

**RELATIONSHIP BETWEEN ENTREPRENEURIAL COMPETENCIES AND  
ENTREPRENEURSHIP PERFORMANCE OF GRADUATES WITH PHYSICAL  
CHALLENGES IN KENYA**

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**Relationship between Entrepreneurial Competencies and  
Entrepreneurship Performance of Graduates with Physical Challenges  
in Kiambu County in Kenya**

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## **DECLARATION**

This thesis is my original work and has not been presented for a degree in any other university

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## **DEDICATION**

I dedicate this thesis to my two lovely daughters Cynthia Waithira and Faith Lisa Wanjiru for the great tolerance and support you displayed throughout my study. I denied you extra time due to my busy schedule though present whenever you needed me. I have set the limit for you, it is upon you to beat it. To my dear father Samuel Mwangi for believing in me and helping me understand that I can make it; to my dear mother Jerusha Mwangi for your constant prayers and encouragement, to my dear friend Wilson Gachau for adding value to my life, and finally to all my brothers and sisters.

*May you always think entrepreneurially in all your undertaking!*

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## **LIST OF ABBREVIATIONS**

<b>ANOVA</b>	Analysis of Variance
<b>ASTE</b>	Assessment Tools and Indicators for Entrepreneurship Education
<b>DEDI</b>	Disability Empowerment and Development Initiatives
<b>RoK</b>	Republic of Kenya
<b>IDDC</b>	International Disability and Development Consortium
<b>ILO</b>	International Labor Office
<b>SMEs</b>	Small and Medium Enterprises
<b>NCPWD</b>	National Council for Persons with Disabilities
<b>NFDK</b>	National Fund for the Disabled of Kenya
<b>PWDs</b>	Persons with Disability
<b>RBV</b>	Resource Based View
<b>RDT</b>	Resource Dependence Theory
<b>SPSS</b>	Statistical Package for Social Sciences
<b>UNCRPD</b>	United Nations Convention on the Rights of Persons with Disabilities
<b>WHO</b>	World health Organization

## DEFINITION OF TERMS

- Assistive Devices and Services:** Implements, tools and specialized services including the services of qualified interpreters for the deaf and qualified teachers for the blind provided to persons with disabilities to assist them in education, employment or other activities Persons with Disabilities Act No.14 (2003).
- Competence:** A job competence is an underlying characteristics of a person, in that it may be motive, traits, skills, aspect of one's self-image a body of knowledge, set of skills and cluster of appropriate motives/traits that an individual possess to perform a given task Vijay *et al.*, (2011).
- Disability:** Disability is referred to as whole or partly, inability of individual to perform ordinary activities of life due to congenital or acquired defect in physical or mental strength United Nations Convention on the Rights of Persons with Disabilities (2007). In this research the word "disability" is used interchangeably with the word "challenge".
- Disabled Entrepreneurship:** It is a new phenomenon referring to a business owned by a person with disability which comprise of some percentage in formal economy and are likely to play role in informal sectors GEM (2005).
- Disabled Person:** A disabled person is an individual whose prospects of securing, returning to, retaining and advancing in suitable employment are substantially reduced as a result of a duly recognized physical, sensory, intellectual or mental impairment ILO (2010).
- Disability** This is the process which is designed to include people with

<b>Mainstreaming:</b>	disabilities in society and perceive disability in the way the social and rights-based models consider International Disability and Development Consortium (2012).
<b>Discriminate:</b>	To accord different treatment to different persons solely or mainly as a result of their disabilities and includes using words, gestures or caricatures that demean, scandalize or embarrass a person with a disability Persons with Disabilities Act No.14 2003.
<b>Entrepreneurship:</b>	Entrepreneurship is about starting a growth oriented small business Bwisa (2012).
<b>Entrepreneurial Competencies:</b>	Entrepreneurial competency is defined as the capability of entrepreneurs to face effectively a critical situation by making sense of environmental constraints and by activating relational and internal specific resources Iandoli (2007).
<b>Entrepreneurial processes:</b>	It is a process in which the entrepreneur together with new ideas and new opportunities creation and identification attempts to introduce new products or services or attempts for better production process along with admission of financial, mental and social risks and finally mobilizing resources, and rewarding personal satisfaction and independence Saeedi-Kia (2007).
<b>Entrepreneurship Performance:</b>	Performance is how a firm does when measurements are conducted Maragia (2008), and can be in form of profitability and sales growth however, financial and non-financial performance complement each other and provide richer description of actual entrepreneurship performance.
<b>Entrepreneurial Skills:</b>	These are generic competences necessary for the success of a person in self-employment over and above any occupational skills which may be required. These include the individual

values, beliefs and attitudes, interpersonal skills, communication skills, and networking skills and realistic awareness of the risks and benefits of self-employment Meager *et al.* (2011).

**Inclusion:** Inclusion refers to the approach through which people with disabilities are integrated into general mainstream in terms of participation in all aspects of societal developments ILO (2007).

**Micro, Small and Medium enterprises:** The Micro-enterprises as a firm, trade, service industry or business activity employ less than ten employees. The Small-enterprises employ between ten and fifty employees, and Medium-enterprises have fifty to one hundred employees Micro & Small Enterprises Act (2012).

**Mobility:** Mobility refers to the ability to move. Persons with mobility limitations may have lost arms, hands, feet or legs due to amputation or congenital problems ILO Bureau for Employers' Activities and Skills and Employability Department (2011).

**Organizations for persons with disabilities:** Associations or societies formed for the purposes of rendering services to persons with disabilities Persons with Disabilities Act No.14 (2003).

**Physical disability:** Neuromusculoskeletal and movement related disability. It is about functions of movement and mobility, including functions of joints, bones, reflexes and muscles. It refers to any difficulty in moving one or more parts of the body WHO (2001).

**Poverty:** It is the state of deprivation of decent human life and reflected in the general well-being of the population that disallows access to basic needs of individuals, households and local communities ILO (2008).

**Training:** It is a process that seeks to change the behavior of the trainee. It facilitates development of knowledge skills and attitudes Noe

(2002).

## ABSTRACT

The purpose of the study was to establish the relationship between Entrepreneurial Competencies and Entrepreneurship Performance of graduates with physical challenges in Kiambu County in Kenya. The research objective was to analyze the significance of Entrepreneurial Competencies in Entrepreneurship Performance. The competencies under focus were: Opportunity, Relationship, Conceptual, Organizing, Strategic and Commitment competencies. Their relationship with Entrepreneurial Performance was being moderated by Business External Environment which had Access to Finance and Location of Business as its constructs. Participants of the study were graduates of higher education and training with physical challenges owning and managing enterprises in Kiambu County in Kenya. The participants had undergone training at higher education and training institutions such as universities and tertiary level colleges. The institutions under focus were Public and Private Universities, Technical Training Institutes, Institutes of Technology and other privately owned commercial colleges. The physical challenges under focus were acquired or congenital mobility related impairments affecting senses, muscles and bones and categorized as neuromusculoskeletal. These impairments may or may not require the use of assistive devices to aid in movement. The problem being addressed was whether there exists any relationship between Entrepreneurial Competencies and Entrepreneurship Performance of graduates with physical challenges in Kiambu County in Kenya. Further the researcher wanted to test whether the competence approach could be used to establish why some enterprises performed well while others did not do as well. The researcher also wanted to assess the impact of entrepreneurship education on persons with disabilities. The study was longitudinal and utilized descriptive-survey method of research. It was largely quantitative in nature and was triangulated by some qualitative aspects. It addressed a population of 480 enterprises owned and run by graduates with physical challenges of higher education and training in various constituencies within Kiambu County in Kenya. Enterprises included in the study were selected through simple random sampling and purposeful sampling methods and a sample population of 172 respondents was picked. Pilot test was carried out on a sample of 17 persons with similar characteristics as those in the final study. A total of 123 fully filled questionnaires were obtained from the research participants and were used to carry out data analysis. To collect primary data, structured questionnaires were used which contained closed and open-ended questions. Secondary data was collected using relevant literature, records from the NCPWD office in Kiambu County. To access discriminant validity, correlations among indicators and constructs was deployed. Reliability was assessed using Cronbach's Alpha. Data was

statistically analyzed (descriptive analysis F-tests and *t*- tests) through applying the SPSS Statistics 17.0 software. The researcher concluded that only Opportunity Competence and Strategic Competence were significant at ( $p=.006, .000$ ) respectively which was less than 0.05. However, all competencies were found to have a significant positive linear relationship with Entrepreneurship Performance and this led to the rejection of all the six null hypotheses of the study thus, accepting the alternative. The moderating effect of Business External Environment was found to have partial moderating effect on the relationship between the six competency areas and Entrepreneurship Performance thus the seventh hypothesis was also rejected. The researcher suggested entrepreneurial and policy recommendations. Entrepreneurial recommendations that the researcher advanced to be addressed through training were: acquiring financial skills and capabilities, record keeping, goal setting, embracing diversity in products and services and being creative as well as innovative. Policy recommendations included: getting special loans tailor-made for persons with disabilities with lesser interest rates different from the existing market rates, government initiated Local Purchase Order fund to finance persons with disabilities who succeed in procuring government tenders, during procurement process requirements from persons with disabilities should be a registered company as opposed to being a member of a disability group. Further, accessibility of mainstream services including access to building, public transport and information should be endorsed by the concerned arm of government.

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background

Entrepreneurial competencies contribute a major role in the success of SMEs. It has been observed by researchers that competency approaches have to be considered more than other approaches (Brophy & Kiely, 2002) in order to identify behaviors which are related to the superior firm performance. The entrepreneurial competency approach can be used to describe the phenomenon why some entrepreneurs fail while others succeed in similar situations (Ahmad, 2007). Competencies play an important role in successful entrepreneurship. As entrepreneurs and managers share similar roles and tasks in organizations, particularly in small business or SMEs, researchers in the entrepreneurship field borrow the concept and related theory of competency from management literature Bird (1995). As a result, the competency approach has become an increasingly popular means of studying entrepreneurial characteristics (Baum *et al.*, 2001; Man *et al.*, 2002).

Entrepreneurial competencies include those clusters or related knowledge, attitudes and skills which an entrepreneur must acquire through managerial training and development to enable him/her produce outstanding performance, maximize profit, while managing a business venture or an enterprise (Nwachukwu, 2005). Quite often, less attention is paid to these critical success variables; rather attention is focused mainly on financial resources, Ojong (2005) thus attributing entrepreneurship failures to inadequacy in financial resources. This calls for a shift in paradigm by considering entrepreneurial competencies as a factor of entrepreneurship performance, and vice versa, lack of it as a large contributor to business failure.

The concept of entrepreneurship performance is core to business because the major objective of businesses is to make profits (Mutindi, Namusonge & Obwigi, 2013). Iravo *et al.* (2013) stated that one of the important questions in business has been

why some organizations succeed and why others fail. Entrepreneurship performance is influenced by both intrinsic (individual) and extrinsic (environmental) factors (Ravindra, 2011). Performance is how a firm does when measurements are conducted (Maragia, 2008), with the measures being in form of profitability and sales growth. Performance is the ultimate criterion for judging whether SMEs are competitive or not as it is with larger firms. This potential is addressed by factors both internal and external to the firm. For a small business, the process of achieving competitiveness is strongly influenced by the role of the key player who is the entrepreneur; and it is at this point competence approach can be used to capture the entrepreneurial process.

