. Mill (1965) popularized the term in England. According to Shapero (1984), "entrepreneurship is "self-employment of any kind". While Leibenstein (1968, 1979) views entrepreneurial activities as "actions necessary to create or hold on an enterprise where not all markets are well made or clearly defined, in which relevant parts of the production function are not completely known".

Onuoha (2007) defined entrepreneurship as "the practice of starting new firms or revitalizing mature firms, particularly new businesses generally in response to identified opportunities".

In the early 1970's, the scope of entrepreneurial research broadened to include issues such as how entrepreneurs operate and their effect on the economy. While it has been explored to pinpoint who entrepreneurs are, the definition of entrepreneurship has also emerged. Starting a new business became the operational definition of entrepreneurial event. Shapero (1984) was a major researcher and writer on entrepreneurship process. The researcher described the role of entrepreneurship at local and regional levels. Shapero (1984) also explained how starting new business resulted in individual and economic development, and thus tied entrepreneurship to this stance.

The concept was vague, wide and not well defined. Entrepreneurs were looked as adventurers and entrepreneurship was looked as a tentative activity. The economist sees an entrepreneur as someone that combines resources such as labour, materials and other assets, introduces changes, innovations and new orders for profitable and rewarding ends. According to economists, entrepreneurship and economic growth will take place in those situations where particular economic conditions are most favourable. Papanek & Harris (1972) acknowledged that when certain conditions are favourable, entrepreneurship and economic development will take place. These conditions are the environmental conditions termed as economic incentive factors.

According to Papanek & Harris (1972), economic incentives are the major drive for the entrepreneurial activities. Such economic incentives are the integral factors that induce entrepreneurial activities and initiatives (Mohanty, 2009). According to Papanek & Harris (1972), the proponents of the theory, economic incentives include industrial policy, taxation policy, source of finance, infrastructure availability, investment and marketing opportunities, and access to information about market conditions. They also firmly believe

that a well-developed market and efficient economic policies foster entrepreneurship. Therefore, these incentives are regarded as the sufficient conditions for the emergence of entrepreneurship (Saleemi, 2009; Kumar, 2011). When an individual recognizes that the market for a product or service is out of equilibrium, he may purchase or produce at the prevailing price and sell to those who are prepared to buy at the highest price.

According to the economist's view, favourable economic environments provide entrepreneurs fertile ground for their emergence. According to them, efficient economic policies, economic incentives, and a good development market foster entrepreneurship in any country (Kumar, 2011). Economists have always emphasized economic incentives, gains and costs as the most important elements that foster the emergence of efficient entrepreneurs. The economic entrepreneurship theory has been synthesized by several researchers. For example, Mokua & Memba (2015) in their study discovered that the economic incentive factors have an influence on the motivation of potential entrepreneurs in realization of self-employment.

Similarly, Oko & Ndubuisi (2015) revealed an influence the economic incentive factors in motivation of entrepreneurs in successful realization of self-employment. Kiragu & Sakwa (2013) also conducted a study to synthesize with the economic entrepreneurship theory. From their research, it was found that there is a positive influence of the economic incentives in self-employment realization. In the same vein, Kumar (2011) & Saleemi (2009) in their separate studies revealed that there is significant impact of influence of the economic incentive factors on the entrepreneurial motivation of entrepreneurs in entrepreneurship practices.

## **2.6 The Conceptual Framework of the Study**

The conceptual framework for this research is adapted from Gallup (2012) Framework/model on the ground of synthesizing with the three theories underpinning this research (i. e. the Vroom's expectancy motivation theory, the personality trait theory and the economic entrepreneurship theory) and previous empirical evidences on self-employment. Giving regards to these syntheses, and in consideration of the reviewed literature from the previous empirical studies, it is asserted that the combined and relative contributions of entrepreneurial traits and economic incentive factors can influence self-employment. Such factors include transformationality, resilience, autonomy machinery/equipment, vocational training, ICT's facilities, taxation incentives and financing.

Subsequently, the conceptual framework illustrates the mediating role of entrepreneurial motivation on these factors in the way they can influence potential entrepreneurs to become self-employed. The independent variables are transformationality, resilience, autonomy, machinery/equipment, vocational training, ICT's, taxation incentives and financing. Entrepreneurial motivation is the mediating variable, while self-employment is depicted as the dependent variable. Thus, self-employment concept is conceptualized by this research to be well comprehended and actualized from the relative role and relationships of entrepreneurial traits, economic incentive factors with the intervention of entrepreneurial motivation as a mediator.

This research focused on investigating some factors that might provide a good atmosphere for potential entrepreneurs in practicing varieties of occupations as earlier mentioned in the background of this research. These occupations require the access and availability of incentives and factors such as vocational training, machinery/equipment, ICT's facilities, financing and taxation incentives to be successful in attaining self-employment (Pardeshi,

et, al. 2007; Saleemi, 2009; Kumar, 2011; Kiragu & Sakwa, 2013; Wanyoko, 2013; Mokua & Memba, 2015; Ndubuisi, 2015; Alani, Rowland & Ezekiel, 2016). Figure 2.2 shows the conceptual framework of the present research.

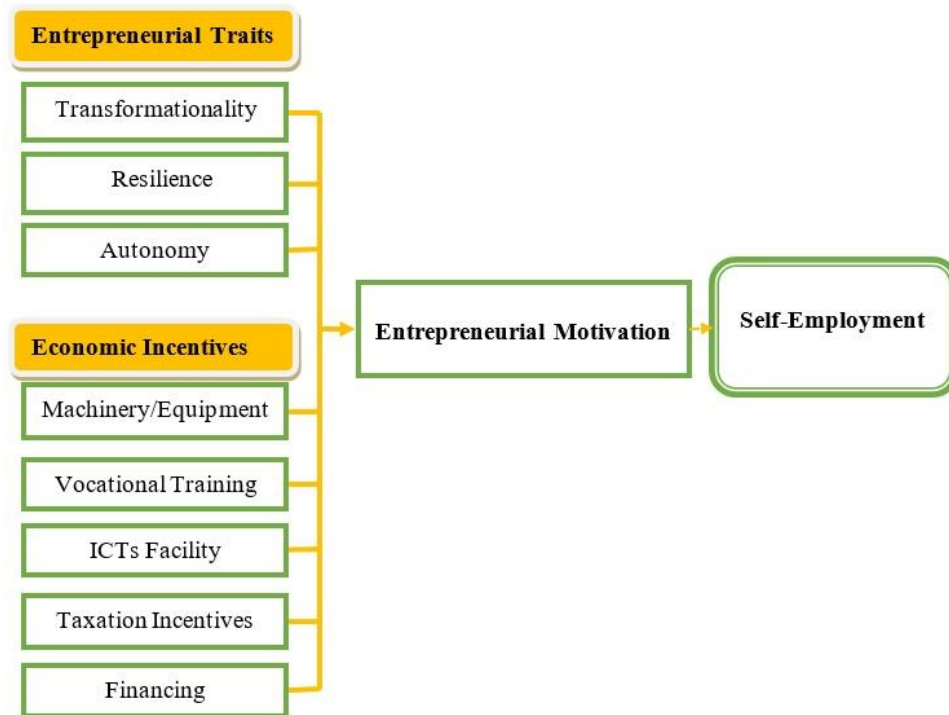


**Figure 2.2:** Conceptual Framework

*Source:* Adapted from Gallup (2012) model

Subsequently, taking into consideration of the current economic downturn and trends in technology surrounding the business environment, particularly the new business start-up propelled another reason for bringing additional factors in the model. Prabhu et al. (2012) have acknowledged that the interaction between the entrepreneurial traits and the environment (economic incentives) create conditions that foster a higher entrepreneurship consciousness that influence the motivation for self-employment. In addition, as a direction for future research, Prabhu et al. (2012) recommended that conducting additional tests and

examining multiple variable interactions may proffer a possible means to tackle issues concerning the business starting process.

Similarly, according to Susanne (2016), the elements affecting self-employment starting processes among potential entrepreneurs have been caused by inadequate training among potential entrepreneurs. Trainings such as vocational training involve mostly applied and practical skills training for proficiency in manual and automated skills (Maclean, Jagannathan & Sarvi, 2012). To this end, the vocational training would provide skills and expertise, which involve specific proficiency, cutting across various types of occupations in self-employment (Scarpetta et al., 2010).

Combining aspects of vocational training allows individuals to recognize opportunities in their occupations and exploit on both skill sets to create socio-economic value and generate income through self-employment (Biavaschi et al., 2012). Offering vocational training in the entrepreneurial context would build transferable competencies in entrepreneurship while fostering highly marketable skills. Maclean et al. (2012) noted that one of the primary objectives of vocational training is providing employability and workplace skills to prepare trainees for occupational skills in self-employment practices.

Furthermore, Silva & Ratnadiwakara (2010) in their investigations revealed that in the developed countries, technological progress from the context of ICT's continues at a relentless speed. It is clear that ICTs offer higher benefit-to-cost ratios in all sectors, while simultaneously offering new ways to create value by better and more efficiently organizing the use of financial and human resources (McGregor & Kartiwi, 2010; Silva et al., 2010; Akande, 2013). Given the potential high returns that ICTs can provide in transforming well-being through self-employment, it remains challenging to commit the impact of ICTs in the

new business start-up among the developing nations particularly Nigeria (Mercy, 2016). Drawing a premise on another important factor is the entrepreneurial motivation. The entrepreneurial motivation is a drive that activates and motivates the entrepreneur to exert a higher level of efforts for the achievement of his/her entrepreneurial goals (Darnihamedani, 2017). Therefore, considering the value attached to the entrepreneurial motivation, if the entrepreneur is motivated, all other factors will be well executed to achieve success.

Therefore, this research conceptualizes that self-employment concept can be well comprehended and actualized from the relative role and relationships of entrepreneurial traits, economic incentive factors such as ICT's, vocational training, taxation incentives, financing and machinery/equipment and with the intervention of entrepreneurial motivation as a mediator. Thus, the variables are expected to extend the Vroom expectancy motivation theory, the personality trait theory, the economic entrepreneurship theory and the Gallup (2012) framework/model.

## **2.7 Hypotheses Development**

Research usually attempts to define an entrepreneur's motivational components in entrepreneurship from the context of their personality traits, and the environment as well. Within the field of the study of entrepreneurship, motivation research analyses an individual's motives for starting a business from such contexts, and has been given a reasonable expectation to hold the motivational turbulence (Karimi et al., 2017). The hypotheses of this study would be developed from previous empirical findings, logical conclusions and theories guiding this research. Thus, the relative impact of the entrepreneurial traits and the economic incentive factors, as well as the entrepreneurial

motivation as a mediator would be tested and subsequently it may be either supported or not supported to attain empirical findings of the study.

## **2.8 Entrepreneurial Traits and Self-Employment**

The decision to become an entrepreneur is traced to be a social and an economic issue. For these reasons, autonomy and self-reliance after becoming self-employed resolved the issues of social and economic menace in a society through job creation (Kritikos, 2014). It increases individual's standards of living, which generate value for themselves by identifying and selling new and more useful products and services through the creation of new businesses. Primarily, taking a decision to become self-employed has become the focal point in the investigation of entrepreneurship, and particularly, the aspect of the potential entrepreneur traits (Mary, 2010). Due to the divergence and multi-dimensionality of entrepreneurial traits, many studies were conducted on the entrepreneur's traits and its relations to being a determinant of self-employment and influences entrepreneurial motivation among the entrepreneurs.

Based on the multi-dimensionality of the entrepreneurial traits, according to Hasan et al. (2010) entrepreneur's traits determine self-employment and influences entrepreneurial motivation. These include the ability to innovate, take risks, self-confidence, personal interest, and the ability to co-operate. Caliendo, Fossen, & Kritikos (2014) acknowledged that agreeableness, extraversion, openness to experience, conscientiousness, neuroticism which are more specifically related to entrepreneurship tasks, influence entrepreneurial motivation and entry into self-employment. Also, according to MacKenzie (2016), the characteristics of entrepreneurs that determines self-employment includes action-orientedness, self-confidence, bearing uncertainty, opportunism, creativeness, discerning

power, inquisitiveness, tolerance of ambiguity and intuitiveness, risk-taking capacity, resourcefulness, affinity for autonomy and control, adaptation, resilience, optimism, tenacity, persuasion and courage.

In addition, Oyvind (2016) assert that innovation is the essence of entrepreneurship. Thus, the necessary conditions for accomplishing a successful innovation are the realistic evaluation of individual's innovation potential in self-employment. Schumpeter (2010) maintains that through instituting new combinations of production, a country's economic development would be manifest as a result of the change brought by entrepreneurs through innovation in self-employment. This portrays that innovativeness influence entrepreneurial motivation in self-employment practice. Innovativeness brings about a new and unique ways of business activities through adoption or creation of an idea or behaviour new to the business by means of exploiting change to accomplish different business goals (Rastbin, 2016).

However, based on the aforementioned multidimensionality of the entrepreneurial traits, the current research will further concentrate and investigate some dimensions of the entrepreneurial traits that were overlooked and under-researched. These dimensions are transformationality, resilience and autonomy (Zahra, 2010). Similarly, according to Renko et al. (2012), although these traits were identified from the literature, they were usually under-researched or ignored in measuring self-employment.

### **2.8.1 Transformationality and Self-employment**

Transformationality has been defined as an attribute through which an entrepreneur enhances and inspires change driven by a strong purpose, mobilizes resources and challenge status-quo in self-employment (Georgianna, Müller, Schermelleh-Engel & Petersen, 2016). A

transformational entrepreneur is described to be less tenacious in his beliefs and open to experiences. Interaction with the external world leads to self-doubt and problems surface, thereby challenging the status-quo and rise for a change. As a result of possessing a transformational trait, an entrepreneur is expected to enhance the morale, performance, as well as expected to being driven by a strong purpose in achieving self-employment (Shukri et al., 2014). According to a finding in a research conducted by Moore et al. (2013), it has been revealed that transformationality as a trait influences the motivation for entrepreneurs and the process and practices of self-employment. This indicates that transformationality has a very vital role among the traits that influence entrepreneurs in self-employment.

Georgianna, Müller, Schermelleh-Engel & Petersen (2016) acknowledged that transformational entrepreneurs typically do not need direction from others, and are able to manage their self-employment practice. Entrepreneurs that possess transformational trait are also regarded as internally motivated. The entrepreneurs use this motivation to direct their efforts positively to the right path in attaining the self-employment target. Also, according to Rastbin (2016), transformationality entails the mobilization of overall resources of an entrepreneur to attain a goal. Thus, the best feature of transformationality on all other entrepreneurial traits is being a tactful trait. Such trait can blend well all available resources as prudent, and to well organize and recognize the effective utilization of such resources to achieve the self-employment objective (Song, 2016).

Furthermore, according to Sazesh & Siadat (2016), the transformationality as a trait possessed by entrepreneurs enable them to be more committed and active in self-employment start-up. This makes them set a reasonable goal in self-employment accomplishment. The entrepreneurs can translate their idea effectively, and also inspire a

sense of commitment and purpose in achieving self-employment. In spite of some few works of literature that studied transformationality as a trait, however, there is a scarcity of studies that investigate the contributions of this particular entrepreneur's trait (Sazesh et al., 2016). Transformationality may influences the motivation of potential entrepreneurs in self-employment from the previous empirical shreds of evidence (Zahra, 2010; Song, 2016).

Transformationality is seen as a determinant of self-employment among entrepreneurs as its role relates to the mobilization of the overall resources in ensuring an effective self-employment start-up among potential entrepreneurs (Sazesh et al., 2016). The well-established importance of this trait, as it influences entrepreneurial motivation and self-employment, suggests that it may also play a significant role in accomplishing self-employment. Accordingly, the more a potential entrepreneur gained transformationality as a trait, the more potential entrepreneur would apply it to start-up a new business. Thus, the hypothesized relationship between transformationality and self-employment is as follows:

**H<sub>1</sub>:** *There is a significant impact between transformationality and self-employment*

## **2.8.2 Resilience and Self-employment**

Resilience has been premised to be important in influencing the motivation of potential entrepreneurs towards accomplishment of self-employment. Resilience has been defined as a trait of an entrepreneur that enables him to bounce back and recover easily from setbacks that may be encountered in the process of self-employment realization (Bulmash (2016). Similarly, according to MacKenzie (2016), the capacity to make realistic plans, have self-confidence, a positive self-image, and have the capacity to manage strong feelings and impulses are the factors associated with resilience. The extent of entrepreneurial resilience has been evident and may be dependent on internal or personal characteristics (Acs, 2010).

Resilience as an individual's ability to successfully adapt to realistic tasks in the face of highly adverse conditions by entrepreneurs has been one of the indispensable traits of entrepreneurs. With resilience, the entrepreneurs may have the ability to rebound from a negative experience with competent functioning in the entrepreneurial process. The concept of resilience among entrepreneurs in relation to the negative effects of adverse situations, in general, is linked to the degree of capacity in the entrepreneurial process.

According to Hayward et al. (2010), the internal or personal characteristics of a potential entrepreneur originates the ability to rebound back from entrepreneurial failure and have been a cornerstone where resilience is understood. Most entrepreneurs will have experienced venture failure and therefore the ability to spring back has been premised as crucial in new venture formation (Blatt, 2009). Hayward et al. (2010) argue that resilience informs confidence, and confidence, facilitates the capacity of the individual to broaden and build their thought in the event of adverse experience that may be encountered.

At this point, resilience as a trait may influence entrepreneurial motivation in self-employment among the entrepreneurs (Hayward et al., 2010). Similarly, resilience is seen as an important predictor of self-employment as its major role relates to the ability to be agile in ensuring and enduring an effective self-employment start-up among the potential entrepreneurs (DeAngelis 2011). However, despite some evidence on the relationship between resilience and self-employment, there is a scarcity of studies that investigate the impact of this particular entrepreneur's trait as its influence the motivation of potential entrepreneurs in self-employment (Hayward et al., 2010; MacKenzie, 2016). The well-established importance of this trait, as it has weight in entrepreneurial motivation to effect

self-employment, suggests that it may play a significant role in the context of self-employment.

Although there are limited studies that investigate the impact of resilience in entrepreneurship, there is an indication from few empirical findings that resilience is associated with self-employment (Bulmash, 2016). But, in order to have more appreciation of the effect of resilience on self-employment, the current research reviews relevant prior empirical studies that synthesize from their findings on the construct of resilience. Thus, the potential entrepreneur's self-employment might be more understood through an intense examination of the impact of resilience on self-employment (Dewald et al., 2010). For this reason, therefore, this research hypothesized the effect between resilience and self-employment as follows:

**H<sub>2</sub>:** *There is a significant impact between resilience and self-employment*

### **2.8.3 Autonomy and Self-employment**

Autonomy is defined as a trait in which entrepreneurs exhibit towards being free of the influence, authority, and control of others, whether in relation to authoritative personal dependency, or procedural constraints in self-employment (Edelman et al. 2010). The need for autonomy/independence regarding numerous traits of entrepreneurs portrays self-determined, independent pioneers who expressed their creativity and explored their ideas without the approval of others in self-employment objective (Fellows, 2016). Autonomy, or independent behaviour, is central to the self-employment concept and critical to the venture initiation process that is involved in entrepreneurship. According to Fellows (2016), the need for autonomy in self-employment among entrepreneurs reflects a tendency towards being free of the influence, authority, and control of others. However, the possession of autonomy

is generally accompanied by an individual's willingness to accept the attendant risks and responsibilities resulting from one's action (Gelderen, 2010).

In a study conducted by Caliendo et al. (2012), the finding revealed that autonomy is a good factor in influencing the motivation and aspiration for business start-up among potential entrepreneurs. This shows that the need for autonomy involves independent self-determination, the process by which a person controls his own capacity in self-employment realization. It involves self-regulation and personal endorsement of one's own actions, the sense that an individual's actions originate from himself (Caliendo et al., 2012). Also, Gelderen (2010) examined the role of autonomy among entrepreneurs and the results of the findings revealed that autonomy has an extent of influence in potential entrepreneurs' motivation in achieving self-employment.

Furthermore, according to Aziz et al. (2013), autonomy involves independent self-determination, the sketch by which potential entrepreneurs have the ability for a control within the context of self-employment practices. Thus, this placed autonomy as an important quality for entrepreneurs because it enables them to have control over their self-employment actions, set their own goals, and make their own decisions independent of external control (Rauch & Frese, 2007). Thus, autonomy influence entrepreneurial motivation which t entails taking control of the business affairs by the entrepreneur.

Conversely, in a study conducted by Binder & Coad (2012), the result revealed a lack of consensus between autonomy and self-employment. The result indicates that autonomy is not a dominant source of entrepreneurial control in self-employment. However, despite such contradiction in findings, many of the aforementioned shreds of empirical evidence indicates that autonomy can influence the motivations of potential entrepreneurs in self-employment

start-up. But besides this, very few literatures examined the relationship between autonomy and self-employment (Fellows, 2016). Autonomy is seen as an important predictor of self-employment among entrepreneurs as its role relates to the aspiration to develop and realize personal values, goals and control in pursuit of business start-up among potential entrepreneurs (Jayawarna et al. 2011).

Thus, the well-established importance of this trait as a determinant of entrepreneurial motivation and self-employment suggests that it may play a significant role in self-employment realization. At this point, this present research would conduct further investigation on the influence of autonomy in motivating the potential entrepreneurs in self-employment accomplishment. Thus, this research hypothesized the influence between autonomy and self-employment as follows:

**H<sub>3</sub>:** *There is a significant impact between autonomy and self-employment*

## **2.9 Economic Incentives and Self-Employment**

An economic incentive can be seen as a factor that influences the motivation of potential entrepreneurs in all efforts to be engaged in a new business start-up in entrepreneurship (Idris, 2015). In practice, however, it is a broadly used term denoting an array of reimbursement intended to encourage the motivation for new business activity or to encourage business start-up or job creation. These incentives encompass tax and financing incentives, infrastructure incentives, ICT facilities, as well as skills acquisition provided by various governments and other stakeholders (Chowdhury, 2017).

In the literature, the influences of a variety of such imperative factors to support entrepreneurial motivation have been evaluated upon the realization of self-employment

among potential entrepreneurs. Due to a large number of different factors, it can be assumed that each factor will have a relatively motivational influence in self-employment start-up (Sozen et al., 2017). In the investigation of economic incentives for achieving self-employment, it is therefore expected that any significant influence by the variety of different factors will be of significant importance for the potential entrepreneurs (Kumar, 2011). Nicolas & Acosta (2010) maintained that recently, the influence of ICTs accessibility and usage along with its importance in enhancing self-employment among the entrepreneurs have been the subject of so much attention and concern. Emerging and developing economies are seeking ways to improve productivity and find new sources of growth through new technologies committed in self-employment (Mercy, 2014).

Also, Silva et al. (2010) acknowledged that, some factors or incentives might provide motivational influence or support in self-employment among potential entrepreneurs. These include information communication technology, skills and knowledge, economic factors such as financing, machinery and materials. Similarly, Ajagbe et al (2016) confirmed from empirical findings that currently is the era where the effective utilization of ICTs has to be taken into consideration in all business operations due to trends in technology. Similarly, Akande (2013) conducted a survey in providing low-cost ICT's facilities that may assist the entrepreneurs in most particularly, with regards to the utilization of ICTs to conduct marketing and sales, processes and research and development. The findings discovered that ICTs is an important factor that influences the motivation of entrepreneurs in self-employment.

On the financing of entrepreneurs, Kerr et al. (2011) and Nagpal et al. (2009) maintained and emphasized that most government financing effort toward providing incentives for self-

employment should be intensified. This indicates the importance of financing as a vital element that influences the motivation of entrepreneurs in effecting and realizing a successful self-employment. Moreover, in the context of skills, according to Dike (2013) and Elebute & Shagaya (2016), potential entrepreneurs should have training such as vocational training, which may influence their motivation to practice varieties of occupations that involve the application of vocational training in realization of their self-employment target.

### **2.9.1 ICT and Self-Employment**

Information and communications technology is a technology which designs, develops, supports or manages internet and computer-based information systems for presence, advertising, online sales, showcasing, and pricing of goods and services for business purposes (Mercy, 2014). Also, Ajagbe et al (2016) defined information communications technology an act that involves the use of electronic computers and software to generate, store, protect, process, transfer, receive and retrieve information securely. To some researchers, information technology connotes to the processing of data or information through computers, in addition to the use of technologies of computing and telecommunications to process and disseminate information (Oladejo & Adereti, 2010; Lasisi et al., 2012). The ICT's is now becoming common and frequently used in carrying out various businesses. It is utilized as a technology for processing data, storage, transfer, management, control and automated data processing in self-employment (Mercy, 2014).

To maintain or create jobs, emerging and developing economies are seeking ways to improve productivity and find new sources of conducting an effective business through utilization of ICTs (Olatunji, 2015). Silva et al. (2010) in their investigation revealed that in the developed

countries, technological progress from the context of ICT continues at a relentless speed. While simultaneously offering new ways to create better value, more efficiently through ICTs, it becomes a motivating factor that influences effective self-employment practice. Therefore, it remains challenging to isolate the impact of ICT's as its impact has often been manifest particularly in the current trends of technology in self-employment realization (Silva et al., 2010).

Given the potential returns that ICT's can provide in enhancing and motivating the entrepreneur's operations in self-employment, issues relating to ICT's developments have been the object of much academic and policy attention of various governments (McGregor & Kertiwi, 2010). Several organizations have made significant efforts to measure and benchmark ICT's deployment and uptake, but few have aimed at equally assessing the impact that ICT's can actually provide to both the entrepreneurs and the economy through self-employment (Hemmer & Heinzl, 2012). Currently, taking into consideration the expected impact of ICTs, information and communication technology has the potential to be an essential tool needed in entrepreneurial activities (Mercy, 2017). This has been the evidence of experienced trends in technology recently. According to McGregor & Kertiwi (2010), information communications technology in particular to entrepreneurship is a leverage for self-employment success. It is also proven that gains have been achieved in entrepreneurial firms which make use of ICT's services when adequately applied and implemented (Akande, 2013).

However, the implementation of ICT's to promote business activities is among the challenges faced by entrepreneurs recently. This has posed a challenge to entrepreneurs due to lack of access and usage of ICT's in running the activities of their firms (Olatunji, 2015).

As a result of the perspectives that some entrepreneurs view the benefits of adopting ICT's in conducting their business operations, a vast majority of them have continued adopting a conventional mechanism in self-employment (Langat, Litondo & Ntale, 2016). In addition, according to Oladejo & Adereti (2010) & Lasisi et. al. (2012), Nigerian entrepreneurs are facing problems regarding access to the ICT's, which consigned them to low or lack of motivation in the aspect of the ICTs. Thus, it subjected the entrepreneurs to being inept in facing the challenges of the technological trends in the current business dispensation. Consequently, much magnitude has been given to information and communication technology as an essential factor in giving support and motivation for entrepreneurs. In addition, according to previous studies, some flaws are still a setback against the effective access and usage of ICT's among entrepreneurs. With due consideration to such lack of consensus and manifest flaws, this study will make further investigation of the concept of ICT's as it influences the motivation of potential entrepreneurs to attain self-employment. Based on these considerations, the following hypothesis is made:

**H<sub>4</sub>:** *There is a significant impact between access to ICT's and self-employment*

### **2.9.2 Vocational Training and Self-Employment**

Vocational training involves the absorption and sustenance of occupational skills and training programmes that are responsive to the current and future desire of occupational practices by entrepreneurs (Sharmila et al., 2016). The aim of vocational training is imparting training to potential entrepreneurs in the much-specified fields through providing significant 'hands-on' experience in acquiring the necessary skill. Such skill is expected to empower and influence the motivation of potential entrepreneurs and make them employable or create for them opportunities for self-employment (Elebute & Shagaya, 2016). Vocational

training involves a specific proficiency in practice of various occupations in self-employment. The vocational training allows potential entrepreneurs to be well equipped and exploit both skill sets to create economic value and generate income through self-employment (Dereje, 2014). Thus, offering vocational training in the entrepreneurial context would build transferable competencies in self-employment while fostering highly occupational and marketable skills (Dike, 2013).

Maclean & Wilson (2009) emphasized the primary objectives of vocational training as providing employability and skills to prepare and influence the motivation of trainees for relevant occupational practices. This enunciate the significance of vocational training among potential entrepreneurs. As a mastery of a body of knowledge and skills that can be applied in a practical way, vocational training program prepares a potential entrepreneur for a successful self-employment start-up (Dereje, 2014). Thus, in this direction, vocational training plays a vital role in influencing entrepreneurial motivation among potential entrepreneurs in self-employment accomplishment (Biavaschi et al., 2012).

Furthermore, Sharmila et al. (2016) in their research discovered that offering vocational training will help potential entrepreneurs build competencies while fostering occupational skills in self-employment. Thus, the vocational training program can strengthen potential entrepreneur's employability as well as enterprising behaviour. In addition, Scarpetta et al. (2010) acknowledged that most particular, potential entrepreneurs with no vocational training face persistent and long-term effects of their early unemployment status and are more vulnerable in the labour market over a long period of time. In addition, Biavaschi et al. (2012) emphasized that effective vocational training is a strong influencing factor in potential entrepreneur's motivation for self-employment start-up.

Nevertheless, Dike (2013) carried out an investigation on the essence of vocational training on self-employment. The finding from the study indicates that there is a flaw on the part of support needed to complement an effective vocational training among potential entrepreneurs in Nigeria. Also, Maclean, Jagannathan & Sarvi (2012) carried out a study of the vocational training as a skill development for employability. Despite the fact that a lot of challenges were encountered from policy issues in the vocational training, the findings of the study emphasized on the need for a priority to be given to vocational training for effective self-employment realization. Hence, there is lack of consensus from some empirical findings, due recognition given to vocational training in influencing the motivation of potential entrepreneurs in self-employment is considerable. Thus, this study will furthermore investigate on the impact of the vocational training in the context of potential entrepreneurs in self-employment practices. Based on this consideration, a hypothesized statement is made as follows:

**H<sub>5</sub>:** *There is a significant impact between vocational training and self-employment*

### **2.9.3 Taxation Incentives and Self-Employment**

A number of studies were conducted in trying to establish a relationship between taxation incentives as it may have an impact in influencing the motivation of self-employment start-up in the potential entrepreneur's perspective. Taxation incentives are a number of incentives given to entrepreneurs as well as potential entrepreneurs to encourage business start-up and growth (Airgeadais, 2015). The good knowledge of these tax incentives would provide the potential entrepreneurs with ideas to effectively plan their business and investment strategies to form new businesses (Mustapha, 2016). By encouraging business formation among the potential entrepreneurs, these tax incentives are seen as a support and influence motivation

for especially, potential entrepreneurs in the context of self-employment start-up (Feyitimi et al., 2016).

According to Airgeadais (2015), the taxation incentives expected to be enunciated within government industrial policy is likely to exert a significant impact on the effective self-employment start-up. In a bid to encourage self-employment start-up, a policy that enhances a favourable tax incentives becomes a vital tool of government entrepreneurial promotion strategy (Fossen, 2008). This can play an important role in attracting and encouraging potential and existing entrepreneurs to remain stable by inspiring their strength in self-employment. Furthermore, Feyitimi et al. (2016) elaborate further that these tax incentives a responsive government can provide to encourage the entrepreneurs may include business registration tax, reduced corporation tax, flat rate tax, tax exemption, tax stability agreement and subsidy or grant and tax holiday and investment allowances. Thus, it is expected that these taxation incentives might encourage both the potential and existing entrepreneurs in influencing their motivation in self-employment start-up and practice (Johannsen, 2012).

To start-up self-employment effectively among the potential entrepreneurs, then, the need for a favourable taxation incentive for the motivation of potential entrepreneurs is essential (Fossen, 2008). Mustapha (2016) confirmed from a study that taxation incentive positively influences entrepreneurial motivation in self-employment start-up. In addition, according to Mutula (2008), the basic support for the self-employment start-up and the development of entrepreneurship, in particular, has been tightly expected to steam out of policies to improve appropriate tax incentives for entrepreneurs. Thus, it will reduce the adverse burden of expenses and cost implications, particularly at the business start-up. Also, Bryan (2013) in a study found that there is a significant relationship between taxation incentives and self-

employment. In addition, Johannsen (2012) also established a fairly significant relationship between taxation incentives and self-employment. This indicates that taxation incentives influence the motivation of entrepreneurs in self-employment.

On the other hand, Baker et al. (2013), Gulen & Mihai (2013) established from their studies that taxation incentives have not been found to be effective in enhancing entrepreneurial motivation in self-employment. The result indicates that tax incentives towards motivation in self-employment practice has not been an effective factor. Furthermore, Feyitimi et al. (2016) discovered from their research findings that given the speculative doubt concerning the influence of income taxes on self-employment, hitherto, it remains an empirical question to how the tax incentives policies recently influence self-employment. In addition, Chatterji, Glaeser & Kerr (2013) in their study of taxation incentives and its effect on self-employment found that taxation incentives is not a significant factor in influencing entrepreneurial motivation in self-employment. This discloses that the government effort on taxation incentives in aiding the potential entrepreneurs to become self-employed has not been effective. These variations in statistical findings indicate inconsistencies emanating from the previous research findings.

Also, some previous empirical studies have stressed the importance of tax incentives that are expected to be contained in the government industrial policy which may exert a motivating impact on self-employment among potential entrepreneurs (Airgeadais, 2015; Feyitimi et al., 2016). In addition, empirical evidence indicates that lack of favourable taxation incentives has remained a setback among Nigerian entrepreneurs (Feyitimi et al., 2016). However, despite there is a lack of consensus from some empirical evidence, tax incentive seems to exert a role in influencing self-employment among the entrepreneurs (Busso et al.,

2012). Therefore, this study would further investigate the relevance and effect of taxation incentives in influencing the motivation of potential entrepreneurs in self-employment start-up. Therefore, the following hypothesized statement is made:

**H<sub>6</sub>:** *There is a significant impact between taxation incentives and self-employment*

## **2.9.4 Financing and Self-Employment**

A number of studies have been conducted on the impact of financing and self-employment in order to investigate the consequence attached to financing in the context of new business start-up. According to Carolynne (2016), the attention of the government in industrial policy initiative should focus on creating a conducive business environment through enhancing favourable financing to entrepreneurs. The researchers stressed the importance of self-employment financing more particularly, the new business start-up. Thus, an effective access to funds can empower and influence the motivation of potential entrepreneurs in their self-employment start-up. This would economically contribute to their personal development through self-employment and the development of a nation at large (Evbuomwan, et al., 2012; Gichuki et al., 2014). In this direction, having access to finance gives entrepreneurs the chance to bear the costs and acquire all requisites to start and develop their businesses. This would, therefore, ensure their relevance in self-employment through effective financing (Gichuki et al., 2014).

According to Nagpal et al. (2009), to provide adequate financing, it is necessary for government to strengthen its effort in a new a business start-up financing. The government should introduce finance-supporting schemes in order to assist in settling the financial burdens that entrepreneurs and small firms experience during their crucial years of start-up and development. Chatterji et al. (2013) asserts that, in some cases of support being justified,

the optimal means of providing a subsidy may still take the form of a loan. Also, if the government's risk tolerance and patience are higher than that of the subsidized entrepreneur, then the optimal subsidy can easily take the form of aid that is largely repaid upon a good outcome. Furthermore, Adewale (2015) emphasized that effective financing can provide a motivating influence for the potential entrepreneurs to reasonably finance the basic requirements needed for their new business start-up.

Moreover, according to Haltiwanger et al. (2012) & Nayab (2011), the findings from their research indicates that due to some flaws, the extent of financing provided for entrepreneurs has been inadequate, and hence not effective. Also, Kerr & Nanda (2011) in their study confirmed that the financing support has not been significant to the self-employment start-up. The reason has been due to successive failure by the relevant stakeholders such as government and entrepreneurship stakeholders to properly fund business start-up among the potential entrepreneurs. Furthermore, Taiwo, Temitope & Edwin (2016) conducted an investigation on the effect of financing and its influence on self-employment start-up. The findings revealed that based on the flaws of the policy on financing, the financing has been ineffective in relation to self-employment start-up among the Nigerian potential entrepreneurs. This finding indicates a negligible support for financing entrepreneurs from the relevant stakeholders (Taiwo et al., 2016).

Based on the prevailing empirical shreds of evidence and flaws in financing for self-employment, this research would further investigation on the impact of financing, particularly, among the potential entrepreneurs in a new business start-up. Financing is upheld by the economic entrepreneurship theory as a good antecedent of self-employment, as well as some aforementioned previous studies. Thus, having access to finance may

enhance the motivation of potential entrepreneurs as a prospect and ability meet financial obligations in their self-employment start-up. Therefore, this study would further investigate the impact of financing on self-employment. Based on this, the following assumed hypothesis is made:

**H7:** *There is a significant impact between access to financing and self-employment*

### **2.9.5 Machinery/Equipment and Self-employment**

Machinery/equipment comprises of physical capital that is created in the occupational production process as the basic infrastructure needed to support procession and production in business operations (Kurtz, 2010). It is a physical capital that is used in the operations of a business conducted across different varieties of occupations to manufacture a product, provide a service or use to sell, store and deliver merchandise by entrepreneurs (Kabir, Hou, Akther, Wang & Wang, 2012). Kabir et al. (2012) investigated the flight of machinery/equipment among entrepreneurs and established from their findings that machinery/equipment availability influences entrepreneurial motivation for effective self-employment.

According to Robertson (2010), more importantly, entrepreneur's capacity is enhanced to facilitate an efficient production of their products if machinery/equipment is well provided and accessed. This portrays the essence of machinery/equipment in influencing the motivation of operations processes of businesses among the entrepreneurs.

Furthermore, Melia, Perez & Dobon (2010) discovered that machinery/equipment as part of the physical capital is positively influencing the entrepreneurial motivation for effective self-employment among entrepreneurs. Thus, the entrepreneurs make use of

machinery/equipment in ensuring the speedy and effective procession of their products efficiently (Melia et al., 2010). This premised machinery/equipment as among various factors expected to influences potential entrepreneur motivation in self-employment. Similarly, according to Ratinho, Harms & Groen (2009), the impact of machinery/equipment has been manifesting among the entrepreneurs. The scholars emphasized the effective provision and access to machinery/equipment in a business start-up among potential entrepreneurs. This has been for the reason that various occupations, especially with the present rapid changes in technology, might need up-to-date machinery/equipment to operate and meet the current demand of consumers/customers (Robertson (2010).

Nevertheless, Kurtz (2010) in a research found that there is lack of effective commitment of machinery/equipment in self-employment among some fashion designers' entrepreneurs. Due to the lack of provision of such machinery /equipment, a significant number of designer-entrepreneurs are faced with the critical challenges in operating and maintaining their businesses. Therefore, it is quite likely that new fashion business starters might find it difficult to accomplish their goal because of the inadequate provision of machinery/equipment to them (Kurtz, 2010; Torres et al., 2016). For this reason, it should be noted that starting a new business by the potential entrepreneurs in this context still remains a challenge.

In another study, Ehinmowo & Fatuase (2016) acknowledged the importance of machinery/equipment among entrepreneurs but doubted the adequacy of such incentive. Their investigation revealed that unavailability and lack of access to machinery/equipment among potential entrepreneurs in Nigeria has affected their entrepreneurial motivation in the self-employment realization. The findings indicate that there is a lack of access to

machinery/equipment as the cost to purchase it has been so high for the entrepreneurs to afford, and conversely, may also affect the potential entrepreneurs' new business start-up (Enhinmowo et al., 2016). This premised machinery/equipment as among various important factors expected to influence the effective motivation of potential entrepreneurs toward starting a new business. The aforementioned empirical findings, divergent results and the magnitude premised to machinery and equipment as a physical capital. Hence this study will further investigate the impact of availability and access of machinery/equipment as a motivation factor that influences potential entrepreneurs in self-employment start-up.

Based on the aforementioned evidences, the following hypothesis is made:

**H<sub>8</sub>:** *There is a significant impact between availability of machinery/equipment and self-employment*

## **2.10 Entrepreneurial motivation mediates in the impact between entrepreneurial traits and economic incentive factors**

The entrepreneurial motivation is a gesture that motivates and strengthens the entrepreneur to exert an effort for the realization of entrepreneurial goals (Darnihamedani, 2017). In other words, the direction of voluntary behaviour exert by an entrepreneur which is internal drive toward accomplishing self-employment goal is influenced by entrepreneurial motivation. It can be said that, an entrepreneur that is effectively motivated will be willing to exert a particular level of effort toward realization of self-employment (Sozen et al., 2017). Basically, research on self-employment has become the focal point of investigation in the field of entrepreneurship. Thus, giving cognizance to individual's qualities as an entrepreneur is a very important step in the entrepreneurial process. Thus, the entrepreneurial traits possessed by entrepreneurs are among the motivational factors that influence the

decision to start a new business, and is born out from the personality traits of entrepreneurs (Caliendo et al., 2014). Due to the divergence and multi-dimensionality of entrepreneurial traits, many pieces of research have been conducted on the entrepreneur's traits. Hence, such traits may trigger entrepreneurial motivation among the potential entrepreneurs that subsequently results in the realization of self-employment (Hoffmann, 2012).

Based on this multi-dimensionality of the entrepreneurial traits, according to Islam (2011), quite a number of traits may influence entrepreneurial motivation to attain self-employment. Mary (2010) also stressed the importance of the entrepreneurial traits towards encouraging and motivating the potential entrepreneurs in their quest to attain self-employment target. Also, in their studies, Mukherjee (2010) & Mirela et al. (2008) maintained that the entrepreneurial traits are among the factors that influence entrepreneurial motivation which may subsequently result in self-employment start-up. Such traits, according to the scholars, would strengthen them to exert an extent of effort towards the realization of the self-employment objective.

Hoffmann (2012) & Morris et al. (2008) acknowledged that entrepreneurial trait is among important factors that influences the decision of a potential entrepreneur in making self-employment decision. Thus, potential entrepreneur's traits may hold as a basic element for accomplishing a successful self-employment as a motivational factor to achieve self-employment (Mirela et al., 2008). Then, other factors from the environment (economic incentive factors) may put more weight to influence entrepreneurial motivation and support the potential entrepreneurs for an effective self-employment accomplishment (Mukherjee, 2010)

In addition, from the context of environmental factors (economic incentive factors) as elements that influence entrepreneurial motivation to achieve self-employment, prior threads of empirical evidence have established that different factors/variables can play a significant role in that direction. Thus, these may include economic incentive factors such as financing and taxation incentives (Kerr & Nanda, 2011; Bryan, 2013). Also, Yusuai et al. (2014) affirmed the importance of financing and taxation incentives in self-employment support among the entrepreneurs. This shows that financing and taxation incentives play a vital role through entrepreneurial motivation in the realization of the self-employment objective.

Moreover, Kumar (2015) in a study of entrepreneurs considered loans from the government and banks as important among influential entrepreneur motivating factors. This shows that the financial loan from the government and banks are important factors in attaining self-employment through entrepreneurial motivation (Sozen et al, 2017). According to Chatterji et al. (2013), a loan from banks was also acknowledged as a preferred that influence entrepreneurial motivation in the potential entrepreneur's self-employment start-up.

Furthermore, according to some scholars, there are many other variables that influence self-employment, such variables includes vocational training and ICT facilities which facilitate and may influence entrepreneurial motivation in the realization of self-employment among potential entrepreneurs (Hasan et al, 2010; Melia, Perez & Dobon, 2010; Silva & Ratnadiwakara, 2010; Kerr & Nanda, 2011; Evbuomwan, et al., 2012; Hemmer et. al., 2012; Johannsen, 2012; Dike, 2013; Bryan, 2013; Gichuki et al., 2014; Airgeadais, 2015; Oyvind, 2016; Sharmila et al., 2016). Also, a research conducted by Elebute et al. (2016) revealed that vocational training skills positively influence entrepreneurial motivation in effecting self-employment. Moreover, Sharmila et al (2016) also revealed that poor or inadequate

vocational training may hinder the entrepreneurial motivation for a successful venturing into self-employment after training. This indicates poor or inadequate vocational training affects potential entrepreneur's motivation in realizing self-employment.

Moreover, on ICTs availability and usage as factor that facilitate the realization of self-employment through entrepreneurial motivation, McGregor & Kartiwi (2010) acknowledged that information communications technology plays an important role in the conduct of entrepreneurial activities. Based on the present technological trends surrounding the business dispensation, the magnitude of information and communication technology cannot be overemphasized. Similarly, according to Akande (2013), information and communication technology has a crucial relevance, particularly in the current business operations. Furthermore, it has been proven that higher gains have been achieved in entrepreneurial firms which make use of ICTs towards the realization of business goals through improved and speedy operations (Mercy, 2016). This indicates that entrepreneurs who utilize ICTs currently might have its benefit in the realization of their self-employment objective.

However, according to Sozen et al. (2017), various governments, stakeholders and researchers should ensure a priority in considering the influence of entrepreneurial motivation in entrepreneurial process. According to the scholars, such priority should be given most especially in the new business start-up among the potential entrepreneurs. The motivation of potential entrepreneurs must be understood from its context in order to succeed (Shane et al., 2012).