Empirically, significant relationship between Entrepreneurial Competencies and Entrepreneurship Performance is reported (Maragia, 2008). Existing literature shows several approaches in measuring Entrepreneurship Performance. One group of researchers advocates the use of traditional financial measures of success as profitability, sales turnover, and return on investment. Perren (2000) state that performance is reflected in some level of growth, as indicated in firm's sales and income (Maragia, 2008). On the other hand, there are some who focus on non-financial measures of success, which includes job satisfaction, flexibility, balance between work and family responsibilities and career progress (Kuratko *et al.*, 1997). Success is more than money and the pursuit of financial goal involves some aspects of intrinsic reward for the entrepreneurs themselves Beaver (2002). Explicit in their argument is that the best measure of entrepreneurship success for small firms is the attainment of personal objectives such as satisfaction with one's own personal involvement, autonomy, and balance in life rather than financial outcome.

Proponents to this approach argue that the significant emphasis given by entrepreneurs, especially those in small firms are on non-financial objectives (Kuratko *et al.*, 1997). Beaver (2002) is of the view that many entrepreneurs do not view money as a prime motivator rather, as a pleasant by-product of having the freedom to take charge of their own future. This "either-or" approach to looking at

indicators for Entrepreneurship Performance has received some criticism for being a poor reflection of reality. Wiklund (2003) suggest that financial and non-financial performance complement each other and provide richer description of actual Entrepreneurship Performance.

### **1.1.1 Components of Entrepreneurial Competencies**

Competencies play an important role in successful entrepreneurship. Mitchelmore and Rowly (2010) opine that research on Entrepreneurial Competencies is rather limited and several definitions of Entrepreneurial Competencies are proposed in the literature. Entrepreneurial Competency is defined as the capability of entrepreneurs to face effectively a critical situation by making sense of environmental constraints and by activating relational and internal specific resources (Iandoli, 2007). According to Bird (1995), Entrepreneurial Competencies are defined as individual's traits, such as specific knowledge, motives, features, self-images, social roles and abilities which result in venture success. Some Entrepreneurial Competencies can be learned through formal education, other competencies are tacit and depend on individual's characteristics and are built during the person's life, experience, and career (Bird, 1995). Entrepreneurship scholars suggest that Entrepreneurial Competencies are vital to enterprise growth and success.

Different competencies are needed at different stages of venture development (Iandoli, 2007). Man *et al.* (2002) suggest that Entrepreneurial Competencies are more important during the start-up phase, while Managerial Competencies are more significant at the growth stage. External stimuli for example, uncertainty and business environment (Man & Lau, 2005); social environment (Mitchelmore & Rowly, 2010); and situation and internal stimuli for example, the nature of education (Colombo & Grilli, 2005); family background in business, and individual's characteristics (Brownell, 2006) influence on emergence and development of Entrepreneurial Competencies.

Entrepreneurial Competencies are related to the performance of the firm and its competitiveness (Man *et al.*, 2002), growth and success of business (Colombo & Grilli, 2005). These competencies are also associated with birth, survival and venture growth (Colombo & Grilli, 2005; Baum *et al.*, 2001; Bird, 1995). Despite a lot of researches relating to Entrepreneurial Competencies (Man *et al.*, 2002; Mitchelmore & Rowly, 2010), there are still gaps in the entrepreneurship literature relating to Entrepreneurial Competencies of entrepreneurs who belong to minority groups especially addressing the disabled persons (Ahmad, 2007).

Vijay and Ajay (2011) incorporated the findings of Man (2001) and a qualitative research of Seet (2009) together with a few other similar researches and they developed an analysis to identify the competencies that can be linked to the role played by SME entrepreneurs. A critical analysis conducted on the earlier models of entrepreneurial competencies ultimately generated eight significant competencies which include strategic, conceptual, opportunity, organizing, and relationship, technical and personal competencies. Thomas *et al.* (2000), examined previous empirical studies in entrepreneurial competencies (Chandler & Hanks, 1994; Baum, 1994; McClelland, 1987; Lau *et al.*, 1999) and categorized them into six competency areas representing distinctive areas of entrepreneurial behaviors namely; opportunity, relationship, conceptual, organizing, and strategic and commitment competencies (See appendix 5).

### **1.1.2 Overview on Disability and Entrepreneurship**

Entrepreneurship is one of the fundamental drivers of innovation, competitiveness, and economic growth for both developed and developing countries and serves as a social inclusion for minority groups for instance persons with disabilities and immigrants Pavey (2006). Entrepreneurship as a field does not lock out persons with disabilities (PWDs) since it is the only area that one can imprint their own creativity and enjoys the full benefits of flexibility on time. Entrepreneurship plays an important role in the society not just because entrepreneurs create jobs but because at the end of the day, it is not just about business, it is about people having the freedom

to express their creativity, to imprint their style on the work they do, to turn their knowledge, skills and abilities into their own businesses, to create flexibility around their life conditions and personal interests and to make employment choices over which they have more control (Jones & Latreille, 2005); Bwisa , 2011).

Mc Naughton *et al.* (2006) focus group research suggests that some of the benefits that persons with disabilities may derive from entrepreneurship are a sense of control over their environment, independence, and the satisfaction that comes from being a contributing member of society. In line with these indications that entrepreneurship may bring a number of positive personal, social and financial benefits to persons with disabilities, an entrepreneur with disability ought to demonstrate that being disabled can facilitate the exploitation of opportunities that previously had been unexploited (Shane & Venkataraman, 2000).

Persons with disabilities may have a greater tendency to be self-employed than persons without disabilities (United States Office of Disability Employment Policy, 2001). The use of self-employment as a means of improving the living standards of persons with disabilities is promising for some reason; it is probable that persons with disabilities who become entrepreneurs will be more likely to hire persons with disabilities, as opposed to entrepreneurs who do not have a disability or other traditional employers ILO (2007). This has been seen on other disadvantaged groups, such as African Americans in the United States (Sinh, Knox & Crump, 2008). As such, resources expended promoting persons with disabilities to enter into entrepreneurship may have greater benefits to the entire persons with disabilities population than those expended promoting regular employment ILO (2007).

Mpofu *et al.* (2011) notes in Zimbabwe that persons with disabilities often lack adequate schooling and have limited access to gainful employment and therefore cannot come up with significant capital to start an entrepreneurial activity. In micro and small enterprises, a single person, usually the owner manager must have both technical and managerial skills. These skills are rare in people with disabilities as their history shows that they have been denied access to formal education and

training that would make them capable to engage in entrepreneurial activities (Mpfu *et al.*, 2011). He further observes that disability is the reason for and the consequence of poverty.

Kenya's Population Census 2010 officially reported that 3.5 per cent of the population or 1,330,312 is comprised of persons with disabilities (PWDs) (RoK, 2010), among these only 1 per cent is formally employed. The number of people with disabilities is growing. There is a higher risk of disability at older ages, and national populations growing older at unprecedented rates; there is also global increase in chronic health conditions, such as diabetes, cardiovascular diseases, and mental disorders, which influence the nature and prevalence of disability (IDDC, 2012).

In Kenya, as in many countries in the region and globally, entrepreneurship is viewed as a core strategy for enhancing the ability to create employment, innovation and wealth RoK (2010), thus the 21<sup>st</sup> century competencies have been defined as the skills, knowledge and attitudes needed in order to compete in the global marketplace. Kenya has a large population of physically challenged people who have shown great interest in entrepreneurship by engaging in owning, managing and running enterprises (Kenya National Survey on Persons with Disabilities, 2008). Entrepreneurship plays a major role in helping disadvantaged person in society break away from their unprivileged positions, a solution to unemployment and discrimination in the labor market (Fairlie, 2005); serves as a potential device for poverty alleviation, and a tool for social inclusion of minority groups (Pavey, 2006).

Disabled people are not a homogenous group. Like all people, their identities, personal situations and needs are shaped by a multiplicity of factors including their gender, age, personality, location, education, ethnicity, colour, class, family, religion and sexual orientation WHO (2013). Disability is simply another dimension of human diversity. It is a normal part of human experience and anyone in the society may experience disability at some time in life IDDC (2012). Individuals with disabilities experience persistently higher poverty rates Mpfu *et al.* (2011). Solesvik (2012); Yeo (2005); Mpfu *et al.* (2011) point out that living in poverty increase the

likelihood of injury and impairment; and the exclusion of disabled persons from participating in the economy leads to greater rates of poverty.

The United Nations Convention on the Rights of Persons with Disabilities UNCRPD (2007) states that persons with disabilities include those who have long-term physical, mental, intellectual and sensory impairment which in interacting with different barriers may hinder their full and effective participation in society on an equal basis with others. In general disability is referred to as whole or partly, inability of individual to perform ordinary activities of life due to congenital or acquired defect in physical or mental strength Karimi *et al.* (2014).

Persons with mobility limitations that refer to the ability to move may have lost arms, hands, feet or legs due to amputation or congenital problems IDDC (2012). Mobility impairments can result from medical conditions such as arthritis, multiple sclerosis, cerebral palsy, spina bifida, diabetes, muscular dystrophy and paraplegia. There are varying degrees of mobility impairments. People with mobility impairments may use assistive devices that may include wheelchairs, or aids such as crutches, canes or walkers to help overcome mobility obstacles WHO (2013) (See appendix 4.)

There exist different models of disability which propose different ways of viewing disability and these are; the social model, medical model, charity model, and rights-based model Sue *et al.* (2003). This research will view disability from the perspectives of social model which views disability as a social problem that needs social interventions and solutions. It also includes some aspects of the rights-based model which champions the rights of persons with disabilities Harris *et al.* (2003).

### **1.1.3 Overview of Entrepreneurship Education**

Entrepreneurship is a cross-disciplinary field of study that has evolved dramatically over the last two decades (Sarasvathy & Venkataraman, 2011). Not only has entrepreneurship grown in legitimacy as an academic and research field (Fayolle,

2007) it has also gained worldwide recognition as an engine of economic, social and personal value creation (Neck & Greene, 2011). Entrepreneurship is one of the fundamental drivers of innovation, competitiveness, and economic growth for both developed and developing countries (Matlay, 2006).

Early formal entrepreneurship education affects the attitudes of students, influencing them on the direction of their future career and affecting their propensity for entrepreneurship on becoming adults, Peterman and Kennedy (2003). In this sense, the pedagogical approach should encourage children to make decisions and accept mistakes as part of the learning process (Bwisa, 2010). He further notes that students at the primary and secondary school levels neither receive quality education since they are treated to rote learning void of problem solving leadership and decision making skills; nor gain the critical skills necessary for the job market whether as employees or self-employed.

Entrepreneurship education in higher education institutions worldwide has been one of the major contributors to fostering entrepreneurial culture in potential entrepreneurs, and the importance of entrepreneurship education has been stressed in the Global Education Initiative Report of the World Economic Forum (WEF, 2009). The forum stressed that education is one of the most important foundations for economic development and entrepreneurship is a major driver of innovation and economic growth. It further observed that entrepreneurship education plays an essential role in shaping attitudes, skills and culture from primary level up to higher education levels and this cuts across all groups of the society including minority groups for instance, persons with disabilities (PWDs).

The ideal stage to acquire basic knowledge about entrepreneurship and to foster a positive attitude toward entrepreneurship is during childhood years of adolescence (Peterman & Kennedy, 2003). This idea is also present in European Union recommendations (Action Plan to Promote Entrepreneurship and Competitiveness - BEST Action Plan, European Commission, 1999 and Green Paper on Entrepreneurship, European Commission, 2003) that refer to the promotion of

entrepreneurship through the education system from primary school to university as a core goal.

McMullan and Long (1987) argue that in order to provide effective entrepreneurship, students should deal with ambiguity and complexity. They must learn how to design solutions and should have substantial hands on experience working with small firm sector. While it is perceived that entrepreneurship can be taught, it is critical to ensure quality teaching is implemented and in doing this be aware of the barriers that exists Nteere (2013). Thus students who are interested in creating new businesses need to develop an array of skills Bwisa (1998). When education is linked with desirable behavioral outcomes, then this is where some very close parallels can be drawn between education and entrepreneurship Nteere (2013).

The most common cited objectives of entrepreneurship education are to demonstrate positive attitude towards self-employment; identify viable business opportunity, portray a desire to venture into business, demonstrate managerial skills for running a successful business enterprise, apply managerial competencies in business situation; understand the factors likely to affect the success of a business, to encourage new start-ups and other entrepreneurial ventures Thomas *et al.* (1994); Nteere (2013). According to Bwisa (2014) entrepreneurship education seeks to prepare learners to become entrepreneurial thinkers and contribute to economic development and sustainable communities. It is not just about teaching someone to run a business as mainstream business courses do. Its core objective is to encourage creative thinking and promote strong sense of self-worth Bwisa (2011).

Through entrepreneurship education, students learn how to create a different and a better business. The core knowledge created by entrepreneurship education includes, but not limited to; the ability to recognize opportunities in one's life; ability to pursue such opportunities by generating new innovative ideas and marshalling needed resources; ability to create and operate an innovative new venture; and finally the ability to think in a creative and critical manner (Bwisa, 2014).

In Kenya, as in many countries in the region and globally, education and training is seen as the core strategy for building human capital for socio economic development, and for enhancing its ability to create employment, innovation and wealth RoK (2010). Kenya was among the first countries in Africa to introduce aspects of entrepreneurship education in its education and training systems. One of the most striking changes that occurred in Kenyan training institutions during the 1990's was the introduction of entrepreneurship education. Many Kenyan universities offer entrepreneurship education aimed at producing self-employable graduates to create employment. Jomo Kenyatta University of Agriculture and Technology pioneered in Kenya in starting a master's degree in entrepreneurship in the 1990s (Namusonge, 1999). Other public and private universities and middle level institutions of learning have introduced entrepreneurship education/training in one form or another.

The key reason for introducing entrepreneurship education was to assist graduates venture into self-employment as opposed to looking for wage employment so as to curb one of the problems facing Kenyan economy which is unemployment RoK (2005). This is due to low economic growth, corruption, nepotism and the negative attitude towards entrepreneurship. Kenya's Vision 2030 looks upon the education sector to deliver the necessary skills and build adequate capital to achieve and sustain the country as middle-income country and entrepreneurship is therefore about starting a growth oriented small business Bwisa (2014). Despite entrepreneurship education having been in existence for the last two decades in Kenya, many of its graduates cannot be said to be productively self-employed in their areas of expertise.

According to RoK (2005) the government encouraged Universities, Polytechnics, Technical Institutions and other MSE support organization to develop certified demand-driven courses on entrepreneurship and business management in order to improve and promote the acquisition of entrepreneurial development programmes in schools and other training institutions so that there can be a widespread enterprise culture. Education has long been regarded as one of the primary components for poverty reduction and socio-economic uplifting. The government recognized the

importance of improving the overall education level of Kenyans within the context of poverty reduction and economic growth RoK (2005).

Entrepreneurship education can be used to make a person more competent and a more professionalized business owner. Entrepreneurship education is supposed to instill knowledge, skills and attitudes. However, all entrepreneurs are business people but not all business people are entrepreneurs (Bwisa, 2011). An entrepreneur is an individual who creates something new with value by devoting the necessary time and effort, assuming the accompanying financial, psychic and social risks and receiving the rewards of monetary and personal satisfaction and independence (Hisrich, Peters & Shepherd, 2009).

## **1.2 Statement of the Problem**

Kenya's Population Census (2010) officially reported that 3.5 per cent of the population or 1,330,312 is comprised of persons with disabilities (RoK, 2010), among these only one per cent is formally employed. The country has been practicing inclusive education since the turn of the century and this has seen the country achieve great milestones in education. The country has a large population of physically challenged people who have shown great interest in entrepreneurship by engaging in owning, managing and running enterprises, Kenya National Survey on Persons with Disabilities (2008); (Bwisa & Margaret, 2013). Physically challenged Kenyans are citizens with equal rights as other citizens (Kenyan constitution article 54, 2010; Disability Act No. 14, 2003). The government has put in place various funds to assist women, youth and persons with disabilities in order to create an enabling environment to nature entrepreneurial development, boost the economic capability of the beneficiaries as well as to create a more inclusive and cohesive Kenyan community RoK (2013), that eventually leads to inclusive development.

It is known that education alone without entrepreneurship cannot generate new jobs Bwisa (2014). The rationale should be to create awareness in young disabled students' minds of the existence of various options in the world of work Nyamoki

(2008). Entrepreneurship education is one key area to inculcate entrepreneurship as a viable alternative to dependent employment in a young person's mind whether disabled or not; and there is some evidence that entrepreneurship education plays a positive role in students entrepreneurial intentions. Whilst entrepreneurial competencies are important for all SMEs, the imperative to develop the understanding of such competencies in the context of physically challenged-led enterprises is necessary (Bwisa & Margaret, 2013). There are growing numbers of self-employed persons with physical disabilities in developing economies such as Kenya and many of these enterprises are highly dependent on the owner and his or her skills Mpofo (2012).

There is evidence that physically challenged persons operate enterprises within Kiambu County and most of them do well while others do not perform as well NCPWD records (2015). Those that do not perform well are associated with low income and lack of job satisfaction as the owners lack the necessary entrepreneurial competencies to operate high performing enterprises Bwisa and Margaret (2013). From the National Council for Persons with Disabilities' office (an independent body charged to oversee issues of persons with disabilities in Kenya); mobility devices, business loans as well as business kits to help start own enterprises are offered. The greater percentages of the beneficiaries are those that sell the devices while others opt not to use them for reasons well known to individual persons. To attest to this, was a case of a person dependent on a wheelchair to run errands of his enterprise during the day but stepped out in the evening in order to beg along the streets.

The question being addressed therefore became; is there any relationship between Entrepreneurial Competencies and Entrepreneurial Performance? Could competence approach help in establishing why some enterprises performed well while others did not? Could the failure be paralleled with having or lack of entrepreneurship education? This research therefore, sought to find out whether there existed any relationship between Entrepreneurial Competencies and Entrepreneurial Performance

of graduates with physical challenges of higher education and training in Kiambu County in Kenya.

### **1.3 General Objective**

The general objective of this study was to establish the relationship between Entrepreneurial Competencies and Entrepreneurial Performance of graduates with physical challenges of higher education and training in Kiambu County in Kenya.

### **1.4 Specific Objectives**

In order to fulfill the research aim, this study intended to;

1. To establish the relationship between Opportunity Competency and Entrepreneurship Performance of graduates with physical challenges in Kiambu County, Kenya.
2. To assess the relationship between Relationship Competency and Entrepreneurship Performance of graduates with physical challenges in Kiambu County, Kenya.
3. To analyze the relationship between Conceptual Competency and Entrepreneurship Performance of graduates with physical challenges in Kiambu County, Kenya.
4. To establish the relationship between Organizing Competency and Entrepreneurship Performance of graduates with physical challenges in Kiambu County, Kenya.
5. To analyze the relationship between Strategic Competency and Entrepreneurship Performance of graduates with physical challenges in Kiambu County, Kenya.
6. To assess the relationship between Commitment Competency and Entrepreneurship Performance of graduates with physical challenges in Kiambu County, Kenya.

7. To establish the moderating effect of Business External Environment of Access to Finance, Location of Business, competition and social issues on the relationship between Entrepreneurial Competencies and Entrepreneurship Performance of graduates with physical challenges in Kiambu County, Kenya.

### **1.5 Hypotheses**

To examine the relationship between Entrepreneurial Competencies and Entrepreneurship Performance, the following null hypotheses were tested;

- H<sub>01</sub>** There is no significant relationship between Opportunity Competency and Entrepreneurship Performance of graduates with physical challenges in Kiambu County, Kenya.
- H<sub>02</sub>** There is no significant relationship between Relationship Competency and Entrepreneurship Performance of graduates with physical challenges in Kiambu County, Kenya.
- H<sub>03</sub>** There is no significant relationship between Conceptual Competency and Entrepreneurship Performance of graduates with physical challenges in Kiambu County, Kenya.
- H<sub>04</sub>** There is no significant relationship between Organizing Competency and Entrepreneurship Performance of graduates with physical challenges in Kiambu County, Kenya.
- H<sub>05</sub>** There is no significant relationship between Strategic Competency and Entrepreneurship Performance of graduates with physical challenges in Kiambu County, Kenya.

**H06** There is no significant relationship between Commitment Competency and Entrepreneurship Performance of graduates with physical challenges in Kiambu County, Kenya.

**H07** There is no significant moderating effect of Business External Environment of Access to Finance, Location of Business, competition and social issues on the relationship between Entrepreneurial Competencies and Entrepreneurship Performance of graduates with physical challenges in Kiambu County, Kenya.

### **1.6 Justification of the study**

Kiambu County was chosen for the research since the county hosts the only mixed National Special Secondary School in Kenya for the Physically Challenged learners. Every year, learners with physical challenges get admitted to higher institutions of learning after sitting for Kenya Certificate of Secondary Education (K.C.S.E), MoE Kiambu County. Other special secondary schools for learners with physical challenges are located in Kisumu and Mombasa with relatively smaller learner population. Kenya education sector embraces inclusivity thus physically challenged learners acquire education just like those without disabilities, National Special Needs Education Policy Framework (2003).

Kiambu County is home to two public universities namely, Kenyatta University (KU) and Jomo Kenyatta University of Agriculture and Technology (JKUAT); several privately owned universities, for instance, Mt. Kenya University, Greta University, St. Paul's University, PAC University and many more. There are also technical institutes for instance, Thika Technical Institute (TTI) and Kiambu Institute of Science and Technology (KIST); Industrial Training Colleges and very many privately owned commercial colleges. Entrepreneurship education is among the stipulated courses in the curriculum at higher education and training institutions of which embrace inclusivity. After clearing secondary education, persons with physical challenges transition to higher institutions of education and training whereupon they

learn Entrepreneurship Skills as a compulsory course as they pursue their careers in various fields.