Therefore, it is important that the support of various governments and stakeholders to provide such relevant motivations for the potential entrepreneurs should be apparent in order

to start their own business. Starting a new business can be attained only through the creation of the necessary ingredients that may arouse and influence entrepreneurial motivation that can give support for potential entrepreneurs to become self-employed (Kisker, 2016).

In their empirical findings, Isa & Muhammad (2015) carried out a research on the relationships between some determining factors, entrepreneurial motivation and the realization of self-employment from the context of developing countries. The study result indicates that such factors influence entrepreneurial motivation to realize self-employment. In addition, Awruk & Staniewski (2015) conducted their research on the impact of motivating factors as its influence entrepreneurial motivation in business start-up among potential entrepreneurs.

The research was conducted based on the direct relationships of the variables, and the results of the findings show that there is a positive influence on the motivation of potential entrepreneurs. Furthermore, Idris (2015) as a direction for future studies, recommended that the mediating role of entrepreneurial motivation should be extended and investigated, given the fact that it may play an important role in stimulating the potential entrepreneurs in a mediation function.

Thus, entrepreneurial motivation with due relevance entailed in it, is expected to mediate the relationship between the personality traits and economic incentive factors in self-employment realization. The economic incentive factors may be supportive in which the potential entrepreneurs may find it encouraging in realizing their self-employment objective (Darnihamedani, 2016).

In addition, entrepreneurial motivation has been employed to measure self-employment which is both depicted as a predictor, and as an outcome, and it has been found to exert a

significant influence in measuring self-employment (Yushuai et al., 2014; Isa & Muhammad, 2015; Awruk & Staniewski, 2015; Kisker, 2016). These studies have already established relationship with the concept of entrepreneurial motivation as both a predictor and outcome (Baron & Kenny, 1986).

Therefore, to avoid redundancy and stagnation of knowledge, this present study will examine it as a mediator to confirm whether it will also account for a relationship as a mediator in measuring self-employment. In the methodology of mediation, according to Baron & Kenny (1986), whenever there is an established relationship with a concept (variable) whether as a predictor or an outcome, then it can be measured as a mediator to confirm whether it will still account for a relationship.

In addition, there is a lack of consensus and inconsistencies arising from the findings of previous studies. Studies carried out by Miller & Breton-Miller (2017), Fossen et al. (2017), Gholami & Birjandi (2016), Kevin et al. (2010) Dunkelberg (2013), Gulen & Mihai (2013) show that there were contingencies from the results of such studies. For this reason, mediation analyses facilitate a better understanding of the relationship between the independent variables and the dependent variable when the variables appear to have no definite connection (MacKinnon, 2011).

In this study, entrepreneurial motivation will be employed to check whether it will account a relationship between the variables to attain the objectives. Therefore, this study will investigate the mediation impact of entrepreneurial motivation on entrepreneurial traits and economic incentive factors in effecting self-employment. Thus, the following hypothesized statements were made:

- H<sub>9</sub>:** *Entrepreneurial motivation mediates the relationship between transformationality and self-employment.*
- H<sub>10</sub>:** *Entrepreneurial motivation mediates the relationship between resilience and self-employment.*
- H<sub>11</sub>:** *Entrepreneurial motivation mediates the relationship between autonomy and self-employment.*
- H<sub>12</sub>:** *Entrepreneurial motivation mediates the relationship between ICTs and self-employment.*
- H<sub>13</sub>:** *Entrepreneurial motivation mediates the relationship between vocational training and self-employment.*
- H<sub>14</sub>:** *Entrepreneurial motivation mediates the relationship between taxation incentives and self-employment.*
- H<sub>15</sub>:** *Entrepreneurial motivation mediates the relationship between financing and self-employment.*
- H<sub>16</sub>:** *Entrepreneurial motivation mediates the relationship machinery/equipment and self-employment.*

## 2.11 Hypothesized Model of the Study

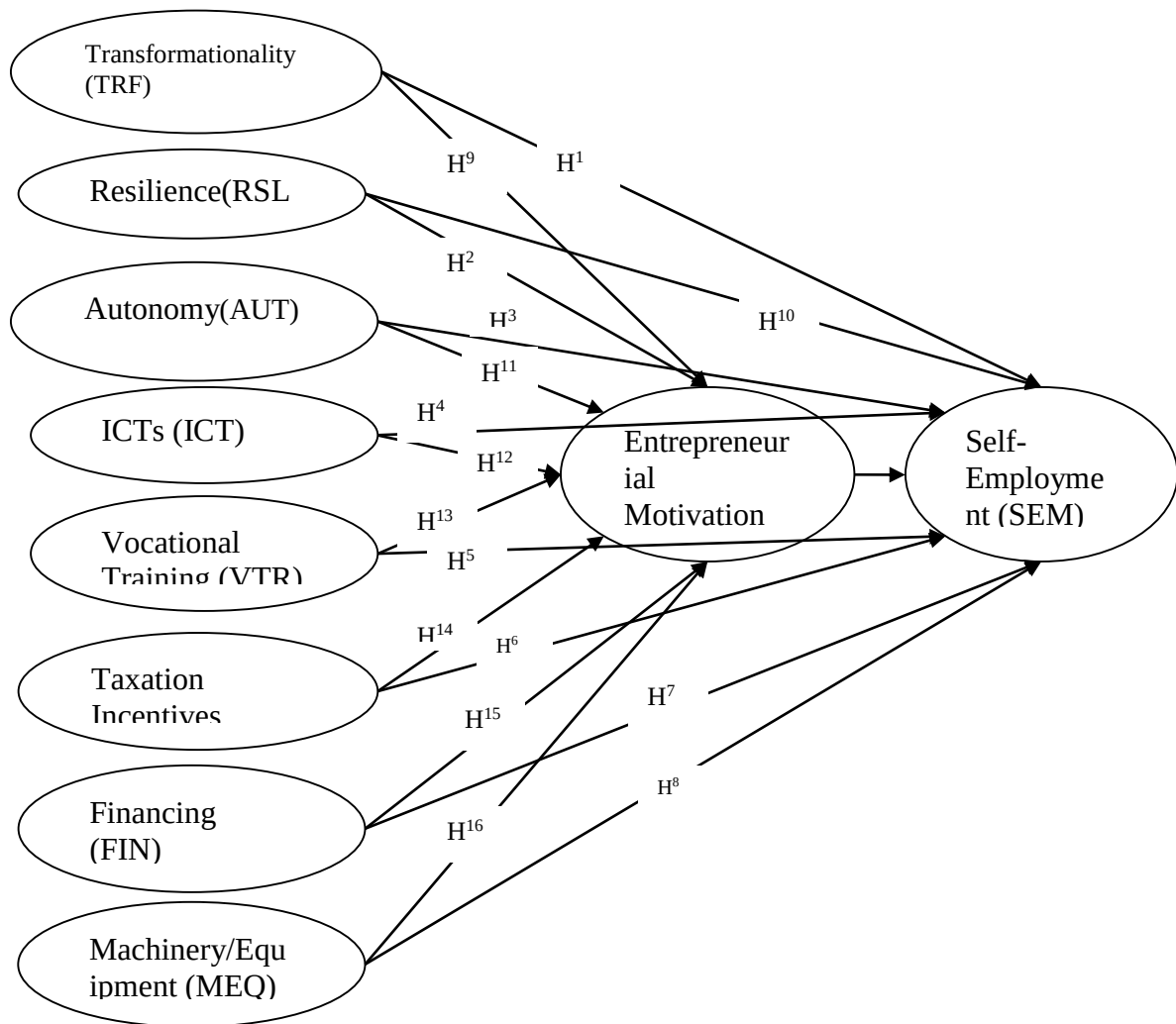


**Figure 2.3:** Hypothesized Model of the Study

## 2.12 Summary of Hypotheses of the Study

This section summarizes the hypotheses of this study. The hypotheses were employed to investigate the impact of entrepreneurial traits and economic incentive factors through the mediation of entrepreneurial motivation on self-employment.

The hypotheses are as follows:

**H<sub>1</sub>:** *There is a significant impact between transformationality and self-employment*

**H<sub>2</sub>:** *There is a significant impact between resilience and self-employment*

**H<sub>3</sub>:** *There is a significant impact between autonomy and self-employment*

**H<sub>4</sub>:** *There is a significant impact between access to ICT and self-employment*

**H<sub>5</sub>:** *There is a significant impact between vocational training and self-employment*

**H<sub>6</sub>:** *There is a significant impact between taxation incentives and self-employment*

**H<sub>7</sub>:** *There is a significant impact between access to financing and self-employment*

**H<sub>8</sub>:** *There is a significant impact between availability of machinery/equipment and self-employment*

**H<sub>9</sub>:** *Entrepreneurial motivation mediates the relationship between resilience and self-employment.*

**H<sub>10</sub>:** *Entrepreneurial motivation mediates the relationship between transformationality and self-employment.*

**H<sub>11</sub>:** *Entrepreneurial motivation mediates the relationship between autonomy and self-employment.*

**H<sub>12</sub>:** *Entrepreneurial motivation mediates the relationship between ICTs and self-employment.*

**H<sub>13</sub>:** *Entrepreneurial motivation mediates the relationship between vocational training and self-employment.*

***H<sub>14</sub>:** Entrepreneurial motivation mediates the relationship between taxation incentives and self-employment.*

***H<sub>15</sub>:** Entrepreneurial motivation mediates the relationship between financing and self-employment.*

***H<sub>16</sub>:** Entrepreneurial motivation mediates the relationship machinery/equipment and self-employment.*

### **2.13 Concluding Remarks**

In conclusion, this chapter has provided the detailed explanations of the five sections. This comprises of an introduction and discussion on the concept of self-employment. The concept of entrepreneurial motivation has also been discussed. It has also explained the theoretical underpinnings guiding this research. Hypotheses development of this research was elaborated. Finally, the hypothesized model of this research was presented, as well as the summary of the hypotheses of the study. Chapter 3 will present the methodology of this research. This comprises the philosophical stands of this study, the research design, population, sample size and the sampling technique for this research. It will also provide the questionnaire design and administration, the procedure for data collection, as well as the procedure of data analysis for the research. The results of pre-test, as well as the pilot study conducted, have been presented.

## **CHAPTER 3**

### **METHODOLOGY**

#### **3.1 Introduction**

This chapter is organized into ten sections. The first section contains a brief introduction of the contents of the chapter. The second section outlined the research design of the study, upon which it has narrated the overall strategy for conducting out the research. The third section explained the philosophical stance of the research which stated the basic rational adapted for the research based on the established research design. The population of the study was described in the fourth section, which is the sphere within which the sample of the study was determined. The sample size for the study was presented and depicted in the fifth section which was drawn from the population for easy generalization upon the larger population. The sixth section highlights the sampling technique of the research, which is selected based on the location and the characteristics of the population. The questionnaire design and administration have been described in the seventh section, which is the tool used in collecting data for the research. The questionnaire was structured based on the defined variables contents. The procedure of data collection was described in the eighth section, which described how the data for the research was collected systematically from the study area. Finally, the procedure for data analysis was discussed in the ninth section. The collected data were analyzed through the procedure that include both descriptive and inferential statistics using SPSS and PLS-SEM path coefficient and Bootstrapping, as well as a Sobel Test statistics.

### 3.2 Research Design

A research design is a strategy to be followed in carrying out a research. The research design for this study is presented in Figure 3.1.

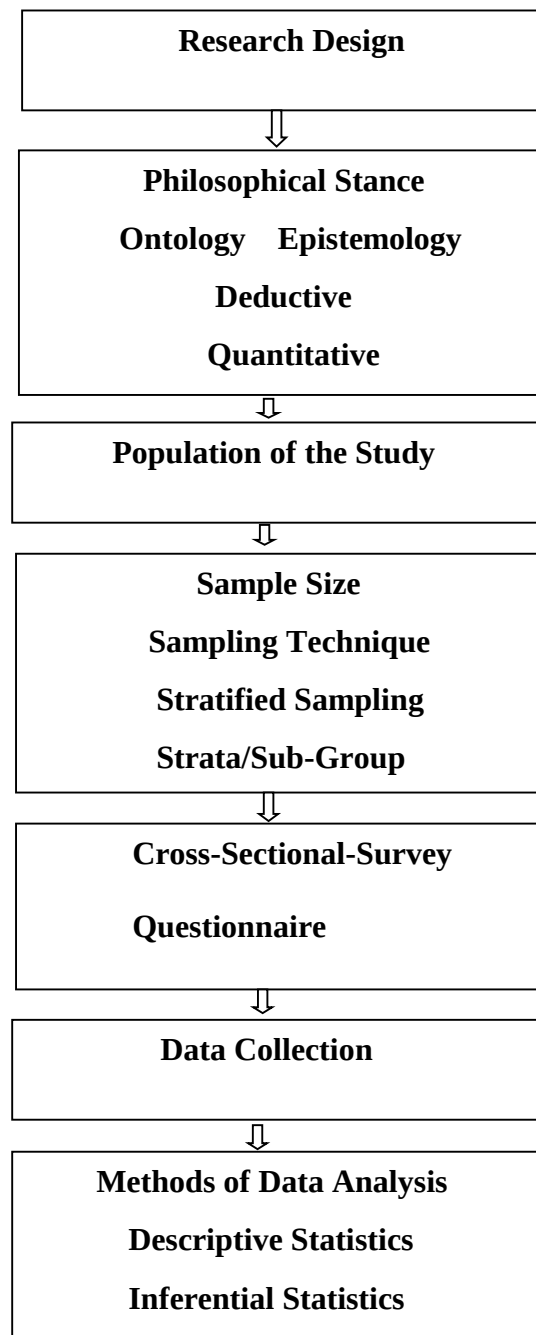


**Figure 3.1:** Research Design

The development of this research design would enable the researcher to draw on the premise of the overall plan as a strategy for carrying out the study. It would enable the researcher to anticipate what the appropriate research decisions are likely to be, and to maximize the validity of the eventual results. Babbie (2014) describe research design as a plan or blueprint for conducting a research. The research design is important because it serve as a plan to the researcher on how data would be collected and analyzed to draw a conclusion of the study. The research design has been stimulated that entails a quantitative approach, a survey design with the cross-sectional approach, and data was collected through a survey questionnaire. The sampling technique for the research is a stratified sampling method. The data collected were analyzed through both descriptive and inferential statistics, as well as path algorithm and bootstrap analysis were carried out. One of the advantages of employing a survey research design is because it is the research format that often permits step-by-step development, accurate and testing of such logical explanation (Babbie, 2013).

The investigation in this study has been carried out through quantification of the identified variables examined. The entire quantitative approach has led the researcher to end with acceptance or rejection of the hypotheses tested. The researcher through the quantitative method identify some variables that the research intends to use in the research work and proceeded with data collection of the research. The sampling technique for the research is a stratified sampling method. The reason for the choice of cluster sampling by the researcher is that the population is spread over some wide geographical regions, the cluster sampling is used to reduce cost (Shaughnessy, Zeichmeister & Jeane 2015). It also consumes less time and efforts, and also the researcher gets a group of respondents in one geographical region/location and collect the data through a questionnaire (Babbie, 2013), and through a cross-sectional survey.

The cross-sectional survey is one of the most common and well-known study surveys in the collection of data from respondents. The research chooses this survey purposely from a set of population (cluster), the respondents have filled the questionnaire with regards to their opinions at the current time of the survey, and has been collected once at the point of time (Rusli & Hasbee, 2014). The researcher is motivated for the choice of using a cross-sectional survey for its easiness and promptness in collecting data during a survey (Babbie, 2010), using a survey questionnaire.

Thus, this study has used a survey questionnaire as a means for data collection of the research. The statistical explanations, descriptions, and relationships of the research topic have been carried out in the research. This is due to the fact that research which employs a survey design, produce data or findings based on the assumptions of the real social world (ontology) (Burrell et al., 1979). The survey questionnaire is the suitable technique of getting to know about the objective reality, which has been administered in a cross-sectional survey.

The data gathered through such 'objective' techniques have been analyzed and interpreted by using statistical techniques (Burrell et al., 1979). Furthermore, the researcher has used both inferential and descriptive statistics in analyzing the gathered data. The inferential statistics has been used in determining the relationship between the independent, dependent, and mediator variables while the descriptive statistics have been used to describe the demographic variables of the respondents. Therefore, in this study, a positivist philosophy, quantitative methodology through deductive approach and survey approach (questionnaire) has been used. It is through the use of the questionnaire that the researcher measured and evaluated factors/incentives that affect or influences self-employment among potential entrepreneurs.

### **3.3 Philosophical Stance**

Several paradigms were employed by various researchers as a supposition to reveal and make known about knowledge, such as positivism, interpretivism, and radical structuralism. To begin a scientific research work, it is expected for the researcher to make some supposition of what is to be known and how to know it (Creswell, 2009) otherwise known as philosophical assumptions, epistemology and ontology, research paradigm or generally referred to as methodology (Neuman, 2011) respectively. Fundamentally, any scientific research, such as this present study, involves an approach to study patterns of behaviours. The basic approaches can be: qualitative (inductive), quantitative (deductive) or the combination of both, otherwise known as a mixed method research approach.

In this direction, based on the research design of this study, an understanding of a phenomena has been pre-established (i.e. knowledge from the result of this study) which reflects a generalization to a specified position through a deductive reasoning. At this point, based on the research objective and hypotheses, this research adopts a positivist philosophy with a quantitative method to examine the relationship between independent variables and the dependent variable, as well as the mediating effect of an interacting variable. One of the hallmarks of scientific research is its generalizability, and accordingly, quantitative research allows research findings to be generalized (Sekaran & Bougie, 2009).

The researcher's choice of a quantitative approach has been built from the ontology and epistemology of the study, in which the phenomena under study is a reality that has to be investigated to attain knowledge. The quantitative research method is a research method that deals with quantifications and measurements in a systematic way of investigating a phenomenon and their relationships. The quantitative approach deals with the statistical

analysis and numerical data to provide quantitative information (Chua, 2013). The researchers' choice of a quantitative approach has been that, the quantitative approach allows the researcher to objectively evaluate data which is numerical in nature, as well as it helps to exclude bias from the researcher's point of view.

Social scientist approaches their subjects through implicit or explicit assumptions about the nature of the social world and the way in which it may be investigated as shown by the nature of social science. Epistemology is a terminology in the field of philosophy, which is concerned with what constitute knowledge, how to attain knowledge and the degree of likelihood to which a certain entity is known (Blaikie, 2010). Ontology, on the other hand, is also a branch of philosophy which is concerned with knowing the likely unit of knowledge that exist, the relationship of each unit to another within a group or particular order and what similarity or otherwise can be said to exist among the units (Guarino et al, 2008). It is therefore necessary to know from such units, the origin of knowledge, how it can be acquired, and the possible branches within which each entity exists (Blaikie, 2010).

The quantitative research method of this study entails a deductive approach which also involves operationalization of theories and variables and to empirically be tested and establish an association among the variables (Neuman, 2011). The deductive logic enables this present study to discover unilateral, causal generalized relationships, predict patterns of behaviour across situations on a phenomenon (Trillas, 2017). Aptly, deductive approach of this study starts with a previously developed theory and examines the relationship between the variables in the theory. To answer the research questions of this study, survey research design would be used, which involves gathering of primary data through a questionnaire. Furthermore, a cross sectional survey has been used to collect the data at one point because it is cheaper, although reliable (Bryman & Bell, 2007). This has been done based on the

philosophical assumptions of the social scientist approaches. The ontological and epistemological stances are subsequently discussed in the next sub-sections.

### **3.3.1 Ontology Stance**

Burrell & Morgan (1979) stated that ontological assumptions are basically concerned with the very essence of the phenomena under investigation, that is the nature of reality. On the ontological premise of the objectivist dimension the world is assumed to be an objective reality. Hence, the basic ontological question faced by a researcher is whether the reality to be investigated is external to the individual or the product of individual consciousness. Objective reality and matter are parallel to the human mind and consciousness on the other hand, therefore, it exists separately and independent of each other in the positivists perspectives (Blaikie, 2010).

From the context of this research, the various elements of self-employment and the factors that influence it (i. e. personality traits, economic incentive factors such as ICTs, vocational training, taxation incentives, financing and machinery/equipment) really exist and have been studied under different literature (Papanek & Harris, 1972; Vroom, 1974; Landstrom, 1998; Gallup, 2012). A fundamental constituent of this research is to appreciate and understand the respondent's opinion/views as to how these factors affect them. Consequently, in this situation the 'social world' is regarded as being natural world, real, external to individuals and objective reality (Burrell & Morgan, 1979). Hence, the key point to be noted here is that realities are defined by the caricature of interactions in the various aspects of lives. However, the realist point of view about the reality is that there is only one reality which is external to the researcher and can be objectively described (Collis & Hussey, 2009), because the reality is made up of real, hard and tangible structures (Burrell et al., 1979).

The reality external to the researcher which is knowledge can be discovered by the researcher through scientific inquiry. It is in this stance that this research will be conducted to discover the reality. In this course, the justification taking the positivist perspective to discover this reality is that the limitations of the previous empirical studies discovered earlier, centered on establishing a relationship of the factors established in this study that influences self-employment (Silva & Ratnadiwakara, 2010; Melia, Perez & Dobon, 2010; Kerr & Nanda, 2011; Caliendo, Fossen, & Kritikos, 2012; Hemmer et. al., 2012; Fernandez-Serrano & Romero, 2012; Evbuomwan, et al., 2012; Johannsen, 2012; Kabir et. al., 2012; Bryan, 2013; Dike, 2013; Gichuki et al., 2014; Airgeadais, 2015; Sharmila et al., 2016), while overlooking or ignoring entrepreneurial motivation and some economic incentive factors, which are very essential in influencing self-employment among potential entrepreneurs (Shane et al., 2012).

### **3.3.2 Epistemology Stance**

The term epistemology is also a branch of philosophy that is concerned with the theory of knowledge and the use of knowledge to know the world around us (Bates et al., 2007). Epistemologically, in this research, the approach is considered to account for knowledge that is occurring, rather than to simply describe them. There is a need for explanation of causal relationship and a need to support that explanation with evidence from each case or event (Burrell et al., 1979). Based on the positivist perspective, it is clear that the relationship that exist between the variables of this study and the subject of the research can be completely objective (Blaikie, 2010).

In this regard, the positivists argue that a researcher can maintain his independent position while providing an objective view of the world being investigated. Consequently, although initial frameworks to measure self-employment exists, the findings from this research will

signifies the extent of knowledge progress in the research world. Such that, the numerous essentials of self-employment and the elements that effect it (i. e. personality traits, economic incentive factors such as ICTs, vocational training, taxation incentives, financing and machinery/equipment) really exist and have been studied under different literature (Papanek & Harris, 1972; Vroom, 1974; Landstrom, 1998; Gallup, 2012). Based on the epistemological stance of this research, such knowledge that is expected to be known through investigation of these factors can be revealed

Such knowledge as a real phenomenon is acknowledged through the views of the respondents. Then, based on their views/opinions, an investigation was conducted through a quantitative approach that the hypotheses of the study have been confirmed supported or not-supported.

### **3.4 Population of the Study**

Population, as referred by Bryne (2010), reflect an entire group of people, things or events of interest that the researcher wishes to investigate from which data for the research would be gathered. In this context, the population for this current research is all registered participants/apprentices of six (6) skills acquisition centres in Bauchi State, Nigeria. These skills acquisition centres are Muhammad Abubakar Empowerment and Vocational Training Initiatives, Future Assured Women and Youth Empowerment Centre, Azare Skills Acquisition Centre, Dambam Skills Acquisition Centre, Alkaleri Entrepreneurship and Skills Development Centre and Ningi Skills Acquisition Centre. Bauchi State in Nigeria as the area for this study, has 4,653,066 populations as revealed by the 2006 population census out of Nigeria's total population of about 180,000,000 people. According to the Nigerian Bureau of Statistics (NBS) of 2016, unemployment data revealed that Bauchi State has an

unemployment rates of 41.4%, and is among the ten states with the highest unemployment rates in Nigeria. Hence, Bauchi State is selected by the researcher to conduct this research due to the over-bearing unemployment rate that prevails across the state.

### 3.5 Sample Size

A sample size of a research is the portion of the population of the study that represents the entire population in a research. It constitutes a reliable representation that is enough to meet the requirement of what is needed and which is sufficiently large to represent the entire population's interest in a research (Pallant, 2011). The sample size for this research was determined using a sample size formula by Bartlett, Kotrlik and Higgins (2001) & Israel (2011) as follows:

$$\frac{\frac{Z^2 p(1-p)}{e^2}}{1 + \left( \frac{Z^2 p(1-p)}{e^2 N} \right)}$$

Where:

Z – Z score (the number of standard deviations a given proportion is away from the mean). It is determined by the desired confidence level (95%). The desired confidence level reflects how certain we are that our sample reflects the population within its margin of error.

N – Population size.

e – Margin of error. A percentage of describing how closely the response (value of the sample) is to the true value (obtained from the population). The margin error of 5% is considered as standard.

P – The expected proportion of answers to a specific question. (the safest assumption for p would be 50%. This distribution assumption will produce the largest variability of the answers)

For the purpose of this research:

N stands for Respondents (potential entrepreneurs) in the entrepreneurship and skills acquisition centres in Bauchi State, Nigeria

Z – 1.96 for a 95% confidence interval

e – 5% (Bartlett, Kotrlik and Higgins (2001) suggest that a margin of error of 5% is an acceptable standard).

P – 0.5 (or 50%, the most covering value)

$$\begin{aligned}
 SS &= \frac{\frac{Z^2 p(1-p)}{e^2}}{1 + \left( \frac{Z^2 p(1-p)}{e^2 N} \right)} \\
 &= \frac{384.16 \times 0.25}{0.0025} \\
 &= \frac{0.9604}{0.0025} \\
 &= 384.16
 \end{aligned}$$

Therefore:

$$SS = \frac{384.16}{1 + \left( \frac{Z^2 p(1-p)}{e^2 N} \right)}$$

$$SS = \frac{384.16}{1 + \left( \frac{384.16}{0.0025 \times 15,000} \right)}$$

$$SS = \frac{384.16}{1 + \left( \frac{384.16}{0.0025 \times 10.244} \right)}$$

$$SS = 1 \times (384.16) + 10.244$$

$$SS = 394$$

*Source:* Bartlett, Kotrlik and Higgins (2001) and Israel (2011).

Therefore, based on the number of the population for this present study, the sample size of this research in accordance with the Bartlett, Kotrlik and Higgins (2001) and Israel (2011) sample size formula, the minimum sample size for this research are 394 of the population of this research.

### **3.6 Sampling Technique**

The sampling technique for this research is a stratified sampling method. The heterogeneous population of this study was split into fairly homogeneous groups/strata within the centres. Under these conditions, stratification generally produces more precise estimates of the population. After the partition the population into groups (strata), then a simple random sample from each group/strata was obtained by the researcher. Then such simple random sample from the strata as a sampling unit in which the mean of the population was used as a population parameter that was randomly sampled was used to collect data for the study.

Accordingly, in this study, the groups/strata represent the sampling frame. The area or geographical location influences the researcher's choice of stratified sampling technique (Babbie, 2011). Another reason for the choice of stratified sampling technique by the researcher is that the population is spread over some wide geographical regions, the stratified sampling technique was used to reduce cost as compared to simple random or systematic

random sampling (Alvi, 2016). The stratified sampling technique also yields more accurate results than other sampling techniques and can show different tendencies within each category (e.g. men and women) (Alvi, 2016).

The respondents comprise of graduates and previous failed small business owners that are undertaking skills training at six entrepreneurship and skills acquisition centres in Bauchi State. These skills acquisition centres are Muhammad Abubakar Empowerment and Vocational Training Initiatives, Future Assured Women and Youth Empowerment Centre, Azare Skills Acquisition Centre, Dambam Skills Acquisition Centre, Alkaleri Entrepreneurship and Skills Development Centre and Ningi Skills Acquisition Centre. The six centres were used as the population frame because the Bauchi State has three major geographical regions upon which two centres were established in each geographical region to cover the region.

The total number of populations of all the centres is 15,000. The characteristics of the respondents that are covered by the present study were gender, age group, educational background, marital status, prior vocational training experience, prior use of machinery experience, self-employment experience, and failed business experience. Subsequently, because the respondents were located in some geographical regions, the sample was stratified by making groups/strata among the respondents upon which a sample is chosen to represent the population of the centres.

### **3.7 Questionnaire Design and Administration**

According to Rusli & Hasbee (2014), questionnaires are chosen among researchers as the most common and popular data collection techniques. The questionnaire in this research was used for the reasons that the large sample of this research's population can be contacted at a

relatively low-cost, they are simple to administer, the format of the questionnaire is familiar to most respondents. In addition, it was designed and used so that answers to questions are scored, and the scores are relatively summed to measure and obtain the overall measure of the attitudes and opinions of the respondents (Babbie, 2014). The responses from the respondents were accommodated in the questionnaire using a likert scale being it a quantitative research.

The questionnaire for this research was designed with the Likert scale options in which it has been answered by the respondents within their closely defined alternative. Since the researcher knows exactly what type of information is required and how to measure it, the questionnaire is the most efficient data collection instrument for this research (Nutbrown, 2012; Shaughnessy et al., 2015). The design of the questionnaire likert scale options for this research consists of a five (5)-point Likert scale, i. e., 1=strongly disagree, 2=disagree, 3=Neutral, 4=Agree and 5=strongly agree as options for the respondents to choose.

On the questionnaire, section 'A' consists of statements on transformationality with eight indicators to measure the variable based on the 5-Likert scales. Section 'B' contained statements on resilience with eight questionnaire items as indicators. Section 'C' has the statements on autonomy with seven indicators. Section 'D' has the statements on ICT's with eight indicators. Section 'E' carries of statements on vocational training with eight indicators to measure the variable. Section 'F' enclosed statement on taxation incentives with seven indicators to appraise the variable.

Section 'G' has statements on financing with seven indicators to quantify the variable. Section 'H' enclosed statements on machinery/equipment with six indicators. Section 'I' has statements on entrepreneurial motivation with seven indicators to measure the variable.

Section 'J' carries statements on self-employment with seven indicators, while section K' has the demographic profile of the respondents i.e. gender, age, educational level, marital status, vocational training experience, use of machinery experience, previous failed business and self-employment experience.

A total of 800 copies of the questionnaire for the actual study was distributed to the respondents cutting across the entrepreneurship and skills acquisition centres in Bauchi State, Nigeria to collect data for this study. A total of 800 questionnaires were distributed to the respondents, a number of 571 questionnaires were successfully returned, while out of the 571 questionnaires, a number of 36 questionnaires were rejected. Precisely, after the data have been collected a total of 36 responses were rejected and not included in the actual analysis for either biased response or incomplete information provided and some outliers cases.

According to Hair (2013), excluding responses with outlier cases in the data is important because such response does not represent the sample of a study. Hence 535 questionnaires were retained for the analysis. Table 3.1 shows the questionnaire statements of the variables of the research (transformationality, resilience, autonomy, information and communication technology, vocational training, taxation incentives, financing, machinery/equipment, entrepreneurial motivation and self-employment). It also shows the source of the adapted questionnaire items for the research.

**Table 3.1:** Questionnaire Development References

| S/No | Variables                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Questionnaire<br>References                     |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| 1.   | <p><b>Transformationality</b></p> <ul style="list-style-type: none"> <li>-I can find new ways on how to harness resources and succeed in my new business</li> <li>-I can introduce new targets in my new business</li> <li>-I can have a persuasive vision of the new future challenges regarding my new business</li> <li>-I have confidence that my business goals will be achieved</li> <li>-I can challenge my status quo after start-up in self-employment</li> <li>-I can seek differing perspectives to solve my new business problems</li> <li>-I can talk optimistically about the future of my new business</li> <li>-I can talk enthusiastically about what needs to be accomplished in my new business</li> </ul> | <p>Shukri et al. (2014);<br/>Rastbin (2016)</p> |
| 2.   | <p><b>Resilience</b></p> <ul style="list-style-type: none"> <li>-After starting my business, I will often be able to maintain a positive outlook even when things look hopeless</li> <li>-After starting my business, if I may experience losses, I will actively implement ways to replace the losses encountered</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                 | <p>MacKenzie (2016)</p>                         |

**Table 3.1** continued

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
|    | <p>-After starting my business, if an event is very stressful from the external environment as an entrepreneur, it would not be difficult for me to recover from that event</p> <p>-After starting my business, I will look for ways to improve situations that may be difficult in the business</p> <p>-After starting my business, when circumstances happen that are outside my influence, I will always try to control the situation</p> <p>-After starting my business, I will always be able to adapt to new circumstances.</p>                                                                             |                |
| 3. | <p><b>Autonomy</b></p> <p>-After starting my business, I can decide on how my business would be run</p> <p>-After starting my business, being independent will give me strength in running the business</p> <p>-When I start my business, I can be free to express my ideas in running my business.</p> <p>-I can do what I rightly decided when I started my own business</p> <p>-After I started my own business, my feelings can always prevail</p> <p>-I feel I could much be myself when I started my own business</p> <p>-I expect much opportunity for me to make decisions after my business start-up</p> | Fellows (2016) |

**Table 3.1** continued

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                 |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| 4. | <p><b>ICTs'</b></p> <ul style="list-style-type: none"> <li>-The availability of ICT's can be prepared by the government for my business start-up</li> <li>-The availability of ICT's can be prepared by myself for my business start-up</li> <li>-I can utilize ICT's for making the presence of my new business online</li> <li>-I can utilize ICT's for advertising my new business online</li> <li>-I can utilize ICT's for online sales of my future products</li> <li>-I can utilize ICT's to make my new business relevant with current technological trends</li> </ul>                                                                                                                                                                                                                                                                      | <p>Mercy (2014);<br/>Olatunji (2015)</p>        |
| 5. | <p><b>Vocational Training</b></p> <ul style="list-style-type: none"> <li>-The vocational training I am taking will prepare me to be self employed</li> <li>-The vocational training would give me a better technical training to be in self-employment</li> <li>-I expect the vocational training I am taking to be relevant to my new business start-up</li> <li>-I perceive that the vocational training I am taking will prepare me to face current issues in my new business</li> <li>-I perceive that the vocational training I am taking will prepare me to face future issues in my business</li> <li>-I perceive that the training centre guidance and counseling will encourage me to be self employed</li> <li>-I am confident that the curriculum of the training centre is well organized to support me to be self employed</li> </ul> | <p>Shukri et al. (2014);<br/>Rastbin (2016)</p> |

**Table 3.1** continued

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| 6. | <p><b>Taxation Incentives</b></p> <ul style="list-style-type: none"> <li>-I expect my business to benefit from government tax incentives</li> <li>-I expect a reasonable tax levy on my new business</li> <li>-I expect my business to have a favourable tax</li> <li>-I expect that tax incentive will help my business to succeed</li> <li>-I expect that provision of tax incentives will improve my new business</li> <li>-I expect that lower amount of tax on my business will make it prosperous</li> </ul>                                                                                                                                                                     | Mustapha (2016);<br>Feyitimi (2016) |
| 7. | <p><b>Financing</b></p> <ul style="list-style-type: none"> <li>-Loan conditions by the government for entrepreneurs should not be stringent</li> <li>-Government loan conditions should be lenient in financing my business start-up</li> <li>-Softer loan conditions by banks should be allowed for new entrepreneurs to access business finance</li> <li>-Lack of business experience may not be a criterion by the government for access to new business financing</li> <li>-The interest rates for loans by banks for business start-up should be affordable</li> <li>-The interest rates on new business financing by banks should be favourable for new entrepreneurs</li> </ul> | Carolyne (2016)                     |

**Table 3.1** continued

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                     |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| 8. | <p><b>Machinery/Equipment</b></p> <ul style="list-style-type: none"> <li>-Having access to machinery and equipment is important for business start-up</li> <li>-Having access to machinery and equipment gives more courage for engaging in entrepreneurial activity</li> <li>-Having access to machinery and equipment will encourage me to start my business</li> <li>-The use of machinery and equipment will enable me to produce my products</li> <li>-The use of machinery and equipment will enable me to produce quality products</li> <li>-The use of machinery and equipment will enable me to produce a large stock of products</li> </ul> | Robertson (2010)                    |
| 9. | <p><b>Entrepreneurial Motivation</b></p> <ul style="list-style-type: none"> <li>-I want to be a business owner</li> <li>-I want to make profit from my own new business</li> <li>-I like to control my own time at work</li> <li>-I am thinking that having a business can improve my financial status</li> <li>-I see a good future for myself if I start a business.</li> <li>-I would like to make business decisions in conducting my own business</li> </ul>                                                                                                                                                                                     | Hassan et al. (2010); Oyvind (2016) |

**Table 3.1** continued

|     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                         |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| 10. | <b>Self-employment</b><br><br>-The need for change attracts me for self-employment<br><br>-The need to be independent attracts me for self-employment<br><br>-The need to reduce poverty influences me for self-employment<br><br>-The need for more money influences me for self-employment<br><br>-The better conditions of working attracts me for self-employment<br><br>-My family commitments influence me for self-employment<br><br>-The demand / market for my new products attracts me for self-employment | Dawson et al.<br>(2009) |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|

### **3.8 Procedures for Data Collection**

The procedures for the data collection for this research is being explain in a systematic procedure through which data was collected and analyzed for the study. It has been so important for the data to be collected through such procedure in order to conform with the standard for the collection of the data in this study.

Figure 3.2 illustrates the steps followed in collecting data for the research.

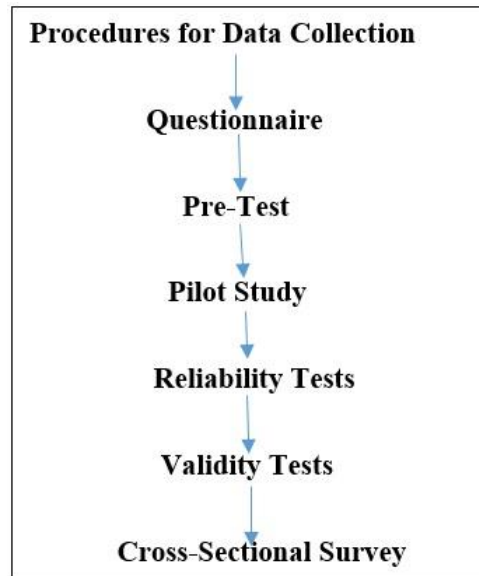


**Figure 3.2:** Procedures for the Data Collection

The procedures for the data collection starts with pre-testing of the instruments and pilot study to further confirm the reliability and validity of the instruments. The data collection was done through a cross-sectional survey. The researcher visited the skills acquisition centres where the respondents are receiving training, and questionnaires were distributed to the respondents' involved. The questionnaires were distributed to the respondents personally and some of the questionnaires were collected immediately while some were collected later. It has been upheld that large data can be collected at a single point of time at different locations with due suitability upholding the procedure (Babbie, 2013; Chua, 2013).

The procedures were as follows:

### **3.8.1 Pre-Test**

Pre-testing plays an essential role in identifying and potentially reducing measurement error that damages statistical estimates at the population level (Fitzgerald, Winstone, & Prestage, 2014). At this point, the researcher carried out the pre-testing with an activity designed to

evaluate a survey instrument's capacity to collect the desired data, the capabilities of the selected mode of data collection, and the overall adequacy of this present study field procedures (Goerman& King, 2014). The pre-test has allowed the researcher to evaluate survey questions and survey procedures before the data were collected. A retrospective think aloud technique was employed by the researcher.

Subsequently, the pre-test was conducted in a way that the researcher can identify questions that don't make sense to the respondents, or problems of understanding with the questionnaire that might lead to biased answers. To conduct the pre-test through the retrospective, think aloud technique, the researcher premised the following guide to explain and guide the way the pre-test was carried out (Fitzgerald et al., 2014):

**a) Ten (10) people were selected from the target groups**

The pre-test has started after the completion of the design of the questionnaire by the researcher. Ten respondents were selected from the targeted respondents to carry out the pre-test randomly. The retrospective think aloud technique has been used by the researcher on the representative respondents for the pre-test. This has been done in order to ensure that the all items of the survey instrument adequately convey the intended questionnaire statements, measure the intended attitudes and values. Also, the researcher draws on particularly, that the collection of data was conducted according to this study's precise protocols.

**b) The Retrospective Think Aloud Technique**

The respondents were asked by the researcher to complete the survey while thinking out loud while filling the questionnaire. The researcher asked the respondents to fill the survey questionnaire once at a time to the extent that they should not be able to watch each other

while completing it. The testers have completed the survey questions the same way that it will be completed in the actual survey.

Based on the protocol of the retrospective think aloud techniques, the researcher asked the testers to think out loud while they are completing the survey. The researcher monitored the testers each time they read and answer a question and the testers were able to tell the researcher exactly what comes into their mind. The researcher has taken notes on everything they said.

**c) The respondents were observed while completing the survey**

At this point, the researcher observed the respondents during the particular time they are completing the survey questionnaires. All the areas that the respondents did not understand clearly on the questionnaires or they need more explanations were observed and noted by the researcher. This is an indication that some items of the survey questions need to be improved. The researcher went further to improve the questionnaire items by giving due consideration to the observation done on the respondents while completing the survey questionnaires.

**d) Improvements were made to the questionnaire based on the pre-test results**

After all the testers have completed the survey, the researcher reviewed what has been observed and noted during the think aloud technique on the completion of the questionnaire on the items that required improvement. The items are Transformationality (TRF1), Autonomy (AUT6), Vocational Training (VTR7) and Entrepreneurial Motivation (EMV3). The wordings of these items were simplified by the researcher for clarity of understanding of what exactly the questions are intended to convey to the respondents. At this point, the researcher made the improvements observed in the questionnaire and the questionnaire have

been reviewed and have been prepared to start the pilot study for the research. Table 3.2 shows the questionnaire items that required improvements and the improved questionnaire items.

**Table 3.2:** Result of Pre-Test

| <b>Variables</b>                  | <b>Questionnaire Items that Need Improvement</b>                                                              | <b>Improved Questionnaire Items</b>                                                                               |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Transformationality (TRF1)        | I can find new ways on how to harness resources to succeed in my new business                                 | I can find new ways on how to tie together resources to succeed in my new business                                |
| Autonomy (AUT6)                   | I feel I could much be myself when I started my own business                                                  | I feel I could much be personally taking decisions when I started my own business                                 |
| Vocational Training (VTR7)        | I am confident that the curriculum of the training centre is well organized to support me to be self employed | I am confident that the set of courses of the training centre is well organized to support me to be self employed |
| Entrepreneurial Motivation (EMV3) | I like to control my own time at work                                                                         | I like to be in charge of my own time at work                                                                     |

### 3.8.2 Pilot Study

The pilot study of this research has been a preliminary study to test research protocols, data collection instruments, sample strategies, and other research techniques in preparation for a larger study. This pilot study is one of the important stages in this research's data collection procedures and was conducted to identify potential problem areas and deficiencies in the research instruments and protocol prior to implementation during the actual study (Hazzi & Maldaon, 2015). It also helps the researcher in this present study to become familiar with the procedures, as well as it is aimed at verifying the extent of understanding of the contents of the questionnaire. Also, the research maintained this procedure to detect some lapses as well as to ensure that the data collected can be analyzed (Billingham et al., 2013).

A questionnaire as a self-administered instrument was designed by adapting relevant scales from the review of literature. After the design of the questionnaire, the researcher has visited the six (6) skills acquisition centres in Bauchi State, Nigeria. The respondents comprise of graduates and previous failed small business owners in the Entrepreneurship and Skills Acquisition Centres. However, the respondents were informed that the information gathered would be solely used for research purposes. In the questionnaire respondents were required to answer close-ended statement based on their choice or opinion about the constructs of personality traits (i. e., transformationality, resilience, and autonomy), economic incentive factors (i. e., ICTs, vocational training, taxation incentives, financing and machinery/equipment), the concept of entrepreneurial motivation, and the concept of self-employment.

According to Friedman (2013), the size of the pilot study sample is generally 10–20% (minimum) of the main sample size as a reasonable number for conducting a pilot study. Accordingly, for this pilot study, a total of 80 questionnaires were distributed to the respondents of this study. The distribution of the pilot study questionnaires was based on stratified sampling technique due to the constraint distance, budget and time.

### **3.8.3 Results of the Pilot Study**

When questionnaires for the pilot study were distributed, out of the total of 80 questionnaires that were distributed to the respondents, a total of 83% (i. e. 67 questionnaires) out of the 80 questionnaires were returned back to the researcher. However, 11% (i. e. 9 questionnaires) out of the 80 questionnaires were excluded from the analysis because of morbidity and incomplete information. For that, a total of 72% (i. e. 52 questionnaires) were considered for the analysis. The KMO (Kaiser-Mayer-Olkin) and Barlett's Test and Cronbach's test were

used to examine the reliability and validity of the questionnaire. Table 3.3 shows the sample size of the pilot study based on the self-reported questionnaires.

**Table 3.3:** Sample Size of the Pilot Study

| <b>Sample</b>                        | <b>No. of respondents</b> | <b>Percentage</b> |
|--------------------------------------|---------------------------|-------------------|
| Distributed Questionnaires           | 80                        | 100%              |
| Returned Questionnaires              | 67                        | 83%               |
| Unfilled and Returned Questionnaires | 9                         | 11%               |
| <b>Total Used Questionnaires</b>     | <b>58</b>                 | <b>72%</b>        |

### **3.9 Reliability Tests**

Reliability is the extent that shows the consistency of measurement of the study (Babbie, 2010; Pallant, 2011). The study can be considered reliable when the particular technique or instrument used in the study is repeated and is consistent (Babbie, 2014).