Kiambu County is cosmopolitan due to its proximity to the capital city Nairobi and it is one among the many residential areas for the people working in Nairobi city (KNBS, 2009). Moreover, the researcher felt that since Kiambu County cuts across both rural and urban orientations it would give richness to the data collected. Moreover, the county uniquely operates Biashara Fund initiated by Disability Empowerment and Development Incentives (DEDI) that issues loans to persons with disabilities (PWDs). This fund places the physically challenged persons in entrepreneurship in Kiambu County at an advantage over others.

The researcher opted to study physical disability because this category has diverse forms of disabilities that range from very mild disabilities (extremities for instance, a slight limp or a deformed limb) to the very severe disabilities (for instance, muscular dystrophy, paraplegia and cerebral palsy). Persons with physical challenges encounter slight or compound mobility limitations and may or may not need any assistance to maneuver around the environment.

### **1.7 Significance of the study**

The study sought to provide information on the relationship between Entrepreneurial Competencies and Entrepreneurship Performance of graduates with physical challenges of higher education and training in Kiambu County. The research would provide policy-makers and entrepreneurs with additional insights into the key competencies associated with Entrepreneurship Performance among persons with physical challenges. They would be in a better position to address issues on disability in policy documents for instance, in the SME policy or the Entrepreneurship policy. Policy-makers who may want to see more new persons with disabilities' led enterprises started and/or, more importantly, to function effectively may target courses to populations of novice, serial and portfolio disabled entrepreneurs who are willing to improve effectiveness of their entrepreneurial engagements.

Organizations that deal with issues concerning disability would benefit from this research for instance, the National Council for Persons with Disabilities (NCPWD), the National Fund for the Disabled of Kenya (NFDK), Disability Empowerment and Development Incentives (DEDI) and other Non-Governmental Organizations (NGOs). These organizations would better understand issues related to disability and entrepreneurship in their endeavors to assist persons with physical challenges in their Entrepreneurship Performance. They would be able to address issues of training in entrepreneurship as opposed to giving funds without prior training. This has been a major issue in loan recovery since some disabled persons squander the money while others are totally unable to repay the money.

This research would also be important to entrepreneurship trainers and educators at higher institutions of learning since it would offer information about competencies necessary for entrepreneurship success among persons with disabilities. It would assist in the adoption of the right pedagogical approaches to teaching entrepreneurship to disabled persons. The study would also contribute to the existing body of knowledge in the area of disability and entrepreneurship.

### **1.8 Scope of the study**

The research addressed the relationship between Entrepreneurial Competencies and Entrepreneurship Performance of graduates with physical challenges of higher education and training in Kiambu County in Kenya. The study focused on disabilities affecting a person's mobility which refer to an individual's ability to execute distinctive activities associated with moving, both themselves and objects, from place to place. The research was carried out on a population of 123 respondents who were owner managers of enterprises selected from a pool of 480 enterprises from all the constituencies of Kiambu County in Kenya.

## **1.9 Limitation of the Study**

Major setbacks experienced during the data collection period ranged from participants getting reluctant to respond to the questionnaire, others felt that the researcher was a government agent; this led to wanting to be tipped in order to fill the questionnaires. A few felt the researcher had ulterior motives different from academic purpose. Group leaders assisted so much in making the participants understand the sole reason for the research. The researcher made sure that she cleared these doubts by introducing herself and clearly stating the purpose of the research before embarking on questionnaire issuance or interview.

Entrepreneurship performance measures were captured through questions related to increased market share, growth of income, sales volume and turnover, business expansion, frequency in borrowing, and flexibility associated with self-employment. During interviews respondents were asked to give the range in Kenya shillings of their profits. Few respondents were truthful in their responses while some were not.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The field of entrepreneurship does not lock out persons with disabilities (Henderson & Robertson, 2000) and it has addressed the challenges faced by disadvantaged, marginalized and minority groups involved in entrepreneurship. This chapter reviews literature in an attempt to provide a basis for an appropriate conceptual and theoretical framework for establishing the relationship between Entrepreneurial Competencies and Entrepreneurship Performance.

#### **2.2 Theoretical Framework**

This section offers discussion on theories relevant to the study and how they relate to the entire work. A classical entrepreneurship theory include McClelland theory of Need for Achievement. Entrepreneurial Competencies and Resource Based View theory, Strategic Contingence theory, Network Competence and Resource Dependent theory have also been discussed. A conceptual framework is thereafter developed to show the relationship between Entrepreneurial Competencies and Entrepreneurship Performance.

##### **2.2.1 Need for Achievement Theory of McClelland**

Need for achievement (N-Ach) refers to an individual's desire for significant accomplishment, mastering of skills, control, or high standards. McClelland's (1961, 1985) need for achievement describes a person's drive to excel with respect to some established set of standards. Individuals' achievement needs are satisfied when they are able to actualize their own purpose relative to and regardless of the situations of others (Yamaguchi, 2003). Those high in achievement needs dislike succeeding by chance and seek personally identifiable sources for their success or failure rather than leaving the outcome to probability (Robbins, 2003). Furthermore, individuals high in

achievement needs experience joy or sadness contingent upon the identifiable outcomes of their efforts (McClelland & Koestner, 1992).

McClelland (1961, 1975, 1985) noted that individuals high in this dimension differentiate themselves from others by their desire to perform at more advanced level than their peers. They seek situations in which they can obtain personal responsibility for finding novel solutions to problems. Further, high achievement individuals are more satisfied in jobs that involve both high skill levels and difficult challenges (Eisenberger, Jones, Stinglhamber, Shanock & Randall, 2005).

According to McClelland the characteristics of entrepreneur has two features – first doing things in a new and better way and second decision making under uncertainty. McClelland emphasizes achievement orientation as most important factor for entrepreneurs (McClelland, 1987). Individuals with high achievement orientation are not influenced by considerations of money or any other external incentives. Profit and incentives are merely yardsticks of measurement of success of entrepreneurs with high achievement orientation. People with high achievement (n-ach) are not influenced by money rewards as compared to people with low achievement. The latter types are prepared to work harder for money or such other external incentives (Todd & Angela, 2012).

On the contrary, profit is merely a measure of success and competency for people with high achievement need. According to (McClelland, 1961), N-Ach is a relatively stable personality characteristic rooted in experiences in middle childhood through family socialization and child-learning practices which stress standards of excellence, material warmth, self-reliance training and low father dominance (Eisenberger, Jones, Stinglhamber, Shanock & Randall, 2005). McClelland found that certain societies tended to produce a large percentage of people with high achievement. He pointed out that individuals, indeed whole societies that possess N-ach will have higher levels of economic well-being than those that do not. McClelland's work indicated that there are five major components to the N-ach trait: responsibility for problem solving, setting goals, reaching goals through one's own

effort, the need for and use of feedback, and, a preference for moderate levels of risk – taking (McClelland, 1961, 1985). In this research the theory has been incorporated to relate Entrepreneurship Competencies and Entrepreneurship Performance of the participants of the study.

### **2.2.2 Entrepreneurial Competencies and Resource Based View (RBV)**

This study argues that entrepreneurial competencies are strong predictor of SMEs Entrepreneurship Performance that culminates into entrepreneurial success. It supports the view of resource- based theory that the competitive advantage for firms can be generated from their unique set of resources (Saffu *et al.*, 2008; Peteraf, 1993; Barney, 1991). A basic assumption of the RBV is that organizational competencies that are immobile and heterogeneous lead to sustainable competitive advantage. Barney (1991) argues that heterogeneous competencies can generate competitive advantage when they satisfy at least two conditions: firstly, the competencies must be valuable that enable the firm to neutralize threats and exploit opportunities in the competitive environment and secondly, that only a few firms in a specific competitive environment pose these competencies.

Due to the combination of specific competencies, an entrepreneur can avail the opportunities from the external environments and then utilize such opportunities for their business success. It is notable that not all entrepreneurs possess all essential competencies thus; the success of various businesses can be distinguished on the basis of their entrepreneurial competencies. Entrepreneurial competencies are related to the performance of the firm and its competitiveness (Man *et al.*, 2002), growth and success of the business (Colombo & Grilli, 2005).

### **2.2.3 Strategic Contingency Theory**

Entrepreneurial competencies (internal and intangible resources) alone do not lead to the success of SMEs businesses because many external factors such as environment play a vital role in the success of SMEs businesses. In the context of persons with

disabilities, the external environment (society) is very hostile and negative towards them. The physical environment is not easily accessible to the users of assistive devices such as wheelchairs and crutches. The moderating role of external environment in relation to other organizational variables and firm's performance is well documented in the literature. For instance, the previous studies such as Gilley and Rasheed (2000) provided evidence in their study of the moderating role of the dynamic environment in relationship between outsourcing and firm's performance.

Antoncic and Hisrich (2001) revealed the moderating role of external environment as a moderator to reveal its impact on the relationship between level of entrepreneurship and organizational performance. Similarly, Ahmad (2007) used perceived external environment as a moderator between entrepreneurial competencies and business success. Many other studies have used external environment as a moderator on the relationship between ownership and performance (Li & Simerly, 1998); on the relationship between entrepreneurial leadership behavior and new venture performance (Ensley *et al.*, 2006); on the relationship between entrepreneur orientation and firm performance (Lumpkin & Dess, 2001); on the relationship between exploratory innovation, exploitative innovation and performance (Jansen *et al.*, 2006).

This study supports strategic contingency theory in considering the moderating impact of external environment factors such as, Access to Finances, competitors and inaccessible Business Locations. The Contingency theory is popular because it is based on the assumption that there is no single best way to organize and no single way of organizing is effective under all situations (Galbraith, 1973). In the field of strategic management, the concept is based on the assumption that the organizational resources match or fit with the external environment context. However, it is also believed that no such universal strategies exists that are optimal for all businesses, regardless of positioning of their resources with the environmental context (Ginsberg & Venkantaraman, 1985).

The core concept of fitness in the contingency theory suggests that a proper alignment among external and internal organizational factors will positively impact on organizational performance and its success (Linton, 2014; Puffer, McCarthy, & Boisot, 2010). Wiklund and Shepherd (2005) state that the basic idea of contingency theory in the field of entrepreneurship literature is that, the actions of entrepreneurs should be aligned with the context of outstanding outcomes. “Contingency fit” represents a simple concept of matching, aligning or consistency of the organizational components with its context that lead to organizational performance (Linton, 2014).

Contingency theory is considered as an important strand in the entrepreneurship research and has a long going tradition of using this theory in this field, (Wiklund & Shepherd, 2005). Thus, based on fit approach of strategic contingency theory, this study argues that the entrepreneurial competencies should match with the external environment of SMEs to face threats and to avail possible opportunities. In other words, graduates with physical challenges in entrepreneurship should be competent enough to face the rapid changing business environments in order to record better entrepreneurship performance that would translate to business success even in turbulent environments.