#### **a) Reliability Test for Pilot Study**

Cronbach's alpha was used to test the reliability of the instrument in the pilot study for this research. Alpha coefficient or sometimes known as Cronbach's alpha determines the reliability and the internal consistency of the scale in the questionnaire after the dimensionality of the instrument was verified. This is to ensure reliability such as the use of language and readability of the items (Pallant, 2011). In this study, reliability analysis is used to; construct reliable measurement scales, improve existing scales, or evaluate the reliability of scales already in use (Pallant 2010; Chua, 2013).

Pallant (2011) upheld that the Cronbach's alpha is used to check the consistency of the questionnaire. Besides, Pallant (2011) also pointed out that the instrument is reliable only if the alpha value is at least 0.70 or more for research purposes. In this study, the reliability of

the instrument in questionnaire is tested using Alpha's coefficient to show the consistency of the questionnaire. Cronbach's alpha was utilized because it is a reliable statistical technique and frequently applied by researchers (Greene et al., 2009).

The overall reliability for the instrument of this pilot study is shown in Table 3.4, where item AUT7 and EMV7 were excluded from the actual test, since the Cronbach's alpha value of the constructs (i. e. autonomy and entrepreneurial motivation) fall below 0.70, but it has been above 0.7 when the two items were deleted. Consequently, the values of Cronbach's alpha for Resilience, Autonomy, Transformationality, ICT's, Vocational Training, Taxation Incentives, Financing, Machinery/Equipment, Entrepreneurial Motivation and Self-Employment variables are 0.778, 0.750, 0.821, 0.790, 0.742, 0.748, 0.847, 0.733, 0.718 and 0.755 respectively.

The Values of Cronbach's alpha are relatively higher than 0.70, and hence, the instrument's reliability was achieved based on the Chin (1998), Green et al. (2009) and Pallant (2011) measurement criteria for contract's reliability attainment. This shows that the constructs and their Cronbach's alpha values are sufficient in terms of being reliable for measurement and quantification.

**Table 3.4:** The Results of Reliability Test for the Pilot Study

| <b>Measure</b>                  | <b>Items</b> | <b>Cronbach's Alpha</b> |
|---------------------------------|--------------|-------------------------|
| Resilience (RSI1-RSL8)          | 8            | 0.778                   |
| Autonomy (AUT1-AUT6)            | 7            | 0.750                   |
| Transformationality (TRF1-TRF8) | 8            | 0.821                   |
| ICT's (ICT1-ICT8)               | 8            | 0.790                   |
| Vocational Training (VTR1-VTR8) | 8            | 0.742                   |
| Taxation Incentives (TAX1-TAX7) | 7            | 0.748                   |

**Table 3.4** continued

|                                                                        |   |       |
|------------------------------------------------------------------------|---|-------|
| Financing (FIN1-FIN7)                                                  | 7 | 0.847 |
| Machinery/Equipment (MEQ1-MEQ7)                                        | 7 | 0.733 |
| Entrepreneurial Motivation (EMV1, EMV2, EMV3, EMV4, EMV5, EMV6 & EMV8) | 8 | 0.718 |
| Self-Employment (SEM1-SEM7)                                            | 7 | 0.755 |

### **b) Reliability Test for the Actual Study**

The reliability for the actual study data was assessed through the measurement of Composite Reliability (CR) using PLS-SEM software (version 2.0) reliability analysis. The Composite Reliability in this study considers indicator's reliability separately, and uses the indicators' outer loadings in estimating reliability (Hair et al., 2014). Hulland (1999) offered a cut-off point of 0.4; that any indicator with outer loading less than 0.4 should be removed from the measurement model. Similarly, Hair et al., (2014) posited that "indicators with outer loadings between 0.40 & 0.70 should be considered for removal from the scale only when deleting the indicator leads to an increase in the composite reliability or the average variance extracted above the suggested threshold value.

### **3.10 Validity Tests**

The validity test for this study has been done as a perfect presentation of the variables which the study intends to measure. According to Babbie (2014), validity is the extent to which the findings of the study truly reflect the real concepts and understanding of the topic. As part of the validity measure of this study, the designed questionnaire has been cross-checked by an expert whether the language, terms, format and content used can be easily understood by the respondents in order not to confuse them before the conduct of the pilot test. With the result obtained from the validity test, it is expected that the questionnaire of this study can

be understood by the respondents (Babbie, 2010). The validity tests conducted in this study were face validity, validity test for the pilot study and validity tests for the actual study.

#### **a) Face Validity**

The face validity of this study was carried out during a pre-test among the respondents. The face validity was done in order to ensure the adequacy of the measurement items. At this point, the researcher observed the respondents during the particular time they are completing the survey questionnaires. All the areas that the respondents did not understand clearly on the questionnaires or they need more explanations were observed and noted by the researcher and have been improved.

#### **c) Validity Test for the Pilot Study**

As one of the main instruments for collecting data for this research, the questionnaire had been tested using pilot study. In this study, the researcher used factor analysis method to test the validity of the instruments of the questionnaire. It has been done by KMO (Kaiser-Mayer-Olkin) and Bartlett's Test value, in order to check, the questionnaire used in this study has really focused on the topic of this study (Chua, 2013).

The KMO (Kaiser-Mayer-Olkin) and Bartlett's test of sphericity, which are the measure of sampling adequacy, was conducted on each variable. Both tests were used to determine the factorability of the matrix as a whole and whether it exceeds the acceptable standard of KMO value of 0.6. If KMO is higher than 0.6, its factorability is assumed (Greene et al., 2009; Pallant 2010). Since KMO values for each variable for the pilot study were higher than 0.6, therefore the factorability was assumed. The value of Bartlett's test of sphericity for each variable was large and significant, thus the validity was achieved (Greene et al., 2009).

**Table 3.5:** The overall result of KMO and Bartlett's test for the Pilot study

| Measure                                | Items | KMO   | Bartlett's Test of Sphericity | Eigen Value | Variance Explained |
|----------------------------------------|-------|-------|-------------------------------|-------------|--------------------|
| Resilience (RSI1-RSL8)                 | 8     | 0.718 | 247.767,<br>P=0.000           | 3.760       | 46.997             |
| Autonomy (AUT1-AUT7)                   | 7     | 0.673 | 96.746<br>P=0.000             | 2.803       | 40.044             |
| Transformationality (TRF1-TRF8)        | 8     | 0.782 | 215.942,<br>P=0.000           | 4.026       | 50.322             |
| ICT's (ICT1-ICT8)                      | 8     | 0.723 | 235.475,<br>P=0.000           | 3.610       | 45.125             |
| Vocational Training (VTR1-VTR8)        | 8     | 0.626 | 134.610,<br>P=0.000           | 2.988       | 37.351             |
| Taxation Incentives (TAX1-TAX7)        | 7     | 0.633 | 126.976,<br>P=0.000           | 2.916       | 41.653             |
| Financing (FIN1-FIN7)                  | 7     | 0.778 | 194.159<br>P=0.000            | 3.790       | 54.142             |
| Machinery/Equipment (MEQ1-MEQ7)        | 7     | 0.668 | 151.817<br>P=0.000            | 2.899       | 41.417             |
| Entrepreneurial Motivation (EMV1-EMV8) | 8     | 0.637 | 119.622<br>P=0.000            | 2.843       | 40.609             |
| Self-Employment (SEM1-SEM7)            | 7     | 0.636 | 136.492<br>P=0.000            | 2.883       | 41.188             |

#### d) Validity Test for the Actual Study

The validity of the actual study data was done through convergent validity and discriminant validity. The convergent validity was conducted to ensure an agreement among multiple items in measuring a particular concept (Hair et al., 2014). Thus, it was done to make sure that the extent to which indicators of a specific variable converge or share a high proportion of variance in common.

The discriminant validity was also conducted to make sure the extent of how indicators of a particular construct actually represent the construct and how they are different from other constructs of the study (Hair et al., 2014). The discriminant validity was assessed based on Fornell & Larcker (1981), in which they demonstrated that the square root of the average variance extracted (AVE) for a particular construct should be higher than the correlation of the subject construct with any other construct in the model. Similarly, according to Venkatesh & Morris (2000), the square root of the AVE value for each construct should be greater than the value of correlations with other construct. The value of latent variable indicator loadings and cross-loading for a particular indicator should be higher in its own construct above its shared loading with other constructs. This is in accordance with Chin (1998) criteria.

### **3.11 Procedure of Data Collection for the Actual Study**

In conducting this research, the method for the data collection was through the distribution and collection a self-administered questionnaire. The researcher has collected the data personally, by visiting the respondents at the Entrepreneurship and Skills Acquisition Centres in Bauchi State, Nigeria between the 1<sup>st</sup> of August to the 30<sup>th</sup> of September, 2017. Questionnaires were administered and distributed to the respondents in which first-hand information was gathered from them. After distribution of the questionnaires, a reasonable time was given to the respondents to fill the questionnaires. Then, the researcher subsequently collected the filled questionnaires from the respondent and prepared it ready for coding, screening and analysis.

### **3.12 Methods of Data Analysis for the Actual Study**

The data for this study has been analyzed using the Statistical Package for Social Sciences (SPSS) and PLS-SEM (Smart PLS v. 2.0) to test the hypotheses of this study and to analyze the data. In the analysis, the researcher used both descriptive and inferential statistics in the analysis and interpretation of the relationships that is generated from the data.

#### **3.12.1 Descriptive Statistics**

In this study, the descriptive statistics such as mean and standard deviation in which table and percentages were used to describe and summarize the demographics of the respondents. The reliability and validity of the results from the pilot study were also analyzed through the descriptive analysis.

#### **3.12.2 Inferential Statistics**

Inferential statistics in this study are involved with making inferences and generalization from the sample to the population. Inferential statistics is tied to the logic of hypothesis testing, and it determines and examines different variables and interrelationships expressed in a series of simultaneous equations that are congruent to a series of equations in this study (Ramaya, 2013). It assists to assess the magnitude of the impact between independent variables, mediating variable, and the dependent variable (Sekaran & Bougie, 2010). It also allows the researcher to make generalizations from the findings to the larger population of this study.

#### **3.12.3 PLS-SEM Analysis**

Partial Least Squares (PLS-SEM) is a form of structural equation modeling (SEM) that can analyze the value of underlying inquiry in behavioral research fields (Lowry & Gaskin, 2014). The PLS-SEM is a second-generation technique that offer extensive, scalable, and

flexible causal-modeling capabilities. The key function of PLS-SEM as a second-generation technique is its superiority over the first-generation techniques in its ability to run the complex causal modeling that dominates recent behavioral research. For confirmatory work, PLS-SEM can be used (Lowry et al., 2014). In particular, PLS-SEM allows for complex models that include latent (unobserved) variables, and chains of mediation effects (Preacher et al., 2014). Hence, the PLS-SEM measurement model analysis and structural model analysis was used in this research.

The researcher has used the measurement model analysis and the structural model analysis to analyze the data for this study. The PLS-SEM technique Path Algorithm have been applied to analyze the measurement model of this study. The measurement model has been used in assessing the beta value, the R squared ( $R^2$ ), construct's internal consistency such as item reliability and Cronbach Alpha; and construct validity such as the convergent validity and discriminant validity. Furthermore, the researcher through the structural model analysis, used Bootstrapping techniques to assess statistical significance. However, other components of the structural model analysis such as the effect size ( $f^2$ ) and determination of coefficients ( $R^2$ ) were assessed. This was followed by the main test of significance of the structural model of the study through bootstrapping. Bootstrapping represents a more exact calculation of measures of significance in this research (Hair et al., 2011). The bootstrapping method was carried out in testing the statistical significance of the path coefficients of both the direct and the indirect effects (mediation). This is because in PLS analysis, bootstrapping has been the most prominent technique in evaluating the statistical significance of path coefficients (Chin, 2010).

After the PLS-SEM bootstrapping analysis, hypotheses of the study would be better known as whether it supported or not-supported the result based on the assumptions made. PLS-

SEM is particularly appealing when the research objective focuses on prediction and in theory extension explaining the variance of key target constructs (Henseler et al., 2009; Reinartz et al., 2009; Hair et al., 2012; Hair et al., 2014). According to Hair et. al. (2013), the PLS-SEM handles reflective constructs and all complex models are identified, and can be used for researches involved in theory extension and predictions. Unlike regression analysis generated by the first generation techniques such as SPSS that test one equation at a particular time, in the smart-PLS, many equations are simultaneously tested (Hair et al., 2013).

### **3.13 Concluding Remarks**

In conclusion, this chapter has explained the nine sections. This includes an explanation on the philosophical stands of the research, the research design, the population, sample size and the sampling technique of the research. It also described the questionnaire design and administration as well as the procedure involved to validate the questionnaire for the research. Finally, the procedure for data collection and the methods of data analysis for the research have been explained. A pretext was conducted in order to tackle any issue that the respondents may face, most especially, with the basic understanding of the contents and language expression of the questionnaire items. Moreover, after the pre-test, a pilot study was subsequently conducted in order to ascertain the constructs reliability and validity. The next chapter, chapter four will present data analysis, findings, and discussion of the research.

## **CHAPTER 4**

### **DATA ANALYSIS, FINDINGS AND DISCUSSION**

#### **4.1 Introduction**

The first section contained the introduction, it discusses the respondent's response rates obtained from the survey, the questionnaire distribution and decision, as well as the frequency and percentages of the questionnaire in the second section. The data screening and preliminary analyses have been explained in the third section. It follows with the results of the descriptive statistics of all respondents' demographic variables in the fourth section. The PLS-SEM research model is presented in the fifth section. Furthermore, in the sixth section, the chapter presented results of the PLS-SEM path model analyses of the assessment of the measurement model, which was subsequently followed by assessment of the average variance extracted (AVE), composite Reliability and R squared analysis in the sub-section one, convergent validity assessment in sub-section two, while the discriminant validity assessment in sub-section three. The structural model analyses were presented in the eighth section. Subsequently the assessment of the effect size of the model in sub-section one, and the assessment of coefficient of determination in sub-section two have been done, while the test of significance on the variables of the study that examines the direct relationships and the mediating effects of entrepreneurial motivation on transformationality, resilience, autonomy, ICT's, vocational training, taxation incentives, financing and machinery/equipment in effecting self-employment is subsequently presented and discussed.

#### **4.2 Respondent's Response Rates**

A total of 800 copies of the questionnaire were distributed to the respondents cutting across

the entrepreneurship and skills acquisition centres in Bauchi State, Nigeria to collect data for this study. A total of 800 questionnaires were distributed to the respondents, a number of 571 questionnaires were successfully returned, while out of the 571 questionnaires, a number of 36 questionnaires were rejected. Precisely, after the data have been collected a total of 36 responses were rejected and not included in the actual analysis for being biased response, incomplete information provided or outliers cases. According to Hair (2013), excluding responses with outlier cases in the data is important because such response does not represent the sample of a study. Hence 535 questionnaires were retained for the analysis. Table 4.1 shows the questionnaire distribution and decision, as well as the frequency and percentages of the questionnaire.

**Table 4.1:** Questionnaire Distribution and Decision

| <b>Items</b>                                   | <b>Frequency</b> | <b>Percentages %</b> |
|------------------------------------------------|------------------|----------------------|
| No. of copies of the questionnaire distributed | 800              | 100%                 |
| No. of copies of the questionnaire returned    | 571              | 78.3%                |
| No. of copies of the questionnaire rejected    | 36               | 4.5%                 |
| No. of copies of the questionnaire retained    | 535              | 66.8%                |

*Source:* Field survey

The sample size considered for this study is 535 respondents which gave an effective response rate of 66.8% that covers the potential entrepreneurs cutting across the six entrepreneurship and skills acquisition centres in Bauchi State, Nigeria as respondents of this study. These response rates can be seen as sufficient considering the argument of Sekaran (2003) which states that the response rate of 30% is acceptable for a survey research.

#### **4.3 Data Screening and Preliminary Analyses**

For the purpose of attaining statistical significance, the collected data for this study was screened using Statistical Packages for Social Sciences (SPSS). The objective of conducting

data screening was to identify the missing values and outliers that may affect the validity of the data. Hair et al. (2014) stressed that initial screening of the data is crucial in any multivariate analysis because it helps the researcher understand the nature of the collected data and further enable him to identify any possibility in respect to the violations of the key assumptions in the conduct of multivariate data analysis technique.

Subsequently, to commence with the initial data screening, the copies of the retained questionnaires were coded into the SPSS spreadsheets. Afterward, assessment of outliers and missing value analysis were conducted (Tabachnick & Fidell, 2007). The procedures for handling the missing values in this research starts after coding the questionnaire responses, then the coded responses were firstly checked for errors. Errors were checked by primarily looking for values that fall outside the range of possible values for a variable. For example, if sex is coded 1-male, 2-female, then any scores other than 1 or 2 for this variable should not be found.

This is because scores that fall outside the possible range can distort the statistical analysis. Therefore, the frequencies for each of the variables was inspected. These includes all of the individual items that make up the scales. Furthermore, the missing values/outliers however, were checked by analyzing the coded values using the SPSS by clicking on Analyze, then Descriptive statistics, then Explore. In the display section, the option both was selected to ensure that statistics and plots were displayed. Then an ID for each variable was selected, and the Statistics button was selected which provides a button to select Outliers. After clicking the Outliers, then a Plot button and Histogram as well as Exclude cases pairwise were selected then the output was displayed. Finally, the SPSS will recognize any blank cell as missing data. Then, such missing values have been revised and corrected.

#### **4.4 Demographic Profile of the Respondents**

The demographic profile of the respondents that are covered by the present study were gender, age group, educational background, marital status, prior vocational training experience, prior use of machinery experience, self-employment experience, and failed business experience. The respondents were drawn from the six Entrepreneurship and Skills Acquisition Centres in Bauchi State, Nigeria. These skills acquisition centres are Muhammad Abubakar Empowerment and Vocational Training Initiatives, Future Assured Women and Youth Empowerment Centre, Azare Skills Acquisition Centre, Dambam Skills Acquisition Centre, Alkaleri Entrepreneurship and Skills Development Centre and Ningi Skills Acquisition Centre.

Subsequently, the level of measurement used in this study for examining the demographic profile was nominal scales. This was done based on the respondents' background which include gender, age group, educational background, marital status, prior vocational training experience, prior use of machinery experience, self-employment experience, and failed business experience for the scale. The scale shows the demographic information of the respondents who have punctually participated in the current survey research.

Table 4.2 shows the demographic information of the respondents who have punctually participated in the current survey research.

**Table 4.2:** Demographic Profile of the Respondents

| <b>Demographic Profile</b>           | <b>Items</b> | <b>Frequency (N)</b> | <b>Percentage (%)</b> |
|--------------------------------------|--------------|----------------------|-----------------------|
| Gender                               | Male         | 291                  | 54.4                  |
|                                      | Female       | 244                  | 45.6                  |
|                                      | <b>Total</b> | <b>535</b>           | <b>100</b>            |
| Age Group                            | 17-23        | 161                  | 30.0                  |
|                                      | 24-30        | 183                  | 34.2                  |
|                                      | 31-37        | 117                  | 21.8                  |
|                                      | 38-above     | 75                   | 14.0                  |
|                                      | <b>Total</b> | <b>535</b>           | <b>100</b>            |
|                                      |              |                      |                       |
| Educational Background               | SSCE/NECO    | 179                  | 33.5                  |
|                                      | ND/NCE       | 62                   | 11.5                  |
|                                      | HND          | 190                  | 35.6                  |
|                                      | B. Sc/B. Ed  | 104                  | 19.5                  |
|                                      | <b>Total</b> | <b>535</b>           | <b>100</b>            |
| Prior Vocational Training Experience | YES          | 277                  | 51.8                  |
|                                      | NO           | 258                  | 48.2                  |
|                                      | <b>Total</b> | <b>535</b>           | <b>100</b>            |
| Prior Use of Machinery Experience    | YES          | 208                  | 39.0                  |
|                                      | NO           | 326                  | 61.0                  |
|                                      | <b>Total</b> | <b>535</b>           | <b>100</b>            |
| Self-employment Experience           | YES          | 244                  | 45.6                  |
|                                      | NO           | 291                  | 54.4                  |
|                                      | <b>Total</b> | <b>535</b>           | <b>100</b>            |
| Failed Business Experience           | YES          | 244                  | 55.7                  |
|                                      | NO           | 291                  | 44.3                  |
|                                      | <b>Total</b> | <b>535</b>           | <b>100</b>            |

The demographic profile of the respondents in Table 4.2 indicates that the majority of the respondents were male, which occupied 54.4 % of the sample while the female constitutes 45.6% of the sample.

With consideration to the age of the respondents, Table 4.2 shows that the majority of the respondents were those between the ages of 24–30, which encompassed 34.2%, followed by those between the age group of 17–23 having 30%. Respondents in the age group of 31-37 have the lowest frequency of 21.8%., while those in the range of 38 years and

above has the lowest percentage of 14%. Table 4.2 also cited that with regards to the respondents' educational background, the majority of them have a Higher National Diploma (HND) represented by 35.6%. This was followed by those holding Senior School Certificate Examination (SSCE) as their educational qualification with 33.5%.

Also, those with a Bachelor of Science and Bachelor of Education (B. Sc/B. Ed) constitutes 19.5%. The last category with the least percentage were those with a National Certificate of Education (NCE) as their qualification which was represented by 11.5% of the sample. In addition, Table 4.2 also indicates those with prior vocational training experience with 51.8%, while those with no prior vocational training experience were having 48.2% among the potential entrepreneurs. Those with prior use of machinery experience constitutes 39%, and those without prior use of machinery experience constitutes 61% of the respondents.

The table also cited those with self-employment experience with 45.6%, while those without self-employment experience constitutes 54.4% of the respondents. Table 4.2 also shows the percentage of those with failed business experience 55.7%, and those without failed business experience were having 44.3% of the respondents.

#### **4.5 PLS-SEM Model of the Research**

This subsection presents the model of the study for clearer understanding of the existence of hypothesized relationships between the variables under investigation. The model for this study has eight exogenous constructs (transformationality, resilience, autonomy, ICT's, vocational training, taxation incentives, financing and machinery/equipment) and one endogenous variable (self-employment) which were connected through a mediating role of entrepreneurial motivation. The entrepreneurial traits have three constructs (i. e., transformationality, resilience, and autonomy) with twenty-three indicators which were

adapted from the literatures developed or used by MacKenzie (2016), Fellows (2016), Rastbin (2016) & Shukri et al. (2014).

The economic incentive factors consist five constructs (i.e., ICT's, vocational training, taxation incentives, financing and machinery/equipment) and consists of eight constructs and fifty-eight-indicators which were adapted from the literatures developed or used by Olatunji (2015), Mercy (2014), Dereje (2014), Mustapha (2016), Feyitimi (2016), Carolyne (2016), Robertson (2010) and Oyvind (2016). The mediating variable (entrepreneurial motivation), the items were adapted from the instruments developed and used by Hassan et al. (2010) and Oyvind (2016). It was uni-dimensional in nature which entails six indicators. At the moment, the revised entrepreneurial motivation construct retained the nature of its uni-dimensionality.

Finally, the concept of self-employment contained seven indicators which were adapted from the instruments developed by Dawson et al. (2009). All the items for the entire questionnaires for this study are subject to a field survey upon which the data for this research was gathered and subsequently analyzed by the researcher.

Figure 4.1 shows the PLS-SEM model of this research.

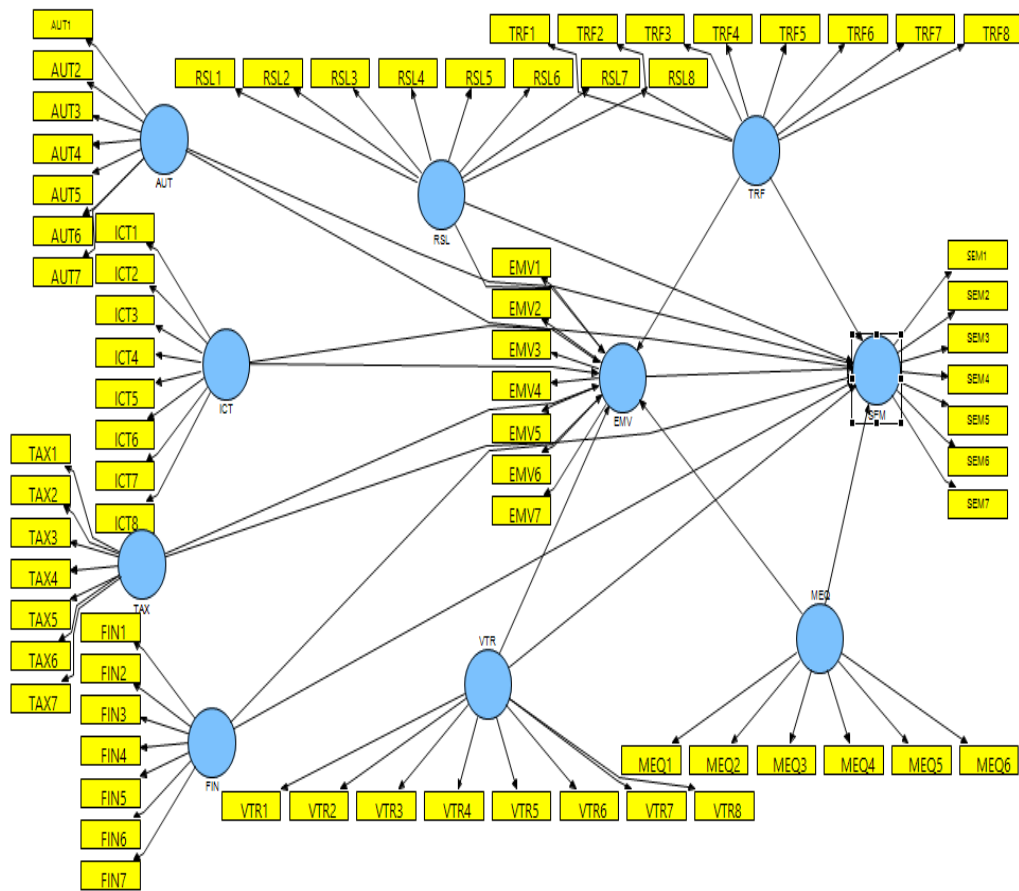


**Figure 4.1:** PLS-SEM Model of the Research

The PLS-SEM model of this research as displayed in Figure 4.1 highlighted the existence of a first order constructs of transformationality (TRF), resilience (RSL), and autonomy (AUT). The Figure 4.1 also indicates that the construct of transformationality is reflected by eight indicators, resilience with also eight indicators, and autonomy with seven indicators. The constructs of ICT were reflected with eight indicators, taxation incentives with seven indicators, financing with also seven indicators, vocational training contained eight indicators, while machinery/equipment has been reflected with six indicators respectively. The mediating variable entrepreneurial motivation (EMV) contained seven indicators, while

the dependent variable, self-employment (SEM) has also been reflected with seven indicators.

Therefore, the study model has eight exogenous variables (i. e., transformationality, resilience, and autonomy, ICT's, vocational training, taxation incentives, financing and machinery/equipment) and one endogenous variable self-employment connected through the mediation of entrepreneurial motivation. The study model provides for comprehensive understanding of direct effects of the constructs of entrepreneurial traits and economic incentives factors on self-employment through the mediation of entrepreneurial motivation.

#### **4.6 Assessment of Measurement Model**

The measurement model is a phase in PLS-SEM algorithm where the average value extracted (AVE), the R squared, composite reliability, the convergent validity and the discriminant validity of the constructs were measured (Chin 1998). Collectively, both tests assess whether the constructs in a model measure what they are supposed to measure, and such validity provides some evidence regarding the goodness-of-fit of the measurement model. The convergent validity and the discriminant validity are tested in order to verify a model construct's validity (Hair et al., 2014). Construct's validity verifies how well the results that are obtained from using the measure fit what the construct measured (Sekaran & Bougie 2010).

The weight relations of indicators (measurement items) and their respective variables (factors) are estimated first. All variables and measurement items were included in the measurement model analysis. Item loadings stand for the coefficients the items possess for the latent factors (Hair et al., 2014). Next, the reliability and validity of the measurement model are estimated by calculating case values of the factors. A common way to assess the

reliability of scales is to use the Cronbach's Alpha (Cronbach, 1951). Cronbach's Alpha (CA) estimates reliability by measuring the inter-correlations of indicators (Hair et al., 2014). Cronbach's Alpha ranges from 0 to 1, where 1 indicates higher reliability. The acceptable value for Alpha is debated, but generally values above 0.7 can be regarded reliable (Tavakol & Dennick, 2011; Venkatesh et al., 2012).

For the loadings of all the factors, subsequently, the researcher examined the respective loadings and cross-loadings to assess if there were problems with any particular items. The researcher used 0.7 as the cut-off value for loadings to be significant (Hair et al. 2010). For the factor loading analysis, it has been found that the loadings for all items exceeded the suggested value of 0.7, except for items FIN4, RSL6, TAX1, TAX2, and TAX3 were retained with loadings less than 0.7. This has been done because the AVE cut-Off value of not less than 0.5 has been attained for these constructs (Urbach & Ahlemann 2010).

Based on this, the researcher retained these items in the model. Table for the factor loadings in the appendices shows that all items measuring a particular variable loaded high on that variable and loaded lower on the other variables, which thus confirmed construct validity. As expected, the value for individual item loading should be greater than 0.70 (Henseler et al., 2009; Hair et al., 2011), however, Hulland (1999) offered a cut-off point of 0.4; that any indicator with outer loading less than 0.4 should be removed from the measurement model. Similarly, Hair et al., (2014) posited that "indicators with outer loadings between 0.40 and 0.70 should be considered for removal from the scale only when deleting the indicator leads to an increase in the composite reliability or the average variance extracted above the suggested threshold value.

#### **4.6.1 AVE, Composite Reliability and R Squared Analysis**

This study assessed reliability through the measurement of Composite Reliability (CR). Differing from Cronbach's Alpha, the Composite Reliability considers indicator's reliability separately, and uses the indicators' outer loadings in estimating reliability (Hair et al., 2014, p.100). In order to obtain the loading of the indicators, cross-loadings, composite reliability and average variance extracted (AVE), the PLS-SEM algorithm was calculated. Hulland (1999) offered a cut-off point of 0.4; that any indicator with outer loading less than 0.4 should be removed from the measurement model. Similarly, Hair et al., (2014) posited that "indicators with outer loadings between 0.40 and 0.70 should be considered for removal from the scale only when deleting the indicator leads to an increase in the composite reliability or the average variance extracted above the suggested threshold value.

The composite reliability depicts the degree to which variable indicators indicate the latent variable (Ramayah et al., 2011). The composite reliability (CR) analysis attempts to measure the sum of a latent variable's factor loadings relative to the sum of the factor loadings plus error variance. The average variance extracted (AVE) measures the variance captured by the indicators relative to measurement error, and it should be greater than 0.5 to justify using a variable (Urbach & Ahlemann 2010). An average variance extracted (AVE) value of at least 0.5 indicates that a latent variable was, on average, able to explain more than half of the variance of its indicators (Urbach & Ahlemann 2010).

The analysis shows that the average variance extracted (AVE) values were in the range of 0.6475 and 0.9323. The composite reliability (CR) values for each variable of this study ranges from 0.7159 to 0.9393, which exceeded the recommended value of 0.7 (Hair et al.,

2010). The Cronbach's Alpha values also ranges from 0.7335 to 0.9216. The composite reliability (CR) values exceeded the recommended cut-off parameters with outer loadings greater than 0.40 and 0.70 (Hair et al., 2014).

**Table 4.3:** AVE, Composite Reliability and R Squared Analysis

|     | AVE    | Composite Reliability | R Square | Cronbach's Alpha | Communality |
|-----|--------|-----------------------|----------|------------------|-------------|
| AUT | 0.9238 | 0.9104                | 0.361    | 0.9016           | 0.6696      |
| EMV | 0.9393 | 0.9457                | 0.229    | 0.9216           | 0.7215      |
| FIN | 0.7159 | 0.9345                | 0.421    | 0.8246           | 0.5610      |
| ICT | 0.8752 | 0.8403                | 0.658    | 0.7335           | 0.7790      |
| MEQ | 0.9066 | 0.8917                | 0.527    | 0.8770           | 0.6192      |
| RSL | 0.7834 | 0.8320                | 0.863    | 0.8766           | 0.6470      |
| TAX | 0.8746 | 0.8800                | 0.076    | 0.8413           | 0.5009      |
| TRF | 0.9024 | 0.8084                | 0.408    | 0.8706           | 0.6088      |
| VTR | 0.8923 | 0.9613                | 0.796    | 0.8521           | 0.5752      |

Table 4.3 shows the AVE, composite reliability, Cronbach's Alpha, Communality and R squared values that met the measurements criteria.

#### 4.6.2 Convergent Validity Assessment

Convergent validity is the degree to which multiple items that measure the same variable are in agreement (Ramayah et al., 2011). Specifically, Hair et al. (2006) define convergent validity as 'the extent to which indicators of a specific variable converge or share a high proportion of variance in common'. A set of items presumed to measure the same variable shows convergent validity if their inter-correlations are at least moderate in magnitude (Kline, 2011). Convergent Validity is a degree of agreement among multiple items in measuring a particular concept (Hair et al., 2014).

Average Variance Extracted (AVE) was used to evaluate the convergent validity based on Hair et al. (2010), Fornell & Larcker (1981) criteria. As Hair et al. (2010) suggests, a model's convergent validity is assessed based on three criteria: (i) factor loading analysis, (ii) composite reliability (CR) analysis, and (iii) average variance extracted (AVE) analysis, with the recommended cut-off parameters of 0.5 and 0.7 respectively. Generally, convergent validity measures the degree to which measurement items explain the variance in factors (Hair et al., 2014). In order to achieve an acceptable level of convergent validity, AVE values should be above 0.5 (Fornell & Bookstein, 1982; Hair et al., 2014). According to Hair et al. (2014), latent construct should at least explain half of the variance of the indicators.

The result of the PLS algorithm reveals that AVE values for all the constructs have met and exceeded the minimum threshold value as discussed above. Conventionally, the internal consistency reliability was assessed based on Cronbach Alpha (Cronbach, 1951). The estimation here is based on indicators of manifest variables inter correlations, whereby all the indicators are assumed to have matching outer loadings (Hair et al. 2014). However, the main concern in PLS-SEM is indicator's individual reliability.

Therefore, due to the drawbacks of Cronbach Alpha, a more robust measure of assessing internal consistency reliability, known as composite reliability is proposed as discussed in Starkweather (2012). On the criteria for assessment of internal consistency reliability using composite reliability, Hair et al. (2011) suggests based on Nunnally & Bernstein (1994) that the composite reliability value should be greater than 0.70, although they have provided a slack of 0.60-0.70 as acceptable in exploratory research.

Internal consistency reliability is deemed sufficient when the values of composite reliability are greater than 0.60. The composite reliability for all the latent construct in this study was calculated in PLS-SEM algorithm and the result indicated that all the latent constructs have met and exceeded the minimum threshold value of 0.70 (Henseler et al., 2009; Hair et al., 2011). Table 4.4 depicts the composite reliability of the constructs as follows; resilience (0.7831), autonomy (0.9238), transformationality (0.9024), information communication technology (ICTs)(0.8752), vocational training (0.8901), taxation incentives (0.8746), financing (0.7159), machinery/equipment (0.9066), while the mediating variable entrepreneurial motivation has 0.9393 variable while the dependent variable, self-employment has 0.9298 respectively. It should be noted that all items that were poorly loaded have been deleted based on the criteria mentioned above.

This is because deletion of these items led to increase in composite reliability and average variance extracted of the constructs to the minimum acceptable value. This applies to other affected items, which is considered acceptable in social research (Hair et al., 2014).

Table 4.4 depicts the entire retained items and their respective loadings.

**Table 4.4:** Convergent Validity Assessment

| <b>Constructs</b>                    | <b>Indicators</b> | <b>Loadings</b> | <b>AVE</b> | <b>Composite Reliability</b> |
|--------------------------------------|-------------------|-----------------|------------|------------------------------|
| Autonomy                             | AUT1              | 0.8193          | 0.6696     | 0.9238                       |
|                                      | AUT2              | 0.8450          |            |                              |
|                                      | AUT3              | 0.7687          |            |                              |
|                                      | AUT4              | 0.8413          |            |                              |
|                                      | AUT5              | 0.8766          |            |                              |
|                                      | AUT6              | 0.7519          |            |                              |
| Entrepreneurial Motivation           | EMV1              | 0.7343          | 0.7215     | 0.9393                       |
|                                      | EMV2              | 0.8984          |            |                              |
|                                      | EMV3              | 0.8474          |            |                              |
|                                      | EMV4              | 0.8708          |            |                              |
|                                      | EMV5              | 0.9249          |            |                              |
|                                      | EMV6              | 0.8069          |            |                              |
| Financing                            | FIN4              | 0.6556          | 0.5610     | 0.7159                       |
|                                      | FIN7              | 0.8322          |            |                              |
| Information Communication Technology | ICT2              | 0.8182          | 0.7791     | 0.8752                       |
|                                      | ICT3              | 0.9426          |            |                              |
| Machinery/Equipment                  | MEQ1              | 0.7291          | 0.6192     | 0.9066                       |
|                                      | MEQ2              | 0.8062          |            |                              |
|                                      | MEQ3              | 0.7475          |            |                              |
|                                      | MEQ4              | 0.7791          |            |                              |
|                                      | MEQ5              | 0.8930          |            |                              |
|                                      | MEQ6              | 0.7552          |            |                              |
| Resilience                           | RSL1              | 0.8996          | 0.647      | 0.7831                       |
|                                      | RSL6              | 0.6963          |            |                              |
| Self-Employment                      | SEM1              | 0.7798          | 0.6886     | 0.9298                       |
|                                      | SEM2              | 0.8445          |            |                              |
|                                      | SEM3              | 0.8358          |            |                              |
|                                      | SEM4              | 0.8330          |            |                              |
|                                      | SEM5              | 0.8774          |            |                              |
|                                      | SEM6              | 0.8051          |            |                              |
| Taxation Incentives                  | TAX1              | 0.6872          | 0.5009     | 0.8746                       |
|                                      | TAX2              | 0.5771          |            |                              |
|                                      | TAX3              | 0.6756          |            |                              |
|                                      | TAX4              | 0.7573          |            |                              |
|                                      | TAX5              | 0.7746          |            |                              |
|                                      | TAX6              | 0.7397          |            |                              |
|                                      | TAX7              | 0.7239          |            |                              |

**Table 4.4** continued

|                     |      |        |        |        |
|---------------------|------|--------|--------|--------|
| Transformationality | TRF2 | 0.7526 | 0.6088 |        |
|                     | TRF3 | 0.8453 |        |        |
|                     | TRF4 | 0.7861 |        |        |
|                     | TRF5 | 0.7905 |        |        |
|                     | TRF6 | 0.8581 |        |        |
|                     | TRF7 | 0.6266 |        | 0.9024 |
| Vocational Training | VTR1 | 0.6781 | 0.5752 |        |
|                     | VTR2 | 0.7983 |        |        |
|                     | VTR3 | 0.7465 |        |        |
|                     | VTR4 | 0.7799 |        |        |
|                     | VTR5 | 0.8136 |        |        |
|                     | VTR6 | 0.7257 |        | 0.8901 |

Table 4.4 presented the factor loadings, the AVE and composite reliability that were measured to achieve convergent validity of this study.

#### 4.6.3 Discriminant Validity Assessment

Discriminant validity shows the extent of how indicators actually represent a construct and how they are different from other construct (Hair et al., 2014). The discriminant validity was assessed based on Fornell & Larcker (1981), in which they demonstrated that the square root of average variance extracted (AVE) for a particular construct should be higher than the correlation of the subject construct with any other construct in the model. Similarly, according to Venkatesh & Morris (2000), the square root of the AVE value for each construct should be greater than the value of correlations with other construct. The discriminant validity was also evaluated by the value of latent variable indicator loadings and cross-loading, in which the loading for a particular indicator should be higher in its own construct above its shared loading with other constructs. This is in accordance with Chin (1998) criteria. In addition, the values of the square root of the

average variance extracted for all the constructs (the bold diagonal) are all above the correlation among other constructs.

The discriminant validity was assessed by the extent of correlation among the individual items. Similar to the latent variable correlation result, the individual items correlation indicated good discriminant validity, as there is no indicator that loaded higher in another construct other than its main construct. Based on Chin(1998), Fornell & Larcker (1981), the above explanation suggests the items are more agreeable to their main construct than with any other construct. Table 4.5 shows that the lowest value of the square root of AVE was 0.5009 for taxation incentives, which is above the value of correlations of any constructs in the model. This is also in line with Campeau, Higgins & Huff (1999)'s criteria.

**Table 4.5:** Discriminant Validity Assessment among the Constructs

|     | AUT          | EMV          | FIN          | ICT          | MEQ          | RSL          | SEM          | TAX          | TRF          | VTR          | AVE    |
|-----|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------|
| AUT | <b>0.818</b> |              |              |              |              |              |              |              |              |              | 0.6696 |
| EMV | 0.015        | <b>0.849</b> |              |              |              |              |              |              |              |              | 0.7215 |
| FIN | 0.493        | 0.079        | <b>0.748</b> |              |              |              |              |              |              |              | 0.561  |
| ICT | -0.078       | 0.044        | -0.057       | <b>0.882</b> |              |              |              |              |              |              | 0.779  |
| MEQ | 0.438        | 0.381        | 0.435        | -0.029       | <b>0.786</b> |              |              |              |              |              | 0.6192 |
| RSL | 0.342        | 0.032        | 0.431        | -0.004       | 0.176        | <b>0.804</b> |              |              |              |              | 0.647  |
| SEM | 0.328        | 0.008        | 0.328        | -0.074       | 0.101        | 0.180        | <b>0.829</b> |              |              |              | 0.6886 |
| TAX | 0.108        | 0.116        | 0.152        | 0.028        | 0.219        | 0.008        | 0.126        | <b>0.707</b> |              |              | 0.5009 |
| TRF | 0.051        | -0.174       | 0.208        | 0.090        | -0.067       | 0.015        | 0.007        | 0.169        | <b>0.780</b> |              | 0.6088 |
| VTR | 0.065        | -0.216       | 0.149        | -0.060       | -0.081       | 0.214        | 0.365        | 0.071        | 0.073        | <b>0.758</b> | 0.5752 |

Table 4.5 indicates how the discriminant validity was achieved by the square roots of the AVEs to ensure that all items of the factors are loading higher in their main constructs.

## 4.7 Assessment of Structural Model (Direct Relationships)

The structural model was assessed in order to attain the test of significance. But however, measures such as the effect size ( $f^2$ ) and determination of coefficient has to be evaluated before the main test of significance of the structural model (Creswell, 2009; Henseler & Fassott, 2010; Hair et al., 2014).

### 4.7.1 Effect Size ( $f^2$ ) of the Model

Drawing from Cohen (1988), Henseler & Fassott (2010), suggested that further analysis should be carried out to evaluate the effect size ( $f^2$ ) of the exogenous variable in the main effect model. The procedure, as illustrated in Hair et al. (2014), is to eliminate an exogenous variable in the PLS model and calculate the PLS standard algorithm to obtain the coefficient of determination ( $R^2$ ). Then the  $R^2$  (excluded) is compared with the  $R^2$  (included) of the model that includes all the variables in the study. Accordingly, the values are substituted in a formula given below (Cohen, 1988; Callaghan, Wilson, Ringle, & Henseler, 2007):

$$f^2 = \frac{(R^2_{\text{included}} - R^2_{\text{excluded}})}{(1 - R^2_{\text{included}})}$$

Effect sizes are evaluated as small (0.02), medium (0.15) or large (0.35) respectively, according to Cohen (1988). Although Chin, Marcolin, & Newsted (2003) upheld that even a small effect size should not be neglected, arguing thus; “Even a small interaction effect can be meaningful under mediating conditions, if the resulting beta changes are meaningful, then it is important to take these conditions into account” (Chin et al., 2003). Consequently, the result of the effect sizes as depicted in Table 4.7. The result shows that Autonomy, Financing, ICTs, Resilience, Vocational Training, and Transformationality have small effects with values 0.025, 0.032, 0.028, 0.029, 0.036 and 0.039. Machinery/Equipment

have medium effect with value 0.138, while Taxation Incentives have none respectively.

**Table 4.6:** Effect Size ( $f^2$ ) of the Model

| <b>Exogenous Constructs</b> | <b>R<sup>2</sup> Incl.</b> | <b>R<sup>2</sup> Excl.</b> | <b>R<sup>2</sup> Incl- R<sup>2</sup> Excl.</b> | <b>1-R<sup>2</sup> Incl.</b> | <b>Effect Size(<math>f^2</math>)</b> | <b>Cohen, (1988)</b> |
|-----------------------------|----------------------------|----------------------------|------------------------------------------------|------------------------------|--------------------------------------|----------------------|
| Autonomy                    | 0.361                      | 0.309                      | 0.030                                          | 0.729                        | 0.027                                | Small                |
| Financing                   | 0.421                      | 0.404                      | 0.045                                          | 0.729                        | 0.034                                | Small                |
| ICTs                        | 0.658                      | 0.607                      | 0.062                                          | 0.729                        | 0.030                                | Small                |
| Machinery/Equipment         | 0.527                      | 0.422                      | 0.107                                          | 0.729                        | 0.146                                | Medium               |
| Resilience                  | 0.863                      | 0.806                      | 0.083                                          | 0.729                        | 0.031                                | Small                |
| Taxation Incentives         | 0.076                      | 0.073                      | 0.006                                          | 0.729                        | 0.008                                | None                 |
| Transformationality         | 0.408                      | 0.401                      | 0.048                                          | 0.729                        | 0.038                                | Small                |
| Vocational training         | 0.796                      | 0.700                      | 0.079                                          | 0.729                        | 0.039                                | Small                |

Table 4.7 shows the measures of the research model's effect size in which the construct of autonomy was having 0.027, financing, 0.034; ICTs, 0.030; machinery/equipment, 0.146; resilience, 0.031; taxation incentives, 0.008; transformationality, 0.038; and vocational training was having 0.039. The table indicates that it was only taxation incentive that was having (None) effect size.

#### 4.7.2 Assessment of Coefficient of Determination ( $R^2$ )

Coefficient of determination ( $R^2$ ) is the variance explained in the endogenous latent variable by exogenous latent variables (Henseler et al., 2009). Therefore is an alternate means of assessing structural model quality in variance-based structural equation modeling, just as goodness-of-fit is in covariance based structural equation modeling (Götz, Liehr-Gobbers, & Krafft, 2010). Three different evaluation criteria were recommended. According to Falk & Miller (1992), an  $R^2$  is deemed satisfactorily if it exceeds 1.5%. Furthermore, Cohen (1988) and Chin (1998) recommended three levels of structural model quality by the coefficient of determination as; substantial (0.26 and 0.67), moderate (0.13 and 0.33) and weak (0.02 and 0.09) respectively. During the assessment of the

measurement model for this study, the standard PLS algorithm was calculated for the main effect model. The  $R^2$  value is 0.271, and so is satisfactorily based on (Falk & Miller, 1992). It is precisely substantial, according to Cohen (1988) and Chin (1998) respectively.

For the test of significance in the structural model, the PLS-SEM bootstrap path coefficient analysis was carried out to test the direct relationships of the hypotheses of this study. The objectives of this study can be accomplished by testing the earlier formulated hypotheses of the study in order to understand the main direct relationship effects within the constructs/variables of the study. The Statistical T-values substantially depend on the degree of freedom, confidence interval and directionality of the hypotheses, thus P-value is used to ascertain if the paths are significant (Hair et al., 2014). In order to obtain the statistical t-values, beta values and the standard error, the PLS bootstrapping resampling (Chin, 2010) was run with 5000 bootstrapping samples (Hair et al., 2011).

The bootstrapping sample is considered adequate, going by Henseler (2012) study. Similarly, Wilson (2011) set his bootstrapping samples at 500 resamples. But, the 5000 bootstrapping resampling was also suggested by Hair et al. (2011). Prior to that, the PLS standard algorithm was also calculated during measurement model assessment, thus the path coefficients and the directionality of the relationship (supported or not-supported) was obtained. The p-value was calculated based on 95% confidence interval, as it is acceptable in social science research (May, 2011; Bickel, 2012).

#### **4.7.3 Transformationality and Self-employment**

The first objective of this study was to examine whether or not, there is a direct impact between transformationality and self-employment. The researcher's aim here has been to determine whether the construct of transformationality has a significant and direct

relationship with the concept of self-employment among the potential entrepreneurs. The result of the PLS-SEM algorithm and bootstrap for testing the direct relationship of transformationality and self-employment were presented in Figure 4.2 and Figure 4.3.

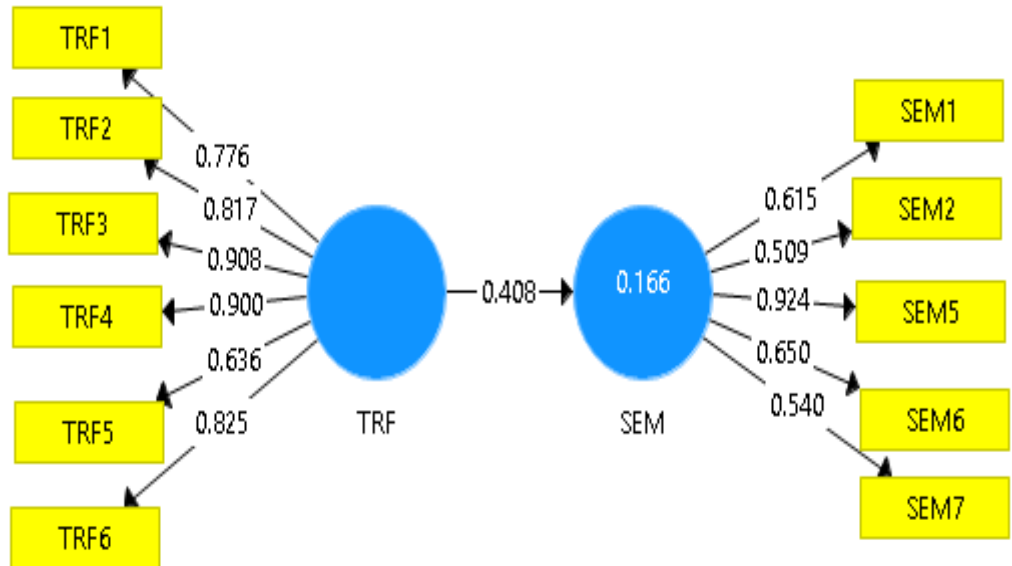


**Figure 4.2:** PLS-SEM Path Algorithm for the Direct Relationship of transformationality and self-employment

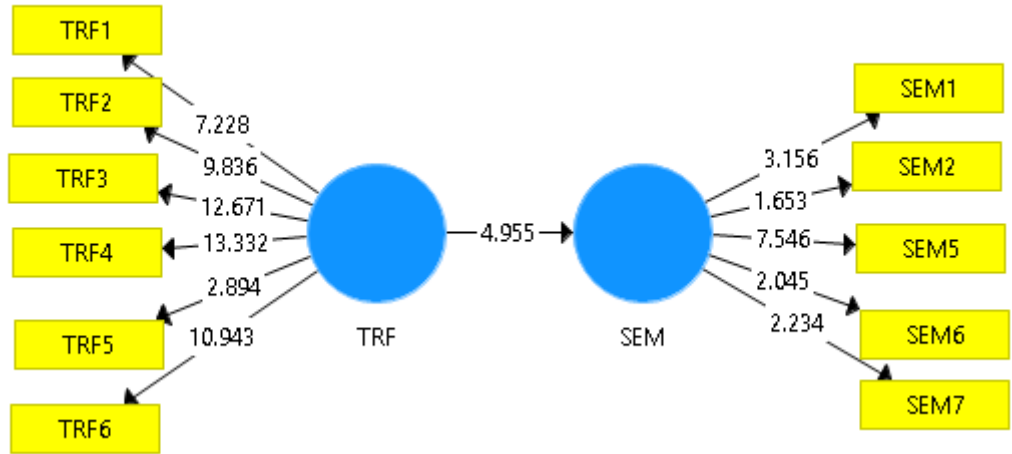


**Figure 4.3:** PLS-SEM Bootstrap for the Direct Relationship of transformationality and self-employment

**H<sub>1</sub>:** *There is a significant impact between transformationality and self-employment*

In this direction, the researcher wanted to know whether there was an existence of an impact between transformationality and self-employment. Hence, the appropriate quantitative statistical analysis to respond to the stated hypothesis was PLS-SEM path model technique. In this regard, preliminary analyses were conducted to make sure that no violation of the assumptions of normality and linearity.

The result of the PLS-SEM bootstrap revealed that the Beta value of the relationships between transformationality and self-employment was  $\beta = 0.408$ ,  $p = 0.000$ . Accordingly, the values of Beta, T-statistics, and P values of the relationships between independent variable (i.e., transformationality) and the dependent variable (i.e., self-employment) were  $\beta = 0.408$ ;  $t = 4.955$ ;  $p = 0.000$ . In this respect, all the values of such relationships are above 1.645 at  $p < 0.05$  confidence levels using one tail test (rule of thumb). According to Hair et al. (2014), Ramayah (2013), Chin (2010), Wong (2014), if the t-value is greater than 1.645 ( $p < 0.05$ ) and if the t-value is greater than 2.33 ( $p < 0.01$ ) is substantially significant for 1-tail test (rule of thumb). For two tail test (rule of thumb), if the t-value is greater than 1.96 ( $p < 0.05$ ) and if the t-value is greater than 2.58 ( $p < 0.01$ ) then it is substantially significant.

Therefore, this hypothesis (H<sub>1</sub>) was supported. In addition, the result confirmed that the entrepreneur's degree of transformational trait positively influence self-employment among the potential entrepreneurs.

**Table 4.7:** The PLS-SEM result of testing the impact of transformationality on self-employment.

| Hypothesis     | Relationship | Beta value | Standard Error (SE) | t-Value | p-Value | Decision  |
|----------------|--------------|------------|---------------------|---------|---------|-----------|
| H <sub>1</sub> | TRF -> SEM   | 0.408      | 0.0486              | 4.955   | 0.000   | Supported |

Source: Field survey

Note: \*\* $P < 0.01$ , \* $p < 0.05$

Table 4.7 indicates that there was a positive impact between transformationality and self-employment ( $\beta = 0.408$ ;  $t = 4.955$ ;  $p = 0.000$ ). Therefore, the first hypothesis was supported. The result of this study found there was a direct effect of transformationality on self-employment. In the same way, this result pointed out that there was a positive correlation between the two related variables. In other words, the level to which the potential entrepreneurs use their ability to harness resources and challenge their status quo would to a greater extent allow them to effectively practice self-employment.

Similarly, this finding was supported by the notion of Personality trait theory (PTT). Personality trait theory emphasized personal characteristics that define entrepreneurship, and the personality trait theory like any other psychological theories, the level of analysis is the individual. The insight into these traits or inborn qualities is uncovered by this theory through the identification of the characteristics associated with an entrepreneur (Coon, 2004; Koomson, 2015). Thus, the pattern of behaving, thinking and expression of feelings or ideas is unique to a particular individual (Coon, 2004). The theory advocated that when potential entrepreneurs possess such a trait, and their ability to apply and utilize it in the entrepreneurial activity, would result in the effective realization of their goal, which is the new business start-up (Mary, 2010).

Also, the finding of this study is in line with the Vroom's expectancy motivation theory. The Vroom's expectancy motivation theory holds the notion that in realizing an entrepreneurial decision, the motivation to start-up is stronger the more a person perceives that the rewards of entrepreneurship (instrumentality) can satisfy the needs which are important to him (value), and the more probable he sees that he is going to succeed in the tasks related to entrepreneurship. Thus, the theory emphasizes that individuals (referred as a person) possess

entrepreneurial characteristics always finds the path to entrepreneurship and succeed in attaining the desired outcome.

Transformationality as a trait among entrepreneurs is the charismatic control position which is the ability to deploy innovative and unconventional means to achieve the self-employment objective through the use of personal power or charisma to organize all resources available. The adjunct to transformationality on all the entrepreneurial traits is being a diplomatic trait that can blend well all resources with prudence, control the resources and recognize the effective utilization of such resources to achieve the self-employment objective (Song, 2016). According to a finding in a research conducted by Moore et al. (2013), revealed that transformationality as a trait that influences the process and practices of self-employment more than other traits.

The finding discovered that, there is a positive relationship between transformationality and self-employment. This indicates that transformationality occupy a very vital role among the traits that influences entrepreneurs in self-employment. Also, in line with the finding of this study, Georgianna, Müller, Schermelleh-Engel & Petersen (2016) found that transformationality is positively associated with self-employment. They affirmed that transformational entrepreneurs typically do not need much direction from others, and are able to manage themselves well in their self-employment practices.

Furthermore, in a relevant finding, according to Sazesh and Siadat (2016), of transformationality influences self-employment because it has been found that transformationality is positively related to self-employment. This shows that transformationality as a trait of entrepreneurs when possessed by entrepreneurs, it enables them to be more committed and active in self-employment start-up. This trigger the potential

entrepreneurs to set a realistic and achievable vision in self-employment. The potential entrepreneurs can then translate the vision effectively in achieving self-employment, and also inspire a sense of commitment and purpose to achieve self-employment.

In addition, Zahra (2010) also found a positive relationship between transformationality and self-employment. In summary, transformationality has been found as a trait that can influence self-employment among the entrepreneurs. Transformationality is seen as an important predictor of self-employment among entrepreneurs as its major role relates to the mobilization of the overall resources in ensuring an effective self-employment start-up among the entrepreneurs (Kacperczyk, 2012).

In their empirical findings, Leonelli & Masciarelli (2017) discovered a significant relationship between transformationality trait and self-employment. The finding disclosed that potential entrepreneurs with transformational traits are much motivated to practice entrepreneurship most particularly, the start-up stage. This indicates that, transformationality trait plays a very vital role for entrepreneurs most especially, at the starting point, which is essentially significant among all entrepreneurs. Also, in Ling et al. (2008), transformationality trait is found to be positively related to self-employment pursuance.

The researchers disclosed that entrepreneurs with such trait, are capable of harnessing and utilizing overall resources to achieve targets in self-employment. They also found that, such entrepreneurs with transformational traits have the courage to challenge a status quo, a situation where an amount of change is essential to bring in new ideas and development, that by and large, would result in positive progress in self-employment context.

#### 4.7.4 Resilience and Self-employment

The second specific objective of this study is to investigate whether resilience as a construct of entrepreneurial trait has a direct relationship with self-employment, and raises the potential entrepreneur's determination in self-employment.

The results of the PLS-SEM algorithm and bootstrap for testing the direct relationship of transformationality and self-employment are presented in Figure 4.4 and Figure 4.5.

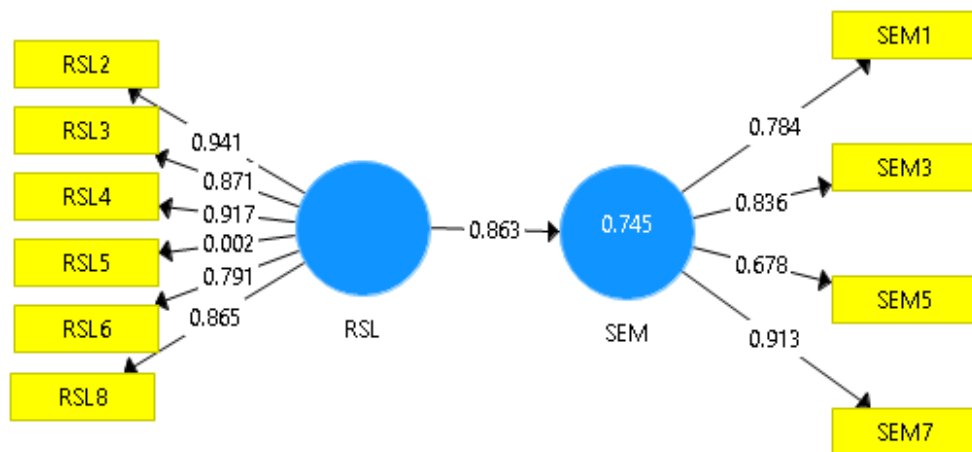


**Figure 4.4:** PLS-ESM Path Algorithm for the Direct Relationship of Resilience and Self-employment

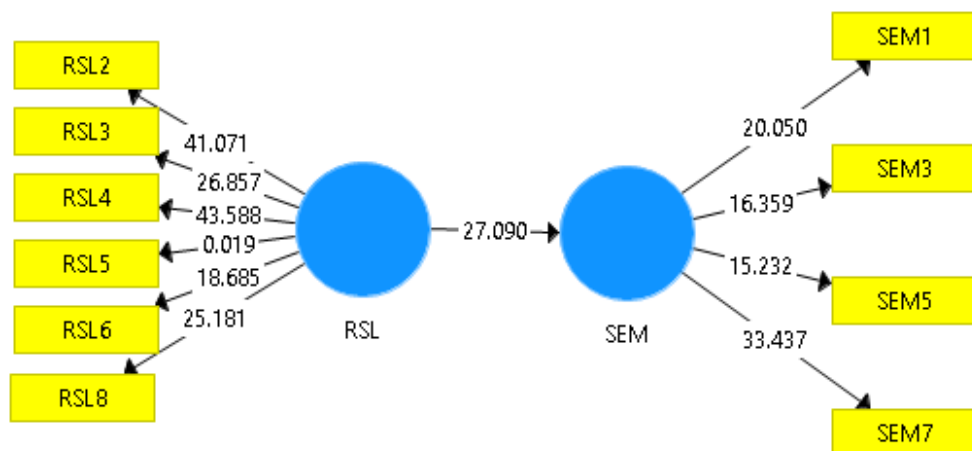


**Figure 4.5:** PLS-ESM Bootstrap for the Direct Relationship Resilience and Self-employment

**H<sub>2</sub>: There is a significant impact between resilience and self-employment**

The research aimed to examine the construct of resilience as a trait of entrepreneurs, and whether it has a direct relationship or not, with self-employment, in potential entrepreneur's new business start-up. The result of the bootstrap and path coefficient disclosed that the Beta value, the T-statistics, and the P values of the relationship between resilience and self-employment were  $\beta=-0.863$ ;  $t=27.090$ ;  $p=0.000$  ( $p<0.05$ ). In this direction, all the values for such relationship are above 2.58 at 0.01 confidence level using two tail tests (rule of thumb).

Basically, based on these statistical values ( $\beta=-0.863$ ;  $t=27.090$ ;  $p=0.000$ ), resilience have a significant relationship with self-employment. Based on the above stated statistical points, however, Hypothesis H<sub>2</sub> has been accepted.

Table 4.8 shows the PLS-SEM path model analysis of the direct relationships between the constructs of resilience and self-employment.

**Table 4.8:** PLS-SEM result of testing the direct effect of resilience on self-employment.

| Hypothesis     | Relationship | Beta value | Standard Error (SE) | t-Value | p-Value | Decision  |
|----------------|--------------|------------|---------------------|---------|---------|-----------|
| H <sub>2</sub> | RSL -> SEM   | 0.863      | 0.0522              | 27.090  | 0.000   | Supported |

Source: Field survey

Note: \*\* $P<0.01$ , \* $p<0.05$

Table 4.8 indicates that there was a positive impact between resilience and self-employment ( $\beta=-0.863$ ;  $t=27.090$ ;  $p=0.000$ ). Therefore, the second hypothesis was accepted. Equally, this finding was supported by the notion of Personality trait theory (PTT). Personality trait theory emphasized personal characteristics that define entrepreneurship, and the

personality trait theory like any other psychological theories, the level of analysis is the individual. The insight into these traits or inborn qualities is uncovered by this theory through the identification of the characteristics associated with an entrepreneur (Landstrom,1988). According to Miller& Breton-Miller (2017), among the abundance of personality qualities that stimulate entrepreneurship, they found that personality traits such as resilience has equally an important role in influencing the motivation of potential entrepreneurs to become self-employed. This indicates that resilience have a positive and significant relationship with self-employment, and this goes in relevance with the finding of this study.

Also, in their empirical findings, Bullough et al. (2014) found that resilience is one of the essential traits of an entrepreneur, the result revealed that resilience have a significant correlation with self-employment. The finding further suggests that individuals develop entrepreneurial intentions if they are able to grow from adversity based on their entrepreneurial capabilities such as being resilient. Furthermore, in line with this present study finding, Jabeen et al. (2017) found that, resilience and other individual and environmental factors influence the entrepreneurial mindset of both males and females of their country of study.

As related to the concept of resilience among entrepreneurs, the negative effects of an adverse life situations in general, and therefore, linked to the entrepreneurial process are modified by several factors including resilience (Dewald et al., 2010). According to Ungar et al. (2008), the capacity to make realistic plans, have self-confidence, a positive self-image, and have the capacity to manage strong feelings and impulses are the factors associated with resilience. The extent of entrepreneurial resilience has been evident and may not only be

dependent on internal or personal characteristics, but also on structural and external factors (Giotopoulos et al., 2017). In recent work by Acs (2010), it has been revealed that entrepreneurial resilience depended on external as well as internal factor influencing self-employment activities across different self-employment context.

#### 4.7.5 Autonomy and Self-employment

This hypothesis (H<sub>3</sub>) was developed to assess the impact between autonomy and self-employment in a direct relationship in this study. Autonomy was assumed to influence potential entrepreneurs in their new business start-up. The result of the PLS-SEM algorithm and bootstrap for testing the direct relationship of transformationality and self-employment were presented in Figure 4.6 and Figure 4.7.

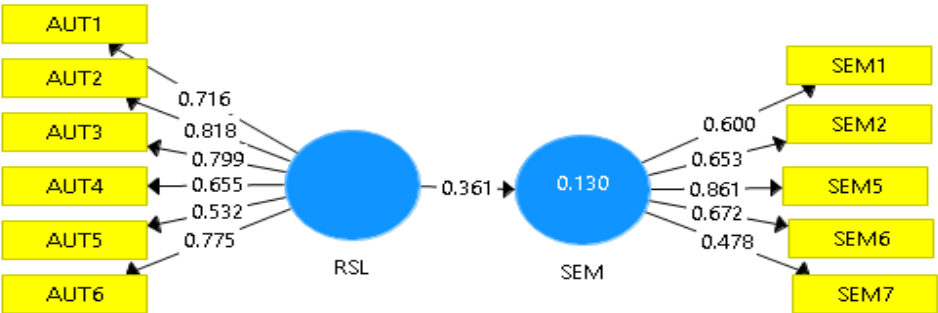


**Figure 4.6:** PLS-ESM Path Algorithm for the Direct Relationship of transformationality and self-employment

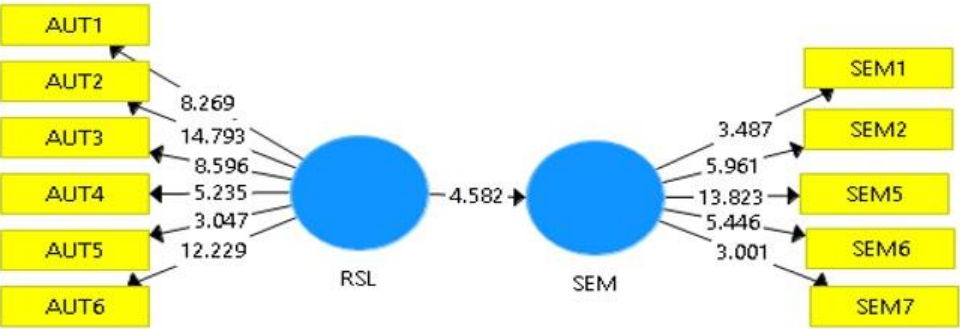


**Figure 4.7:** PLS-ESM Bootstrap for the Direct Relationship of transformationality and self-employment

It was hypothesized that:

**H<sub>3</sub>:** *There is a significant impact between autonomy and self-employment*

The third specific objective of this study is to investigate whether autonomy as a construct of entrepreneurial trait has a direct relationship with self-employment, and raises the potential entrepreneur's determination in self-employment. The research aimed to examine autonomy as a trait of entrepreneurs, and whether it has a direct relationship with self-employment or not, in influencing potential entrepreneur's self-employment practice.

The result of the bootstrap and path coefficient disclosed that the Beta value of the relationships between autonomy and self-employment was  $\beta=0.361$ ,  $p=0.000$ . However, the values of Beta, T-statistics, and P values of the relationships between autonomy and self-employment were  $\beta=0.361$ ;  $t=4.582$ ;  $p<0.000$ . Therefore, all the values of such relationships exceeded 2.58 at 0.000 confidence level using one tail test (rule of thumb). In essence, Hypothesis H<sub>3</sub> was supported. Moreover, the result indicated that the extent to which potential entrepreneurs exhibit their being autonomous towards self-employment positively relates to self-employment practice. Table 4.9 shows the PLS-SEM path model analysis of testing the direct relationships of contract of autonomy and self-employment.

**Table 4.9:** The PLS-SEM result of the direct impact of autonomy on self-employment.

| Hypothesis     | Relationship | Beta value | Standard Error (SE) | t-Value | p-Value | Decision  |
|----------------|--------------|------------|---------------------|---------|---------|-----------|
| H <sub>3</sub> | AUT -> SEM   | 0.361      | 0.0657              | 4.582   | 0.000   | Supported |

Source: Field survey

Note: \*\* $P<0.01$ , \* $p<0.05$

Table 4.9 indicates that there was a positive relationship between autonomy and self-employment ( $\beta=0.361$ ;  $t=4.582$ ;  $p<0.000$ ). Therefore, the third hypothesis was accepted.

Theoretically, this finding was supported by the notion of personality trait theory (PTT). The theory generally advocated that an entrepreneur can be influenced by personality trait he/she possessed in commitment and practice of a successful self-employment (Landstrom, 1988; Coon, 2004).

The effective realization of new business start-up among the potential entrepreneurs can be from the context of their autonomous trait that allows them to be independent in the aspects of their business controls. Thus, the degree of autonomy they can exert over entrepreneurial activity (new business start-up) will result in the accomplishment of the self-employment objective they want to attain (Mallya, 2011). The personality trait is considered by Landstrom (1998) as characters that potential entrepreneurs exercise towards their entrepreneurial realization. The theory stressed the traits as fundamental in the overall realization of the goals of potential entrepreneurs, particularly, the new business start-up (Staniewski & Awruk, 2015).

In addition, the Vroom's expectancy motivation theory (Vroom, 1964) substantiates the notion that a person's role is one of the basic success elements towards the expectancy, instrumentality and valence chain in realization of a new business start-up as an outcome or value. The theory elaborates that attaining to the valence or value is determined by a person's internal value for a thing (e.g., money), and the attractiveness of a certain field (e.g., entrepreneurship) to fulfill the need. A person has his/her own subjectively perceived motivational structure and also a subjectively perceived picture of entrepreneurship as a tool for fulfilling one's needs.

Similarly, the need for autonomy, whether in relation to authoritative personal dependency, or procedural constraints in self-employment among entrepreneurs, reflect a tendency

towards being free of the influence, authority, and control from others (Edelman et al., 2010). The presence of autonomy is generally accompanied by an individual's willingness to accept the attendant risks and responsibilities resulting from one's action.

In line with this finding, and in a study conducted by Caliendo et al. (2012), the results of the findings indicate that the desire for autonomy is positively related with the aspiration for business start-up among entrepreneurs. This shows that the need for autonomy involves independent self-determination, the process by which a person controls their own life. It involves self-regulation and personal endorsement of one's own actions, the sense that your actions originate from you (Caliendo et al., 2012). Also, Gelderen, (2010) examined the role of autonomy among entrepreneurs and the results of the findings revealed that autonomy has a positive relationship with the entrepreneur's realization of self-employment. This indicates that autonomy relates to the aspiration to develop and realize personal values, goals and interests among the entrepreneurs.

Al-Jubari et al. (2017) in their empirical investigation, revealed that autonomy is positively correlated with self-employment. Autonomy is found to be an essential and influential predictor in self-employment. The findings emphasized the weight and magnitude of autonomy in self-employment practices among potential entrepreneurs. Thus, inarguably, possession of autonomy as an entrepreneurial trait complements the potential entrepreneur's capacity in all efforts towards the realization of self-employment across various occupational practices.

Also, in a similar finding, Rauch et al. (2007) found that autonomy is positively associated with self-employment, and it is important for entrepreneurs because it enables them to have control over their self-employment environment and essentially regulate their own

behaviour. According to Lumpkin, Cogliser & Schneider, (2009), their findings revealed that autonomy has a positive relationship with self-employment. It encourages the state of being independent, self-governing, on a behavioural level, such as in the occupational context of self-employment where people have discretion over how work is to be performed, managed and controlled.

Moreover, in relevance with the finding of this present study, Sriram & Mersha (2017) discovered autonomy to be positively significant with self-employment. The result revealed that, entrepreneurs that are autonomous are strong in approaching most hesitant achievement in self-employment. They also revealed that, entrepreneurs with autonomous traits were more persistent and enthusiastic, had a better sense of achievement, and were more cautious in taking risks relevant to their occupational context in self-employment. Thus, this indicates that, the more entrepreneurs are autonomous, the greater would then be their capacity in facing a lot of challenges based within the context of their own personal decision making. Autonomy is moreover found as an important predictor of self-employment among entrepreneurs as its major role relates to the aspiration to develop and realize personal values, goals and interests in pursuit of starting or venturing into self-employment among potential entrepreneurs (Jayawarna et al. 2011).

#### **4.7.6 Information and Communication Technologies (ICTs) and Self-employment**

The fourth objective of this study was to investigate if there is a significant impact between Information and Communication Technologies (ICTs) and self-employment.. The result of the PLS-SEM algorithm and bootstrap of ICT and self-employment were presented in Figure 4.8 and Figure 4.9.

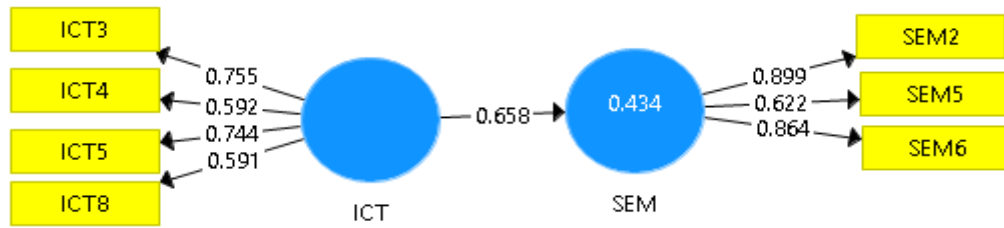


**Figure 4.8:** PLS-ESM Path Algorithm for the Direct Relationship of ICT and self-employment

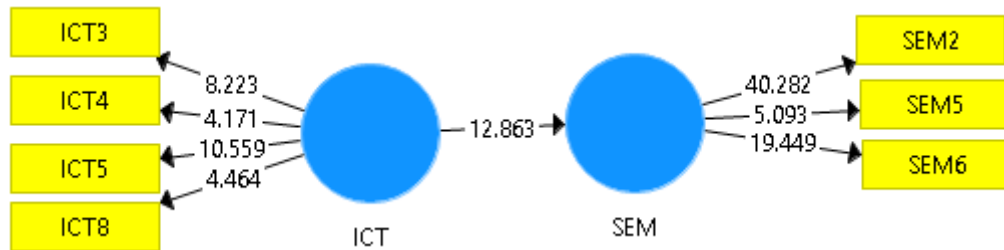


**Figure 4.9:** PLS-ESM Bootstrap for the Direct Relationship of ICT and self-employment

Thus, it was hypothesized that:

**H<sub>4</sub>:** *There is a significant impact between access to ICTs and self-employment*

The result of the investigation disclosed that the Beta value of the relationships between information and communication technologies (ICTs) and self-employment was  $\beta = -0.658$ ;  $p = 0.000$ . However, the values of Beta, T-statistics, and P values of the relationship between information and communication technologies (ICTs) and self-employment were  $\beta = 0.658$ ;  $t = 12.863$ ;  $p < 0.000$ . Therefore, all the values of such relationships are below 2.58 at  $p < 0.01$  confidence levels using two tail tests (rule of thumb). In this direction, this hypothesis ( $H_4$ ) has met the significance criterion and hence been accepted. Table 4.5 shows the result of testing the direct relationships of constructs of information and communication technologies

(ICTs) and self-employment. Table 4.10 shows the bootstrap and path coefficient model analysis of the direct relationships of ICTs and self-employment.

**Table 4.10:** The PLS-SEM result of the direct effect of ICTs on self-employment.

| Hypothesis     | Relationship | Beta value | Standard Error (SE) | t-Value | p-Value | Decision  |
|----------------|--------------|------------|---------------------|---------|---------|-----------|
| H <sub>4</sub> | ICT -> SEM   | 0.658      | 0.0355              | 12.863  | 0.000   | Supported |

Source: Field survey

Note: \*\*P<0.01, \*p<0.05

The results of the bootstrap and path coefficient disclosed that the Beta value, the T-statistics, and P values of the relationships between information and communication technologies (ICTs) and self-employment where the Beta value of the relationship was  $\beta = 0.658$ ;  $t = 12.863$ ;  $p < 0.000$ . Based on the above stated statistical points, this hypothesis (H<sub>4</sub>) has been accepted.

The economic entrepreneurship theory (Papanek & Harris, 1972) upheld within the context of industrial policy on the essential factors such as the ICT as a good antecedent of a new business start-up. Thus, provision of effective vocational training for the potential entrepreneurs would supplement them when properly applied to relevant occupational practices. In Kumar (2011) and Saleemi (2009), economic incentives are the main drivers for entrepreneurship, and economic incentives include factors within the industrial policy of a country.

Accordingly, Kevin et al. (2010) carried out a study on the relationship between ICTs and self-employment (entrepreneurship). Their findings revealed that the access and utilization of the ICTs by entrepreneurs has been positively correlated with self-employment practice. Thus, the result further shows that, ICTs at the area of their study, directly influences

entrepreneurs within the context of their self-employment practices. Also, the work of Matambalya & Wolf (2011) on the influence ICTs on the entrepreneur's self-employment realization. The hypothesis was in a direct relationship, and the methodology is quantitative using questionnaire as an instrument of data collection. The findings revealed that ICTs has a significant relationship with self-employment.

Similarly, in accordance with the findings of this study, Langat et al.(2016) found a significant relationship between ICTs and self-employment. The finding revealed that most entrepreneurs pay attention to the access and usage of ICTs. Thus, the utilization of ICTs to promote business productivity is among the important factors utilized by the entrepreneurs recently. This has posed an opportunity to the entrepreneurs and awareness of the benefits of implementing ICT in conducting their self-employment practices. As a result of the perspectives that some entrepreneurs view the benefits of adopting ICT in conducting their business operations, however, some of them have continued adopting a conventional mechanism in self-employment behavior.

Furthermore, according to Kevin et al. (2010), the effectiveness of ICTs might be depended upon external factors influencing business dispensation across different self-employment context. Moreover, despite that environmental factor such as ICTs do equally play a role in influencing the motivation of potential entrepreneurs to become self-employed, this might have been possible as a result of much recent trends in global technology in all attempts to match the fluctuations in the customer demands from the context of such factor.

#### 4.7.7 Vocational Training and Self-employment

The significant effect between vocational training and self-employment has been the fifth objective ( $H^5$ ) of this research. The aim of testing this hypothesis was to examine the direct relationship between vocational training and self-employment.

Figure 4.10 and Figure 4.11 shows the result of the PLS-SEM algorithm and bootstrap for testing the direct relationship of vocational training and self-employment.

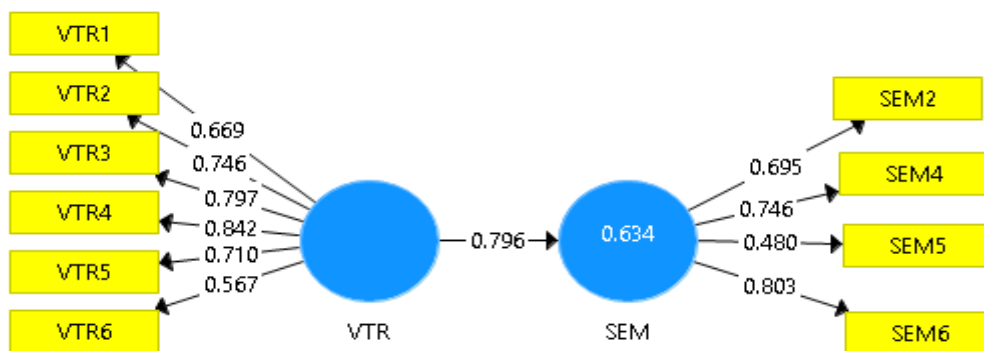


**Figure 4.10:** PLS-ESM Path Algorithm for the Direct Relationship of Vocational Training and Self-employment

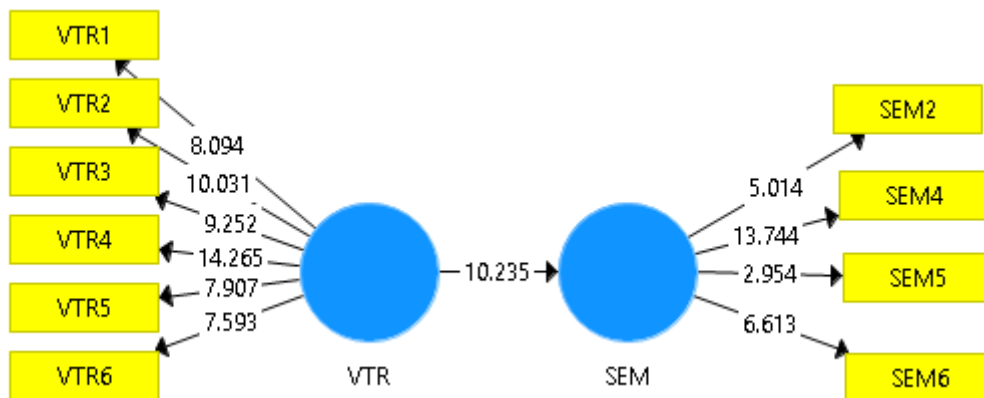


**Figure 4.11:** PLS-ESM Bootstrap for the Direct Relationship of Vocational Training and Self-employment

The hypothesized statement has been assumed that:

**H<sub>5</sub>:** *There is a significant impact between vocational training and self-employment*

Subsequently, the result of the bootstrap and path coefficient revealed that the values of the relationships between vocational training and self-employment. Accordingly, the values of Beta, T-statistics, and P values of the relationships between vocational training and self-employment were  $\beta = 0.796$ ;  $t = 10.235$ ;  $p < 0.000$ . In this respect, all the values of such relationships are above 2.58 at 0.01 confidence level using two tail tests (rule of thumb).

Based on these values, this hypothesis (H<sub>5</sub>) was supported. In addition, the result of the finding conveys that the extent to which the potential entrepreneurs utilizes the skills and knowledge they gained from such vocational training would positively support and enhances their self-employment practices.

Table 4.11 shows the result of testing the effect of vocational training on self-employment.

**Table 4.11:** PLS-SEM result of testing the direct effect of vocational training on self-employment.

| Hypothesis     | Relationship | Beta value | Standard Error (SE) | T-Value | P-Value | Decision  |
|----------------|--------------|------------|---------------------|---------|---------|-----------|
| H <sub>5</sub> | VTR -> SEM   | 0.796      | 0.052               | 10.235  | 0.000   | Supported |

Source: Field survey

Note: \*\* $P < 0.01$ , \* $p < 0.05$

Table 4.11 of the bootstrap and path coefficient results shows that there was a positive influence between vocational training and self-employment ( $\beta = 0.796$ ;  $t = 10.235$ ;  $p < 0.000$ ). For that reason, the fifth hypothesis was supported. The result of the finding of this study found the direct effect of vocational training on self-employment. The economic entrepreneurship theory (Papanek & Harris, 1972) upheld within the context of industrial

policy on the essential factors such as the vocational training as a good antecedent of a new business start-up. In Kumar (2011) and Saleemi (2009), economic incentives are the main drivers for entrepreneurship, and economic incentives include factors within the industrial policy of a country. Thus, provision of effective vocational training for the potential entrepreneurs would supplement them when properly applied to relevant occupational practices.

This will lead to the effective realization of the new business start-up among the potential entrepreneurs (Dike, 2013). Moreover, the Vroom's expectancy motivation theory affirmed efforts in attainment of an outcome and relates such efforts to individual's skills and abilities. Such that, vocational training has been a means for the potential entrepreneurs to exert an effort towards a desired outcome (i.e., new business start-up).

Simply put, the theory states that the actions of an individual are driven by expected consequences. Deciding among behavioral options, an individual is likely to select an option with the greatest motivation forces (MF), which Vroom (1964) expressed by the following equation: In the equation, expectancy is the probability (belief) that one's effort will result in the attainment of desired goals ("If I work hard, I can start my own business"). A person must believe that exerting a given amount of effort can result in the achievement of a particular level of performance (the effort–performance relationship). Shaver et al. (2011) found that entrepreneurs, who believe in their skills and abilities, are motivated to exert the necessary effort and realize the dream outcome. As pointed out by Manolova et al. (2008) implicitly suggest that perceived utility is a function of an individual's perception of the likelihood that personal abilities and efforts in entrepreneurial activity will be successful (expectancy) and that the outcomes will be of value (instrumentality and valence).

Similarly, this result pointed out that there was a positive impact between the two related variables. In line with this finding, Elebute et al. (2016) found a positive relationship between vocational training and self-employment. Their result affirmed that combining vocational training and entrepreneurial skills allows individuals to recognize opportunities in their communities and capitalize on both skill sets to create socio-economic value and generate income through self-employment. Furthermore, Sharmila et al. (2016) in their research established that offering vocational entrepreneurial training will help potential entrepreneurs build transferable competencies in entrepreneurship while fostering highly marketable skills in their self-employment practices. This indicates a positive relationship between vocational training and self-employment. As a result, the vocational programs taken simultaneously can strengthen individual's employability as well as enterprising behavior in practicing self-employment.

In addition, Hussain et al. (2017) found a positive correlation between vocational training and self-employment. The result indicates that vocational training yields a kind of skills in potential entrepreneurs as they can have their own individual business that would lead to a low rate of the unemployment rate and good economic environment with less poverty. The study also disclosed, most particularly, on new business start-up, potential entrepreneurs who receives such vocational training skills, together with adequate resources, would reflect and enhance their capacity to start their own new business with less hurdles.

Besides, Scarpetta et al. (2010) acknowledged that most particular, low-skilled individuals without the vocational training face persistent and long-term effects of their early unemployment and are thus more vulnerable in the labor market throughout their lives. This signifies the relevance of vocational training in attaining successful self-employment

practice. Also, Biavaschi et al. (2012) found vocational training to be positively correlated with self-employment. The result shows that effective vocational training is a strong determinant of an individual successful ground for self-employment start-up.

In addition, Dike (2013) conducted a study on the essence of vocational training on self-employment across various occupations. Though the findings from the study indicates that there is flaws on the part of support needed to supplement an effective vocational training among potential entrepreneurs in Nigeria, but the result revealed a positive relationship between vocational training and self-employment.

Furthermore, Chakravarty et al. (2017) in their empirical findings, discovered that, essentially, vocational training is vital for potential entrepreneurs in various occupational practices. The result indicates a significant relationship between vocational training and self-employment. Thus, the level upon which a potential entrepreneur acquired an effective vocational training, the extent to which he/she can also effectively start-up a new business. In addition, Stadler & Smith (2017) found a similar positive relationship between vocational training and self-employment among university students. This shows a relevance of vocational training in complementing various occupational practices among potential entrepreneurs. Thus, the more a potential entrepreneur acquires effective vocational training, the higher he can utilizes it for occupational practice toward the self-employment realization.

#### **4.7.8 Taxation Incentives and Self-employment**

Hypothesis H<sub>6</sub> of this research was formulated in order to confirm the direct impact between taxation incentives and self-employment. During this investigation, it was assumed whether taxation incentives may influence self-employment (new business start-up) among potential entrepreneurs.

The result of the PLS-SEM algorithm and bootstrap for testing the direct relationship of taxation incentives and self-employment were presented in Figure 4.12 and Figure 4.13.

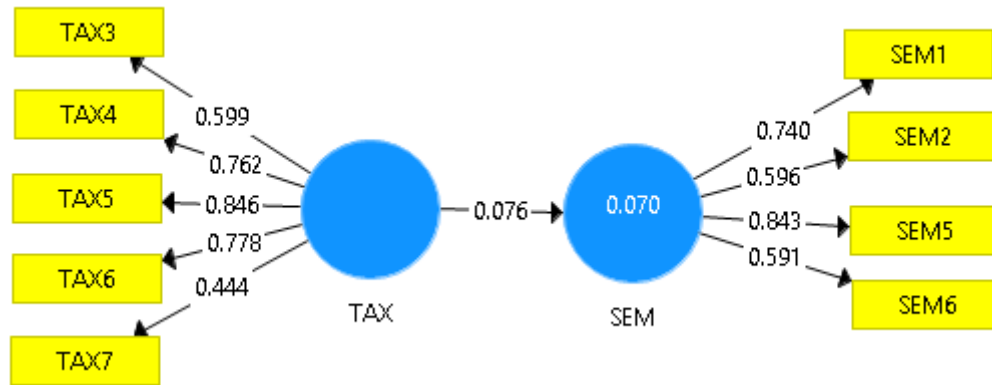


**Figure 4.12:** PLS-ESM Path Algorithm for the Direct Relationship of Taxation Incentives and Self-employment

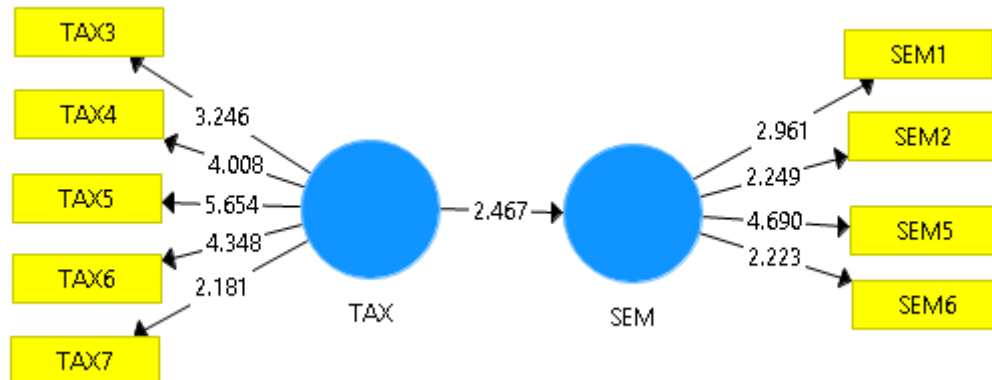


**Figure 4.13:** PLS-ESM Bootstrap for the Direct Relationship of Taxation Incentives and Self-employment

Thus, the hypothesis presumed that:

**H<sub>6</sub>:** *There is a significant impact between taxation incentives and self-employment*

After conducting the bootstrap and path coefficient analysis, The result of the investigation revealed that the value of the relationships between taxation incentives and self-employment

was such that, the beta vales were  $\beta = 0.076$ , the T-statistic was  $t=2.467$ , while the P-value was  $p=0.162$ . To this effect, all the values of such relationships failed to meet criterion for significance due to an insignificant P value which is 0.162. Thus, the hypothesis ( $H_6$ ) has failed to be accepted.