#### **2.2.4 Network Competence and Resource Dependence Theory (RDT)**

The network competency theory is another factor that can improve the relationship between entrepreneurial competencies and Entrepreneurship Performance in the context of persons with physical challenges in business. Network competence represents the firm’s ability to develop and manage relations with their suppliers, customers, and other organizations, and to deal effectively with the interactions among these relations (Ritter *et al.*, 2002). The network competence can be described on the basis of Resource Dependence Theory (RDT). The origin of resource dependence theory is in social exchange theory. RDT focuses on the needs of the firm’s resources (Chiu, 2008). Thus, the firms seek to build relationships with other

firms to gain or to access the needed resources and assets (Nohria & Garcia-Pont, 1991).

Traditionally, the firms depend more on their vertical network members but now increasingly establish relations with their horizontal actors to acquire resources (Chiu, 2008). Thus, RDT is concerned with firm's requirements to gain resources from other actors in its environment and states how scarcities of firm's resources force it to introduce new innovations that utilize alternative resources (Sherer & Lee, 2002). The scholars generally integrate RDT with network or networking theory (Gulati, 1995), which is also based on many common assumptions regarding dependence but more emphasizes on the socially embedded context of organizations (Hillman *et al.*, 2009). Others have integrated RDT with organizational learning and game theory to understand the power of partners (Saxton, 1997), and with network theory or transaction cost to predict the choice of partners (Elg, 2000).

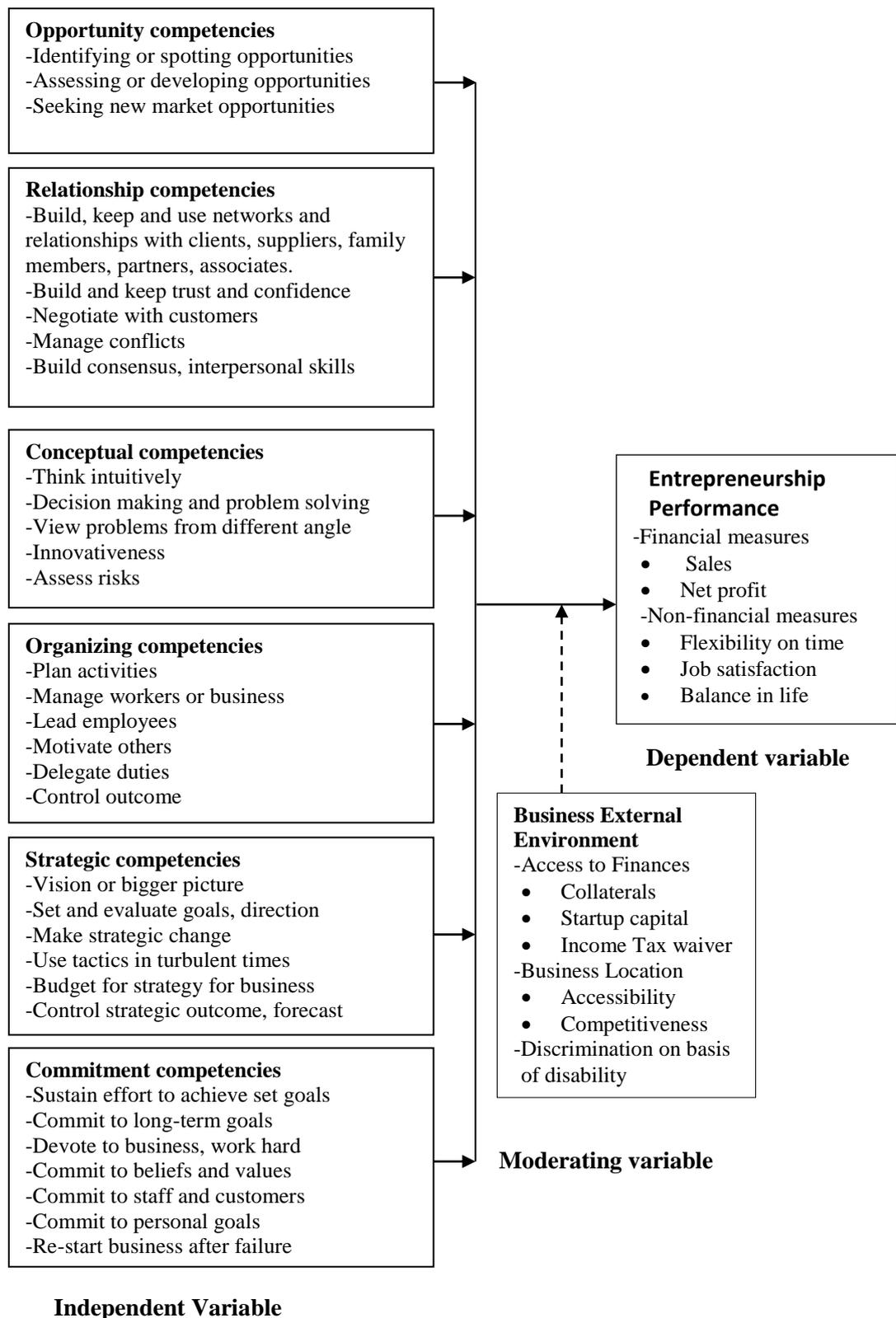
Firms cannot be successful through their individual efforts alone because their performance largely depend on the activities, performances and quality of relationships with other counterparts as well (Wilkinson & Young, 2002). Such relationships with external parties involve both competitive and cooperative elements. Simultaneously, firms expand their resources through cooperation and also compete to get means of such resources. Firms compete to establish cooperative relationships with their counterparts such as suppliers and customers that help them to create competitive advantages by creating value for the customers (Wilkinson & Young, 2002).

### **2.3 Conceptual Framework**

Miles and Huberman (1994) define a conceptual framework as a visual or written product, one that explains, either graphically or in narrative form the main things to be studied; the key factors, concepts, or variables and the presumed relationships among them. Conceptual framework is a network or a plane of interlinked concepts that together provide a comprehensive understanding of a phenomenon or

phenomena. Conceptual frameworks possess ontological, epistemological, and methodological assumptions, and each concept within the conceptual framework plays an ontological or epistemological role. The ontological assumptions relate to knowledge of the ways things are or the nature of reality; the epistemological assumptions relate to how things really are and how things really work in an assumed reality (Guba & Lincoln, 1994). The methodological assumptions relate to the process of building the conceptual framework and assessing what it can tell us about the real world.

The conceptual framework in the study comprise of independent variables covering the six competence areas adopted from Man *et al.* (2006). These competences are: Opportunity, Relationship, Conceptual, Organizing, Strategic and Commitment competencies. Each competence area is captured using a variety of constructs that describes it. The dependent variable in the study is Entrepreneurship Performance that consists of sales and profit as its constructs. The relationship between the Entrepreneurial Competencies is moderated by Business External Environment of Access to Finance and Location of Business as its constructs.



**Figure 2.1: Conceptual Framework**

## **2.4 Review of Empirical Literature**

### **2.4.1 Opportunity Competency and Entrepreneurship Performance**

Entrepreneurship concerns the noticing and pursuing of opportunities (Miller, 2011; Shane & Venkataraman, 2000). Entrepreneurs start businesses because they are able to see opportunities in the business environment (Bwisa, 1998). Entrepreneurship literature often focuses on the active pursuit of opportunities regardless of resources under control (Stevenson & Jarillo, 1990), or activities relating to the recognition and/or exploitation of business opportunities (Shane & Venkataraman, 2000). Entrepreneurial activities are often referred to as the work of creating new social or economic value (Davidsson & Wiklund, 2001).

One of the most distinguishing competencies for the entrepreneur is the opportunity related competency. Opportunity Competence is one of the basic leading firms to competitive advantage (Chandler & Hanks, 1994; Mitton, 1989; Murray, 1996). These are competencies related to recognizing market opportunities through various means. For instance, McClelland (1987) finds “to see and act on opportunities” as one of the competencies for successful entrepreneurs. Bwisa (2011) suggests that one of the most important entrepreneurial roles is the ability to recognize and envision taking advantage of opportunities. This category of competencies comprise of entrepreneurial activities in spotting opportunities, actively seeking new opportunities and developing the opportunities.

These opportunity competencies can be broadly distinguished into three clusters of identifying, assessing and seeking market opportunities. These clusters suggest that a competent entrepreneur should be able to identify opportunities from various means, work on the potential opportunities by thorough assessment and turn them into feasible opportunities (Thomas & Theresa, 2000). They actively seek opportunities which are not readily available to them. The usual ways for doing that include promotional activities like advertising, participating in exhibitions and using the internet. In order to seek further opportunities, the entrepreneurs also need to collect market information through personal networks or from journals and newspapers.

In the context of physically challenged entrepreneurs, this competency must be present in order to see and act on opportunities availing themselves in the business environment. Entrepreneurs with physical challenges need to seek situations in which they can obtain personal responsibility for finding novel solutions to problems as it has been advanced in the n-ach theory of McClelland. Disabled entrepreneurs must demonstrate that being disabled can facilitate the exploitation of opportunities that previously had been unexploited (Shane & Venkataraman, 2000). They must also look credible by framing the unknown in such a way that it becomes believable (Aldrich & Fiol, 1994). In this sense, disabled persons' entrepreneurial activity may be conceived as a balancing act between deviation and belonging (Lindgren & Packendorff, 2006). It may also provide insight, innovation and unique opportunity recognition.

Entrepreneurs with disability need to not only attract a recognized seal of approval for their activities and products but also enrich their undertakings with an appeal that relates to their specific situation. Though the normative attitudes that broader society holds towards persons with disabilities must change, to stimulate social inclusion, disabled persons may also benefit if they exploit opportunities and activities that relate to their specific situation (Pavey, 2006). Such an opportunity may include among others carrying out an activity that directly addresses their needs as a minority group, for instance, starting a tour agency for disabled persons, trading in assistive devices associated with disability, training other disabled persons on particular skills that are necessary in pursuit of entrepreneurial career.

#### **2.4.2 Relationship Competency and Entrepreneurship Performance**

These are competencies related to person-to-person or individual-to-group-based interactions, for instance, building a context of cooperation and trust, using contacts and connections, persuasive ability, communication and interpersonal skills (Thomas & Lau, 2000). Competencies related to building networks and trust with suppliers and customers (Man *et al.*, 2002; Mitton, 1989). Relationship competencies include the ability to build, to keep, and to use networks, relationships, trust and confidence with all stakeholders of the firm including clients, suppliers, employees, family

members, partners, and business associations (Man *et al.*, 2002). Entrepreneurs are required to leverage their relations with suppliers and customers and build good and trustful relations to get competitive advantage. To successfully do so, the entrepreneur needs to possess competencies in relationship building, communication, persuasive and interpersonal abilities Lau *et al.* (2000).

Successful entrepreneurs with physical challenges need to possess effective communication and negotiation skills in dealing with different people, be able to build and use networks amongst themselves and with the other non-disabled entrepreneurs. They should maintain good relationship with suppliers and build good and trustful relations with customers. This can happen if normative attitudes that broader society holds towards persons with disabilities change and the non-disabled stop viewing purchasing products from a disabled person as contracting the disability Pavey (2006). Physically challenged persons must deal with products that are worth purchasing and should stop expecting customers to purchase from them out of pity Mpfu *et al.* (2011). The N-Ach theory of McClelland (1961) identifies a person with need for and use of feedback as one who has high need for achievement. Feedback can be received from family, friends, business associates, clients, suppliers and, employees and these helps maintain good and healthy relationships.