Table 4.12 exhibits the result of testing the effect of taxation incentives on self-employment.

**Table 4.12:** The PLS-SEM result of testing the effect of taxation incentives on self-employment.

| Hypothesis | Relationship | Beta value | Standard Error (SE) | T-Value | P-Value | Decision      |
|------------|--------------|------------|---------------------|---------|---------|---------------|
| $H_6$      | TAX -> SEM   | 0.076      | 0.0473              | 2.467   | 0.162   | Not-supported |

Source: Field survey

Note: \*\* $P < 0.01$ , \* $p < 0.05$

Hence, Table 4.12 results revealed that there was no positive effect between taxation incentives and self-employment  $\beta = 0.076$ , the T-statistic was  $t=2.467$ , while the P-value was  $p=0.162$ . The result disclosed that the Beta value, the T-statistics are sufficient for significance, but the P value was 0.162 thus failed the hypothesis to be accepted. In terms of explanatory power, even though taxation incentives and self-employment had explained an amount of variance in the relationship. But, this study found that there is no significant relationship between taxation incentives and self-employment. Based on the above stated statistical points, however, hypothesis  $H_6$  has failed to be accepted, and hence, it was rejected. In line with the finding of this study, Philippe et al., (2017) also found a non-significant and negative relationship between taxation incentives and self-employment. Their finding indicates that lower marginal tax rates have a negative effect on the probability of being an entrepreneur.

Also, Fossen et al. (2017) in their study found that there is no significant positive relationship between taxation incentives and self-employment. Their empirical results revealed that start-up tax rates do not affect entrepreneurs and does not decrease the probability of owning a business. In addition, Johannsen (2012) from the result of a study, found no statistical significance between taxation incentives and self-employment. Based on this point, the researcher argued under the assumption of risk-neutrality that progressive taxes with imperfect loss offset reduce the expected after-tax returns from risky projects and which is assumed to make entry into self-employment less attractive. Even if the tax system treats income from wage employment and self-employment differently, the theoretical ambiguity remains.

Similarly, Baker et al. (2013) & Gulen et al. (2013) found a negative relationship between taxation incentives and self-employment as the policy on the tax incentives towards the self-employment process has not been effective, rather it affects the self-employment negatively. This indicates that flaws were inherent in the taxation policies. Furthermore, Feyitimi et al. (2016) found from research findings that given the theoretical ambiguity concerning the influence of income taxes on self-employment, it remains an empirical question how the tax policies in the recent past influenced self-employment choice. Furthermore, Arulampalam et al. (2017) has found a non-significant negative relationship between taxation and self-employment. Their findings indicated that the taxation rates do not affect the potential entrepreneurs entry into self-employment, and neither does it affect the existing entrepreneurs practices of self-employment.

In this direction, according to Philippe et al. (2017), taxation incentives effectiveness can be traced in relation to the external factors influencing business dispensation across different

self-employment context. Moreover, despite that environmental factor such as taxation incentives does not equally been so significant in influencing the motivation of potential entrepreneurs to become self-employed, this might have been possible as a result of variability in the context of taxation incentives. In addition, it can as well been due to the fluctuations and the dynamic nature and trends in the environment as it may change over time. Thus, may limit the overall effectiveness of taxation incentives in the effective self-employment realization by entrepreneurs (Baker et al. (2013).

#### 4.7.9 Financing and Self-employment

Another objective of this study has been to examine the impact between financing and self-employment. This is the seventh objective of the study, and the researcher's aim here was to find out if there is any significant impact between financing and self-employment, and relevantly, whether financing influences or affect potential entrepreneurs in attaining their self-employment goal. Financing and self-employment were both measured on the ordinal scale variable.

Figure 4.14 and Figure 4.15 display the result of the PLS-SEM algorithm and bootstrap for testing the direct relationship of financing and self-employment:

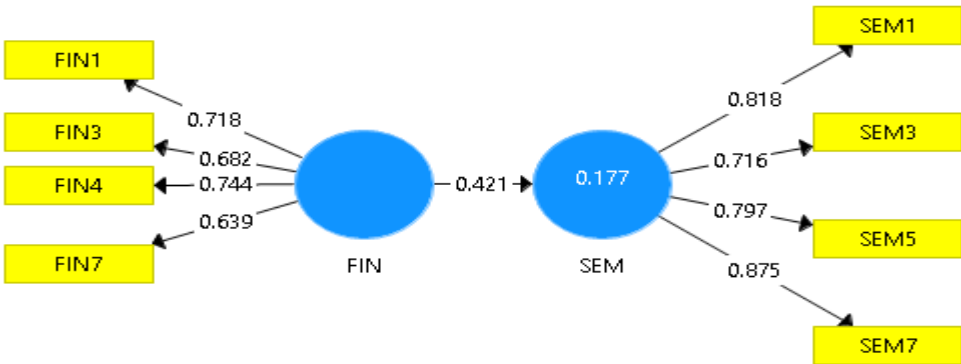


**Figure 4.14:** PLS-ESM Path Algorithm for the Direct Relationship of financing and self-employment

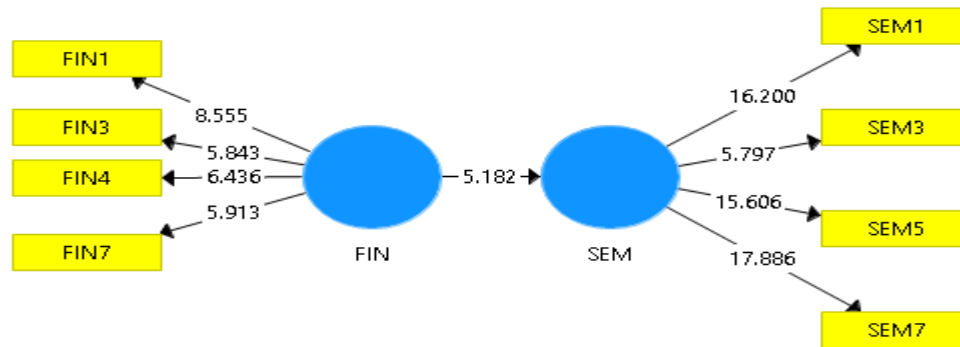


**Figure 4.15:** PLS-ESM Bootstrap for the Direct Relationship of financing and self-employment

The hypothesized statement supposed that:

**H<sub>7</sub>:** *There is a significant impact between financing and self-employment*

The result of the bootstrap and coefficient disclosed that the Beta value of the impact between financing and self-employment was  $\beta=0.421$ ,  $p=0.000$ . However, the values of Beta, T-statistics, and P values of the relationships between financing and self-employment were  $\beta= 0.421$ ;  $t=5.182$ ;  $p<0.000$ . Therefore, all the values of such relationships exceeded 2.58 at 0.01 confidence level using two tail tests (rule of thumb). In essence, this hypothesis(H<sub>7</sub>) was supported. Furthermore, the result indicated that the extent to which financing is being committed appropriately to the entrepreneurs was positively related to self-employment realization.

Table 4.13 demonstrated the result of testing the effect of financing on self-employment.

**Table 4.13:** PLS-SEM result of testing the effect of financing on self-employment.

| Hypotheses     | Relationship | Beta value | Standard Error (SE) | T-Value | P-Value | Decision  |
|----------------|--------------|------------|---------------------|---------|---------|-----------|
| H <sub>7</sub> | FIN -> SEM   | 0.421      | 0.0751              | 5.182   | 0.000   | Supported |

Source: Field survey

Note: \*\*P<0.01, \*p<0.05

Table 4.13 of the bootstrap and path coefficients indicates that there was a positive impact between financing and self-employment ( $\beta = 0.421$ ;  $t = 5.182$ ;  $p < 0.000$ ). Therefore, the seventh hypothesis was supported. The study found support for the direct effect of financing on self-employment. Such result of positive correlation coefficient between the financing and self-employment shows that the commitment in providing the necessary financing to entrepreneurs will certainly boost them to attain all financial commitments that is required for a successful self-employment realization.

Equally, financing is upheld by the economic entrepreneurship theory as a good antecedent of self-employment, as well as some previous studies. Papanek & Harris (1972) are the proponent of the economic entrepreneurship theory. These proponents strongly uphold that economic incentives are the main strength for the entrepreneurship activities. Therefore, these incentives and gains are regarded as the sufficient conditions for the emergence of entrepreneurship.

The theory has been synthesized by several researchers. Mokua & Memba (2015) in their study on access to finance as it exerts influence on self-employment start-ups. The findings from their research established that there is a significant relationship between financing and self-employment. Also, Oko & Ndubuisi (2015) conducted a study in which the finding also synthesizes with this theory as the result indicate that there is a correlated relationship between the economic incentives and self-employment.

Kiragu & Sakwa (2013) also conducted a study in an attempt to synthesize with this theory. From their research, it has been established that there is a positive influence of the economic incentives on self-employment. Thus, having access to finance gives entrepreneurs an opportunity to finance all aspects that would assist in boosting their businesses, which can

therefore ensure their competitiveness and relevance in self-employment (Evbuomwan, et al., 2012; Gichuki et al., 2014). Similarly, the Vroom's expectancy motivation theory supported the notion that having instrumental elements (i.e., financing) will trigger an individual much more to exert higher level of effort in realizing the desired outcome (i.e., self-employment).

In line with this finding, Adewale (2015) established from a research that there is a significant positive relationship between financing and self-employment, as government policy on financing positively has an impact on self-employment start-up. Obamuyi (2017) also in an empirical finding that covered several sub-Saharan countries discovered that there is a significant relationship between financing and self-employment. The results indicated that effective financing enhances both potential entrepreneurs and the existing entrepreneurs in terms of effectiveness in the self-employment accomplishment. Thus, these findings indicate that a policy of providing more financing for entrepreneurs will lead to more start-up, increased expansion and growth. Similarly, Abor (2017) also found financing to be positively related with self-employment.

The result indicated that financing greatly complement entrepreneurship practices. Thus, the magnanimity of financing is crucial and critical for any entrepreneurial venture. This revealed that financing is the very vital element that is fundamental to any business start-up and practice in entrepreneurship.

Additionally, Bird & Schjoedt (2017) studied e-entrepreneurship financing. The result indicated a positive significant relationship between financing and entrepreneurship. Thus the particular entrepreneurs dealing with modern e-business find financing to be so crucial in carrying out their business. In this direction, financing has been one of the basic

ingredients when made available to them, and hence, the effectiveness of such e-business is complemented. Noor et al. (2017) conducted a research on motivating factors and prospects for rural community involvement in entrepreneurship. Their findings revealed that access to finance is one of the significant external factors that are found to influence entrepreneurship practice.

Thus, the result of the study revealed that access to financing has been one of the essential factors that influence self-employment. Such access to financing, as a prospect for rural community involvement in entrepreneurship will boost their capacity in all efforts towards the realization of their self-employment goal. According to this finding, such would bring about change in the social and economic resources for commercialization to gain income at various levels of economy, i.e. micro (individual) and macro (firm and national) level. This also indicates that effective financial support policies are crucial in order to encourage more people in rural areas to involve in entrepreneurship.

#### 4.7.10 Machinery/Equipment and Self-employment

In testing this hypothesis, machinery/equipment was assumed to exert a level of effect on the potential entrepreneur's new business start-up in self-employment. Figure 4.16 and Figure 4.17 shows the result of the PLS-SEM algorithm and bootstrap for testing the direct relationship of machinery/equipment and self-employment.

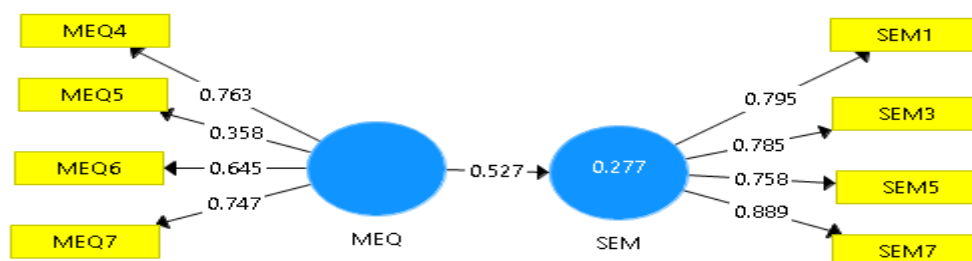


**Figure 4.16:** PLS-ESM Path Algorithm for the Direct Relationship of Machinery/Equipment and Self-employment.

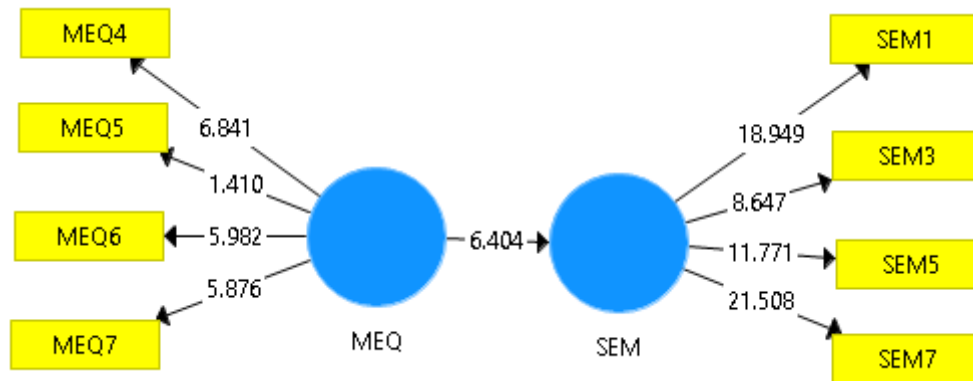


**Figure 4.17:** PLS-ESM Bootstrap for the Direct Relationship of Machinery/Equipment and Self-employment

Thus, it was hypothesized that:

**H<sub>8</sub>:** *There is a significant impact between machinery/equipment and self-employment*

This study assessed the existence of a relationship between machinery/equipment and self-employment. The result of the bootstrap and path coefficient investigation revealed that the Beta value of the relationships between machinery/equipment and self-employment was  $\beta = -0.527$ ;  $p = 0.000$ . Consequently, the values of Beta, T-statistics, and P values of the relationships between machinery/equipment and self-employment were  $\beta = 0.527$ ;  $t = 6.404$ ;  $p = 0.000$ . To this effect, all the values of such relationships are above 2.58 at  $p = 0.01$  confidence level using two tail tests (rule of thumb). Thus, this signifies a significant effect between machinery/equipment and self-employment. Therefore, basically, the eighth hypothesis (H<sub>8</sub>) has been accepted.

**Table 4.14:** Exhibits the PLS-SEM result of testing the direct effect of machinery/equipment on self-employment.

| Hypothesis     | Relationship | Beta value | Standard Error (SE) | T-Value | P-Value | Decision  |
|----------------|--------------|------------|---------------------|---------|---------|-----------|
| H <sub>8</sub> | MEQ -> SEM   | 0.527      | 0.0621              | 6.404   | 0.000   | Supported |

Source: Field survey

Note: \*\*P<0.01, \*p<0.05

Table 4.14 results revealed that the Beta value, the T-statistics, and P values of the relationships between machinery/equipment and self-employment was  $\beta=0.527$ ;  $t=6.404$ ;  $p=0.000$ . Therefore, all the values for such relationship are above 2.58 at  $p=0.01$  confidence level using two tail tests (rule of thumb). This shows that the direct relationship between machinery/equipment and self-employment was significant, and hence the hypothesis H<sub>8</sub> has met all significance criterion for such relationship. In terms of explanatory power, the relationships machinery/equipment and self-employment had explained an amount of variance in the relationship. Thus, this study found that there is a significant relationship between machinery/equipment and self-employment. Based on the above stated statistical points, this hypothesis (H<sub>8</sub>) has been accepted.

Basically, the economic entrepreneurship theory (Papanek & Harris, 1972) upheld the notion on the essential factors such as machinery/equipment as a good determinant of a new business start-up. Thus, provision of effective machinery/equipment to the potential entrepreneurs would supplement them when properly applied to relevant occupational practices. In line with the finding of this study, Robertson (2016), in an empirical result, revealed that there is a statistical significance between machinery/equipment and self-employment. The finding indicated that, there may be little or more physical resources

needed when starting a business. The finding emphasized that the resources required to start-up and operate a business also vary from business to business.

In another study, Ehinmowo et al. (2016) investigated the relationship between machinery/equipment (physical capital) and small scale entrepreneurship in Nigeria. The findings indicate that there is a significant relationship between machinery/equipment and self-employment. The result shows that there has been a little access to machinery/equipment as the cost to purchase it has been so high for the entrepreneurs to afford.

Furthermore, according to Ehinmowo et al. (2016), machinery/equipment influence on the entrepreneurial motivation of potential entrepreneur's effectiveness in business start-up can be traced to be related to some factors. Such factors might be the external factors influencing business operations across different self-employment context. Moreover, despite that environmental factor such as machinery/equipment that has been equally so significant in influencing the motivation of potential entrepreneurs to become self-employed, such machinery/equipment can supplement the potential entrepreneur's effective self-employment start-up (Robertson, 2016).

#### **4.8 Assessment of the Mediation Effects**

This research aimed at testing a number of eight hypotheses that were concerned with investigating the indirect effects (mediation) between the independent variables and the dependent variable. This section presents results of the indirect effects of the mediation role for this study. Indirect effects deal with the impact of the dependent variable on the independent variable through a mediating variable (Hayes & Preacher, 2010). The analysis of the mediation test was conducted to find out whether or not the mediating variable

can significantly influence the independent variable on a dependent variable (Ramayah et al., 2011).

In this aspect, Hayes & Preacher (2010), maintained that mediation test analysis in multivariate constructs is determined through any of the following ways: (i) Re-sampling approaches such as bootstrapping. (ii) Simple techniques that consist of the causal step approach (Baron & Kenny, 1986) (iii) The distribution of the product method (MacKinnon, Lockwood, & Williams, 2004) (iv) The Sobel test (Sobel, 1982).

Nevertheless, the PLS-SEM has a path analysis facility which simultaneously test both direct and indirect models like some other mediation analysis techniques (e.g., Baron, & Kenny, 1986), but there is yet no specific avenue for testing mediating models concurrently. Nevertheless, the PLS-SEM technique has no established formal guidelines for testing the extent of mediation effects (Bontis, Booker, & Serenko, 2007). Thus, PLS SEM method only provides guidelines for determining whether or not the mediation exist among certain variables, further explanations about whether the mediation is full or partial remains unresolved.

Though, the PLS-SEM technique has been considered to be exceptionally appropriate technique for conducting mediation study (Chin, 1998; Bontis et al., 2007; Hair, Ringle, & Sarstedt, 2013). Thus, the PLS SEM technique only provides guidelines for determining whether or not the mediation exists between certain variables, further explanations about whether the mediation is full or partial can be done through the Sobel test analysis. Though, the PLS-SEM technique has been considered to be an exceptionally appropriate technique for conducting a mediation study (Chin, 1998; Bontis et al., 2007; Hair, Ringle, & Sarstedt, 2013).

The PLS-SEM structural equation modeling (SEM) technique is suitable for testing and analyzing complex multivariate indirect effects models (similar to those in this current research) through bootstrap. In PLS-SEM analysis, bootstrapping represents a more exact calculation of measures (Chin, 2010). Thus, Bootstrap and Sobel test are the procedures and techniques that were employed in this study to assess and evaluate the statistical significance of relevant path coefficients.

PLS-SEM has a path analysis facility which simultaneously tests both direct and indirect models like some other mediation analysis techniques (e.g., Baron, & Kenny, 1986). The mediation significance level was ascertained by running the Sobel test for the bootstrapped paths values of the independent variable to mediator [Beta ( $\beta$ )], mediator to dependent variable [Beta ( $\beta$ )], independent variable to the mediator (Standard Error), and mediator to dependent variable (Standard Error).

Additionally, in PLS-SEM, calculation of bootstrap mediation is said to be established if the T-statistics and Sobel Test Statistics have an absolute value  $\geq 1.96$  at 0.05 confidence level using two tail test or  $\geq 1.64$  at 0.05 significance level using one-tail test (Hair et al., 2010). The outcome of indirect relationships (mediation) within the constructs of the model was determined by analyzing the mediating effect of entrepreneurial motivation.

Thus, entrepreneurial motivation might mediate between transformationality, resilience, autonomy, ICTs, vocational training, taxation incentives, financing and machinery/equipment on self-employment. The results will determine and suggests whether entrepreneurial motivation might serve as a significant mediator or otherwise between transformationality, resilience, autonomy, ICTs, vocational training, taxation incentives, financing and machinery/equipment and self-employment. Thus entrepreneurial motivation

is expected to mediate in the relationships between transformationality, resilience, autonomy, ICTs, vocational training, taxation incentives, financing and machinery/equipment and self-employment.

Figure 4.18 shows the PLS-SEM structural model and bootstrap coefficients for the mediation effects of the research.

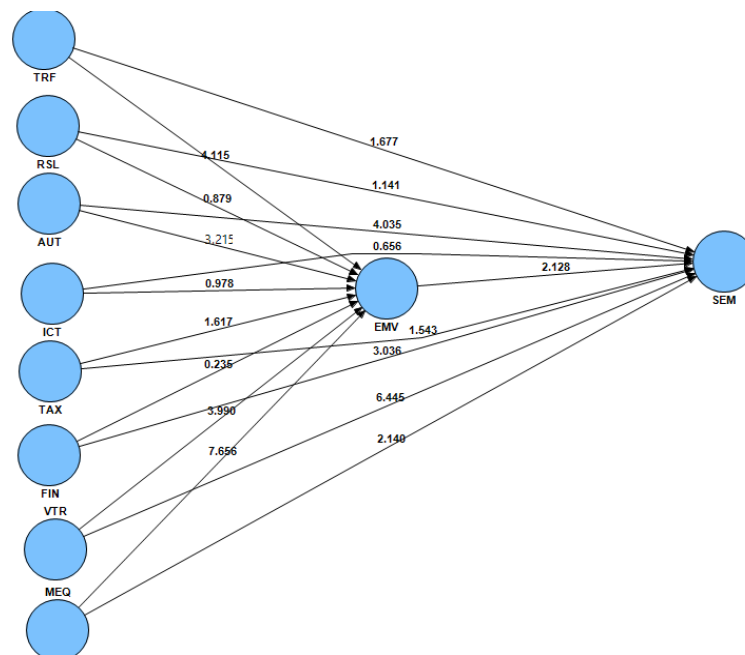


**Figure 4.18:** PLS SEM bootstrap structural model result of the mediation effects of the research.

**Table 4.15:** PLS SEM bootstrap and path coefficient result of the mediation effects

| Path           | Beta value | Standard Error | T-Values | Sobel Test Statistics | Two Tailed Probability (P-Values) | Decision      |
|----------------|------------|----------------|----------|-----------------------|-----------------------------------|---------------|
| AUT->EMV>SEM   | 0.1715     | 0.0533         | 3.2153   | 2.51533               | 0.011                             | Supported     |
| FIN->EMV->SEM  | 0.0131     | 0.0556         | 0.2352   | 0.023490              | 0.814                             | Not-Supported |
| ICT-> EMV->SEM | 0.0445     | 0.0455         | 0.9780   | -0.544991             | 0.585                             | Not-Supported |
| MEQ->EMV>SEM   | 0.4003     | 0.0523         | 7.6560   | 2.062688              | 0.039                             | Supported     |
| RSL->EMV->SEM  | 0.0554     | 0.063          | 0.8785   | -0.696685             | 0.485                             | Not-Supported |

**Table 4.15** continued

|               |        |        |        |           |       |               |
|---------------|--------|--------|--------|-----------|-------|---------------|
| TAX->EMV>SEM  | 0.0814 | 0.0503 | 1.6174 | 1,1168632 | 0.264 | Not-Supported |
| TRF->EMV->SEM | 0.1470 | 0.0357 | 4.1149 | 1.991459  | 0.012 | Supported     |
| VTR->EMV>SEM  | 0.1792 | 0.0449 | 3.9934 | 3.393340  | 0.000 | Supported     |

Source: Field survey

Note: \*\*P&lt;0.01, \*p&lt;0.05

#### 4.8.1 Transformationality, Entrepreneurial Motivation and Self-employment

This research hypothesis was constructed and tested on the basis of unmasking the extent to which the essentials of entrepreneurial motivation may indirectly raise entrepreneur's commitment in effecting a successful self-employment realization. The mediating role of entrepreneurial motivation on transformationality in effecting self-employment has been tested. The underlying variable was measured on the ordinal scale level of measurement. Thus, it was hypothesized that entrepreneurial motivation may mediate in the relationship between transformationality and self-employment:

**H<sub>9</sub>:** *Entrepreneurial motivation mediates the relationship between transformationality and self-employment*

The result of the bootstrap and coefficient disclosed that the Beta value of the relationships between transformationality and self-employment was  $\beta=0.0814$ ,  $p=0.000$ . However, after the inclusion of entrepreneurial motivation as a mediator, the values of Beta, T-statistics, and P values of the relationships transformationality, entrepreneurial motivation and the self-employment were  $\beta=0.1470$ ;  $t=4.1149$ ,  $p=0.000$  ( $p<0.05$ ). Therefore, all the values of such relationships exceeded 2.58 at 0.01 confidence level using two tail tests (rule of thumb).

Moreover, for the strength of the mediator, the inclusion of entrepreneurial motivation ( $\beta=0.1470$ ,  $p=0.000$ ) indicated that there was a significant mediation relationship between transformationality, entrepreneurial motivation and self-employment. However, before the inclusion of entrepreneurial motivation into the analysis ( $\beta=0.0814$ ,  $p=0.000$ ) was found to be statistically significant with self-employment. The T-Statistics and Sobel Test Statistics still remain significant ( $t=4.1149$ ; Sobel Test Statistics=1.9814;  $p=0.012$ ) which are all greater than 1.96. In terms of explanatory power, the inclusion of entrepreneurial motivation had explained variance in the dependent variable. Hence, statistically, this study revealed that entrepreneurial motivation partially mediates the relationship between transformationality and self-employment.

Based on the above stated statistical points, this hypothesis ( $H_9$ ) was supported. In addition, the overall results signifies that the extent to which entrepreneurs possesses transformationality as a trait, would support and encourage them to have effectiveness and efficiency in harnessing overall resources as well as in challenging a status quo in their self-employment dispensation. The result indicated that, the more an entrepreneur possesses transformational trait, the more his entrepreneurial motivation increases and the greater would be his/her self-employment realization.

#### **4.8.2 Resilience, Entrepreneurial Motivation and Self-employment**

The tenth hypothesis ( $H_{10}$ ) of this study has been to examine the indirect effect (mediation) between resilience, entrepreneurial motivation and self-employment. Particularly, this research hypothesis was formulated on the basis of discovering the extent to which the basics of entrepreneurial motivation may trigger entrepreneurs' commitment in carrying out a successful self-employment realization.

**H<sub>10</sub>:** *Entrepreneurial motivation mediates the relationship between resilience and self-employment.*

For the result of the investigation of testing the mediation role of entrepreneurial motivation between resilience and self-employment before the inclusion of the mediator, disclosed that the Beta value of the relationships between resilience and self-employment was  $\beta = -0.0596$ ,  $p = 0.000$ . However, after the inclusion of entrepreneurial motivation as a mediator, the values of the Beta, T-statistics, and P values of the relationships between resilience, entrepreneurial motivation and self-employment were  $\beta = 0.0554$ ;  $t = 0.8785$ ,  $p = 0.190$  ( $p < 0.05$ ). Therefore, all the values of such relationships fall below 1.96 at 0.05 confidence level using two tail tests (rule of thumb).

Moreover, for the strength of the mediator, the inclusion of entrepreneurial motivation ( $\beta = 0.0554$ ) indicated that there was no positive mediation relationship between resilience and self-employment. Moreover, before the inclusion of entrepreneurial motivation into the analysis ( $\beta = -0.0596$ ,  $p = 0.190$ ), resilience was found to be non-significantly correlated with self-employment. The T-statistics still remain insignificant  $t = 0.8785$  which is less than 1.96. Thus, this study found that entrepreneurial motivation does not mediate the relationship between job involvement and transfer of training. Based on the above stated statistical points, however, Hypothesis H<sub>10</sub> has failed to be accepted.

#### **4.8.3 Autonomy, Entrepreneurial Motivation and Self-employment**

This hypothesis was tested in determining the mediation of entrepreneurial motivation between autonomy and self-employment. Thus, it was hypothesized that:

**H<sub>11</sub>:** *Entrepreneurial motivation mediates the relationship between autonomy and self-employment*

The result of the bootstrap and path coefficient for testing the mediation role of entrepreneurial motivation on autonomy and self-employment disclosed that the Beta value of the relationships between independent variable (i.e., autonomy) and the dependent variable (i.e., self-employment) was  $\beta=0.265$ ,  $p=0.000$ .

However, the values of Beta, T-statistics, and P values of the relationships between autonomy, entrepreneurial motivation and self-employment were  $\beta=0.1715$ ;  $t=3.2153$ ,  $p=0.001$  ( $p<0.05$ ). Therefore, all the values of such relationships exceeded 2.58 at 0.01 confidence level using two tail tests (rule of thumb).

Moreover, for the strength of the mediator, the inclusion of transfer motivation ( $\beta=0.1715$ ,  $p=0.001$ ) indicated that there was a positive mediation relationship between autonomy and self-employment constructs. However, before the inclusion of entrepreneurial motivation into the analysis ( $\beta=0.265$ ) was found to be significantly correlated with self-employment. The T-Statistics and Sobel Test Statistics still remain significant ( $t=3.2153$ ; Sobel Test Statistics=2.51533;  $p=0.001$ ) which are all greater than 1.96. In terms of explanatory power, the inclusion of entrepreneurial motivation had explained of variance in the dependent variable. Hence, statistically, this study revealed that entrepreneurial motivation partially mediates the relationship between organizational commitment and transfer of training in the organization.

The above statistical values confirmed that Hypothesis H<sub>11</sub> was supported. In addition, the overall results signifies that the extent to which entrepreneurs possesses autonomy as a trait, would support and encourage them to have effectiveness and efficiency in taking the

right control and exercise sense of independence in self-employment realization. The result indicated that, the more an entrepreneur possesses autonomy as a trait, the more his entrepreneurial motivation increases and the greater would be his self-employment realization.

These findings are consistent with the Personality trait theory, which considers personality traits as an inborn characters and stable qualities that in most situations a person display potentials that makes such individual naturally an entrepreneur (Coon (2004). These traits are viewed as characters that an individual shows in most situations of entrepreneurial endeavour (Landstrom, 1998). Personality trait theory emphasized personal characteristics that define entrepreneurship, and the personality trait theory like any other psychological theories, the level of analysis is the individual. The insight into these traits or inborn qualities is uncovered by this theory through the identification of the characteristics associated with an entrepreneur (Landstrom (1998) Koomson, 2015). By way potential entrepreneurs possess these traits, they will acquire the pattern of behaviours, thinking and expression of feelings or ideas as unique to a particular entrepreneurial individual in achieving self-employment.

Additionally, in an effort to synthesizes with the Personality trait theory and establish a relationship between the personality traits and self-employment start-ups, a number of researchers have investigated such influences. These include Islam (2011), Mallya (2011), Mary (2010), Mukherjee (2010), Hoffmann & Casnocha (2012), and Atkinson (2010). From their findings, it has been evident that the personality traits exert a significant influence on the entrepreneur's drive and ambition to become self-employed.

Furthermore, motivation has been much concerned with the initiation, intensity, direction and persistence of behavior. The motivations may be considered as the spark that transforms a latent intention into real action and therefore, bridging the missing link between intentions and actions in the particular setting of self-employment (Carsrud and et al., 2011). Darnihamedani (2017) affirmed that entrepreneurial motivation has been much enriched with the forces or drive within an entrepreneur that affect the direction, intensity, and persistence of his / her voluntary behaviour as an entrepreneur. It is worthy to note that, a motivated entrepreneur will be willing to exert a particular level of effort (intensity), for a certain period of time (persistence) toward a particular goal (direction) in self-employment.

Also, in line with this study's findings, Azmi (2017) conducted a study on the entrepreneurial motivation of entrepreneurs. The findings revealed that individual personality trait factors account to entrepreneurial motivation. Similarly, Suriani (2013) in a research conducted established that the most motivating factor for entrepreneurs among others is their personality traits. Besides, in their studies, Yusuai et al. (2014) found that entrepreneurial traits have been significantly associated with entrepreneurial motivation and so it makes entry into self-employment effective.

In addition, Alam et al. (2012) confirmed from a study that the women's most important motivation to get engaged in business is to have greater freedom and to adopt their own approach in self-employment. Moreover, a study carried out by Isa et al. (2015) from the context of developing countries. The study results indicate that entrepreneurial motivational factors are positively correlated with self-employment. In addition, Awruk et al. (2015) conducted their research on the impact of motivating factors and barriers in the commencement of one's own business among potential entrepreneurs. The research was

conducted based on the direct relationships of the variables, and the results of the findings show that there is a positive relationship between the motivating factors and potential entrepreneur's business start-up. This indicates the relevance of entrepreneurial motivating factors in effecting self-employment among potential entrepreneurs.

In essence, the constructs of personality trait among the potential entrepreneurs by way of entrepreneurial motivation have exerted an influence on the degree to which the potential entrepreneurs come up with all efforts to ensure their realization of self-employment.

#### **4.8.4 ICTs, Entrepreneurial Motivation and Self-employment**

In this context, the twelfth objective of this study was to investigate the mediation effect between the independent variable and the dependent variable. The researcher assessed the mediating role (indirect effect) of entrepreneurial motivation in the relationship between ICTs and self-employment. Predominantly, this research objective was constructed on the basis of revealing the degree to which the fundamentals of entrepreneurial motivation may indirectly raise entrepreneur's pledge in carrying out a successful self-employment realization.

**H<sub>12</sub>:** *Entrepreneurial motivation mediates the relationship between ICTs and self-employment*

The result of the bootstrap and path coefficient for the relationships between ICTs and self-employment was  $\beta = -0.0233$ ,  $t = 0.256$ . On the other hand, after the inclusion of entrepreneurial motivation as a mediator, the values of Beta, T-statistics, and P values of the relationships between ICTs, entrepreneurial motivation and self-employment were

$\beta=0.0445$ ;  $t=0.9781$ ,  $p=0.164$  ( $p<0.05$ ). Therefore, all the values of such relationships are below 1.96 at 0.05 confidence level using two tail tests (rule of thumb).

In addition, for the strength of the mediator, the inclusion of entrepreneurial motivation ( $\beta=0.0445$ ) also indicated that there was no significant mediation relationship between ICTs and self-employment. Also, before the inclusion of entrepreneurial motivation into the analysis ( $\beta=-0.0233$ ,  $p=0.256$ ) was found to be non-significantly correlated with self-employment. The T-statistics still remain insignificant  $t=0.9781$  which is less than 1.96. Thus, this study found that entrepreneurial motivation does not mediate the relationship between ICTs and self-employment. Based on the above stated statistical points, however, Hypothesis  $H_{10}$  has failed to be accepted, and hence was rejected.

#### **4.8.5 Vocational Training, Entrepreneurial Motivation and Self-employment**

Specifically, this research hypothesis was developed on the basis of revealing the span to which the rudiments of entrepreneurial motivation may indirectly lift entrepreneur's commitment in carrying out a successful self-employment accomplishment. The underlying variables were measured on the ordinal scale level of measurement. It was assumed that:

**H<sub>13</sub>:** *Entrepreneurial motivation mediates the relationship between vocational training and self-employment*

The result of the investigation of testing the mediation role of entrepreneurial motivation in the relationship between vocational training and self-employment disclosed that the Beta value of the relationship was  $\beta=0.3352$ ,  $p=0.000$ . However, the mediation analysis results revealed that, values of Beta, T-statistics, and P values of the relationships between vocational training, entrepreneurial motivation and self-employment were  $\beta=-0.1792$ ;

$t=3.3990$ ,  $p=0.000$  ( $p<0.05$ ). Therefore, all the values of such relationships exceeded 2.58 at 0.01 confidence level using two tail tests (rule of thumb).

Moreover, for the strength of the mediator, the inclusion of entrepreneurial motivation ( $\beta=-0.1792$ ;  $p=0.000$ ) indicated that there was a significant mediation relationship between vocational training and self-employment constructs. However, before the inclusion of entrepreneurial motivation into the analysis, beta value at ( $\beta=0.265$ ) was found to be significantly correlated with self-employment. The T-Statistics and Sobel Test Statistics still remain significant ( $t=3.3990$ ; Sobel Test Statistics= $3.393340$ ;  $p=0.000$ ) which are all greater than 1.96. In terms of explanatory power, the inclusion of entrepreneurial motivation had explained variance on self-employment. Hence, statistically, this study revealed that entrepreneurial motivation partially mediates the relationship between vocational training and self-employment.

The above affirmed statistical values confirmed that this hypothesis ( $H_{13}$ ) was supported. In addition, the overall result signifies that the extent to which vocational training improves the potential entrepreneur's motivation and encourage them to have effectiveness and efficiency in practicing varieties of occupations in their self-employment dispensation. The result indicated that, the more a potential entrepreneur acquires effective vocational training, the more his entrepreneurial motivation increases and the greater would be his self-employment realization.

#### **4.8.6 Taxation Incentives, Entrepreneurial Motivation and Self-employment**

Basically, the researcher's focus here was to examine the mediating role (indirect effect), if any, between the independent variable and the dependent variable. The construct of taxation

incentives was the independent variable, entrepreneurial motivation was the mediating variable, while self-employment was depicted as the dependent variable.

**H<sub>14</sub>:** *Entrepreneurial motivation mediates the relationship between taxation incentives and self-employment*

The result of the bootstrap and path coefficient for testing the relationships between taxation incentives and self-employment was  $\beta=0.073$ ,  $p=0.062$ . However, after the inclusion of the entrepreneurial motivation as a mediator, the values of Beta, T-statistics, and P values of the relationships between taxation incentives, entrepreneurial motivation and self-employment were  $\beta=0.0814$ ;  $t=1.6174$ ,  $p=0.053$  ( $p<0.05$ ). Therefore, all the values of such relationships are below 1.96 at 0.05 confidence level using two tail tests (rule of thumb).

Furthermore, for the strength of the mediator, the inclusion of entrepreneurial motivation  $\beta=0.0814$ ;  $p=0.053$  ( $p<0.05$ ) also indicated that there was no significant mediation relationship between taxation incentives and self-employment. Moreover, before the inclusion of entrepreneurial motivation into the analysis ( $\beta=0.073$ ,  $p=0.062$ ) was found to be non-significantly correlated with self-employment. The T-statistics still remain insignificant  $t=1.6174$  which is less than 1.96. Thus, this study found that entrepreneurial motivation does not significantly mediates the relationship between taxation incentives and self-employment. Based on the above stated statistical points, however, Hypothesis H<sub>10</sub> has failed to be accepted, and hence was rejected.

#### 4.8.7 Financing, Entrepreneurial Motivation and Self-employment

The research hypothesis (H<sub>15</sub>) of this study was to examine the mediating role of entrepreneurial motivation in the relationship between financing and self-employment. Categorically, this research objective was formed on the basis of uncovering the degree on which the elements of entrepreneurial motivation may raise the extent of entrepreneurs' capacity with regards to financing in achieving self-employment.

**H<sub>15</sub>:** *Entrepreneurial motivation mediates the relationship between financing and self-employment*

After running the bootstrap and path algorithm, the result of the investigation for testing the impact of financing in effecting self-employment shows that the Beta value of the relationships was  $\beta=0.2281$ ,  $p=0.001$ . Nevertheless, after the inclusion of the entrepreneurial motivation as a mediator, the Beta value, the T-statistics, and P values of the relationships between financing, entrepreneurial motivation and self-employment were  $\beta=0.0131$ ;  $t=0.2352$ ;  $p=0.407$  ( $p<0.05$ ). In this direction, all the values for such relationship are below 1.96 at 0.05 confidence level using two tail tests (rule of thumb).

Additionally, for the strength of the mediator, the inclusion of entrepreneurial motivation ( $\beta=0.029$   $p=0.407$ ) indicated that there was no positive mediation relationship between financing and self-employment. However, before the inclusion of entrepreneurial motivation into the analysis, the Beta value and significance level ( $\beta=0.2281$ ,  $p=0.001$ ) was found to be positively significant between financing and self-employment. Thus, this study found that entrepreneurial motivation does not mediate the relationship between financing and self-employment. Based on the above stated statistical points, however, the hypothesis (H<sub>15</sub>) was failed to be accepted, and hence was rejected.

#### 4.8.8 Machinery/Equipment, Entrepreneurial Motivation and Self-employment

This hypothesis was aimed at discovering the mediation effect of entrepreneurial motivation on machinery/equipment in effecting self-employment. Thus:

**H<sub>16</sub>:** *Entrepreneurial motivation mediates the relationship between machinery/equipment and self-employment*

In testing this hypothesis, the result of the bootstrap and coefficients of the direct relationship between machinery/equipment and self-employment disclosed that the Beta value of the relationships was  $\beta = -0.1328$ ,  $p = 0.016$ . After the inclusion of entrepreneurial motivation as a mediator, the values of Beta, T-statistics, and P value of the relationships between machinery/equipment, entrepreneurial motivation and self-employment were  $\beta = 0.4003$ ;  $t = 7.656$ ,  $p = 0.000$  ( $p < 0.05$ ). Therefore, all the values of such relationships exceeded 2.58 at 0.01 confidence level using two tail tests (rule of thumb).

Moreover, for the strength of the mediator, the inclusion of entrepreneurial motivation ( $\beta = 0.4003$ ,  $p = 0.000$ ) indicated that there was a positive mediation relationship between machinery/equipment and self-employment. Furthermore, after inclusion of the mediator (entrepreneurial motivation), the T-Statistics and Sobel Test Statistics remained significant ( $t = 4.383$ ; Sobel Test Statistics = 2.062688;  $p = 0.03914$ ) which are all greater than 1.96. Hence, statistically, this study revealed that entrepreneurial motivation mediates the relationship between machinery/equipment and self-employment among potential entrepreneurs.

Based on the above stated statistical points, the hypothesis (H<sub>16</sub>) was supported. In addition, the overall results signifies that the extent to which potential entrepreneurs are provided

with relevant and adequate machinery/equipment, the more it would geared them to be in making persistent and intense efforts towards utilizing the facilities of such machinery/equipment in their self-employment practices. Thus, the result exhibited that the extent to which potential entrepreneurs were provided with relevant machines to operate processes involved in the practice of their occupations, the greater would then be their successful self-employment realization.

However, despite that not all the mediation factors have been significant in the role of mediation, many factors have played and acted as significant factors as mediators. These include machinery/equipment, autonomy, transformationality and vocational training. This indicates that potential entrepreneurs can be supported and motivated by enhancing machinery/equipment and vocational training by various governments to ensure their success in attaining self-employment (Biavaschi et al., 2012; Elebute et al., 2016; Chakravarty et al., 2017). The autonomy and transformationality as entrepreneurial traits should also be given much attention to the personality of the potential entrepreneurs (Mary, 2010; Mallya, 2011; Hoffman et al., 2012). Thus, the relevant stakeholders when taken the impact of these factors into consideration, by making reinforcements and mobilization of such factors, would result in the improvement of the vulnerable situation of the potential entrepreneurs that trailed their position as job seekers.

These findings were consistent with Papanek & Harris (1972) economic entrepreneurship theory and personality trait theory. The economic entrepreneurship theory strongly advocated and upheld that economic incentives are the main drive for the entrepreneurship activities and economic conditions are sufficient conditions for the emergence of entrepreneurs. According to Papanek & Harris (1972), Kumar (2011) & Saleemi (2009),

economic incentives as the main antecedents for entrepreneurship, and economic incentives includes infrastructure availability and accessibility such as machinery/equipment, access and usage of ICTs and vocational training among others.