### **2.4.3 Conceptual Competency and Entrepreneurship Performance**

Conceptual competencies are reflected in the actions of the entrepreneur and are necessary in firm performance. These are competencies related to different conceptual abilities which are reflected in the behaviors of the entrepreneurs, for instance, decision making skills, absorbing and understanding complex information, risk-taking, and innovativeness (Lau *et al.*, 2000; Man *et al.*, 2002). They represent a category of competencies which are not easily identifiable behaviors but are often considered to be important for entrepreneurial success. The ability to have a cognitive and analytical thinking, learning, decision making and problem solving, sustaining temporal tension, innovating and in coping with uncertainty and risk belong to this category (Lixiang, 2009).

Conceptual competencies have a stronger linkage with entrepreneurial traits and are less directly observable. They involve high level of conceptual activities and are reflected in the entrepreneur's behaviors when they conduct analysis learn, make decisions and solve problems. They may also enhance the effectiveness of carrying a task in the present or in the future. Similar to strategic competencies, conceptual competencies require a more abstract level of abilities. However, unlike strategic competencies, conceptual competencies are concerned with a shorter-term perspective, resolving instant events, or requiring intuitive responses (Man *et al.*, 2002).

Prior research suggest that risk-taking, innovativeness, decision making skills are among the conceptual competencies of entrepreneurs (Man *et al.*, 2002) and the ability to take risks is one of the key success factors to firm performance. Manjula (2008) suggests that a firm's degree of entrepreneurship is the extent to which it innovates, acts proactively and takes risks. Pro-activeness refers to how firms relate to market opportunities in the process of new entry, and seize such opportunities in order to shape the environment while aggressiveness refers to how firms relate to the competition and responds to trends and demands that already exist in the market place (Lumpkin & Dess, 1996). This variable was anchored on McClelland's N-Ach theory that describes entrepreneurs with high N-Ach as people who make decisions under uncertain conditions and desire to perform at more advanced level than their peers (McClelland, 1987).

#### **2.4.4 Organizing Competency and Entrepreneurship Performance**

These competencies include among others, managerial competence (Chandler & Hanks, 1994; Murray, 1996), human resource management competence (Brownell 2006), financial management competence (Brinckmann *et al.*, 2011). Organizing competencies are related to the organization of different internal and external human, physical, financial and technological resources, including team building, leading employees, training and controlling. Being the chief managers of their firms entrepreneurs ought to possess organizing competencies, which equip them with

skills and knowledge to perform managerial functions of planning, organizing, leading, motivating, delegating and controlling (Thomas & Lau, 2000).

Entrepreneurs must be good at acquiring various human, technological, financial and physical resources internal or external to the firm and organizing them into a systematic and efficient way. In their research on Hong Kong owner managers in service sector, Thomas *et al.* (2000) found that SMEs entrepreneurs needed to be good in organizing human resources because they worked directly with their subordinates rather than relying on human resource departments as in large companies. In general, organizing competencies are similar to the managerial competencies which calls for the ability to lead, control, monitor, organize and develop the external and internal resources towards the firm's capabilities through the entrepreneur's organizing competencies in different areas. McClelland (1961) suggests that entrepreneurs with high N-Ach dislike succeeding by chance but seek personally identifiable sources for their success or failure rather leaving the outcome to probability (Robbins, 2003).

#### **2.4.5 Strategic Competency and Entrepreneurship Performance**

Studies have confirmed that the person who forms a venture is ultimately responsible for its success or failure. Thus as key players, the ability of entrepreneurs to cope with all responsibilities that come along with these roles-entrepreneurial, managerial and functional should not be overlooked Vijay *et al.* (2011). Competent entrepreneurs not only set long-term visions, but also plan achievable and realistic medium-term goals and positions. They also need to make strategic changes in facing environmental changes, or to use tactics in facing customers and competitors. They are also responsible for estimating the financial feasibility of a strategy and controlling the strategic outcome Lau *et al.* (2000).

Strategic competencies are related to setting, evaluating and implementing the strategies of the firm Lau *et al.* (2000). In SMEs, the critical resources are likely to be held by the individual entrepreneurs that are reflected in their skills, knowledge, abilities, experience and education. Being the key decision makers, the entrepreneurs

have high influence on the formation of business strategy and are responsible to set the roadmap for their firms to move towards the set goals. The lack of separation between ownership and control in small firms suggests that the business owners themselves are responsible for the direction and the development of their firms Vijay *et al.* (2011). The owner of the business controls it. As McClelland's theory of n-ach suggests, entrepreneurs with high need for achievement should be responsible for setting goals and further reaching them through one's own efforts (McClelland, 1961, Todd & Angela, 2012).

Being the owner of the firm, the entrepreneur must set the direction for the whole company. This category of competencies require the entrepreneur to have a vision or a big picture in their mind for their business, to have clear goals to achieve, or to formulate and implement strategies to achieve these visions and goals Lau *et al.*, (2000). In essence, these competencies are necessary for entrepreneurship performance of persons with physical challenges and they are related to setting, evaluating and implementing the strategies of the firm, while calling for abilities and skills from a broader and long-term perspective.

In this research, components of Strategic competence required the owner to have a vision for the business, have the ability to set short and long-term goals for the business as well as evaluate these goals. Making strategic changes whenever the business called for such as well as use of tactics as the owner established their space in business. All these strategies could not come to fruition if one did not develop a budget for strategy such that it would be easier to control and evaluate the strategic outcome of the business.

#### **2.4.6 Commitment Competency and Entrepreneurship Performance**

These are competencies that help to drive the business to achieve the set goals Vijay *et al.* (2011). Commitment competencies call for the ability to sustain one's dedication to the business in different situations. Such commitment is also exemplified by a strong devotion to work hard, a desire to aim long-term goals rather than short-term gains, as well as an ability to start the business up again after failure.

In the starting up, the entrepreneur has to be tough enough to face difficulties like lack of customers and cash-flow problems. During development, he or she has to sustain through organizational and environmental crisis while maintaining a long-term goal.

Successful entrepreneurs are often characterized as diligent people with restless attitude in their work. In other words, they have a strong competency in totally committing, determining and dedicating as well as taking proactive actions towards their responsibilities and duties. This corresponds to the entrepreneurial role of the drive to see firm through to fruition advanced by Bwisa (2014). Another aspect of this competency area as advanced in McClelland's need for achievement theory is the initiative or proactive orientation, which calls for the entrepreneurs taking action before being asked or forced by events, and actualizing own purpose (McClelland, 1987).

#### **2.4.7 Business External Environment**

Business operation is considered to be very complex in a competitive business environment which is constantly changing with fast technological advancements. Entrepreneurs are expected to interact with these environmental forces which require them to be highly competent in different dimensions like intellectual, attitudinal, behavioral, technical, and managerial aspects (Gibb, 2005). Entrepreneurs are therefore permanently challenged to deploy a set of competencies to succeed in their entrepreneurial endeavors.

The idea that human capital and financial capital are key input factors for a start-up success and growth of firms makes entrepreneurship inaccessible for people with disabilities (Mpofu, 2011). Most nascent entrepreneurs with disabilities lack experience, do not have a history of prior success, and are unable to provide collateral for loans; thus, at the beginning of the start-up process, obtaining capital requires convincing somebody outside the traditional banking system to share the high risk of starting the new venture (Mpofu, 2003). The only available tie for people with disabilities may be that of families and disability-related non-governmental

organizations which do not often translate into financial support for them (Zimmer & Aldrich, 1987).

Noakes (2006) states that people generally relate people with disabilities with a lack of different types of capital resources which are human, social and financial resources. Accordingly, challenged entrepreneurs are often regarded as having competitive disadvantages due to increased labor costs for instance, the need to hire a person to carry merchandise instead of carrying it oneself, additional transportation costs, slower production and many more Mpofo (2012). In many cultures, due to prejudice and superstition, being challenged can also result in marketing disadvantage since consumers might not want to contract products or services from challenged entrepreneurs, Handojo (2004). Hence, being challenged may turn into a competitive disadvantage when challenged entrepreneurs face competition from non-challenged entrepreneurs. This impacts much on their human and social capital and may have a trickling effect on financial capital as well.

#### **2.4.8 Entrepreneurship Performance**

The concept of entrepreneurship performance is core to business because the major objective of businesses is to make profits (Mutindi, Namusonge & Obwigi, 2013). Iravo *et al.*, (2013) stated that one of the important questions in business has been why some organizations succeed and why others fail. Most research studying outcome of entrepreneurial competency use entrepreneurship performance as the indicator of outcome with several models proposed to explain how entrepreneurial competencies affect firm performance Man *et al.*, (2002) and in general, significant relationships are reported in empirical studies. As a process through which individuals recognize, evaluate and exploit opportunities (Shane & Venkantaraman, 2000), entrepreneurship is characterized by uncertainty in that the outcome of entrepreneur's actions are unknown (Alvarez & Barney, 2005) and as a result emphasis on competence as a means of capturing key aspects of the entrepreneur that impact entrepreneurship performance has been of great importance to researchers.

Entrepreneurship performance is influenced by both intrinsic (individual) and extrinsic (environmental) factors (Ravindra, 2011). Performance is how a firm does when measurements are conducted (Maragia, 2008), with the measures being in form of profitability and sales growth. Performance is the ultimate criterion for judging whether SMEs are competitive or not as it is with larger firms. This potential is addressed by factors both internal and external to the firm. For a small business, the process of achieving competitiveness is strongly influenced by the role of the key player who is the entrepreneur; and it is at this point competence approach can be used to capture the entrepreneurial process. Empirically, significant relationship between entrepreneurial competencies and entrepreneurship performance is reported. Sony and Iman (2005) confirm that entrepreneurial competencies which comprise management skill, industry skill, opportunity skill, and technical skill are positively related to venture growth.

Existing literature shows several approaches in measuring entrepreneurship success. One group of researchers advocates the use of traditional financial measures of entrepreneurship success as profitability, sales turnover, and return on investment. Perren (2000) state that performance is reflected in some level of growth, as indicated in firm's sales and income (Maragia, 2008). On the other hand, there are some who focus on non-financial measures of success, which includes job satisfaction, flexibility, balance between work and family responsibilities and career progress (Kuratko *et al.*, 1997). Success is more than money and the pursuit of financial goal involves some aspects of intrinsic reward for the entrepreneurs themselves Beaver (2002). Explicit in their argument is that the best measure of success for small firms is the attainment of personal objectives such as satisfaction with one's own personal involvement, autonomy, and balance in life rather than financial outcome.

Proponents to this approach argue that the significant emphasis given by entrepreneurs, especially those in small firms are on non-financial objectives (Kuratko *et al.*, 1997). Beaver (2002) is of the view that many entrepreneurs do not view money as a prime motivator rather, as a pleasant by-product of having the

freedom to take charge of their own future. This “either-or” approach to looking at indicators for entrepreneurial success has received some criticism for being a poor reflection of reality. Wiklund (2003) suggest that financial and non-financial performance complement each other and provide richer description of actual entrepreneurship performance.