The theory has been synthesized by several researchers. Mokua & Memba (2015) in their study on the economic incentive factors as it exerts influence on self-employment start-ups. The findings from their research established that there is a significant relationship between economic incentives and self-employment. Also, Oko & Ndubuisi (2015) conducted a study in which the finding also synthesizes with the findings of this study. The result indicates that there is a correlated relationship between the economic incentives and self-employment. Kiragu & Sakwa (2013) also conducted a study and the finding synthesizes with the theory underpinning this study, as well as in line with the findings of this study. From their research, it has been established that there is a positive and significant influence of the economic incentive factors on self-employment. Similarly, Kumar (2011) & Saleemi (2009) in their separate studies revealed that there is an established relationship between the economic incentive factors and self-employment.

Similarly, the personality trait theory also considered the entrepreneurial traits as a motivator for entrepreneurs in energizing them to hold a very positive and strong yearning in striving to become self-employed. The personality trait theory is one of the theories underpinning this research. Personality trait theory emphasized personal characteristics that define entrepreneurship, the insight into these traits or inborn qualities is uncovered by this theory through the identification of the characteristics associated with an entrepreneur (Landstrom (1998) Koomson, 2015). The theory believed that the pattern of behaving, thinking and expression of feelings or ideas is unique to a particular individual (Coon, 2004). Each day

individual interact with unique and different persons that possesses trait and qualities that are personally distinctive which constitutes their personality in entrepreneurship. Such special bonds between individuals is created through the difference and uniqueness of each person's personality trait in the context of entrepreneurship practice.

Likewise, in an effort to synthesizes with this theory and establish a relationship between the personality traits and self-employment start-ups, a number of researchers have investigated such influences. These include Atkinson (2010), Mary (2010), Mukherjee (2010), Islam (2011), Mallya (2011) & Hoffmann et al. (2012). From their findings, it has been evident that the personality traits exert a significant influence on the entrepreneur's drive and ambition to become self-employed. The theory/model stressed that entrepreneurs are subject to these traits to become motivated in practicing entrepreneurship.

Furthermore, the Vroom's expectancy motivation theory through its chain of expectancy, instrumentality and valence acknowledged individuals perceived instrumentality to be triggered by certain factors (such as the entrepreneurial traits and economic incentive factors) to exert a level of effort. Such effort enhances the individual's ability to perform better and realize a certain outcome (i.e., self-employment). Douglas and Shepherd (2010) offer a model where the choice to pursue entrepreneurship is based on a person's utility function, which reflects perceptions of anticipated income, the anticipated amount of work effort to achieve this income, the risk involved, plus other factors such as the person's desired attitudes and the anticipated environment.

The entrepreneurial motivation has been much concerned with the process that motivates and activates the entrepreneur to exert a higher level of efforts for the achievement of entrepreneurial goals in self-employment (Darnihamedani, 2017). Also, in line with the

findings of this study, previous studies have revealed that different factors play a significant role in a successful self-employment realization among the economic incentive factors. Furthermore, in their studies, Yushuai et al. (2014) found that economic incentive factors have been significantly associated with entrepreneurial motivation. Moreover, a research conducted by Elebute et al. (2016) revealed that vocational training obtained in a workshop on-the-job training is positively correlated with entrepreneurial motivation.

The findings of this present study are also consistent with the evidence of empirical results offered by Barba-Sánchez & Atienza-Sahuquillo (2017). Their findings revealed that entrepreneurial motivation is positively related with self-employment. Thus, the evidence disclosed the critical importance of motivation as a driving force for business creation among potential entrepreneurs. It also indicates that, all stakeholders involved with the provision of necessary inputs for entrepreneurs like government agencies, venture capital companies, banks, and financial institutions, when they makes it effective, hence the entrepreneurs will achieve great success in self-employment. It would also reduce the anxiousness and depression faced by the potential entrepreneurs before venturing into self-employment. The higher these motivational factors were enhanced, the better for the potential entrepreneurs to have an effective start-up, and hence, success in self-employment.

Similarly, Dunkelberg (2013) findings indicate that entrepreneurial motivation indirectly has a positive relationship with self-employment. Entrepreneurial motivation is influenced by both the personality trait factors, as well as economic incentive factors in the drive to become self-employed among potential entrepreneurs (Awruk et al., 2015). To put into effect, researchers in the field of entrepreneurship have come to realize and admit satisfactorily the understanding of these factors will assist government and agencies in basic understanding of

all resources, both intrinsic and extrinsic to organize and mobilize in order to offer a proper support for self-employment (Staniewski et. al, 2015).

Finally, despite that entrepreneurial motivation has not been found to mediate between some entrepreneurial traits and some economic incentive factors, might have been as a result of some variabilities (Staniewski et. al, 2015). These variabilities may occur because of the dynamic nature of human behaviour, as well as the business environment. Such factors might be both the internal factors relating to the potential entrepreneurs (i.e., entrepreneurial traits), and the external factors (i.e., economic incentive factors) influencing business operations across different self-employment context. It can as well have been due to the fluctuations and the dynamic nature and trends in the environment as it may change over time (Robertson, 2016).

#### **4.9 Concluding Remarks**

This chapter has discussed about the findings of this study, the data screening and preliminary analysis were presented in the chapter. The demographic profile of the respondents was analyzed, and the revision of the proposed theoretical model has also been provided. The results of measurement model tests were presented to signify the validity and reliability of the questionnaire used. The statistical technique of PLS-SEM was applied to test the research hypotheses constructed in this study and thereafter the collected data were analyzed in the chapter. Also, the analysis of the direct effects and the analysis of mediation effects were also presented. From the results, this study found that there is a significant relationship between the constructs of entrepreneurial traits and economic incentive factors and self-employment. It also revealed that entrepreneurial motivation acted as a mediator in

the relationships between entrepreneurial traits and economic incentive factors in measuring self-employment in Bauchi State, Nigeria.

## **CHAPTER 5**

### **CONCLUSION AND IMPLICATIONS**

#### **5.1 Introduction**

The first section of this chapter explained the conclusion of the research. The second section outlined the research implications to the body of knowledge, which includes essential discussion on the implications of the research on the theory, empirical and to practice. The third section additionally highlighted limitations of the research, and provides the recommendations for future research in building more additional and precise empirical research frameworks.

#### **5.2 Conclusion**

To attain to the overall objective of this research, this study investigated the relationship between entrepreneurial traits, economic incentives factors and self-employment, and the mediating role of entrepreneurial motivation in such relationships. In this regard, the study hypothesized that the extents of possession of the entrepreneurial traits by the potential entrepreneurs and the commitment and effective utilization of the economic incentive factors might have a significant effect on potential entrepreneur's self-employment realization. Thus, such results from the tested hypotheses indicates the attainment of the objectives of this research, and which is expected to contribute to the body of knowledge in the field of entrepreneurship.

Through the established hypotheses of this research, consequently, this study has found a direct positive influence of entrepreneurial traits and economic incentive factors in the self-employment accomplishment. The findings exhibited the extent of the possession of traits

by potential entrepreneurs as well as the degree in which government and other stakeholders remain dedicated in most particular, the provision of the economic incentive factors. The results revealed that such may improve potential entrepreneur's effective motivations in the accomplishment of self-employment. Various governments and other stakeholder have to ensure their pledge in the provision of such economic incentive factors for potential entrepreneurs are in place, this might lead to an increased self-employment motivation to achieve objective. Impliedly, this reciprocates the application of both the traits possessed, as well as the resources committed by stakeholders and utilized in the self-employment realization by the potential entrepreneurs.

Based on the attained objectives of the research, it becomes imperative for the government and other stakeholder to vigorously improve their commitments, most particularly to the economic incentive factors as it influences potential entrepreneur's motivation in effecting self-employment target. The commitment may be such of greater pledge to accessibility in ICTs, easier financing, favourable taxation incentives, committed the provision of effective vocational training, as well accessible machinery/equipment in practicing varieties of occupations (Yushuai et al., 2014; Staniewski et. al, 2015; Chowdhury, 2017).

Furthermore, on the grounds that entrepreneurial motivation that mediates the relationship between the entrepreneurial traits, the economic incentive factors and self-employment, the present study revealed significant mediation for such relationships. In other words, the results revealed that the extent to which potential entrepreneurs possess entrepreneurial traits, as well as adequate economic incentive factors may influence their self-employment accomplishment. In addition, the results disclosed that entrepreneurial motivation acted as a

mediator in some of the relationships and in some relationships, did not act completely as a significant mediator.

Nevertheless, this might have been possible as a result of the dynamic nature of human behaviour and the external environment factors. Such dynamism and fluctuations may limit the overall effectiveness of entrepreneurial traits and economic incentive factors in the effective self-employment realization by entrepreneurs (Staniewski et. al, 2015; Awruk & Staniewski, 2015). However, obtaining a partial mediation effect or insignificant mediation effect has been the right outcome as it is almost impracticable to obtain a full mediation effect (Sobel, 1982; Baron & Kenny, 1986; Hayes & Preacher, 2010; Ramayah et al., 2011). Summarily, based on the attained objectives of this research, the results have provided theoretical, empirical, and practical implications/contributions to the body of knowledge in the field of entrepreneurship, most particularly in the aspect of potential entrepreneur's self-employment start-up.

Essentially, it can be concluded that, the objectives of this research have been achieved based on the significant relationships established in the results of this study. Thus, the confirmation of significant influence of the entrepreneurial traits and economic incentive factors as well as the significant mediation of entrepreneurial motivation in potential self-employment justified the attainment of the objectives of this research.

### **5.3 Research Contributions to the Body of Knowledge**

The outcome of this study has important implications for theory, essential for empirical implications, and practical implication. These are in line with the generalization and the applicability of the underpinning theories of this research across different entrepreneurship context and practice. It is also critical to consider the implications, as well as Nigerian

entrepreneurship stakeholders and entrepreneurs in other part of the world may actively be involved in making good utilization of these findings to improve their extant of the entrepreneurship practices in accomplishing an effective self-employment. The implications are thus discussed in the following sub-sections.

### **5.3.1 Theoretical Implications**

This study has offered theoretical implications through the stipulation of added empirical basis in the purview the of the Vroom's expectancy motivation theory, the economic entrepreneurship theory and the personality trait theory to new business start-up. Both theories proposed and hold the notion that entrepreneurs from their environmental context and individual level can realize self-employment. This study hypothesized these environmental factors and the individual factors upon the attainment of the objectives of this research. Thus, through the ability to utilizes supports and incentives as well as from motivation and behaviour, potential entrepreneurs can effectively practice self-employment. Thus, both the theories supported the commitment and mobilization of the economic incentives, individual factors (traits) together with efforts and pledge to effectively realize self-employment.

This research has made a significant implication to the theory and knowledge by exploring and showing how the effects of potential entrepreneur's motivation are channeled to behavioral outcomes in respect of a new business start-up. The Vroom's expectancy motivation theory upholds the notion on internal factors on the assumption of expectancy, instrumentality and valence that influences the motivation of entrepreneurs in entrepreneurship. However, this research explored and integrated some external factors that

influences the motivation of potential entrepreneurs in a new business start-up which is expected to contribute to knowledge.

Explicitly, this study found it rational to align the belief, perception and expectation upheld by the Vroom's expectancy motivation theory with other external factors such as vocational training, machinery/equipment and ICT's for an effective new business start-up among the potential entrepreneurs. Thus, holding such belief, perception and expectation by the potential entrepreneurs can be supplemented by these external factors to effectively realize new business start-up. In practice, the impact of these external factors will be of paramount importance in the realization of an effective venture creation witnessing the current changes in customer demands and trends in technology. In essence, this research has employed the combined and relative impact of both the internal and the external factors to measure self-employment. Thus, this could expand the generalization and the applicability of the Vroom's expectancy motivation theory in different entrepreneurship practices and contexts.

Additionally, with regards to the past literature on entrepreneurship, this study has theoretically contributed to the body of knowledge (self-employment) as it expands the entrepreneurship theories by adding the views of Nigeria's potential entrepreneurs. In addition, as this study was conducted in the Nigerian context and specifically on potential entrepreneurs in Bauchi State, the findings have substantiated the generalization and applicability of the Vroom's expectancy motivation theory, the economic entrepreneurship theory and the personality trait theory, the Gallup entrepreneurship model and empirical findings in different entrepreneurship practice contexts.

Furthermore, this present study conveys a theoretical implication by discovering the combined and relative strengths and contributions of these theories to measure self-

employment. According to Dissanayake (2013) and Uyangoda (2011), whenever theories were employed from different contexts or domains to measure a certain concept, such theories can be merged together as a theory extension to have a clearer appreciation of the concept. This demonstrates how the theoretical extension is executed with the objective of producing new knowledge (Dissanayake, 2015). Therefore, the findings of the current study have added more knowledge from the purview of the Vroom's expectancy motivation theory, the economic entrepreneurship theory and the personality trait theory. This can lead to effective self-employment practice through an effective motivation of the potential entrepreneurs.

Lastly, several factors were explored in the Gallup Entrepreneurship model, including both environmental and personality factors. However, this study further explored factors that were not thoroughly investigated, other than those identified in the Gallup model. Thus, this extended the Gallup model in such a way much relevant to the context of this present study. In essence, this provides a new dimension that might be much relevant to the extent of new business practices among potential entrepreneurs.

### **5.3.2 Empirical Implications**

The contributions of this study are to rectify the inadequacies in the past literature by confirming the relationships between entrepreneurial traits, economic incentive factors, entrepreneurial motivation and self-employment. Most explicitly, this study leaned that possession and provision of entrepreneurial traits and economic incentive factors could enhance self-employment. However, these might not be adequate to sufficiently motivate potential entrepreneurs to attain self-employment without the mediation of entrepreneurial motivation. Consequently, entrepreneurial motivation is crucial. Without proper

entrepreneurial motivation which can be influenced both from possession of traits, as well as the accessibility and provision of economic incentive factors, it is difficult to motivate the potential entrepreneurs to utilize essential factors and pledge the realization of an effective self-employment. Hence, entrepreneurial motivation has been employed to serve as a mediator, as well as to bridge the inconsistencies and lack of consensus that emanated from the previous empirical findings.

Moreover, the conceptual framework of this study was put together on the grounds of theoretical and empirical gaps identified in the past literatures. This was upheld and supported from the viewpoints of the Vroom's expectancy motivation theory, the economic entrepreneurship theory, the personality trait theory and the Gallup entrepreneurship model and prior empirical research findings on self-employment. The present study integrated entrepreneurial motivation as a mediating variable to better explain the relationship between entrepreneurial trait constructs and economic incentives factors in achieving self-employment.

### **5.3.3 Practical Implications**

The current study has manifested a number of practical implications in relation to entrepreneurship practices in the context of potential entrepreneurs in Bauchi State, Nigeria. This has been on the purview of some entrepreneurial traits and economic incentive factors that influences the motivation of potential entrepreneurs. Thus, the entrepreneurship stakeholders and the government should establish a culture of providing adequate resources optimally to ensure an effective self-employment practice. In practice, it is essential for entrepreneurship stakeholders and the government to grasp the significant impact of these factors on potential entrepreneur's motivation in self-employment realization.

Essentially, the importance of these determinants of self-employment as a vital notion towards entrepreneurial motivation of the potential entrepreneurs should be properly considered. Consequently, this finding posted yet another important magnitude for entrepreneurship stakeholders to exploit on motivating and enhancing self-employment among potential entrepreneurs in a new business start-up. In this manner, the Nigerian entrepreneurship stakeholders should consider the significant impact of such factors so as to increase mobilizations for self-employment start-up among potential entrepreneurs particularly in Nigeria. The actions of the Nigerian entrepreneurship stakeholders should be responsive in creating a conducive atmosphere for motivation of the potential entrepreneurs by actively committing more concern to them. In particular, it is essential for the Nigerian entrepreneurship stakeholders (Banks, financial institutions, NGOs) and the government to concentrate on putting more efforts to potential entrepreneur's motivation for a new business start-up.

Furthermore, these findings can have a practical implication to some agencies and programmes such as the Small and Medium Enterprises Development Agencies of Nigeria (SMEDAN) with its various policies and programmes and the recent Social Intervention Programmes. The Social Intervention Programmes includes the Conditional Cash Transfers (CCT), the Government Enterprises and Empowerment Programmes (GEEP), the Anchor Borrowers Programme and the N-Power Project. Such results suggest to these policies and programmes on how an effective support and motivation can be successfully rendered to the potential entrepreneurs for self-employment accomplishment.

#### **5.3.4 Methodological Implications**

This study premises the methodological implications in evaluating the phenomenon using some self-employment measures. Explicitly, this study is guided by the positivist ontological and epistemological philosophy of making scientific grounds in investigating the nature of potential entrepreneur's new business start-up, thus, this study contributed to the research methodology. This research bridges a methodological gap through assessing less-researched self-employment determinants from the context of a new business start-up through a quantitative approach (Melia et al., 2010; Martha et al., 2011). This present research used a quantitative approach in conducting the research using a survey questionnaire to collect data. This has been the fact that a survey questionnaire is the suitable technique of getting to know about the objective reality, which has been administered in a cross-sectional survey. In this direction, the present study modified and removed irrelevant statement from the adapted research instrument on self-employment.

The relevant statements/items were added in an effort to actually obtain the degree to which the accomplishment of self-employment start-up is examine in the context of the study. The irrelevant statements are most particularly, those relating to existing businesses rather than new business start-up. By removing the irrelevant statements and adding the relevant ones from the original scale, this study validated and tested the instruments of self-employment in Bauchi State, Nigeria, which is by context, different from the original settings and context in which the instruments were developed.

Additionally, the present study employed a cross-sectional design to collect data which do not capture the data based on different time periods from the variables of interest and population. Hence, in future, a longitudinal research design needs to be employed in

examining the constructs at different points in time. A longitudinal survey approach may help future researchers to collect more data on the variables of interest at different points in time.

#### **5.4 Limitations of this Research and Area for Future Studies**

Although the findings of this study have contributed in several ways and have supported a number of hypothesized relationships between the understudied variables, it is not without limitations. First and foremost, the present study examined some entrepreneurial traits and economic incentive factors. Thus, the investigation of these essential determinants of self-employment in this research has been carried out on relevant factors that influence entrepreneurial motivation in a new business start-up. Hence, this study focused on assessing the context of self-employment outcome from the self-employment start-up perspectives. Thus, future research needs to focus on investigating existing businesses such as business performance, business growth and business sustainability (Jeremy et al., 2010; Taiyuan et al., 2017). This is to ensure that, a reasonable scope within the context of entrepreneurship practices is investigated and covered.

In addition, this present research used a quantitative approach in conducting the research using a survey questionnaire to collect data. This has been the fact that a survey questionnaire is the suitable technique of getting to know about the objective reality, which has been administered in a cross-sectional survey. Future studies should employ a qualitative approach and utilize the use of interviews and secondary data in measuring and realization of the context of their research to attain objectives. Thus, this would allow future studies to carry investigations using a different research approach in exploring. In addition, a different data collection method in cases of such behaviours, opinions and perceptions that can be best

measured effectively through personal interview. Also, a different method of analysis can be of paramount importance in drawing a conclusion.

Additionally, the present study employed a cross-sectional design to collect data which do not capture the data based on different time periods from the variables of interest and population. Hence, in future, a longitudinal research design needs to be employed in examining the constructs at different points in time. A longitudinal approach may help future researchers to collect more data on the variables of interest at different points in time. This is to authenticate some responses that may fluctuate over time to draw a valid and effective results and conclusions.

Finally, the respondents of the present study were drawn from potential entrepreneurs of only one particular State in Nigeria. This portrayed relatively a limited scope of the study and limited generalizability as it was based on potential entrepreneurs in Bauchi State, Nigeria. Accordingly, further research work is needed to expand the size of the population by taking cognizance of other respondents from the remaining thirty-five States of Nigeria, as well as in different entrepreneurship practice contexts. This may increase the generalizability of these research focus from similar studies in different contexts. Also, this study has been confined on the potential entrepreneur's perspective. Future research could explore beyond the individual level by considering the entrepreneurial team perspective (combined group of entrepreneurs) (Drnovsek et al., 2009) and encompassing other aspects which are relevant with the motivation of an entrepreneur (Hmieleski & Baron, 2009; Murnieks et al., 2014).

## **5.5 Concluding Remarks**

This chapter contained the research conclusions, research implications as well as the research limitations and scope for future research. The conclusions are discussed in the first section, which elaborated and concluded about the attained objectives of the study as well as what such attainment of the objectives entails. The research implications were highlighted in the second section, which highlights the theoretical implications, the empirical implications and the practical implications evolving from the results of this research. The limitations and the scope for future studies were given in the third section, which emphasized the focus of this research to a particular context, upon which future studies were provided with recommendations to focus on other relevant contexts in their research. Other methodological approaches were also recommended for future researchers which is different from the one employed in this present research.

## REFERENCES

- Abdullah, M., Nel, P., Mellalieu, P., & Thaker, A. (2016). *Immigrant entrepreneurs in Malaysia: an exploratory study on their business success and prospects in small retail business*. Australian Centre for Entrepreneurship, Research Exchange (ACERE) Conference (pp. 1-14).
- Abimbola, O. H., & Agboola G. M. (2011). Environmental factors and entrepreneurship development in Nigeria. *Journal of Sustainable Development in Africa*, 13(4), 234-256.
- Abor, J. Y. (2017). *Introduction to Entrepreneurial Finance*. Entrepreneurial Finance for MSMEs. Springer International Publishing. Disney Inc, Canada.
- Abu, E., & Hossam, M. (2008). An investigation of the relationship of openness to experience and organizational citizenship behavior. *Journal of American Academy of Business*, 13(1), 72-78.
- Acs, Z. J. (2010). Entrepreneurship and economic development: the valley of backwardness. *Annals of Innovation & Entrepreneurship*, 1(1), 230-246.
- Adam, S., Mahrous, A. A., & Kortam, W. (2017). The relationship between entrepreneurial orientation, marketing innovation and competitive marketing advantage of female entrepreneurs in Egypt. *International Journal of Technology Management & Sustainable Development*, 16(2), 157-174.
- Adebisi, T. A., & Oni, C. S. (2012). Assessment of relevance of the national directorate of employment (NDE) training programmes to the needs of the trainees in Southwestern Nigeria. *International Journal of Vocational and Technical Education*, 4(3), 29-37.
- Ademiluyi, F. L. (2007). Business competencies needed for effective entrepreneurship as perceived by fresh graduates. *Business Education Journal*, 6(91), 18-28.

- Alam, S. S., Senik, Z. C., & Jani, F. M. (2012). An exploratory study of women entrepreneurs in Malaysia: Motivation and problems. *Journal of Management Research*, 4(4), 282-297.
- Al-Jubari, I., Hassan, A., & Hashim, J. (2017). The role of autonomy as a predictor of entrepreneurial intention among university students in Yemen. *International Journal of Entrepreneurship and Small Business*, 30(3), 325-340.
- Adeola, K. L., & Bolarinwa, K. (2010). Strategies for promoting entrepreneurship education in secondary school curriculum. *Business Education Journal*, 1(10), 221- 227.
- Afolabi, O. O. (2013). The Rate of Youth Unemployment and Its Effects on National Security. *Cultural and Religious Studies*, 1(1), 8-20.
- Ahmad, I., & Yusuf, A. (2011). *Entrepreneurship: A Bridge and Panacea for Self- Employment*. Ibadan, Nigeria: University Press Ltd, Educ.
- Ahmad, N. H., Halim, H. A., & Zainal, S. R. M. (2010). Is entrepreneurial competency the silver bullet for SME success in a developing nation. *International Business Management*, 4(2), 67-75.
- Agwu, M. O., & Emeti, C. I. (2014). Issues, challenges and prospects of small and medium scale enterprises (SMEs) in Port-Harcourt City, Nigeria. *European Journal of Sustainable Development*, 3(1), 101-120.
- Ahangar, R. G. (2010). A study of resilience in relation to personality, cognitive styles and decision making style of management students. *African Journal of Business Management*, 4(6), 953-961.
- Ajagbe, A. M., Olujobi, J. O., Udo, E. E., & Uduimoh, A. A. (2016). Leveraging on information communications technology for enhanced entrepreneurial performance. *International Journal of Advanced Academic Research Management Science*, 2(3), 19-24.

- Akande, O. O. (2013). Effective Financing of Small/Medium Scale Enterprises (SMEs) as an Impetus for Poverty Alleviation in Nigeria: An Analytical Approach. *International Journal of Economic and Development Issues*, 7(10), 12-24.
- Akehurst, G., Simarro, E., & Mas-Tur, A. (2012). Women entrepreneurship in small service firms: motivations, barriers and performance. *The Service Industries Journal*, 32(15), 2489-2505.
- Alabede, J. O., Ariffin, Z. B. Z., & Idris, K. M. (2011). Determinants of tax compliance behaviour: A proposed model for Nigeria. *International Research Journal of Finance and Economics*, 78(1), 121-136.
- Alam, S. S., Senik, Z. C., & Jani, F. M. (2012). An exploratory study of women entrepreneurs in Malaysia: Motivation and problems. *Journal of Management Research*, 4(4), 282-297.
- Airgeadais, M. (2015). Tax and entrepreneurship review department of finance government buildings. *International Research Journal of Finance and Economics*, 7(3), 141-166.
- Alkali, M., & Isa, A. H. M. (2012). Assessing the influence of external environmental factors on the performance of small business manufacturing enterprises in Bauchi State, Nigeria. *Interdisciplinary Journal of Contemporary Research in Business*, 4(7), 621-628.
- Allport, G.W., & Odbert, H. S. (1936). Trait-Names: A psycho-lexical study. *Psychological Monographs*, 47(211), 21-27.
- Aloulou, W., & Fayolle, A. (2005). A conceptual approach of entrepreneurial orientation within small business context. *Journal of Enterprising Culture*, 13(1), 21-45.
- Alvi, M. (2016). *A Manual for Selecting Sampling Techniques in Research*. New Delhi: University Press Inc.
- Amanda M. K., McNeill K., Seth C., & Jacqueline, B. (2014). *Student Assessments for Reading and Writing Scientific Arguments*. New Jersey, USA: Prentice Inc.

- Ambrose, J., & Catherine, K. (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), 30-51.
- Arulampalam, W., & Papini, A. (2017). Employment dynamics and taxation in Norway. *Journal of Enterprising Culture*, 14(6), 21-34.
- Álvarez, C., Urbano, D., & Amorós, J. E. (2014). GEM research: achievements and challenges. *Small Business Economics*, 42(3), 445-465.
- Andy, F. (2009). *Discovering Statistics Using SPSS*. California, USA: SAGE Publications.
- Anju, M., Kanesathasan, A., & Patel, P. (2012). Connectivity: How mobile phones computers and the Internet can catalyze womens entrepreneurship. India: a case study. *International Entrepreneurship and Management Journal*, 4(8), 7-16.
- Atnafu, A. M. (2016). Analysis on determinants of student's self-employment intension in newly established universities of Ethiopia: The case of Dire Dawa University. *Research on Humanities and Social Sciences*, 6(3), 251-272.
- Awruk, K., & Staniewski, M. (2015). Motivating factors and barriers in the commencement of business for potential entrepreneurs. *Ekonomika Istraživanja*, 28(1), 583-592.
- Ayodeji, M. (2015). Entrepreneurial development barriers in a developing nation: A Case Study of the Nigerian Printing SMEs. Ibadan, Nigeria: UPL Publications.
- Ayyagari, M., Demircuc-Kunt, A., & Maksimovic, V. (2014). Who creates jobs in developing countries? *Small Business Economics*, 43(1), 75-99.
- Azimzadeh, S., EhsanI, M., Kordnaeij, A., Kozechian, H., & Pitts, B. (2014). A model for small and medium-sized sport enterprises start-up. *Journal of Enterprising Culture*, 10(7), 67-76.

- Aziz, N., Friedman, B. A., Bopieva, A., & Keles, I. (2013). Entrepreneurial motives and perceived problems: An empirical study of entrepreneurs in Kyrgyzstan. *International Journal of Business*, 18(2), 163-177.
- Azmi, I. A. G. (2017). Muslim women entrepreneurs motivation in SMEs: a quantitative study in Asia Pacific Countries. *Asian Economic and Financial Review*, 7(1), 27-39.
- Babbie, E. (2011). *The Practice of Social Research* (9<sup>th</sup>Ed.) Belmont, California: Thompson & Wardsworth
- Babbie, E. (2010). *The Practice of Social Science Research* 12th Edition, California, USA: Chapman University.
- Babbie, E., & Mouton, J. (2013). *The Practice of Social Research*. Cape Town: Oxford University Press Inc.
- Babbie, E. (2013). *The Practice of Social Research*, Belmont, CA: Wordsworth Cengage Learning
- Babbie, E. (2014). *The Practice of Social Research*, Belmont, CA: Wordsworth Cengage Learning
- Badal, S. B. (2014). *Talents that drive entrepreneurial success*. Princeton, New Jersey: Entrepreneurial Strengths Finder.
- Badal, S. (2010). *Entrepreneurship and Job Creation*. Princeton, New Jersey, USA: Gallup Inc.
- Baker, S. R., Bloom, N., & Davis, S. J. (2013). *Measuring Economic Policy Uncertainty*. Retrieved from <http://www.policyuncertainty.com/media/BakerBloomDavis.pdf>.
- Barba-Sánchez, V., & Atienza-Sahuquillo, C. (2017). Entrepreneurial motivation and self-employment: evidence from expectancy theory. *International Entrepreneurship and Management Journal*, 5(7), 1-19.
- Bardasi, E., Blackden, C. M., & Guzman, J. C. (2007). Gender, Entrepreneurship, and Competitiveness. *International Entrepreneurship and Management Journal*, 4(3), 9-21.

- 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), 1173-1210.
- Bauchi State Government of Nigeria (2017). Bauchi State Government. Retrieved from <https://www.bauchistate.gov.ng>
- Baum, J. R., Frese, M., & Baron, R. A. (Eds.). (2014). *The psychology of entrepreneurship*. London, UK: Psychology Press.
- Baum, J. R., Bird, B. J., & Singh, S. (2011). The practical intelligence of entrepreneurs: Antecedents and a link with new venture growth. *Personnel Psychology*, 64(2), 397-425.
- Baum, J. R., Frese, M., Baron, R. A., & Katz, J. A. (2007). Entrepreneurship as an area of psychology study: An introduction. *The Psychology of Entrepreneurship*, 7(9) 1-18.
- Bello, M. I., Danjuma, I. M., & Adamu, A. Y. (2007). A survey of vocational training needs of 15-25 years old out-of-school youths in Bauchi Metropolis. *Journal of Career and Technical Education*, 23(1), 232-244.
- Bernard, M. J., & Barbosa, S. D. (2016). Resilience and entrepreneurship: A dynamic and biographical approach to the entrepreneurial act. *Journal of Management*, 19(2), 89-103.
- Biavaschi, C., Zimmermann, K. F., Eichhorst, W., Giulietti, C., Kendzia, M. J., Muravyev, A., & Schmidl, R. (2013). Youth unemployment and vocational training. *Foundations and Trends in Microeconomics*, 9(2), 1-157.
- Bienkowska, D., & Klofsten, M. (2012). Creating entrepreneurial networks: academic entrepreneurship, mobility and collaboration during PhD education. *Higher Education*, 64(2), 207-222.
- Bickel, R. (2012). *Multilevel Analysis for Applied Research: It's Just Regression!* London, UK: Guilford Press.

- Billingham, S. A., Whitehead, A. L., & Julious, S. A. (2013). An audit of sample sizes for pilot and feasibility trials being undertaken in the United Kingdom registered in the United Kingdom Clinical Research Network database. *BMC Medical Research Methodology*, 13(1), 104-156.
- Binder, M., & Coad, A. (2013). Life satisfaction and self-employment: A matching approach. *Small Business Economics*, 40(4), 1009-1033.
- Bird, B., & Schjoedt, L. (2017). *Revisiting the Entrepreneurial Mind* (pp. 379-409). Canada, USA: Springer International Publishing.
- Bollen, K. A. (2007). *An Overview of Structural Equation Models with Latent Variables*. Oxford, OH: Miami University Symposium on Computational Research.
- Bosma, N., Wennekers, S., & Amorós, J. (2012). *Global entrepreneurship monitors 2011 extended report. entrepreneurs and entrepreneurial employees across the globe*. NJ, USA: Global Entrepreneurship Research Association (GERA).
- Barrett, P. (2007). Structural equation modeling: Adjudging model fit. *Personality and Individual Differences*, 42(5), 815-824.
- Benzing, C., & Chu, H. M. (2009). A comparison of the motivations of small business owners in Africa. *Journal of Small Business and Enterprise Development*, 16(1), 60-77.
- Blatt, R. (2009). Resilience in entrepreneurial teams: Developing the capacity to pull through. *Frontiers of Entrepreneurship Research*, 29(11), 1-12.
- Borgatti, S. P., Mehra, A., Brass, D. J., & Labianca, G. (2009). Network analysis in the social sciences. *Science*, 323(5916), 892-895.
- Brandstätter, H. (2011). Personality aspects of entrepreneurship: A look at five meta-analyses. *Personality and Individual Differences*, 51(3), 222-230.

- Brenes E., & Haar, J. (2012). *The Future of Entrepreneurship in Latin America*. 1<sup>st</sup> Ed. Chippenham, UK: Palgrave Macmillan.
- Brown, T. A. (2006). *Confirmatory Factor Analysis for Applied Research*. New York, USA: Macmillan.
- Brush, C. G., & Brush, C. G. (2006). *Growth-Oriented Women Entrepreneurs and Their Businesses: A Global Research Perspective*. Mohota: Edward Elgar Publishing.
- Bryman, A., & Bell, E. (2015). *Business Research Methods*. London, UK: Oxford University Press.
- Byrne, B. M. (2013). *Structural Equation Modeling with Mplus: Basic Concepts, Applications, and Programming*. Toronto, USA: Routledge.
- Bryan, J. L. (2013). The Impact of government policy on economic growth. *Journal of Entrepreneurship*, 8(15), 23-32.
- Budig, M. J. (2006). Intersections on the road to self-employment: Gender, family and occupational class. *Social Forces*, 84(4), 2223-2239.
- Buera, F. (2009). A dynamic model of entrepreneurship with borrowing constraints: theory and evidence, *Annals of Finance*, 5(3), 443-464.
- Bughin, J., & Chui, M. (2010). The rise of the networked enterprise: Web 2.0 finds its payday. *McKinsey Quarterly*, 4(6), 3-8.
- Bulmash, B. (2016). *Entrepreneurial Resilience: Locus of Control and Well-being of Entrepreneurs*. Paris: Prentice Inc.
- Bullough, A., Renko, M., & Myatt, T. (2014). Danger zone entrepreneurs: The importance of resilience and self-efficacy for entrepreneurial intentions. *Entrepreneurship Theory and Practice*, 38(3), 473-499.

- Bureau of Labor Statistics (2010). *U.S. Department of Labor, Occupational Outlook Handbook, 2010-11 Fashion Designers*. Retrieved from <http://www.bls.gov/oco/ocos291.htm>
- Bullough, A., & Renko, M. (2013). Entrepreneurial resilience during challenging times. *Business Horizons*, 56(3), 343-350.
- Burrell, G., & Morgan, G. (2017). *Sociological Paradigms and Organizational Analysis: Elements of the Sociology of Corporate Life*. Toronto, USA: Routledge.
- Braunerhjelm, P., Acs, Z. J., Audretsch, D. B., & Carlsson, B. (2010). The missing link: knowledge diffusion and entrepreneurship in endogenous growth. *Small Business Economics*, 34(2), 105-125.
- Bruner, D. C. (2011). Identifying and comparing characteristics of successful minority and majority businesses. *McNair Scholars Research Journal*, 3(1), 8-10.
- Cahn, M. (2008). Indigenous entrepreneurship, culture and micro-enterprise in the Pacific Islands: case studies from Samoa. *Entrepreneurship and Regional Development*, 20(1), 1-18.
- Callaghan, W., Wilson, B., Ringle, C. M., & Henseler, J. (Eds.). (2007). *Exploring Causal Path Directionality for a Marketing Model Using Cohen's Path Method*. Aas, Norway: Matforsk.
- Caliendo, M., Fossen, F., & Kritikos, A. S. (2014). Personality characteristics and the decisions to become and stay self-employed. *Small Business Economics*, 42(4), 787-814.
- Caliendo, M., Fossen, F. M., & Kritikos, A. S. (2009). Risk attitudes of nascent entrepreneurs—new evidence from an experimentally validated survey. *Small Business Economics*, 32(2), 153-167.
- Cantillon, R. (1755). *Essai Sur La Nature Du Commerce en General*. London, UK: Gyles.

- Canevello, A. J. (2011). Interpersonal goals, others' regard for the self, and self-esteem: The paradoxical consequences of self-image and compassionate goals. *European Journal of Social Psychology*, 41(4), 422-434.
- Carolyne, M. W. (2016). Factors Influencing the Success of Youth Entrepreneurship Business Startups: A Case of Technoserve Stryde Program in Nyeri County *Small Business Economics*, 40(6), 31-38.
- Carsrud, A., & Brännback, M. (2011). Entrepreneurial motivations: what do we still need to know? *Journal of Small Business Management*, 49(1), 9-26.
- Castells, M. (2011). *The Power of Identity: The Information Age: Economy, Society, and Culture*. New York, USA: John Wiley & Sons.
- Cassar, G. (2007). Money, money, money? A longitudinal investigation of entrepreneur career reasons, growth preferences and achieved growth. *Entrepreneurship and Regional Development*, 19(1), 89-107.
- Central Bank of Nigeria (2010). *N200 Billion Small and Medium Enterprises (SME) Credit Guarantee Scheme (SMECGS)*. Abuja, Nigeria: CBN.
- Central Bank of Nigeria (2011). *Statistical Bulletin*. Abuja, Nigeria: CBN.
- Central bank of Nigeria (2012). *Guidelines N300 Billion Power and Airline Intervention Fund (PAIF) revised guidelines (v5)*. Abuja, Nigeria: CBN. Retrieved from [http://www.cenbank.org/Out/2012/CCD/PAIF\\_Guidelines%20v5.pdf](http://www.cenbank.org/Out/2012/CCD/PAIF_Guidelines%20v5.pdf)
- Chakravarty, S., Lundberg, M. K., Nikolov, P., & Zenker, J. (2017). The value of skill training programs for self-employment, entrepreneurship and non-cognitive traits. Evidence from a regression discontinuity design. *Journal of Human Resource Management*, 9(10), 31-43.
- Chua, Y. P. (2013). *Mastering Research Statistics*. Shah Alam: McGraw Hill Educ.

- Chell, E. (2008). *The Entrepreneurial Personality: A Social Construction*. NJ, USA: Routledge.
- Chin, W. W. (1998). *The Partial Least Squares Approach for Structural Equation Modeling*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Chin, W. W., Vinzi, V. E., Henseler, J., & Wang, H. (Eds.). (2010). *Handbook of partial least squares: Concepts, methods and applications*. Toronto, USA: Springer Science & Business Media.
- Chowdhury, F. N. (2017). A Study of Entrepreneurship Development in Bangladesh: Pros and Cons. *Journal of Asian Scientific Research*, 7(1), 1-12.
- Choudrie, J., & Middleton, C. (2013). *Management of Broadband Technology and Innovation: Policy, Deployment and Use*. Toronto, USA: Routledge.
- Coon, D., & Mitterer, J. (2004). *Introduction to psychology*. London, UK: Thomson Learning.
- Cooney, T. M. (2012). *Entrepreneurship Skills for Growth-Orientated Businesses*. Copenhagen, Danish Business Authority, Minota: Leems Inc Pub.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297-334.
- Dana, A. L. (2014). Entrepreneurship and Creativity. A Comparative Study. *Bulletin of the Transilvania University of Brasov. Economic Sciences Series*, 7(2), 139-146.
- Danso, A., Adomako, S., Damoah, J. O., & Uddin, M. (2016). Risk-taking Propensity, Managerial Network Ties and Firm Performance in an Emerging Economy. *The Journal of Entrepreneurship*, 25(2), 155-183.
- Darnihamedani, P. (2016). Individual characteristics, contextual factors and entrepreneurial behavior. *Journal of Small Business Management*, 10(4), 23-230.

- David, P. M. (2011). Integrating mediators and moderators in research design. *Research on Social Work Practice*, 21(6), 675-681.
- David, G. B. & Chris, S. (2014). *Entrepreneurship in the UK: Towards Self employment*. NJ, USA: Iza Pelwave.
- Davis, J. L. (2015). *Firm-level Entrepreneurship and Performance: An Examination and Extension of Relationships and Measurements of the Entrepreneurial Orientation Construct*. Texas, USA: The University of Texas at Arlington.
- Dawson, C. J., Henley, A., & Latreille, P. L. (2009). Why do individuals choose self-employment? *Journal of Business Venturing*, 8(12), 23-31.
- Dayan, M., Dayan, M., Zacca, R., Zacca, R., Husain, Z., Husain, Z., ... & Ryan, J. C. (2016). The effect of entrepreneurial orientation, willingness to change, and development culture on new product exploration in small enterprises. *Journal of Business & Industrial Marketing*, 31(5), 668-683.
- DeAngelis, S. F. (2011). *Business week's Top Young Entrepreneurs for 2010*. Retrieved from [http://enterpriseresilienceblog.typepad.com/enterprise\\_resilience\\_man/2010/12/businessweeks-top-young-entrepreneurs-for-2010.html](http://enterpriseresilienceblog.typepad.com/enterprise_resilience_man/2010/12/businessweeks-top-young-entrepreneurs-for-2010.html).
- De Beaugrande, R. (1993). Discourse analysis and literary theory: Closing the gap. *Journal of Advanced Composition*, 6(8), 423-448.
- De Bruin, A., Brush, C. G., & Welter, F. (2007). Advancing a framework for coherent research on women's entrepreneurship. *Entrepreneurship Theory and Practice*, 31(3), 323-339.
- De Jong, J. P. (2013). The Decision to Exploit Opportunities for Innovation: A Study of High-Tech Small-Business Owners. *Entrepreneurship Theory and Practice*, 37(2), 281-301.
- Delmar, F., Davidsson, P., & Gartner, W. B. (2013). Arriving at the high-growth firm. *Journal of Business Venturing*, 18(2), 189-216.

- De Pillis, E., & Reardon, K. K. (2017). The influence of personality traits and persuasive messages on entrepreneurial intention: A cross-cultural comparison. *Career Development International*, 12(4), 382-396.
- Dereje, W. S. (2014). The role of technical and vocational education training in improving the self-employment opportunity: The case of Kolfe-keranyo sub city. *Professional and Vocational Education Program Unit*, 5(4), 21-29.
- Dike, V. E. (2013). *Technical and Vocational Education and Training (TVET): Understanding the Nigerian Experience*. UK: Drexel University.
- Dissanayake, D. M. N. S. W. (2013). *Research, Research Gap and the Research Problem*. Toronto, USA: Billgon Inc.
- Dissanayake, S. (2015). *Theory Testing and Extension or Development: The Two Outcome Oriented Research Approaches*. London, UK: Prentice Inc.
- Djankov, S., Ganser, T., McLiesh, C., Ramalho, R., & Shleifer, A. (2010). The effect of corporate taxes on investment and entrepreneurship. *American Economic Journal: Macroeconomics*, 2(3), 31-64.
- Drnovsek, M., Cardon, M. S., & Murnieks, C. Y. (2009). Collective passion in entrepreneurial teams in understanding the entrepreneurial mind. *Journal of Entrepreneurship*, 4(6), 191-215.
- Dragnić, D. (2014). Impact of internal and external factors on the performance of fast-growing small and medium businesses. *Management: Journal of Contemporary Management Issues*, 19(1), 119-159.
- Drucker, P. F. (1985). *Innovation and Entrepreneurship*. New York, USA: Harper & Row Publishers Entrepreneurial Studies (pp.187-199).

- Dunn, T., & Holtz-Eakin, D. (2000). Financial capital, human capital, and the transition to self-employment: Evidence from intergenerational links. *Journal of Labor Economics*, 18(2), 282-305.
- Duening, T. N. (2010). Five minds for the entrepreneurial future: Cognitive skills as the intellectual foundation for next generation entrepreneurship curricula. *The Journal of Entrepreneurship*, 19(1), 1-22.
- Dunkelberg, W. C., & Wade, H. (2009). NFIB small business economic trends. *National Federation of Independent Business*, 5(3), 19-33.
- Dutta, S., & Mia, I. (2007). *Global Information Technology Report 2006-2007: Connecting to the Networked Economy*. Basingstoke, UK: Palgrave Macmillan.
- Dutta, B. (2009). *Entrepreneurship Management (Text and Cases)*. New Delhi, India: Excel Books.
- Dzisi, S. (2008). Women entrepreneurs in small and medium enterprises (SMEs) in Ghana. *Journal of International Entrepreneurship*, 12(5), 24-30.
- Elebute, A., & Shagaya, O. M. (2016). Impact of vocational and technical education on livelihood sustenance and economic development in Nigeria: the art workshop experience. *International Journal of Vocational and Technical Education Research*, 2(2), 233-258.
- Edelman, L. F., Brush, C. G., Manolova, T. S., & Greene, P. G. (2010). Start-up motivations and growth intentions of minority nascent entrepreneurs. *Journal of Small Business Management*, 48(2), 174-196.
- Emmanuel A., Effiong, S. A., & Ele, A. A. (2012). Entrepreneurship education policy: An intervention strategy for economic development in Nigeria. *Business & Entrepreneurship Journal*, 1(1), 101-110.

- Eravia, D., & Handayani, T. (2015). The opportunities and threats of small and medium enterprises in pekanbaru: comparison between SMEs in food and restaurant industries. *Procedia-Social and Behavioral Sciences*, 169(13), 88-97.
- Estay, C., Durrieu, F., & Akhter, M. (2013). Entrepreneurship: From motivation to start-up. *Journal of International Entrepreneurship*, 11(3), 243-267.
- Essen, M., Strike, V. M., Carney, M., & Sapp, S. (2015). The resilient family firm: Stakeholder outcomes and institutional effects. *Corporate Governance: An International Review*, 23(3), 167-183.
- Evans, D. S. & Leighton, L. S. (2009). Small business formation by unemployed and employed workers, *Small Business Economics*, 2(6), 319-330.
- Ezekiel A. O., & Agwu, M. E. (2015). Employment generation through entrepreneurial development: The Nigerian experience. *British Journal of Economics, Management & Trade*, 11(3), 1-14.
- Falk, R. F., & Miller, N. B. (1992). *A primer for soft modeling*. Ohio, USA: University of Akron Press.
- Fátima, M. J. A. (2012). *On Becoming Self-Employed: Gender, Class and Entrepreneurship in Portugal*. SSS, UK: Publishing Inc.
- Fatuase, A. I., & Ehinmowo, O. O. (2016). Adoption of Improved Cassava Processing Technologies by Women Entrepreneur in South–West, Nigeria. *World Journal of Agricultural Research*, 4(4), 109-113.
- Fellows, G. T. (2016). *First Principles at Work: Self Determination Theory and he Mechanism of Organismic Integration Over Individual Dispositions in Entrepreneurship*. Lusalka: Queensland University Press.

- Fernández-Serrano, J., & Romero, I. (2012). Entrepreneurial quality and regional development: Characterizing SME sectors in low income areas. *Papers in Regional Science*, 92(3), 465-513.
- Feyitimi, O., Temitope, O. A., Akeem, L. B., & Samuel, O. (2016). Tax incentives and the growth of small and medium scale enterprises in developing economy—the Nigerian experience. *European Journal of Research and Reflection in Management Sciences*, 4(2), 122-130.
- Fitzgerald, R., Winstone, L., & Prestage, Y. (2014). *A Versatile tool? Applying the Cross-National Error Source Typology (CNEST) to Triangulated Pre-test Data*. Oxford, UK: Oxford Press.
- Fogel, K., Casson, M., Yeung, B., & Basu, A. (Eds.). (2008). *The Oxford handbook of entrepreneurship*. Oxford, UK: Oxford University Press.
- Fornell, C., & Bookstein, F. L. (1982). Two structural equation models: LISREL and PLS applied to consumer exit-voice theory. *Journal of Marketing Research*, 3(4), 440-452.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 76-79.
- Fossen, F. M., Rees, R., Rostam-Afschar, D., & Steiner, V. (2017). How do entrepreneurial portfolios respond to income taxation? *Journal of Accounting & Finance*, 6(5), 34-41.
- Franck, A. K. (2012). Factors motivating women's informal micro-entrepreneurship: Experiences from Penang, Malaysia. *International Journal of Gender and Entrepreneurship*, 4(1), 65-78.
- Frese, M., & Gielnik, M. M. (2014). The psychology of entrepreneurship. *Annual Review of Organizational Psychology and Organizational Behavior*, 1(1), 413-438.
- Friedman, L. (2013). Commentary: why we should report results from clinical trial pilot studies. *Trials*, 14(1), 14-21.

- Gallagher, D., Ting, L., & Palmer, A. (2008). A journey into the unknown; taking the fear out of structural equation modeling with AMOS for the first-time user. *The Marketing Review*, 8(3), 255-275.
- Gallup, A. (2012). *Entrepreneurial Ecosystem: Framework for Measuring Entrepreneurial Activity*. London, UK: Sage.
- Garba, I. (2015). *Necessity of Entrepreneurial Support in Nigeria*. Ibadan, Nigeria: University Press Ltd (UPL) Inc.
- Gareth, M. (2015). *Sociological Paradigms and Organisational Analysis Elements of the Sociological and Industrial Relations*. Organisational Behaviour, New York, USA: York University Inc.
- Garcia-Murillo, M., Garcia-Murillo, M., Velez-Ospina, J. A., & Velez-Ospina, J. A. (2017). ICTs and the informal economy: mobile and broadband roles. *Digital Policy, Regulation and Governance*, 19(1), 58-76.
- Gaskin, J., & Lowry, P. B. (2014). Partial least squares (PLS) structural equation modeling (SEM) for building and testing behavioral causal theory: When to choose it and how to use it. *IEEE Transactions on Professional Communication*, 57(2), 123-146.
- Gatewood, E. J., Shaver, K. G., Powers, J. B., & Garner, W. B. (2012). Entrepreneurial expectancy, task effort and performance. *Entrepreneurship Theory and Practice*, 27(2), 187-206.
- Georgianna, S., Müller, G. F., Schermelleh-Engel, K., & Petersen, B. (2016). Entrepreneurs' Job Satisfaction and Its Relationship to Super-Leadership and Self-Leadership. *Journal of Research in Business, Economics and Management*, 6(3), 928-940.
- Goerman, P., & King, R. (2014). *Adaptation of standard cognitive interview methodology for use with Spanish-speaking respondents*. CA, USA: Anaheim.

- Giacomin, O., Janssen, F., Pruett, M., Shinnar, R. S., Llopis, F., & Toney, B. (2011). Entrepreneurial intentions, motivations and barriers: Differences among American, Asian and European students. *International Entrepreneurship and Management Journal*, 7(2), 219-238.
- Gichuki, J. A. W., Njeru, A., & Tirimba, O. I. (2014). Challenges facing micro and small enterprises in accessing credit facilities in Kangemi Harambee market in Nairobi City County, Kenya. *International Journal of Scientific and Research Publications*, 4(12), 1-25.
- Giotopoulos, I., Kontolaimou, A., & Tsakanikas, A. (2017). Drivers of high-quality entrepreneurship: what changes did the crisis bring about? *Small Business Economics*, 48(4), 913-930.
- Goby, V. P., & Erogul, M. S. (2011). Female entrepreneurship in the United Arab Emirates: Legislative encouragements and cultural constraints, women's studies. *International Forum*, 34(4), 329-334.
- Gholami, S., & Birjandi, M. (2016). The effect of market orientation and entrepreneurial orientation on performance of SME's. *Journal of Current Research in Science*, 4(3), 287-290.
- Götz, O., Liehr-Gobbers, K., & Krafft, M. (2010). *Handbook of partial least squares*. USA: Springer.
- Gray, D. E. (2009). *Doing Research in the Real World*. 2<sup>nd</sup> Edition. London, UK: Saga Publications.
- Greene, J., & d'Oliveira, M. (2009). *Learning to Use Statistical Tests in Psychology* (2<sup>nd</sup> Rev.edition). Buckingham, UK: Open University Press.
- Giuliano, G., & Roberto, P. (2007). The role of job satisfaction in transitions into self-employment. *Entrepreneurship Theory and Practice*, 40(3), 543-571.
- Grundstén, H. (2014). *Entrepreneurial intentions and the entrepreneurial environment: A study of technology-based new venture creation*. Silvanus, Finland: Helsinki University Press.

- Gulen, H., & Mihai, I. (2013). Policy uncertainty and corporate investment. *International Journal of Entrepreneurship and Small Business*, 2(4), 13-55.
- Gupta, V. K., & Bhawe, N. M. (2007). The influence of proactive personality and stereotype threat on women's entrepreneurial intentions. *Journal of Leadership & Organizational Studies*, 13(4), 73-85.
- Hadjimanolis, A. (2016). Perceptions of the institutional environment and entrepreneurial intentions in a small peripheral country. *International Journal of Entrepreneurship and Small Business*, 28(1), 20-35.
- Hair, J. F., Black, B., Babin, B., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data Analysis*, 5(3), 207-219. Upper Saddle River, NJ: Prentice hall.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed, a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139-152.
- Hair, J. F., Sarstedt, M., Pieper, T. M., & Ringle, C. M. (2012). The use of partial least squares structural equation modeling in strategic management research: a review of past practices and recommendations for future applications. *Long Range Planning*, 45(5), 320-340.
- Hair, J. F., Tomas G. M., Christian M. R., & Marko, S. (2014). *A Primer On Partial Least Squares Structural Equation Modelling*. Upper Saddle River, NJ: Prentice hall.
- Haltiwanger, J., Jarmin, R., & Miranda, J. (2012). Where Have All the Young Firms Gone? *Journal of Small Business and Enterprise Development*, 1(5), 19-63.
- Hassan, Z., & Agus, A. (2010). The structural influence of entrepreneurial leadership, communication skills, determination and motivation on sales and customer satisfaction. *Journal of Small Business and Enterprise Development*, 11(6), 31-42.

- Hayward, M. L., Forster, W. R., Sarasvathy, S. D., & Fredrickson, B. L. (2010). Beyond hubris: How highly confident entrepreneurs rebound to venture again. *Journal of Business Venturing*, 25(6), 569-578.
- Hazzi, O. A., & Maldaon, I. S. (2015). A pilot study: Vital methodological issues. *Business: Theory and Practice/Verslas: Teorijair Praktika*, 16(1), 53-62.
- Hemmer, E., & Heinzl, A. (2012). Determinants of information channel choice: The impact of task complexity and dispositional character traits. In *45th Hawaii International Conference on System Science (HICSS), 2012* (pp. 1717-1726). IEEE.
- Henseler, J., & Fassott, G. (2010). *Handbook of partial least squares*. London, UK: Springer Berlin Heidelberg.
- Henseler, J. (2012). Why generalized structured component analysis is not universally preferable to structural equation modeling. *Journal of the Academy of Marketing Science*, 40(3), 402-413.
- Henseler, J., & Chin, W. W. (2010). A comparison of approaches for the analysis of interaction effects between latent variables using partial least squares path modeling. *Structural Equation Modeling*, 17(1), 82-109.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2012). Using partial least squares path modeling in advertising research: basic concepts and recent issues. In S. Okazaki. (ed.) *Handbook of research on international advertising* (pp. 252-271). Cheltenham, UK: Edward Elgar Publishing.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. In Sinkovics, R. R., & Ghauri, P. N. (Eds.) *New challenges to international marketing* (pp. 277-319). Bingley, UK: Emerald Group Publishing Limited.
- Henley, A. (2007). Entrepreneurial aspiration and transition into self-employment: evidence from British longitudinal data. *Entrepreneurship & Regional Development*, 19(3), 253-280.

- Henry, C., Foss, L., & Ahl, H. (2016). Gender and entrepreneurship research: A review of methodological approaches. *International Small Business Journal*, 34(3), 217-241.
- Hamidi, D. Y., Wennberg, K., & Berglund, H. (2008). Creativity in entrepreneurship education. *Journal of Small Business and Enterprise Development*, 15(2), 304-320.
- Hanafiah, M. H., Yousaf, S. U., & Hashim, N. A. (2017). Entrepreneurs' intention to invest in current business: An empirical study of Malaysian SME entrepreneurs. *Geografia-Malaysian Journal of Society and Space*, 12(2), 321-356.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. UK: Guilford Press.
- Hermawan, R. W., Soetjipto, B. E., & Rahayu, W. P. (2016). The effect of entrepreneurial self-efficacy and locus of control on entrepreneurship interest through entrepreneurship literacy. *Journal of Business and Management*, 18(2), 277-280.
- Henri, G. (2014). *Entrepreneurial Intentions and Entrepreneurial Environment*. Salamanca, Spain: ISSE University.
- Hessels, J., Van Gelderen, M., & Thurik, R. (2008). Entrepreneurial aspirations, motivations, and their drivers. *Small Business Economics*, 31(3), 323-339.
- Hmieleski, K. M., & Baron, R. A. (2009). Entrepreneurs' optimism and new venture performance: A social cognitive perspective. *Academy of Management Journal*, 52(3), 473-488.
- Hmieleski, K. M., & Corbett, A. C. (2008). The contrasting interaction effects of improvisational behavior with entrepreneurial self-efficacy on new venture performance and entrepreneur work satisfaction. *Journal of Business Venturing*, 23(4), 482-496.
- Hisrich, R., Langan-Fox, J., & Grant, S. (2007). Entrepreneurship research and practice: a call to action for psychology. *American Psychologist*, 62(6), 575-589.

- Hofer, A. R. (2015). *Innovation and Knowledge: An Explorative Study of Entrepreneurial Firms in Germany*. Toronto, USA: University of Toronto Press.
- Hopp, C., & Sonderegger, R. (2015). Understanding the dynamics of nascent entrepreneurship—Prestart-up experience, intentions and entrepreneurial success. *Journal of Small Business Management*, 53(4), 1076-1096.
- Hsu, D. K., Shinnar, R. S., & Powell, B. C. (2014). Expectancy theory and entrepreneurial motivation: A longitudinal examination of the role of entrepreneurship education. *Journal of Business and Entrepreneurship*, 26(1), 121-140.
- Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. *Strategic Management Journal*, 8(6), 195-204.
- Hussain, A., Tunio, S., Qadir, A., & Ali, A. (2017). Vocational education empowers micro-entrepreneurial culture in Pakistan. *Imperial Journal of Interdisciplinary Research*, 3(2), 12-23.
- Isa, Y. Z. M., Abu Bakar, Y. A., & Ahmad, S. (2016). Determinant factors of women entrepreneurs' business performance: a conceptual framework. *Journal of Global Business and Social Entrepreneurship*, 1(1), 244-256.
- Idris, A. (2015). *Entrepreneurial Motivation in Nascent Entrepreneurship, An Assessment of Business Start-Up in Nigeria*. Ncsuu, Nigeria: JPK Publications.
- Islam, M. A., Khan, M. A., Obaidullah, A. Z. M., & Alam, M. S. (2011). Effect of entrepreneur and firm characteristics on the business success of small and medium enterprises (SMEs) in Bangladesh. *International Journal of Business and Management*, 6(3), 289-308.
- Jabeen, F., Jabeen, F., Faisal, M. N., Faisal, M. N., Katsioloudes, M., & Katsioloudes, M. (2017). Entrepreneurial mindset and the role of universities as strategic drivers of entrepreneurship:

- evidence from the United Arab Emirates. *Journal of Small Business and Enterprise Development*, 24(1), 136-157.
- Jackson, D. L., Gillaspay Jr, J. A., & Purc-Stephenson, R. (2009). Reporting practices in confirmatory factor analysis: an overview and some recommendations. *Psychological Methods*, 14(1), 6-17.
- Jagodič, G., & Dermol, V. (2015). ICT tools for the development of entrepreneurial competencies. *Managing Intellectual Capital and Innovation for Sustainable and Inclusive Society*, 1(1), 2-5.
- James, J. C. (2010). *Research in Psychology: Methods and Design*. Sixth Edition, New York, USA: John Wiley & Sons
- Jayawarna, D., Rouse, J., & Kitching, J. (2013). Entrepreneur motivations and life course. *International Small Business Journal*, 31(1), 34-56.
- Jeremy, H. K., Daneke, G. A., & Lenox, M. J. (2010). Sustainable development and entrepreneurship: Past contributions and future directions. *Journal of Business Venturing*, 25(5), 439-448.
- Jill, C., & Hussey, R. (2013). *Business Research: A Practical Guide for Undergraduate and Postgraduate Students*. Basingstoke, UK: Palgrave Macmillan.
- Johnston, K. A., Andersen, B. K., Davidge-Pitts, J., & Ostensen-Saunders, M. (2010). Identifying ICT Entrepreneurship Potential in Students. *Informing Science and IT Education*, 3(9), 27-41.
- Johannsen, B. (2013). *When are the effects of fiscal policy uncertainty large?* Basingstoke, UK: Palgrave Macmillan.
- Josiah, M., Ozele, E. C., & Agbo, I. S. (2016) Entrepreneurship motivation: an assessment of small and medium enterprises in river state. *Journal of Accounting* 2(7), 360-371

- Joyce, M. G. (2013). *Effects of Transformational Leadership and Prior Knowledge on Growth of Women-Owned Micro and Small Enterprises in Kasarani Division*. Kenya: Kasarani Inc.
- Juusola M., & Evans, D. (2010). *Social media marketing: the next generation of business engagement*. NJ, USA: John Wiley & Sons.
- Kabir, M. S., Hou, X., Akther, R., Wang, J., & Wang, L. (2012). Impact of small entrepreneurship on sustainable livelihood assets of rural poor women in Bangladesh. *International Journal of Economics and Finance*, 4(3), 265-279.
- Kacperczyk, A. J. (2012). Opportunity structures in established firms: Entrepreneurship versus intrapreneurship in mutual funds. *Administrative Science Quarterly*, 57(3), 484-521.
- Karimi, S., Biemans, H. J. A., Mahdei, K. N., Lans, T., Chizari, M., & Mulder, M. (2017). Testing the relationship between personality characteristics, contextual factors and entrepreneurial intentions in a developing country. *International Journal of Psychology*, 12(14), 221-236.
- Kassin, S. (2013). *Psychology*. New York, USA: Prentice-Hall Inc.
- Kerr, W., & Nanda, R. (2011). *Financing Constraints and Entrepreneurship. Handbook on Research on Innovation and Entrepreneurship*. Bulawayo, Zimbabwe: Getrad Publish.
- Kerr, W. R., & Nanda, R. (2009). Democratizing entry: Banking deregulations, financing constraints, and entrepreneurship. *Journal of Financial Economics*, 94(1), 124-149.
- Kaushalesh, L., & Dunnewijk, T. (2008). *Entrepreneurship and innovation strategies in ICT SMEs in enlarged Europe (EU25)*. Maastricht, Netherlands: United Nations University.
- Kelly, S., & Beasley, M. (2011). Graduate entrepreneurs: intentions, barriers and solutions. *Education Training*, 53(8), 722-740.
- Kevin, A., Andersen, B. K., Davidge-Pitts, J., & Ostensen-Saunders, M. (2010). Identifying ICT Entrepreneurship Potential in Students. *Informing Science and IT Education* 7(3), 27-41).

- Kharuddin, S., Zariyawati, M. A., & Annuar, M. N. (2010). Information system and firms' performance: the case of Malaysian small medium enterprises. *International Business Research*, 3(4), 28-43.
- Khare, A. (2015). *Non-formal vocational training and national development: The contribution of IGNOU in North East India*. New Delhi, India: Indian Press.
- Kim, G. (2008). Entrepreneurship and self-employment: the state-of-the-art and directions for future research. *New England Journal of Entrepreneurship*, 11(1), 39-43.
- Kim, P. H., Aldrich, H. E., & Keister, L. A. (2006). The impact of financial, human, and cultural capital on entrepreneurial entry in the United States. *Small Business Economics*, 27(1), 5-22.
- Kiragu, E. M., & Sakwa, M. (2013). Effect of group lending mechanisms on enterprise of rural women in Kenya: A survey of Kenyenyie district, Kisii county. *Interdisciplinary Journal of Contemporary Research in Business*, 6(9), 23-32.
- Kisker, C. E. W. (2016). Model for testing the impact of motivational factors of nascent entrepreneurs on business surviving success. *European Scientific Journal*, 12(4), 34-45.
- Klyver, K., Nielsen, S. L., & Evald, M. R. (2013). Women's self-employment: An act of institutional (dis)integration? A multilevel, cross-country study. *Journal of Business Venturing*, 28(4), 474-488.
- Knopf, J. W. (2015). *Doing a Literature Review*. Naval Postgraduate School, Kalkota: Macgrew Inc.
- Koomson, I., Peprah, J. A., & Afoakwah, C. (2015). Savings, entrepreneurial trait and self-employment: evidence from selected Ghanaian Universities. *Journal of Global Entrepreneurship Research*, 5(1), 11-25.
- Kontula, J. (2012). *New Venture Creation in Software Business: A Contextually Embedded Entrepreneur's Perspective*. London, UK: Prentice Inc.

- Kotler, P., & Armstrong, G. (2011). *Principles of Marketing*. NJ, USA: Pearson Prentice Hall.
- Kothari, C. R. (2008). *Research Methodology: Methods and Techniques*. Delhi, India: New Age International Publishers.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607-610.
- KritikoS, A. S. (2014). Entrepreneurs and their impact on jobs and economic growth. *Journal of Global Entrepreneurship Research*, 7(11), 20-35.
- Kropp, F., Lindsay, N. J., & Shoham, A. (2008). Entrepreneurial orientation and international entrepreneurial business venture startup. *International Journal of Entrepreneurial Behavior & Research*, 14(2), 102-117.
- Kumar, A. S., Purnima, C. S., Abraham, K. M., & Jayashree, K. (2011). *Entrepreneurship Development*. New Delhi, India: New age international Publisher.
- Kunt, A. D. L. F., & Panos, G. A. (2011). Entrepreneurship in post-conflict transition. *Economics of Transition*, 19(1), 27-78.
- Kuratko, D. F. (2009). *Entrepreneurship, Theory, Process, Practice*. California, USA: South-Western Cengage learning.
- Kuratko, D. F., & Hodgetts, R. M. (2008). *Entrepreneurship: Theory, Process & Practice*. Mason, OH: South-Western Publishers.
- Kurz, E. (2010). Analysis on fashion design entrepreneurship: Challenges and supporting models. *Journal of Entrepreneurship Research*, 75(9), 20-29.
- Kushida, K. E. (2012). Entrepreneurship in Japan's ICT Sector: Opportunity and Protection from Japan's Telecommunications Regime Shift. *Social Science Japan Journal*, 15(1), 30-36.

- Leitão, J., & Ferreira, J. (2012). *ICT and Entrepreneurship: A comparative analysis between Portugal and Germany*. Covilha, Portugal: UBI Press.
- Landstrom, H. (1998). The roots of entrepreneurship research. *Scandinavian Journal of Management*, 17(2), 225-248.
- Landstrom, H. (2005). *Pioneers in Entrepreneurship and Small Business Research*. New York, USA: Springer Science Business Media, Inc.
- Langat, J., Kate, O. L., & Ntale J. F. (2016). Information communication technologies and marketing decisions among small scale farmers in Kenya, review of evidence. *International Journal of Economics, Commerce and Management*, 4(4), 332-356.
- Lasisi, A. N., Ahmed, M., & Ajagbe, A. M. (2012). Samba Open Dap Performance in a Simulated Environment. *IRACST-International Journal of Computer Science and Information Technology & Security*, 2(3), 503-509.
- Lee, L., Wong, P. K., Der Foo, M., & Leung, A. (2011). Entrepreneurial intentions: The influence of organizational and individual factors. *Journal of Business Venturing*, 26(1), 124-136.
- Lefebvre, R. C. (2011). An integrative model for social marketing. *Journal of Social Marketing*, 1(1), 54-72.
- Leonelli, S., Ceci, F., & Masciarelli, F. (2017). The importance of entrepreneurs' traits in explaining start-ups' innovativeness. *Sinergie Italian Journal of Management*, 9(6), 23-34.
- Ling, Y. A. N., Simsek, Z., Lubatkin, M. H., & Veiga, J. F. (2008). Transformational leadership's role in promoting corporate entrepreneurship: Examining the CEO-TMT interface. *Academy of Management Journal*, 51(3), 557-576.
- Livanos, I. (2009). What determines self-employment? A comparative study. *Applied Economics Letters*, 16(3), 227-232.

- Lorz, M., & Volery, T. (2011). The impact of entrepreneurship education on entrepreneurial intention. *Journal of Entrepreneurship*, 7(11), 34-42.
- Lumpkin, G. T., Cogliser, C. C., & Schneider, D. R. (2009). Understanding and measuring autonomy: An entrepreneurial orientation perspective. *Entrepreneurship Theory and Practice*, 33(1), 47-69.
- Lucy, B. S. (2013). Entrepreneurship activities in rural Tanzania: understanding women's micro businesses. *Journal of Small Business Management*, 7(6), 23-35.
- Maclean, R., Jagannathan, S., & Sarvi, J. (2012). Skills development for inclusive and sustainable growth in developing Asia-Pacific. *International Journal of Entrepreneurship*, 9(15), 12-32.
- MacKenzie, D. (2016). The entrepreneurial brew investigating the reflexive duality of drivers and determinants to entrepreneurship—a comparative analysis of the Ethiopian and Rwandan coffee markets. *Journal of Management*, 11(6), 14-23.
- Magnus, L. (2011). The role of institutions and ICT entrepreneurship in developing countries: The case of Cameroon. *Journal of Entrepreneurial Behavior*, 8(3), 16-32.
- Mahajar, A. J. B., & Yunus, J. B. M. (2012). Factors that encourage women involvement in SMEs in Pahang, Malaysia. *The Journal of Human Resource and Adult Learning*, 8(2), 33-39.
- Mallya, L. S. (2012). Successful entrepreneurs of Indian origin a case study. *Journal of Management & Entrepreneurship*, 3(10), 16-20.
- Mattare, M., Monahan, M., & Shah, A. (2011). A profile of micro-entrepreneurship in western Maryland: How demographic variables affect these nascent engines of opportunity. *Journal of Marketing Development and Competitiveness*, 5(3), 127-139.
- Marie-Josée, B., Bernard, M. J., & Barbosa, S. D. (2016). Resilience and entrepreneurship: A dynamic and biographical approach to the entrepreneurial act. *Management Journal*, 19(2), 67-89.

- Mary, K. C. (2010). *Strategies of a Successful Entrepreneur: Nature or Nurture*, in MBA Review. London, UK: Macmillan Inc.
- Mason, C., & Brown, R. (2014). Entrepreneurial ecosystems and growth oriented entrepreneurship. *OECD Journal*, 30(1), 77-102.
- May, T. (2011). *Social Research*. London, UK: McGraw-Hill Education.
- Maziriri, E. T., & Madinga, N. W. (2016). A Qualitative Study on the Challenges Faced by Entrepreneurs Living with Physical Disabilities within the Sebokeng Township of South Africa. *International Journal of Entrepreneurship*, 1(6), 22-31.
- McClelland, D. C. (1961). *The Achieving Society*. NJ, USA: Princeton Van Nostrand.
- Melia, M. R., Perez, A. B., & Dobon, S. R. (2010). The influence of innovation orientation on the internationalization of SMEs in the service sector. *The Service Industries Journal*, 30(5), 777-791.
- Mercy, O. N. (2014). Utilization of information and communication technology to enhance entrepreneurship in South-East, Nigeria. *Journal of Entrepreneurial Behavior*, 18(10), 14-22.
- Miller, D., & Breton-Miller, L. (2017). Underdog Entrepreneurs: A Model of Challenge-Based Entrepreneurship. *Entrepreneurship Theory and Practice*, 41(1), 7-17.
- Miller, D. (2016). Response to research on the dark side of personality traits in entrepreneurship: observations from an organizational behavior perspective. *Entrepreneurship: Theory and Practice*, 40(1), 19-25.
- Mthanti, T. S. (2013). The impact of effectuation on the performance of South African medium and high technology firms. *Journal of Business Management*, 9(8), 11-20.

- Mirzaei O., Micheels E. T., & Boecker, A. (2016). Product and Marketing Innovation in Farm-Based Businesses: The Role of Entrepreneurial Orientation and Market Orientation. *International Food and Agribusiness Management Review*, 19(2), 82-99.
- Moberg, K. (2014). Assessing the Impact of Entrepreneurship Education. *Journal of Small Business*, 7(13), 31-43.
- Moha, A. A., Kedah, Z., & Anwar, M. A. (2015). Effects of Islamic entrepreneurship mind programming on entrepreneurial performance through entrepreneurial motivation. *International Journal of Business and Globalization*, 15(3), 294-312.
- Mohammad, A. N., Idris, W. M. S., & Moh'd A. F. A. (2014). An empirical study of the moderator effect of entrepreneurial orientation on the relationship between environmental turbulence and innovation performance in five-star hotels in Jordan. *International Journal of Business Administration*, 5(2), 111-120.
- Mohanty, S. K. (2009) *Fundamentals of Entrepreneurship*. Delhi, India: PHI Learning Private Limited.
- Mokua, C. M., & Memba, F. (2015). Effect of progressive lending mechanism on access to finance in rural Kenya: a survey of Masaba north district. *The International Journal of Humanities & Social Studies*, 3(4), 256-289.
- Manolova, T. S., Brush, C. G., Edelman, L. F., & Shaver, K. G. (2012). One size does not fit all: Entrepreneurial expectancies and growth intentions of US women and men nascent entrepreneurs. *Entrepreneurship & Regional Development*, 24(12), 7-27.
- Morris, M.H., Ireland, R. D., Covin, J. G., & Kuratko, D. F. (2009). Conceptualizing corporate entrepreneurship strategy. *Entrepreneurship Theory and Practice*, 33(1), 19-46.

- Müller-Falcke, D. (2015). The Use of Telecommunication and Information Technologies in Small Businesses - Evidence from Indian Small-Scale Industry. *Entrepreneurship Theory and Practice*, 5(3), 18-59.
- Mukherjee, S. (2010). Profiling the Urban Women Micro entrepreneurs in India. *IUP Journal of Entrepreneurship Development*, 7(3), 23-30.
- Murnieks, C. Y., Mosakowski, E., & Cardon, M. S. (2014). Pathways of passion: Identity centrality, passion, and behavior among entrepreneurs. *Journal of Management*, 40(6), 1583-1606.
- Mungai, J., & Ogot, K. (2012). Socio-Cultural Determinants of Entrepreneurial Capabilities among the Chagga and Sukuma Small and Medium Enterprises in Tanzania. *Journal of Economics and Sustainable Development*, 5(17), 90-103.
- Mustapha, D. (2016). Investigating the influential factors on small and medium-sized hospitality entrepreneurs at the start-up process: a preliminary study from Ipoh/Malaysia. *Journal of Entrepreneurial Behavior*, 8(12), 13-22.
- Nigeria Galleria. (2017). Nigeria information Portal. Retrieved from <https://www.nigeriagalleria.com>
- National Bureau of Statistics Nigeria. (2016). Data and Statistics, Retrieved from [www.nigerianstat.gov](http://www.nigerianstat.gov)
- National Directorate of Employment (NDE, 2011). *National Open Apprenticeship Scheme*. Abuja, Nigeria: Graduate Training Programmes.
- Nayab, N. (2011). *Factors having an impact in starting and operating a business*. Retrieved from <http://www.brighthub.comioffice/entrepreneurs/articles173616.aspx>.
- Naudé, W. (2013). *Entrepreneurship and Economic Development: Theory, Evidence and Policy*. Florida, USA: Macmillan.

- Nicks, M. (2008). *The History of Entrepreneurship in Nigeria*. Retrieved from: <http://bizcovering.com/history/thehistory-of-entrepreneurship-in-Nigeria>.
- Nicolaou, N., & Shane, S. (2009). Can genetic factors influence the likelihood of engaging in entrepreneurial activity? *Journal of Business Venturing*, 24(1), 1-22.
- Nicolaou, N., Shane, S., Cherkas, L., Hunkin, J., & Spector, T. D. (2008). Is the tendency to engage in entrepreneurship genetic? *Journal of Management Science*, 54(1), 167-179.
- Noella, N., & Narcisse, K. (2015). *Entrepreneurial Infrastructure for The Development of Entrepreneurs in Rwanda*. Sweden: Växjö Press.
- Noor, F. F., Mahmud, R., Nga, J. L., & Mail, R. (2017). Motivating Factors and Prospects for Rural Community Involvement in Entrepreneurship: Evidence from Mantanani Island, Sabah, Malaysia. *World Academy of Science, Engineering and Technology, International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering*, 11(1), 267-272.
- Nunnally, J. & Bernstein, I. (1994). *Psychometric Theory* (3rd ed.). New York, USA: McGraw-Hill.
- Ndubuisi, W. C. & Oko, A. E. N. (2015). Entrepreneurial development deficiencies in developing economies, Nigeria in focus. *International Journal of Academic Research in Business and Social Sciences*, 5(6), 206-291.
- Nutbrown, A. (2012). *A Student Guide to Methodology: Justifying Enquiry*. London, UK: SAGE.
- Nwachukwu, A. C. (2012). The role of entrepreneurship in economic development: The Nigerian perspective. *European Journal of Business and Management*, 4(8), 81-96.
- Obamuyi, T. M. (2017). Start-up financing and expectations for growth: young and older entrepreneurs in Sub-Saharan Africa. *International Journal of Entrepreneurship and Small Business*, 30(3), 448-459.

- Olatunji, O. S. (2015). The Impact of Information Communication Technology on Small and Medium Scale Enterprises Productivity in Nigeria. *Journal of Business Management*, 7(17), 21-32.
- OECD (2011). *Report on the gender initiative: gender equality in education, employment and entrepreneurship*. Retrieved from <http://www.oecd.org/education/48111145.pdf>
- OECD (2010). *Leveraging Training and Skills Development in SMEs*. OECD Report. Retrieved from <http://www.oecd.org/education/48111145.pdf>
- OECD (2009). *Quantitative assessment of the benefits of trade facilitation in overcoming border bottlenecks: the costs and benefits of trade facilitation*. Retrieved from <https://data.oecd.org/emp/selfemployment-rate.htm>.
- Ogbo, A., & Nwachukwu, A. C. (2012). The role of entrepreneurship in economic development: The Nigerian perspective. *European Journal of Business and Management*, 4(8), 96-102.
- Oladejo, M. O., & Adereti, A. S. (2010). Impact of information technology on the performance of micro finance institutions in Ogun State, Nigeria. *International Journal of Economic Development Research and Investment*, 1(1), 105-122.
- Ong, J. W. & Ismail, H. B. (2008). Revisiting personality traits in entrepreneurship study from resource-based perspective. *Business Renaissance Quarterly*, 3(1), 97-105.
- Oni, E. O. (2012). Development of small and medium scale enterprises: The role of government and other financial institutions. *Oman Chapter of Arabian Journal of Business and Management Review*, 1(7), 16-29.
- Oppong, S., & Sachs, P. R. (2015). Managing graduate unemployment in emerging economies: critical analysis of the skills mismatch and oversupply theses. *Business Excellence*, 9(1), 125-129.

- Oyvind, H. (2016). The impact of social capital on entrepreneurial activity in makerspaces, hackerspaces and fab labs. *Journal of Management*, 7(11), 34-42.
- Pallas, A. M. (2011). Preparing education doctoral students for epistemological diversity. *Educational Researcher*, 30(5), 1-6.
- Pallant, J. (2011). *A Step by Step Guide to Data Analysis Using SPSS, Program survival manual*, 4<sup>th</sup> edition. NSW, Australia: Allen & Unwin.
- Pallant, J. F. (2010). Development and validation of a scale to measure perceived control of internal states. *Journal of Personality Assessment*, 75(2), 308-337.
- Papanek, G. F. (1972). *The Development of Entrepreneurship*, Kilby (ed.). London, UK: The Free Press.
- Papanek, G. (1962). *The Development of Entrepreneurship*. NJ, USA: American Economic Review.
- Parker, S. C. (2009). *The economics of entrepreneurship*. Cambridge, UK: Cambridge University Press.
- Pavlin, B., Henrik, E., & Thomas, N. (2015). *Examining Entrepreneurial Potential Publication*. Bulgaria: Bulgarian Economic Paper BEP02-2015.
- Philippe. A., Akcigit, U., Lequien, M., & Stantcheva, S. (2017). *Do Entrepreneurship and Self-Employment Respond to Simpler Fiscal Incentives? Evidence from France*. Paris, France: Hilltop Inc.
- Porter, M. (2007). *Clusters and Economic Policy: Aligning Public Policy with the New Economics of Competition*. Cambridge, UK: Harvard Business School, Inc.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods*, 36(4), 717-731.

- 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., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, 42(1), 185-227.
- Premand, P., Brodmann, S., Almeida, R., Grun, R., & Barouni, M. (2012). Entrepreneurship training and self-employment among university graduates: evidence from a randomized trial in Tunisia. *International Journal of Entrepreneurship*, 3(4), 15-19.
- Prottas, D. (2008). Do the self-employed value autonomy more than employees? Research across four samples. *Career Development International*, 13(1), 33-45.
- Pyysiainen, J., Anderson, A., McElwee, G., & Vesala, K. (2006). Developing the entrepreneurial skills of farmers: some myths explored. *International Journal of Entrepreneurial Behavior & Research*, 12(1), 21-39.
- Raimi, L. (2015). Entrepreneurship development through corporate social responsibility—a study of the Nigerian telecommunication industry. *Journal of Management*, 5(10), 14-22.
- Raimi, L., & Adeleke, I. A. (2010). Using entrepreneurship development and corporate social responsibility as strategies for conflict resolution in the Niger-Delta region in Nigeria. *Nigeria International Journal*, 1(4), 11-23.
- Ramayah, T., Lee, J. W. C., & In, J. B. C. (2011). Network collaboration and performance in the tourism sector. *Service Business*, 5(4), 411-420.
- Ramayah, T., Yeap, J. A., & Ignatius, J. (2013). An empirical inquiry on knowledge sharing among academicians in higher learning institutions. *Minerva*, 51(2), 131-154.
- Ramoni, A. S. (2016). Determinants of Entrepreneurial Intention among Nigerian University Graduates. *World*, 6(1), 344-376.

- Rachel, C., Emilia P., Ting Y., Sunghee L., Mingnan, L., & Mengyao, H. (2016). *Pretesting Cross-Cultural Survey Guidelines*. London, UK: Cengage Pub.
- Rastbin, P. (2016). To investigate the relationship between transformational leadership with inter-organizational entrepreneurship (a case study: Kurdistan province industrial firms) Young Researchers Club. *Journal of Tourism & Hospitality*, 8(7), 12-22.
- Rauch, A., & Frese, M. (2007). Let's put the person back into entrepreneurship research: A meta-analysis on the relationship between business owners' personality traits, business creation, and success. *European Journal of Work and Organizational Psychology*, 16(4), 353-385.
- Rauch, A., Wiklund, J., Lumpkin, G. T., & Frese, M. (2009). Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. *Entrepreneurship Theory and Practice*, 33(3), 761-787.
- Rai, M. (2010). *Horning Entrepreneurial Skills: Role of Business Schools in MBA Review*. Toronto, USA: Macgraw Inc.
- Reinartz, W., Haenlein, M., & Henseler, J. (2009). An empirical comparison of the efficacy of covariance-based and variance-based SEM. *International Journal of Research in Marketing*, 26(4), 332-344.
- Renko, M., Shrader, R. C., & Simon, M. (2012). Perception of entrepreneurial opportunity: a general framework. *Management Decision*, 50(7), 1233-1251.
- Reynolds, P. D., Gartner, W. B., Greene, P. G., Cox, L. W., & Carter, N. M. (2012). The entrepreneur next door: Characteristics of individuals starting companies in America: An executive summary of the panel study of entrepreneurial dynamics. *Journal of Management*, 6(10), 11-22.
- Ringle, C. M., Wende, S., & Will, A. I. H. W. S. D. (2012). SmartPLS release: 2.0 (beta). *SmartPLS*, Hamburg, Germany. URL <http://www.Smartpls.com>.

- Romaní, G., Atienza, M., & Amorós, J. E. (2009). Financing entrepreneurial activity in Chile: scale and scope of public support programs. *Venture Capital*, 11(1), 55-70.
- Roberts, B. W. (2009). Back to the future: Personality and assessment and personality development. *Journal of Research in Personality*, 43(2), 137-145.
- Raposo, M. L. B., Ferreira, J. J. M., do Paço, A. M. F., & Rodrigues, R. J. G. (2008). Propensity to firm creation: empirical research using structural equations. *International Entrepreneurship and Management Journal*, 4(4), 485-504.
- Robertson, K. T. (2011). A business framework for the effective start-up and operation of African immigrant-owned businesses in the Cape Town Metropolitan area, South Africa. *Journal of Entrepreneurial Behaviour*, 11(13), 20-32.
- Roomi, M. A. (2013). Entrepreneurial capital, social values and Islamic traditions: Exploring the growth of women-owned enterprises in Pakistan. *International Small Business Journal*, 31(2), 175-191.
- Rusli, A., & Usop, H. (2011). *Conducting Research in Social Sciences, Humanities, Economics and Management Studies: A Practical Guide*. Kuching, Sarawak: R S Publishing House.
- Rusli, A., & Usop, H. (2014). *Conducting Research in Social Sciences and Management Studies: Practical Step by Step*. Kuching, Sarawak: R S Publishing House.
- Runco, M. A. (2007). *Creativity: Theories and Themes: Research, Development and Practice*. Amsterdam: Thomas Inc.
- Rwigema, H., & Venter, R. (2014). *Advanced entrepreneurship*. Oxford, USA: Oxford University Press.
- Ryoji, N. (2010). Generational change in Chinese ICT Entrepreneurs and their Business Models: A Review of A. Saxenian's Brain Circulation Model. *Journal of Entrepreneurship*, 23(2), 23-30.

- Saeidi, P., Alidadiani, F., Abadi, G. S., & Sodagar, H. R. (2015). *Discussing the effects of information technology on creativity and entrepreneurship of students of Bojnurd's Azad University*. Retrieved from <https://www.bau.com>.
- Sazesh, A., & Siadat, S. A. (2016). The relationship between leadership styles of human resources and entrepreneurship of managers in staff of cooperative office in golestan, iran. *International Business Management*, 10(6), 963-967.
- Shamsudin, F. M., Subramaniam, C., & Ibrahim, H. (2011). Investigating the influence of human resource practices on deviant behavior at work. *International Journal of Trade, Economics and Finance*, 2(6), 514-521.
- Salami, A., Kamara, A. B., & Brixiova, Z. (2010). *Smallholder Agriculture in East Africa: Trends, Constraints and Opportunities*. Tunis, Africa: African Development Bank.
- Saleemi, N. A. (2009). *Entrepreneurship simplified*. Nairobi: Saleemi publication ltd.
- Samuel, O. M. (2012). The adoption of information and communication technology by small enterprises in Thika municipality, Kenya. *International Journal of Business and Social Science*, 3(13), 22-30.
- Sangeeta, B. (2015). *Gallup's Framework for Measuring Entrepreneurial Activity Entrepreneurship and Job Creation Leveraging the Relationship*. Washington, DC, USA: Gallup, Inc.
- Saunders, M., Thorn, H. A., & Lewis, P. (2007). *Research Methods for Business Student 4th Edition*. NJ, USA: Macmillan.
- Syed, S. A., Zizah, C. S., & Fauzi, M. J. (2012). An exploratory study of women entrepreneurs in Malaysia: motivation and problems. *Journal of Management Research*, 4(4), 175-189.
- Scarpetta, S., Sonnet, A. & Manfredi, T. (2010). *Rising Youth Unemployment During the Crisis: How to Prevent Negative Long-term Consequences on a Generation?* (Working Paper no. 106). New York, USA: OECD Publishing.

- Scheepers, M. J. (2008). Entrepreneurial mindset of information and communication technology firms. *South African Journal of Information Management*, 10(4), 2-11.
- Scott, J. L., & Sarkees-Wircenski, M. (2008). *Overview of Career and Technical Education* (4<sup>th</sup> ed.). Orland Park, IL: American Technical Press. Stellenbosch.
- Schreiber, U. (2015). *Megatrends 2015 Making Sense of a World in Motion*. Bolton, USA: Cengage Inc.
- Scotland, J. (2012). Exploring the philosophical underpinnings of research: Relating ontology and epistemology to the methodology and methods of the scientific, interpretive, and critical research paradigms. *English Language Teaching*, 5(9), 9-20.
- Sekaran, U., & Bougie, R. (2010). *Research methods for business: A skill building approach*. New York, USA: John Wiley & Sons.
- Sekaran, U. (2006) *Research Methods for Business: A Skill Building Approach*. New Delhi, India: Wiley India, PVT Limited.
- Sekaran, U. (2003) *Research Methods for Business a Skill-Building Approach*. Illinois, USA: Southern Illinois University at Carbondale John Wiley & Sons, Inc.
- Sekaran, U. (1983) Methodological and theoretical issues and advancements in cross cultural research. *Journal of International Business*, 5(4), 61-73.
- Shamoo, A. E., & Resnik, D. B. (2009). *Responsible conduct of research*. Oxford, UK: Oxford University Press.
- Shane, S. (2012). Reflections on the 2010 AMR decade award: Delivering on the promise of entrepreneurship as a field of research. *Academy of Management Review*, 37(1), 10-20.
- Shane, S., Nicolaou, N., Cherkas, L., & Spector, T. D. (2010). Genetics, the Big Five, and the tendency to be self-employed. *Journal of Applied Psychology*, 95(6), 1154-1188.