Motivation is one of the key factors in the matter of entrepreneurship performance. Economic consideration has been found to be a major motive for people to become entrepreneurs and entrepreneurial motivation changes from economic to non-economic pursuant to entrepreneurial experience (Khanka, 2009). In management literature, “competencies” is used to describe the set of disparate skills managers require to help them perform their jobs. These skills are identified and effectively initiated in training courses or programmes. Competencies therefore constitute a cluster of related knowledge, attitudes, and skills, which an individual acquires and uses together to produce outstanding performance in any given area of responsibility (Benjamin & Rebecca, 2009).

Entrepreneurial competencies therefore, include those clusters or related knowledge, attitudes and skills which an entrepreneur must acquire through managerial training and development to enable him/her produce outstanding performance, maximize profit, while managing a business venture or an enterprise (Nwachukwu, 2005). Quite often, less attention is paid to these critical success variables; rather attention is focused mainly on financial resources, Ojong (2005) thus attributing entrepreneurial failures to inadequacy in financial resources. This calls for a shift in paradigm by considering entrepreneurial competencies as a factor of entrepreneurship performance, and vice versa, lack of it as a large contributor to business failure.

This variable was anchored on McClelland’s (1961) need for achievement theory that advances that entrepreneurs with high n-ach are not influenced by money or any other external incentives. Profits and incentives are merely yardsticks of measurement of success of entrepreneurs with high n-ach orientation.

## 2.5 Critique of Existing Literature

Most of the research that has been carried out among persons with disabilities has been geared towards Disability Mainstreaming for instance the research carried out by Kamundia (2012); advocating for the Rights of Persons with Disabilities by Disabled People's Organizations (DPOs) and Non-government Organizations (NGOs). Walton (2012) carried out research on Economic Benefits of Disability, and availability of Sheltered Workshops for persons with disabilities. Their themes resonated around the idea that persons with disabilities are weak and unable to articulate issues that affect them thus, alienating persons with disabilities further from the mainstream society as observed in literature review.

Disabled and non-disabled alike have common mutual responsibilities and their abilities in the society are essential. Disabled people therefore, should not be separated from the society, United Nations Convention on the Rights of Persons with Disabilities (2007). Persons with disabilities may have a greater tendency to be self-employed than persons without disabilities due to discriminatory attitudes among employers. Therefore, considering the limited employment opportunities, flexibility in self-employment and, a sense of control over their environment, entrepreneurship is one of the best ways to create opportunities for persons with disabilities.

Despite a body of studies related to entrepreneurial competencies (Man *et al.*, 2002; Mitchelmore & Rowley, 2010), there are still gaps in the knowledge base. Issues relating to the competencies development process relating to entrepreneurs with physical challenges have not been delved into. Though numerous scholars in entrepreneurship have assessed the entrepreneurial competencies in developed economies (e.g., Brinckmann *et al.*, 2011; Man & Lau, 2000), there is a gap in the knowledge base relating to specific entrepreneurial competencies of entrepreneurs in emerging economies. However, Capaldo *et al.* (2004) suggest that the context shapes entrepreneurial competencies. All current research that involve entrepreneurial competencies implicitly presumes that entrepreneurs are different from non-entrepreneurs in terms of competencies they possess (Baum *et al.*, 2001; Man *et al.*, 2002; Sony & Iman, 2005).

Research on the entrepreneur began with the personality traits approach. Scholars tried to differentiate entrepreneurs from non-entrepreneurs by identifying their personality traits. Although attractive for its simplicity, there are limits to the usefulness of the approach, with results reported in literature showing considerable inconsistency. During the 1990s, the traits approach was out of favor and researchers began to look at entrepreneurs from a behavioral and contextual perspective. From a behavioral perspective, Boyatzis (1982) defined competencies as underlying characteristics that are casually related to effective and/or superior performance in a job. Since then, studies in competencies have grown in volume, extended to different managerial positions and have become a popular means of studying entrepreneurial characteristics (Sony & Iman, 2005).

## **2.6 Research Gap**

The study is motivated by the fact that there is little understanding of the phenomenon of disability and entrepreneurship and due to this; one cannot term the Kenyan economy as inclusive Nyamoki (2008). The disabled persons' needs in business and their unique characteristics have not been extensively studied. In order for the Kenyan economy to grow and fulfill the flagships stipulated in the economic pillar of its Vision 2030, the social problems in the social pillar must be addressed and this goes hand-in-hand with issues of disabled persons in entrepreneurship.

Studies in the literature review addressing entrepreneurial competencies have been carried out in big organizations with distinct levels in their operational set up and configuration with most of them being manufacturing firms. For instance, Nusrat *et al.* (2014) studied the relationship between Entrepreneurial Competencies of SME owner/managers and Firm Performance on manufacturing companies in Bangladesh. They found out that all competencies had positive relationship with firm performance; when competencies increased, firm performance increased. While Strategic Competency held the highest level of correlation, Conceptual and Commitment had no significance to Firm Performance due to their high level of p-value although they had a positive relationship with Firm Performance.

Studies focusing on disabled persons can be traced in the literature addressing other issues other than entrepreneurship. For instance, Jose *et al.* (2008) looked at an approach to the socio-labour situation of disabled women in rural communities in a Spanish region. They found that the disabled women were highly discriminated upon in the United States. Tonny *et al.* (2006) looked at women and disability while exploring the interface of multiple disadvantage and found that they faced more discrimination than their male counterparts. Karimi *et al.* (2014) studied entrepreneurial attitudes in students with hearing disabilities in Iran and discovered that only a small percentage of students had a positive attitude toward entrepreneurship and they lacked the necessary competencies. A gap exists in the literature on studies carried out on SMEs with physical disabilities in entrepreneurship.

## **2.7 Summary**

An entrepreneur is an individual who creates (Bwisa, 2011) something new with value by devoting the necessary time and effort, assuming the accompanying financial, psychic and social risks and receiving the rewards of monetary and personal satisfaction and independence (Hisrich, Peters & Shepherd, 2009). The field of entrepreneurship involves the study of sources of opportunities; the process of discovery evaluation and exploitation of opportunities; and the set of individuals who discover, evaluate and exploit them (Shane & Venkantaraman, 2000). Saeedi-Kia (2007) refer to entrepreneurial process as a process in which the entrepreneur together with new ideas and new opportunities creation and identification attempts to introduce new products or services or attempts for better production process along with admission of financial, mental and social risks and finally mobilizing resources, and rewarding personal satisfaction and independence Bwisa (2011); Hisrich, Peters and Shepherd, (2009).

Promotion of the full enjoyment of persons with disabilities of their human rights and fundamental freedoms and their full participation will result in their enhanced sense of belonging and in significant advances in the human, social and economic development of the society and subsequently, eradication of poverty. Disabled and

non-disabled alike have common mutual responsibilities and their abilities in the society are essential thus, it is clear that disabled people are not separated from the society (United Nations Convention on the Rights of Persons with Disabilities, 2007).

Employment is one of the most important factors to understand and eliminate negative attitudes and psychological-social barriers in disabled and non-disabled people, because it facilitates social interaction and changes the attitudes of both groups. Turner and Turner in their study found the emotional impact of unemployment on people with disabilities is more than the impact it has on the non-disabled. It seems that due to the limited employment opportunities, entrepreneurship is one of the best ways to create employment opportunities for people with disabilities Karimi *et al.* (2014).

Disadvantaged persons are those individuals who have difficulty integrating into the marketplace and typically are located outside the mainstream of social and institutional support for entrepreneurship, such as disabled persons or visible minorities and immigrants (Pavey, 2006). Several studies have demonstrated that the tendency or ability to become self-employed differs between native people and immigrants. Entrepreneurship is seen as a vital component in any economy promoting economic growth and fuelling positive changes in attitude towards business. It has been a vehicle used by immigrants, women, minorities and historically disadvantaged populations to secure a foothold in the employment market and eventual economic independence (Fairlie & Meyer, 1996). Self-employment and entrepreneurship are seen as a vehicle to help disabled people evolve from unemployment, under-employment or entitlements-based programs to attain gainful employment and self-sufficiency.

Aspiring entrepreneurs with specific disadvantages (disabilities), need to convince investors, customers and other stakeholders that their unprivileged position in society does not prevent their entrepreneurial undertakings from aligning with existing expectations of what is perceived as acceptable in the marketplace (Aldrich, 1999).

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter describes the methodology, the philosophical position, data collection methods and data analysis that was used to gather and analyze the relationship between Entrepreneurial Competencies and Entrepreneurship Performance of graduates with physical challenges with higher education and training qualifications. It sets out various stages and phases that were followed in completing the study. It identified the procedures and techniques that were used in the collection, processing and analysis of data. Specifically the following sub sections were included; research design, target population, sampling frame, data collection instruments, data collection procedures, pilot test, data processing and analysis, finally, ethical issues.

#### **3.2 Research Design**

A discussion of methodology reflects the epistemological stance chosen for the overall research process. Epistemology is the theory of knowledge embedded in the theoretical perspective that informs the research (Cresswell, 2003). Hesse-Biber and Leavy (2011) as quoted by Ngure (2013) describe methodology as the bridge that brings philosophical (on ontology and epistemology) and method (perspective and tool) together. The methodology gives shape to what is studied and also indicates the relationship between the investigator and research participants. Research generally seeks to understand a phenomenon or to find answers to the research inquiry through a planned course of action.

This research embraced phenomenological aspects of research philosophy whereby the researcher identified the essence of human experiences concerning a phenomenon (physical disability and entrepreneurship) as was described by participants of the study.

Understanding the lived experiences marked phenomenology as a philosophy as well as a method. The procedure involves studying a small number of participants through extensive and prolonged engagement to develop patterns and relationship of meaning.

Research design is the blue print for the collection, measurement, analysis of data a plan to obtain research questions (Cooper & Schindler, 2006). The study employed the descriptive-survey approach. This design was suitable for the study as it sought to describe the relationship between Entrepreneurial Competencies and Entrepreneurship Performance of graduates of higher education and training with physical challenges. The study was largely quantitative in nature and was triangulated by some qualitative aspects. Quantitative and qualitative research methods complemented each other. Kothari (2007) argues that by combining qualitative methods to quantitative methods, the results would be much more meaningful and would have greater probability of being valid, of actually measuring what it purports to measure. Quantitative research methods included multiple linear regression model whose coefficients were tested using Analysis of Variance (ANOVA) for overall model significance. Qualitative research method included content analysis where issues emerging from the key open ended questions would be clustered into thematic areas upon which interpretations and conclusions were drawn.

Correlation research design was also used to measure the relationship between two variables. According to Kothari (2007) simple correlation assumes there is a linear relationship between two variables. It therefore describes the examinees relationship and determine causality among variable where possible statistical analysis is conducted to reduce and organize data, determine significant relationships and identify differences and similarities within and between different categories of data, reliability and validity of instrument, (Nachimias & Nachimias, 2008; Nicholas, 2011). Evans and Oslon (2000) describe correlation as a measure of strength of linear relationship between two variables. The Pearson Product-Moment correlation coefficient is used as a measure of the relationship strength and it is the most commonly used statistical measure of degree of relationship between two variables

(Christensen, 2007). Correlation design was used in the study to measure the degree and strength of relationship between Entrepreneurial Competencies and Entrepreneurship Performance.