- Shapero, A. (1984). *The entrepreneurial event in Kent, The environment for Entrepreneurship*. Lexington, Massachusetts: Lexington Books.
- Shapiro, A. F. (2014). Self-employment and business cycle persistence: Does the composition of employment matter for economic recoveries? *Journal of Economic Dynamics and Control*, 46(5), 200-218.
- Sharmila, S., Sutermaster, S., Gill, A., Volz, J., & Mehta, K. (2016). Context-Driven Entrepreneurial Education in Vocational Schools. *International Journal for Research in Vocational Education and Training*, 3(2), 106-126.
- Shaughnessy, J., Zeichmeister, E., & Jeanne, Z. (2015). *Research Methods in Psychology*. Dubuque, Iowa: McGraw Hill Education.
- Shaughnessy, J., Zeichmeister, E., & Jeanne, Z. (2011). *Research Methods in Psychology* (9th ed.). New York, USA: McGraw Hill.
- Shepherd, D. A., & Patzelt, H. (2018). *Motivation and Entrepreneurial Cognition*. Palgrave Cham, Switzerland: Macmillan.
- Shukri, B. M., & Mahmood, R. (2014). Linking transformational leadership and corporate entrepreneurship to performance in the public higher education institutions in Malaysia. *Advances in Management and Applied Economics*, 4(3), 109-120.
- Silva, H., & Ratnadiwakara, D. (2008). Using ICT to reduce transaction costs in agriculture through better communication: A case-study from Sri Lanka. *Journal of Management Review*, 6(11), 20-29.
- Simpeh, K. N. (2011). Entrepreneurship theories and Empirical research: A Summary Review of the Literature. *European Journal of Business and Management*, 3(6), 1-8.

- Sikdar, A., & Mitra, S. (2012). Gender-role stereotypes: Perception and practice of leadership in the Middle East. *Education, Business and Society: Contemporary Middle Eastern Issues*, 5(3), 146-162.
- Sitabutr, V., & Pimdee, P. (2017). *Thai Entrepreneur and Community-Based Enterprises' OTOP Branded Handicraft Export Performance: A SEM Analysis*. London, UK: SAGE.
- Schreiber, J. B., Nora, A., Stage, F. K., Barlow, E. A., & King, J. (2006). Reporting structural equation modeling and confirmatory factor analysis results: A review. *The Journal of Educational Research*, 99(6), 323-338.
- Small and Medium Enterprises Development Agency of Nigeria (SMEDAN, 2008). *Policy and Programmes*. Nigeria: UPL Publishing Inc.
- SMEDAN (2011). *Annual report hard copy distributed*. Nigeria: UPL Publishing Inc.
- Song, N. H. (2016). The influence of transformational leadership and competence on small enterprise success in Malaysia: the mediating effect of innovativeness *Journal of Business Review*, 9(5), 13-19.
- Somekh, B., & Lewin, C. (2011). *Theory and Methods in Social Research*. London, UK: SAGE.
- Sonny N., Kabaale, E., Moya, M., Amulen, C., & Mayoka, K. G. (2013). The role of information communication technology (ICT) small and medium enterprises (SMEs) in job creation in Kampala, Uganda. *Journal of Business*, 1(5), 75-82.
- Sozen, E., & O'Neill, M. (2017). *An Exploration of the Motivations Driving New Business Start-up in the United States Craft Brewing Industry*. Cham, Switzerland: Palgrave Macmillan.
- Spinelli, S., Timmons, J. A., & Tan, Y. (2012). *New venture creation: Entrepreneurship for the 21st century*, 4. Burr Ridge, IL: Irwin Publications.

- Sørensen, A. T., & Shklovski, I. (2011). *The Hugging Team: The Role of Technology in Business Networking Practices*. London, UK: Springer.
- Sriram, V., & Mersha, T. (2017). Entrepreneurial drivers and performance: an exploratory study of urban minority and women entrepreneurs. *International Journal of Entrepreneurship and Small Business*, 31(4), 514-533.
- Ssendi, L. B. (2013). Entrepreneurship activities in rural Tanzania: understanding women's micro businesses. *Journal of Entrepreneurship*, 8(10), 20-32.
- Stadler, A., & Smith, A. M. (2017). Entrepreneurship in vocational education: A case study of the Brazilian context. *Industry and Higher Education*, 31(2), 81-89.
- Starkweather, J. (2012). *Step out of the past: Stop using coefficient alpha; there are better ways to calculate reliability*. Texas, USA: University of North Texas Research and statistical support.
- Susanne, S. (2016). *Desination: Self-Employment Tag der Promotion*. London, UK: Macmillam Inc.
- Sweida, G. L., & Reichard, R. J. (2013). Gender stereotyping effects on entrepreneurial self-efficacy and high-growth entrepreneurial intention. *Journal of Small Business and Enterprise Development*, 20(2), 296-313.
- Szirmai, A., Naudé, W., & Goedhuys, M. (2011). *Innovation and entrepreneurship in developing countries*. Maastricht, Netherlands: United Nations University Press.
- Suriani, M. R. (2013). Values and identities of women entrepreneurs: a study of Muslim women of Malay ethnicity in Malaysia *Journal of Entrepreneurship*, 5(15), 7-12.
- Tabachnick, B. G., & Fidell, L. S. (1996). *Using Multivariate Statistics, 3rd edition*. New York, USA: Harper Collins.

- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2(53), 256-266.
- Taiwo, J. N., Falohun, T. O., & Agwu, M. E. (2016). SMEs financing and its effects on Nigerian economic growth. *European Journal of Business, Economics and Accountancy*, 4(4), 22-30.
- Tang, J. (2008). Environmental munificence for entrepreneurs: entrepreneurial alertness and commitment. *International Journal of Entrepreneurial Behavior & Research*, 14(3), 128-151.
- Tenenhaus, M., Vinzi, V., Chatelin, Y.M., & Lauro, C. (2005). PLS path modeling. *Computational Statistics and Data Analysis*, 7(48), 159-205.
- Thaddeus, E. (2012). Perspectives: Entrepreneurship development & growth of enterprises in Nigeria. *Entrepreneurial Practice Review*, 2(2), 31-35.
- Thurik, A. R., Carree, M. A., Van Stel, A., & Audretsch, D. B. (2008). Does self-employment reduce unemployment? *Journal of Business Venturing*, 23(6), 673-686.
- Trillas, E. (2017). *Thinking, Analogy, and Reasoning*. Berlin, Germany: Springer International Publishing.
- Uddin, R., & Bose, T. K. (2013). Motivation, success factors and challenges of entrepreneurs in Khulna City of Bangladesh. *Journal of Entrepreneurial Behaviour*, 9(10), 14-22.
- Ugochukwu, U. I. (2015). Contributions and challenges of entrepreneurship in Nigeria: a sociological analysis. *European Journal of Business and Innovation Research*, 3(3), 211-235.
- Ungar, M., Liebenberg, L., Boothroyd, R., Kwong, W. M., Lee, T. Y., Leblanc, J., & Makhnach, A. (2008). The study of youth resilience across cultures: Lessons from a pilot study of measurement development. *Research in Human Development*, 5(3), 166-180.

- Urbach, N., & Ahlemann, F. (2010). Structural equation modeling in information systems research using partial least squares. *Journal of Information Technology Theory and Application*, 11(2), 5-19.
- Urban, B. (2013). Social entrepreneurship in an emerging economy: A focus on the institutional environment and social entrepreneurial self-efficacy. *Managing Global Transitions*, 11(1), 3-15.
- Uyangoda, J. (2011). *Writing Research Proposals in the Social Sciences and Humanities: A Theoretical and Practical Guide*. (In Sinhalese). Toronto, USA: Grawhills Inc.
- Uzoigwe, O. (2011). The challenges of government policy on entrepreneurship in Nigeria. *The Journal of Commerce*, 3(2), 11-23.
- Uzo-Okonkwo, N. H. (2013). *Entrepreneurial Competencies Needed by NCE Business Teacher Education graduates in Anambra State*. Abakaliki, Nigeria: Abakaliki Press Inc.
- Venkatesh, V., & Morris, M. G. (2000). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425-478
- Van Ness, R. K., & Seifert, C. F. (2016). A theoretical analysis of the role of characteristics in entrepreneurial propensity. *Strategic Entrepreneurship Journal*, 10(1), 89-96.
- Virginia, B., Martínez-Ruiz, M. D. P., & Jiménez-Zarco, A. I. (2007). Drivers, benefits and challenges of ICT adoption by small and medium sized enterprises (SMEs): a literature review. *Problems and Perspectives in Management*, 5(1), 104-115.
- Vroom, V. H. (1964). *Work and motivation*. New York, USA: Wiley & Sons.
- Vroom, V. H., & Jago, A. G. (1978). On the validity of the vroom-Yetton model. *Journal of Applied Psychology*, 63(7), 151-162.

- Wang, T., Thornhill, S., & De Castro, J. O. (2017). Entrepreneurial orientation, legitimation, and new venture performance. *Strategic Entrepreneurship Journal*, 4(6), 21-29.
- Watson, J., Gatewood, E., & Lewis, K. (2014). A framework for assessing entrepreneurial outcomes: an international perspective. *International Journal of Gender and Entrepreneurship*, 6(1), 2-14.
- Wee, D. (2008). *Resilience Entrepreneurship Helps You to Bounce Back*. London, UK: Macmillan Press Inc.
- Wetzels, M., Odekerken-Schröder, G., & Van Oppen, C. (2009). Using PLS path modeling for assessing hierarchical construct models: Guidelines and empirical illustration. *MIS Quarterly*, 6(7), 177-195.
- William, Y., & Tilley, F. (2016). Can businesses move beyond efficiency? The shift toward effectiveness and equity in the corporate sustainability debate. *Business Strategy and the Environment*, 15(6), 402-415.
- Wube, M. C. (2010). Factors affecting the performance of women entrepreneurs in micro and small enterprises. The case of Dessie town, India. *Journal of Management*, 9(10), 14-22.
- Youth Enterprise with Innovation in Nigeria (2013). *What is YouWiN1?* Retrieved from <https://www.youwin.org.ng>
- Yusuf, L. (2013). Influence of gender and cultural beliefs on women entrepreneurs in developing economy. *Scholarly Journal of Business Administration*, 3(5), 117-119.
- Yushuai, W., Na, Y., & Changping, W. (2014). An Analysis of Factors Which Influence Entrepreneurial Motivation Focused on Entrepreneurs in Jiang Xi Province in China. *Journal of Applied Sciences*, 14(8), 767-775.
- Zahra, S. A. (2011). Doing research in the (new) Middle East: Sailing with the wind. *The Academy of Management Perspectives*, 25(4), 6-21.

- Zahra, S. A. (2017). Contextualizing theory building in entrepreneurship research. *Journal of Business Venturing*, 22(3), 443-452.
- Zapkau, F. B., Schwens, C., Steinmetz, H., & Kabst, R. (2015). Disentangling the effect of prior entrepreneurial exposure on entrepreneurial intention. *Journal of Business Research*, 68(3), 639-653.
- Zarrella, D., & Zarrella, A. (2010). *The Facebook Marketing Book*. NJ, USA: O'Reilly Media, Inc. Jessey.
- Zhang, P., Zhang, P., Cain, K. W., & Cain, K. W. (2017). Reassessing the link between risk aversion and entrepreneurial intention: The mediating role of the determinants of planned behavior. *International Journal of Entrepreneurial Behavior & Research*, 23(5), 793-811.
- Zhang, Z., & Arvey, R. D. (2009). Rule breaking in adolescence and entrepreneurial status: An empirical investigation. *Journal of Business Venturing*, 24(5), 436-447.
- Zhao, H., Seibert, S. E., & Lumpkin, G. T. (2010). The relationship of personality to entrepreneurial intentions and performance: A meta-analytic review. *Journal of Management*, 36(2), 381-404.
- Zuurhout, P. (2012). *Entrepreneurship Education and Self-Employment: The Role of Perceived Barriers*. Cape town, South Africa: Prentice Inc.

## APPENDICES

### Appendices A: Research Questionnaire

#### QUESTIONNAIRE

Universiti Malaysia Sarawak



Dear respondents,

I am conducting a PhD research work on the title: **“AN INVESTIGATION ON THE DETERMINANTS OF SELF-EMPLOYMENT: A MEDIATION OF ENTREPRENEURIAL MOTIVATION IN BAUCHI STATE, NIGERIA”**. You have been selected in the survey because of your suitability to provide the required information. You may be very busy, but I will remain grateful if you can optimize your time to answer this questionnaire. I assured you that all information you provided would be kept confidential, which can only be used for the purpose of this research.

I would like to thank you in advance for your time and participation as a respondent in this research work.

Thank you

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| STATEMENTS                                                                                                                                                          | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------|---------|-------|----------------|
| After starting my business, I will often be able to maintain a positive outlook even when things look hopeless                                                      |                   |          |         |       |                |
| After starting my business, if I may experience losses, I will actively implement ways to replace the losses encountered                                            |                   |          |         |       |                |
| After starting my business, if an event is very stressful from external environment as an entrepreneur, it would not be difficult for me to recover from that event |                   |          |         |       |                |
| After starting my business, I will look for ways to improve situations that may be difficult in the business                                                        |                   |          |         |       |                |
| After starting my business, when circumstances happen that are outside my influence, I will always try to control the situation                                     |                   |          |         |       |                |
| After starting my business, I will always be able to adapt to new circumstances                                                                                     |                   |          |         |       |                |

| STATEMENTS                                                                                  | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---------------------------------------------------------------------------------------------|-------------------|----------|---------|-------|----------------|
| After starting my business, I can decide on how my business would be run                    |                   |          |         |       |                |
| After starting my business, being independent will give me strength in running the business |                   |          |         |       |                |
| When I start my business, I can be free to express my ideas in running my business.         |                   |          |         |       |                |
| I can do what I rightly decided when I started my own business                              |                   |          |         |       |                |
| After I started my own business , my feelings can always prevails                           |                   |          |         |       |                |
| I feel I could much be myself when I started my own business                                |                   |          |         |       |                |
| I expect much opportunity for me to make decisions after my business start-up               |                   |          |         |       |                |

| STATEMENTS                                                                            | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---------------------------------------------------------------------------------------|-------------------|----------|---------|-------|----------------|
| I can find new ways on how to harness resources and succeed in my new business        |                   |          |         |       |                |
| I can introduces new targets in my new business                                       |                   |          |         |       |                |
| I can have a persuasive vision of the new future challenges regarding my new business |                   |          |         |       |                |
| I have confidence that my business goals will be achieved                             |                   |          |         |       |                |
| I can challenge my status quo after start-up in self-employment                       |                   |          |         |       |                |
| I can seek differing perspectives to solve my new business problems                   |                   |          |         |       |                |
| I can talk optimistically about the future of my new business                         |                   |          |         |       |                |

|                                                                                    |  |  |  |  |  |
|------------------------------------------------------------------------------------|--|--|--|--|--|
| I can talk enthusiastically about what needs to be accomplished in my new business |  |  |  |  |  |
|------------------------------------------------------------------------------------|--|--|--|--|--|

| STATEMENTS                                                                             | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|----------------------------------------------------------------------------------------|-------------------|----------|---------|-------|----------------|
| The availability of ICT's can be prepare by government for my business start-up        |                   |          |         |       |                |
| The availability of ICT's can be prepare by myself for my business start-up            |                   |          |         |       |                |
| I can utilize ICT's for making the presence of my new business online                  |                   |          |         |       |                |
| I can utilize ICT's for advertising my new business online                             |                   |          |         |       |                |
| I can utilize ICT's for online sales of my future products                             |                   |          |         |       |                |
| I can utilize ICT's to make my new business relevant with current technological trends |                   |          |         |       |                |

| STATEMENTS                                                                                                    | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---------------------------------------------------------------------------------------------------------------|-------------------|----------|---------|-------|----------------|
| The vocational training I am taking will prepare me to be self employed                                       |                   |          |         |       |                |
| The vocational training would give me a better technical training to be in self employment                    |                   |          |         |       |                |
| I expect the vocational training I am taking to be relevant with my new business start-up                     |                   |          |         |       |                |
| I perceive that the vocational training I am taking will prepare me to face current issues in my new business |                   |          |         |       |                |
| I perceive that the vocational training I am taking will prepare me to face future issues in my business      |                   |          |         |       |                |
| I perceive that the training centre guidance and counseling will encourage me to be self employed             |                   |          |         |       |                |
| I am confident that the curriculum of the training centre is well organized to support me to be self employed |                   |          |         |       |                |

| STATEMENTS                                                               | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|--------------------------------------------------------------------------|-------------------|----------|---------|-------|----------------|
| I expect my business to benefit from government tax incentives           |                   |          |         |       |                |
| I expect a reasonable tax levy on my new business                        |                   |          |         |       |                |
| I expect my business to have a favourable tax                            |                   |          |         |       |                |
| I expect that tax incentive will help my business to succeed             |                   |          |         |       |                |
| I expect that provision of tax incentives will improve my new business   |                   |          |         |       |                |
| I expect that lower amount of tax on my business will make it prosperous |                   |          |         |       |                |

| STATEMENTS                                                                                                | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|-----------------------------------------------------------------------------------------------------------|-------------------|----------|---------|-------|----------------|
| Loan conditions by the government for entrepreneurs should not be stringent                               |                   |          |         |       |                |
| Government loan conditions should be lenient in financing my business start-up                            |                   |          |         |       |                |
| Softer loan conditions by banks should be allowed for new entrepreneurs to access business finance        |                   |          |         |       |                |
| Lack of business experience may not be a criterion by the government for access to new business financing |                   |          |         |       |                |
| The interest rates for loans by banks on business start-ups should be affordable                          |                   |          |         |       |                |
| The interest rates on new business financing by banks should be favourable for new entrepreneurs          |                   |          |         |       |                |

| STATEMENTS                                                                                           | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|------------------------------------------------------------------------------------------------------|-------------------|----------|---------|-------|----------------|
| Having access to machinery and equipment is important for business start-up                          |                   |          |         |       |                |
| Having access to machinery and equipment gives more courage for engaging in entrepreneurial activity |                   |          |         |       |                |
| Having access to machinery and equipment will encourage me to start my business                      |                   |          |         |       |                |
| The use of machinery and equipment will enable me to produce my products                             |                   |          |         |       |                |
| The use of machinery and equipment will enable me to produce quality products                        |                   |          |         |       |                |
| The use of machinery and equipment will enable me to produce large stock of products                 |                   |          |         |       |                |

| STATEMENTS                                                            | Lowest Motivation | Low Motivation | Average | High Motivation | Highest Motivation |
|-----------------------------------------------------------------------|-------------------|----------------|---------|-----------------|--------------------|
| I want to be a business owner                                         |                   |                |         |                 |                    |
| I want to make profit from my own new business                        |                   |                |         |                 |                    |
| I like to control my own time at work                                 |                   |                |         |                 |                    |
| I am thinking that having a business can improve my financial status  |                   |                |         |                 |                    |
| I see a good future for myself if I start a business.                 |                   |                |         |                 |                    |
| I would like to make business decisions in conducting my own business |                   |                |         |                 |                    |

| STATEMENTS                                          | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|-----------------------------------------------------|-------------------|----------|---------|-------|----------------|
| The need for change attracts me for self employment |                   |          |         |       |                |

|                                                                         |  |  |  |  |  |
|-------------------------------------------------------------------------|--|--|--|--|--|
| The need to be independent attracts me for self employment              |  |  |  |  |  |
| The need to reduces poverty influences me for self employment           |  |  |  |  |  |
| The need for more money influences me for self employment               |  |  |  |  |  |
| The better conditions of working attracts me for self employment        |  |  |  |  |  |
| My family commitments influences me for self employment                 |  |  |  |  |  |
| The demand / market for my new products attracts me for self employment |  |  |  |  |  |

### Respondent's Demographic Background

|                                                         |                                    |                                 |                                |                                            |
|---------------------------------------------------------|------------------------------------|---------------------------------|--------------------------------|--------------------------------------------|
| Gender                                                  | Male <input type="checkbox"/>      | Female <input type="checkbox"/> |                                |                                            |
| Age Group                                               | 17-23 <input type="checkbox"/>     | 24-30 <input type="checkbox"/>  | 31-37 <input type="checkbox"/> | 38-above <input type="checkbox"/>          |
| Educational Background                                  | SSCE/NECO <input type="checkbox"/> | ND/NCE <input type="checkbox"/> | HND <input type="checkbox"/>   | B Sc Degree-Above <input type="checkbox"/> |
| Do you have any prior vocational training experience?   |                                    | Yes                             |                                | No                                         |
| Do you have prior use of machinery experience?          |                                    | Yes                             |                                | No                                         |
| Have you ever been self-employed before?                |                                    | Yes                             |                                | No                                         |
| Have you ever started a business and failed previously? |                                    | Yes                             |                                | No                                         |

Thank you for your anticipated co-operation.

## Appendices B: Default PLS-SEM Results

### Factors Cross Loadings

|      | AUT           | EMV           | FIN           | ICT           | MEQ           | RSL           | SEM           | TAX           | TRF           | VTR     |
|------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------|
| AUT1 | <b>0.8193</b> | 0.041         | 0.3737        | -0.0016       | 0.4538        | 0.2988        | 0.1897        | 0.1525        | 0.0441        | 0.0276  |
| AUT2 | <b>0.8451</b> | -0.0119       | 0.4193        | -0.0448       | 0.3285        | 0.296         | 0.286         | 0.0863        | 0.0238        | 0.0564  |
| AUT3 | <b>0.7687</b> | 0.0235        | 0.4547        | -0.0851       | 0.3466        | 0.2884        | 0.1995        | 0.0418        | 0.0288        | 0.0596  |
| AUT4 | <b>0.8413</b> | 0.0437        | 0.4662        | -0.0833       | 0.4           | 0.3098        | 0.289         | 0.0754        | 0.0423        | 0.0787  |
| AUT5 | <b>0.8766</b> | -0.035        | 0.3925        | -0.0784       | 0.3022        | 0.3013        | 0.3482        | 0.0775        | 0.056         | 0.0762  |
| AUT6 | <b>0.7519</b> | 0.0409        | 0.3259        | -0.0787       | 0.3765        | 0.1852        | 0.2396        | 0.1177        | 0.0558        | 0.008   |
| EMV1 | 0.0516        | <b>0.7343</b> | 0.0249        | 0.0714        | 0.2456        | -0.0185       | 0.0068        | 0.0755        | 0.1529        | -0.183  |
| EMV2 | 0.0782        | <b>0.8984</b> | 0.1568        | 0.0058        | 0.3557        | 0.1099        | 0.0783        | 0.0913        | -0.199        | -0.1259 |
| EMV3 | -0.0563       | <b>0.8474</b> | -0.0095       | 0.0215        | 0.2897        | -0.0698       | -0.0273       | 0.1162        | 0.1133        | -0.2207 |
| EMV4 | 0.0181        | <b>0.8708</b> | 0.0523        | 0.0122        | 0.3569        | 0.0241        | 0.0289        | 0.093         | -0.159        | -0.191  |
| EMV5 | -0.0166       | <b>0.9249</b> | 0.0316        | 0.0676        | 0.3702        | 0.0011        | -0.0132       | 0.1097        | -0.168        | -0.2328 |
| EMV6 | 0.0136        | <b>0.8069</b> | 0.15          | 0.0561        | 0.308         | 0.1185        | -0.0332       | 0.1061        | 0.0948        | -0.1482 |
| FIN4 | 0.2278        | -0.0941       | <b>0.6556</b> | -0.0056       | -0.0052       | 0.2722        | 0.2402        | 0.0583        | 0.4166        | 0.1625  |
| FIN7 | 0.4809        | 0.1731        | <b>0.8321</b> | -0.071        | 0.5761        | 0.3662        | 0.2543        | 0.1576        | 0.0321        | 0.0768  |
| ICT2 | 0.0091        | 0.0496        | 0.0477        | <b>0.8182</b> | 0.0394        | 0.043         | -0.0326       | 0.0195        | 0.0639        | 0.0265  |
| ICT3 | -0.1165       | 0.0348        | -0.1088       | <b>0.9426</b> | -0.0649       | -0.0312       | -0.0865       | 0.0291        | 0.0917        | -0.1008 |
| MEQ1 | 0.2335        | 0.2193        | 0.2594        | -0.033        | <b>0.7291</b> | 0.0839        | 0.069         | 0.2242        | 0.0121        | -0.051  |
| MEQ2 | 0.3152        | 0.2946        | 0.3198        | 0.0095        | <b>0.8060</b> | 0.1216        | -0.0046       | 0.2228        | 0.0458        | -0.1044 |
| MEQ3 | 0.3061        | 0.2554        | 0.2971        | -0.007        | <b>0.7475</b> | 0.054         | 0.0509        | 0.1712        | 0.0524        | -0.0403 |
| MEQ4 | 0.3802        | 0.362         | 0.3869        | -0.0467       | <b>0.7791</b> | 0.2058        | 0.1342        | 0.0886        | 0.0906        | -0.0161 |
| MEQ5 | 0.4009        | 0.3273        | 0.4186        | 0.0116        | <b>0.8933</b> | 0.1626        | 0.0923        | 0.1875        | 0.0547        | -0.1166 |
| MEQ6 | 0.3878        | 0.303         | 0.3331        | -0.0678       | <b>0.7552</b> | 0.1606        | 0.1091        | 0.1796        | 0.0459        | -0.0591 |
| RSL1 | 0.2769        | 0.0419        | 0.3427        | 0.0175        | 0.1061        | <b>0.8996</b> | 0.1722        | 0.0295        | 0.0341        | 0.1827  |
| RSL6 | 0.2891        | 0.0025        | 0.374         | -0.0384       | 0.2099        | <b>0.6963</b> | 0.109         | -0.0308       | 0.0224        | 0.1667  |
| SEM1 | 0.2125        | 0.022         | 0.2256        | -0.044        | 0.001         | 0.1216        | <b>0.7798</b> | 0.0356        | 0.0443        | 0.2609  |
| SEM2 | 0.3233        | -0.0131       | 0.3271        | -0.0913       | 0.1034        | 0.1933        | <b>0.8445</b> | 0.0797        | 0.0282        | 0.32    |
| SEM3 | 0.228         | 0.0404        | 0.2314        | -0.0813       | 0.1644        | 0.1233        | <b>0.8358</b> | 0.1228        | 0.0059        | 0.2603  |
| SEM4 | 0.2808        | 0.0082        | 0.2862        | -0.0468       | 0.1706        | 0.1395        | <b>0.8331</b> | 0.1004        | 0.0317        | 0.3002  |
| SEM5 | 0.2979        | -0.0122       | 0.2741        | -0.041        | 0.0338        | 0.1778        | <b>0.8774</b> | 0.1435        | 0.0242        | 0.3563  |
| SEM6 | 0.2679        | 0.0096        | 0.2714        | -0.0662       | 0.0411        | 0.1268        | <b>0.8051</b> | 0.14          | 0.0365        | 0.3048  |
| TAX1 | 0.0887        | 0.1223        | 0.165         | 0.0099        | 0.1035        | 0.0898        | 0.1249        | <b>0.6872</b> | 0.0492        | 0.0639  |
| TAX2 | 0.024         | -0.0264       | 0.0873        | 0.0113        | 0.0987        | 0.026         | 0.0705        | <b>0.5771</b> | 0.1242        | 0.0194  |
| TAX3 | -0.0668       | 0.1081        | -0.0569       | 0.13          | 0.0645        | -0.028        | 0.0554        | <b>0.6756</b> | 0.0274        | 0.0223  |
| TAX4 | 0.1053        | 0.0818        | 0.1294        | -0.0098       | 0.2179        | -0.0233       | 0.0765        | <b>0.7573</b> | 0.2402        | 0.029   |
| TAX5 | 0.1597        | 0.0832        | 0.1333        | -0.0476       | 0.2274        | -0.0324       | 0.1252        | <b>0.7746</b> | 0.1866        | 0.0678  |
| TAX6 | 0.0823        | 0.0569        | 0.126         | 0.0223        | 0.185         | 0.0087        | 0.0336        | <b>0.7397</b> | 0.2434        | 0.0689  |
| TAX7 | 0.0903        | 0.0372        | 0.1477        | 0.0572        | 0.193         | -0.0272       | 0.079         | <b>0.7239</b> | 0.2401        | 0.0624  |
| TRF2 | 0.1007        | -0.0618       | 0.2026        | 0.0346        | 0.033         | 0.0467        | 0.0505        | 0.1381        | <b>0.7526</b> | 0.1078  |
| TRF3 | -0.0047       | -0.1343       | 0.1149        | 0.1064        | -0.1018       | 0.0082        | -0.013        | 0.139         | <b>0.8453</b> | 0.1163  |

|      |         |         |        |         |         |         |         |         |               |               |
|------|---------|---------|--------|---------|---------|---------|---------|---------|---------------|---------------|
| TRF4 | 0.0429  | -0.1553 | 0.1709 | 0.1022  | -0.0396 | 0.0456  | 0.0218  | 0.1864  | <b>0.7861</b> | 0.0675        |
| TRF5 | -0.0338 | -0.1401 | 0.1383 | 0.0453  | -0.1128 | 0.0066  | 0.0128  | 0.212   | <b>0.7905</b> | 0.0619        |
| TRF6 | 0.0514  | -0.1377 | 0.2256 | 0.0447  | -0.0715 | 0.0389  | 0.0349  | 0.1925  | <b>0.8581</b> | 0.063         |
| TRF7 | 0.1145  | -0.144  | 0.1413 | 0.069   | 0.0178  | -0.0577 | -0.0514 | -0.0767 | <b>0.6266</b> | -0.0437       |
| VTR1 | 0.0807  | -0.1927 | 0.0942 | -0.0367 | -0.0872 | 0.1084  | 0.1969  | 0.0927  | 0.115         | <b>0.6781</b> |
| VTR2 | 0.1331  | -0.2085 | 0.2311 | -0.0468 | -0.0373 | 0.2524  | 0.3419  | -0.0505 | 0.0351        | <b>0.7983</b> |
| VTR3 | -0.0466 | -0.1294 | 0.0527 | -0.0136 | -0.0624 | 0.1003  | 0.2269  | 0.1059  | 0.0785        | <b>0.7465</b> |
| VTR4 | 0.0459  | -0.1631 | 0.0759 | -0.0705 | -0.076  | 0.18    | 0.3139  | 0.0608  | 0.0681        | <b>0.7799</b> |
| VTR5 | -0.0096 | -0.1624 | 0.0761 | -0.0826 | -0.083  | 0.14    | 0.266   | 0.093   | 0.055         | <b>0.8136</b> |
| VTR6 | 0.0636  | -0.1199 | 0.1115 | -0.0144 | -0.0336 | 0.1543  | 0.2839  | 0.0661  | 0.0906        | <b>0.7257</b> |

*Note:*

|            |                                   |                      |            |                            |
|------------|-----------------------------------|----------------------|------------|----------------------------|
| <i>AUT</i> | <i>Autonomy</i>                   |                      | <i>RSL</i> | <i>Resilience</i>          |
| <i>EMV</i> | <i>Entrepreneurial Motivation</i> |                      | <i>SEM</i> | <i>Self-Employment</i>     |
| <i>FIN</i> | <i>Financing</i>                  |                      | <i>TAX</i> | <i>Taxation</i>            |
| <i>ICT</i> | <i>Information Technologies</i>   | <i>Communication</i> | <i>TRF</i> | <i>Transformationality</i> |
| <i>MEQ</i> | <i>Machinery/Equipment</i>        |                      | <i>VTR</i> | <i>Vocational Training</i> |

### Composite Reliability

|     | AVE    | Composite Reliability | R Square | Cronbach's Alpha | Communality | Redundancy |
|-----|--------|-----------------------|----------|------------------|-------------|------------|
| AUT | 0.6696 | 0.9238                | 0        | 0.9016           | 0.6696      | 0          |
| EMV | 0.7215 | 0.9393                | 0.229    | 0.9216           | 0.7215      | -0.0253    |
| FIN | 0.561  | 0.7159                | 0        | 0.8246           | 0.561       | 0          |
| ICT | 0.779  | 0.8752                | 0        | 0.7335           | 0.779       | 0          |
| MEQ | 0.6192 | 0.9066                | 0        | 0.877            | 0.6192      | 0          |
| RSL | 0.647  | 0.783                 | 0        | 0.8766           | 0.647       | 0          |
| SEM | 0.6886 | 0.9298                | 0.2713   | 0.9095           | 0.6886      | 0.07       |
| TAX | 0.5009 | 0.8746                | 0        | 0.8413           | 0.5009      | 0          |
| TRF | 0.6088 | 0.9024                | 0        | 0.8706           | 0.6088      | 0          |
| VTR | 0.5752 | 0.89                  | 0        | 0.8521           | 0.5752      | 0          |

### Convergent Validity Assessment

| Constructs          | Indicators | Loadings | AVE    | Composite Reliability |
|---------------------|------------|----------|--------|-----------------------|
| Autonomy            | AUT1       | 0.8193   | 0.6696 | 0.9238                |
|                     | AUT2       | 0.8450   |        |                       |
|                     | AUT3       | 0.7687   |        |                       |
|                     | AUT4       | 0.8413   |        |                       |
|                     | AUT5       | 0.8766   |        |                       |
|                     | AUT6       | 0.7519   |        |                       |
| Entrepreneurial     | EMV1       | 0.7343   | 0.7215 | 0.9393                |
| Motivation          | EMV2       | 0.8984   |        |                       |
|                     | EMV3       | 0.8474   |        |                       |
|                     | EMV4       | 0.8708   |        |                       |
|                     | EMV5       | 0.9249   |        |                       |
|                     | EMV6       | 0.8069   |        |                       |
| Financing           | FIN4       | 0.6556   | 0.5610 | 0.7159                |
|                     | FIN7       | 0.8322   |        |                       |
| Information         | ICT2       | 0.8182   | 0.7791 | 0.8752                |
| Communication       | ICT3       | 0.9426   |        |                       |
|                     |            |          |        |                       |
| Technology          |            |          |        |                       |
| Machinery/Equipment | MEQ1       | 0.7291   | 0.6192 | 0.9066                |
|                     | MEQ2       | 0.8062   |        |                       |
|                     | MEQ3       | 0.7475   |        |                       |
|                     | MEQ4       | 0.7791   |        |                       |
|                     | MEQ5       | 0.8930   |        |                       |
|                     | MEQ6       | 0.7552   |        |                       |
| Resilience          | RSL1       | 0.8996   | 0.647  | 0.7831                |
|                     | RSL6       | 0.6963   |        |                       |

### Convergent Validity Assessment continued

|                     |      |        |        |        |
|---------------------|------|--------|--------|--------|
| Self-Employment     | SEM1 | 0.7798 | 0.6886 |        |
|                     | SEM2 | 0.8445 |        |        |
|                     | SEM3 | 0.8358 |        |        |
|                     | SEM4 | 0.8330 |        |        |
|                     | SEM5 | 0.8774 |        | 0.9298 |
|                     | SEM6 | 0.8051 |        |        |
| Taxation Incentives | TAX1 | 0.6872 | 0.5009 |        |
|                     | TAX2 | 0.5771 |        |        |
|                     | TAX3 | 0.6756 |        |        |
|                     | TAX4 | 0.7573 |        |        |
|                     | TAX5 | 0.7746 |        |        |
|                     | TAX6 | 0.7397 |        | 0.8746 |
|                     | TAX7 | 0.7239 |        |        |
| Transformationality | TRF2 | 0.7526 | 0.6088 |        |
|                     | TRF3 | 0.8453 |        |        |
|                     | TRF4 | 0.7861 |        |        |
|                     | TRF5 | 0.7905 |        |        |
|                     | TRF6 | 0.8581 |        | 0.9024 |
|                     | TRF7 | 0.6266 |        |        |
| Vocational Training | VTR1 | 0.6781 | 0.5752 |        |
|                     | VTR2 | 0.7983 |        |        |
|                     | VTR3 | 0.7465 |        |        |
|                     | VTR4 | 0.7799 |        |        |
|                     | VTR5 | 0.8136 |        | 0.8901 |
|                     | VTR6 | 0.7257 |        |        |

## Discriminant Validity Assessment among the Constructs

|     | AUT          | EMV          | FIN          | ICT          | MEQ          | RSL          | SEM          | TAX          | TRF          | VTR          | AVE    |
|-----|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------|
| AUT | <b>0.818</b> |              |              |              |              |              |              |              |              |              | 0.6696 |
| EMV | 0.015        | <b>0.849</b> |              |              |              |              |              |              |              |              | 0.7215 |
| FIN | 0.493        | 0.079        | <b>0.748</b> |              |              |              |              |              |              |              | 0.561  |
| ICT | -0.078       | 0.044        | -0.057       | <b>0.882</b> |              |              |              |              |              |              | 0.779  |
| MEQ | 0.438        | 0.381        | 0.435        | -0.029       | <b>0.786</b> |              |              |              |              |              | 0.6192 |
| RSL | 0.342        | 0.032        | 0.431        | -0.004       | 0.176        | <b>0.804</b> |              |              |              |              | 0.647  |
| SEM | 0.328        | 0.008        | 0.328        | -0.074       | 0.101        | 0.180        | <b>0.829</b> |              |              |              | 0.6886 |
| TAX | 0.108        | 0.116        | 0.152        | 0.028        | 0.219        | 0.008        | 0.126        | <b>0.707</b> |              |              | 0.5009 |
| TRF | 0.051        | -0.174       | 0.208        | 0.090        | -0.067       | 0.015        | 0.007        | 0.169        | <b>0.780</b> |              | 0.6088 |
| VTR | 0.065        | -0.216       | 0.149        | -0.060       | -0.081       | 0.214        | 0.365        | 0.071        | 0.073        | <b>0.758</b> | 0.5752 |

## Effect Size ( $f^2$ ) of the Model

| Exogenous<br>Constructs | R <sup>2</sup> Incl. | R <sup>2</sup> Excl. | R <sup>2</sup> Incl-<br>R <sup>2</sup> Excl. | 1-R <sup>2</sup> Incl. | Effect<br>Size( $f^2$ ) | Cohen,<br>(1988) |
|-------------------------|----------------------|----------------------|----------------------------------------------|------------------------|-------------------------|------------------|
| Autonomy                | 0.271                | 0.209                | 0.020                                        | 0.729                  | 0.027                   | Small            |
| Financing               | 0.271                | 0.204                | 0.025                                        | 0.729                  | 0.034                   | Small            |
| ICTs                    | 0.271                | 0.207                | 0.022                                        | 0.729                  | 0.030                   | Small            |
| Machinery/Equipment     | 0.271                | 0.122                | 0.107                                        | 0.729                  | 0.146                   | Medium           |
| Resilience              | 0.271                | 0.206                | 0.023                                        | 0.729                  | 0.031                   | Small            |
| Taxation Incentives     | 0.271                | 0.223                | 0.006                                        | 0.729                  | 0.008                   | None             |
| Transformationality     | 0.271                | 0.201                | 0.028                                        | 0.729                  | 0.038                   | Small            |
| Vocational training     | 0.271                | 0.200                | 0.029                                        | 0.729                  | 0.039                   | Small            |

## PLS-SEM Path Coefficients

|        | Original<br>Sample (O) | Sample<br>Mean (M) | Standard<br>Deviation<br>(STDEV) | Standard<br>Error<br>(STERR) | T-Statistics<br>( O/STERR ) |
|--------|------------------------|--------------------|----------------------------------|------------------------------|-----------------------------|
| AUT -  |                        |                    |                                  |                              |                             |
| >      |                        |                    |                                  |                              |                             |
| EMV    | -0.1715                | -0.1744            | 0.05                             | 0.05                         | 3.4301                      |
| AUT -  |                        |                    |                                  |                              |                             |
| > SEM  | 0.2650                 | 0.2675             | 0.0658                           | 0.0658                       | 4.026                       |
| EMV -  |                        |                    |                                  |                              |                             |
| > SEM  | 0.0899                 | 0.0892             | 0.0451                           | 0.0451                       | 1.9958                      |
| FIN -> |                        |                    |                                  |                              |                             |
| EMV    | 0.0131                 | 0.013              | 0.0563                           | 0.0563                       | 0.2324                      |
| FIN -> |                        |                    |                                  |                              |                             |
| SEM    | 0.2281                 | 0.2203             | 0.0687                           | 0.0687                       | 3.3193                      |
| ICT -> |                        |                    |                                  |                              |                             |
| EMV    | 0.0445                 | 0.0444             | 0.0479                           | 0.0479                       | 0.9297                      |
| ICT -> |                        |                    |                                  |                              |                             |
| SEM    | -0.0233                | -0.0282            | 0.034                            | 0.034                        | 0.6845                      |
| MEQ -  |                        |                    |                                  |                              |                             |
| >      |                        |                    |                                  |                              |                             |
| EMV    | 0.4003                 | 0.4031             | 0.0524                           | 0.0524                       | 7.642                       |
| MEQ -  |                        |                    |                                  |                              |                             |
| > SEM  | -0.1328                | -0.1296            | 0.0612                           | 0.0612                       | 2.1701                      |
| RSL -  |                        |                    |                                  |                              |                             |
| >      |                        |                    |                                  |                              |                             |
| EMV    | 0.0554                 | 0.0576             | 0.0612                           | 0.0612                       | 0.9049                      |
| RSL -  |                        |                    |                                  |                              |                             |
| > SEM  | -0.0596                | -0.0457            | 0.0502                           | 0.0502                       | 1.1867                      |
| TAX -  |                        |                    |                                  |                              |                             |
| >      |                        |                    |                                  |                              |                             |
| EMV    | 0.0814                 | 0.0929             | 0.0523                           | 0.0523                       | 1.5572                      |
| TAX -  |                        |                    |                                  |                              |                             |
| > SEM  | 0.0730                 | 0.0776             | 0.0461                           | 0.0461                       | 1.5831                      |
| TRF -  |                        |                    |                                  |                              |                             |
| >      |                        |                    |                                  |                              |                             |
| EMV    | 0.1470                 | -0.1494            | 0.0346                           | 0.0346                       | 4.2452                      |
| TRF -  |                        |                    |                                  |                              |                             |
| > SEM  | -0.0814                | -0.0794            | 0.0483                           | 0.0483                       | 1.6866                      |
| VTR -  |                        |                    |                                  |                              |                             |
| >      |                        |                    |                                  |                              |                             |
| EMV    | 0.1792                 | -0.18              | 0.0429                           | 0.0429                       | 4.1747                      |
| VTR -  |                        |                    |                                  |                              |                             |
| > SEM  | 0.3352                 | 0.3331             | 0.0512                           | 0.0512                       | 6.5498                      |

## P-Value

|            | <b>Beta<br/>value</b> | <b>Standard<br/>Error</b> | <b>T Value</b> | <b>P Value</b> |
|------------|-----------------------|---------------------------|----------------|----------------|
|            | -                     |                           |                |                |
| AUT -> EMV | 0.1715                | 0.0533                    | 3.2153         | 0.001          |
| AUT -> SEM | 0.2650                | 0.0657                    | 4.0354         | 0.000          |
| EMV -> SEM | 0.0899                | 0.0423                    | 2.1281         | 0.017          |
| FIN -> EMV | 0.0131                | 0.0556                    | 0.2352         | 0.407          |
| FIN -> SEM | 0.2281                | 0.0751                    | 3.0358         | 0.001          |
| ICT -> EMV | 0.0445                | 0.0455                    | 0.978          | 0.164          |
|            | -                     |                           |                |                |
| ICT -> SEM | 0.0233                | 0.0355                    | 0.6564         | 0.256          |
| MEQ -> EMV | 0.4003                | 0.0523                    | 7.656          | 0.000          |
|            | -                     |                           |                |                |
| MEQ -> SEM | 0.1328                | 0.062                     | 2.1402         | 0.016          |
| RSL -> EMV | 0.0554                | 0.063                     | 0.8785         | 0.190          |
|            | -                     |                           |                |                |
| RSL -> SEM | 0.0596                | 0.0522                    | 1.1413         | 0.127          |
| TAX -> EMV | 0.0814                | 0.0503                    | 1.6174         | 0.053          |
| TAX -> SEM | 0.0730                | 0.0473                    | 1.5428         | 0.062          |
| TRF -> EMV | 0.1470                | 0.0357                    | 4.1149         | 0.000          |
| TRF -> SEM | 0.0814                | 0.0486                    | 1.6766         | 0.047          |
|            | -                     |                           |                |                |
| VTR -> EMV | 0.1792                | 0.0449                    | 3.99           | 0.000          |
| VTR -> SEM | 0.3352                | 0.052                     | 6.4454         | 0.000          |

## Appendices C: Publications

1. Adamu, M. & Shakur, M. M. A. (2017). Antecedents of a new business start-up among potential entrepreneurs: The role of entrepreneurial motivation. *International Journal of Management and Commerce Innovations* ISSN 2348-7585 5(2), 882-891.
2. Adamu, M. & Shakur, M. M. A. (2017). The Roles of Determinants of Self-employment: A Mediation of Entrepreneurial Motivation in Bauchi State, Nigeria. *International Journal of Accounting & Finance Review*, 1(1), 2017
3. Adamu, M. & Shakur, M. M. A. (2018). The relationships of expectancy, instrumentality and valence for motivation in self-employment: A mediation of entrepreneurial motivation Accepted in: *International Journal of Business and Management Future*. <http://www.cribfb.com/journal/ijbmf/>
4. Adamu, M. (2018). The impact of training effectiveness among potential entrepreneurs in business organizations: A mediation of opportunity of participation in Bauchi State, Nigeria. Accepted in: *International Journal of Business Excellence*. <http://www.inderscience.com/jhome.php?jcode=ijbex> (Index Journal)