Normality of distribution was analyzed using the Kolmogorov Smirnov Test otherwise known as KS Test to check whether the dependent variable was normal or not, thus, deducing the statistical significance leading to either reject or fail to reject the outcome. The Gaussian distribution is one of the methods used to determine how well the data is distributed. The best way to evaluate how far data deviates from the Gaussian is to look at the graph and see if the distribution deviated grossly from a bell-shaped normal distribution (Graphpad, 2011). Lapan *et al.* (2012) observe that in order to fit a linear model, the dependent variable has to be normally distributed. Q-Q plots and the Kolmogorov-Smirnov (KS) test were used to confirm normality in this study.

### **3.3 Population of study**

Target population in statistics is the specific population about which information is desired; this is described as the population from which a sample is drawn and conclusion is based on Kothari (2007). A population can be defined as including all people and items with the characteristics one wishes to understand. It is a set of individual units which the research question seeks to find out about Sekaran and Rodger (2010). The study targeted a population of micro, small, medium and large enterprises run by graduates with physical challenges within Kiambu County. According to NCPWD database in Kiambu County (2015) there were 1,012 enterprises owned and run by persons with physical challenges in the various constituencies of the county. From this larger population, a smaller population of 480 graduates with physical challenges from higher education and training was picked as the population of the study.

### **3.4 Sampling Frame**

A sample frame is a complete list in which each of the unit of analysis is mentioned only once (Kerlinger & Lee, 2000). In this study, a sample frame was drawn from accessible population of 480 businesses owned and run by graduates with physical challenges with higher education and training qualifications. According to Nicholas (2011) it is impossible to do a random sampling on a population without a sampling frame unless the population is extremely small. The sampling frame in this study was done from information given by the National Council for Persons with Disability office in Kiambu County and at the National level as by year 2015. Information was also sought from the Kenya National Bureau of Statistics (KNBS) concerning the year 2009 population census.

Kiambu County had a total number of 480 registered persons with physical challenges with higher education and training qualifications running enterprises. This was obtained from the register of applicants of income tax exemption and from information obtained from various disability group leaders with the help of the coordinator at the county level. It is from the 480 registered persons that the final research sample size of 172 respondents was drawn.

See (Appendix 6) for the sampling frame, (Appendix 7) for the year 2009 population census, and section 3.5 for sample size determination.

### **3.5 Sample and Sampling Technique**

Simple random sampling technique was used to select the businesses owned by graduates with physical challenges of higher education and training that would be included in the research. Nicholas (2011) defines simple random sampling as a sampling method in which each member of the population has an equal and known chance of being selected. This method was applied because it is simple, easily applied to a small population and ensures there is no bias. At the point of choosing specific category of businesses to be included in the research, purposeful sampling was used to distinguish between enterprises run by persons with physical challenges

with higher education and training qualifications from those without. The accessible population where the sample was drawn was 480 registered persons with higher education and training qualifications running enterprises in the county.

For most survey research, external validity is important, which requires a representative sample. The consistency or inconsistency of the findings would help to determine whether entrepreneurship competencies could be used as a distinguishing factor between entrepreneurs and non-entrepreneurs with physical challenges in Kiambu County in Kenya.

The sample size determination formulae and procedure for categorical data (Cochran, 1977; Bartles *et al.*, 2001) was adopted and calculated using the following formula in which;

$n = Z^2 \cdot P(1-P) / (D^2 \cdot D)$  and the required sample is  $(N_o) = n / [1 + (n-1/N)]$  Z= confidence level at 95per cent (standard value 1.96).

P=True proportion of factors in the population, or the expected frequency value

D= margin error at 6per cent (standard value 0.06)

$$n = (1.96)^2(0.5)(0.5) / (0.06)^2 = 266.6667$$

$$\text{Sample size } (N_o) = n / [1 + (n-1/N)]$$

$$N_o = 267 / [1 + 266/480] = 172$$

Since the population was less than 10,000 the effective sample size would therefore be 172 that was arrived at using the calculations in the formula given. This criterion was used at 95 per cent confidence level, 6 per cent margin of error and a Z-Value of 1.96.

### **3.6 Data Collection Instruments**

The study used both primary and secondary data. Primary data was collected by the use of assessment tools which assess entrepreneurial mindsets, attitudes and competencies developed by ASTEE team. These concepts are complicated to observe which make them difficult to measure. The term latent construct is generally used for such variable that cannot be measured directly and cannot be fully captured by a single question Ullman (1996). Therefore, in order to develop a suitable measurement tool, a single variable needs to be captured through multiple questions representing the variable. However, the indicators of entrepreneurial competencies must be established first. The questions in the survey were a combination of validated constructs and constructs developed by the researcher. The development of the measurement tools has been pre-studied and pilot tested in order to increase precision, validity and reliability of the measurement tools, as well as making them more parsimonious.

Brown (2001) states that questionnaires are any written instruments that present respondents with a series of questions or statements to which they are to react either by writing out their answers or by selecting from among existing answers. It yields to quantitative data and due to provision for open-endedness, the instrument may be used to generate qualitative and exploratory data Dornyei (2007). Questionnaires were used together with interview guide to collect primary data.

#### **3.6.1 Validity**

The most important criterion of research is validity. Validity is concerned with the integrity of the conclusions that are generated from a piece of research. It is the degree to which an instrument measures what it purports to measure. It estimates how accurately the data in the study represents a given variable or construct in the study (Mugenda, 2008). Validity suggests fruitfulness and refers to the match between a construct, or the way a study conceptualizes the idea in a conceptual definition, and the data.

To establish the validity of the research instruments in the study, the researcher sought the opinion of experts in the field of study especially the supervisors. This facilitated the necessary revision and modification of research instruments therefore enhancing its validity.

### **3.6.2 Reliability**

Reliability is a test of how consistently a measuring instrument measures whatever concept it is measuring-the stability and consistency of measurement which helps to assess the “goodness” of a measure (Sekaran & Roger, 2010). Reliability is synonymous with the consistency of a test, survey, observation, or other measuring device. Reliability is increased by including many similar items on a measure, by testing a diverse sample of individuals and by using uniform testing procedures. Cronbach’s Alpha which is based on internal consistency was calculated using SPSS Statistics 17.0 software to establish the reliability of the research instruments. This methodology measures the average of measurable items and its correlation. Field (2009) contends that Cronbach Alpha value that is at least 0.70 suffices for a reliable research instrument. In this study a threshold of 0.70 was used to establish the reliability of the data collection instrument.

### **3.7 Pilot Test**

Pilot test aims at assessing the reliability of the instrument psychometric measures used in the study. Polit *et al.* (2001) describe a pilot study to be the pre-testing or trying out of a particular research instrument. A pilot test was conducted on 17 respondents of the study which constituted 10 per cent of the calculated sample population size of 172 respondents. Ten per cent of the larger population is the recommended sample size to carry out a pilot test Mugenda and Mugenda (2003). Their views were not eligible for the main study but to ensure that the research instruments were consistent and were not ambiguous. Pilot study helps in refining the questionnaires and making them more relevant and meaningful (Kothari, 2007).

### 3.8 Data Processing and Data Analysis

According to Sekaran (2003) data analysis is breaking up, separating, disassembling of research materials into pieces, parts, elements, or units. With facts broken down into manageable pieces, the researcher sorts and sifts them, searching for types, classes, sequences, processes, patterns or wholes with the aim of assembling or reconstructing the data in a meaningful or comprehensible fashion. The objectives of data analysis are getting a feel of the data, testing the goodness of the data and testing the hypothesis developed for the research Sekaran and Rodger (2010). SPSS Statistics 17.0 was used to aid in data analysis as well as to test hypothesis using T-tests and F-tests. Correlation analysis, multiple regression analysis and ANOVA were carried out. Tables were used to summarize responses for further analysis and facilitate comparison. The findings were presented using tables and scatter plots.

The following models were to be tested:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \epsilon$$

.....**Model One**

$$Y = \beta_0 + \beta_1 X_1 * X_7 + \beta_2 X_2 * X_7 + \beta_3 X_3 * X_7 + \beta_4 X_4 * X_7 + \beta_5 X_5 * X_7 + \beta_6 X_6 * X_7 + \epsilon$$

.....**Model Two**

$Y_i$  = is the dependent variable which is (Entrepreneurship Performance)

$\beta_0$  = the regression co-efficient  $\beta_1 \beta_2 \beta_3 \beta_4$  = slopes of the regression equation

$X_1$  = Opportunity Competence

$X_2$  = Relationship Competence

$X_3$  = Conceptual Competence

$X_4$  = Organizing Competence

$X_5$  = Strategic Competence

$X_6$  = Commitment Competence

$X_7$  = Business External Environment

$\varepsilon$  = error term which is distributed about a mean of 0

### **3.9 Ethical Issues**

Ethics in business research refers to a code of conduct or expected societal norm of behavior while conducting research. Ethical conduct should be reflected in the behavior of the researcher who conduct the investigation, the participants who provide the data, the analyst who provides the results and the entire research team that presents the interpretation of the results and suggests alternative solutions (Uma *et al.*, 2010). Informed consent of the subjects was sought. The researcher adhered to the primary responsibility of treating the information given by the respondents as strictly confidential and guarding their privacy. The researcher also made sure that the purpose of the research was clearly explained to the respondents before embarking on the exercise. Respondent's self-esteem and self-respect was not in any way violated by the researcher.

During collection of primary data, the researcher refused to offer tips in order to get respondents fill the questionnaire or respond to interview. No one was forced to respond to the survey and for those that did not wish to avail themselves as participants, the individual desire was respected. Respondents were fully made aware that the research was purely academic and they had the right to agree or refuse to respond to the questionnaire or interview. This led to a total of 123 respondents out of the sampled 172 respondents.

The researcher tried as much as possible to stick to ethical issues concerning research citations and referencing so as to avoid plagiarism. The study was carried out in Kiambu County though the neighboring County of Murang'a was quite near and easily accessible. There was no misrepresentation or distortion in reporting the data collected during the study.

## **CHAPTER FOUR**

### **FINDINGS AND DISCUSSION**

#### **4.1 Introduction**

This chapter presents the findings of the research in form of descriptive and inferential statistics, and discussion of data of 123 or 72 percent who returned the questionnaires and interviewed out of the sampled 172 respondents. The chapter is divided into five sections. Section one presents the findings of the biographic data, section two reports Entrepreneurship Performance's descriptive and inferential statistics. Section three reports the findings of the Entrepreneurial Competencies and their relationship with Entrepreneurship Performance while section four presents the effect of Business External Environment on the relationship between Entrepreneurial Competencies and Entrepreneurship Performance. Finally, section five presents the discussion of the findings.

#### **4.2 Response Rate**

The intended sample size for the study was 172 respondents as per the calculations under sample and sampling technique. The researcher distributed research questionnaires to the intended sample and a total of 123 well filled questionnaires were returned. Out of the 172 self-administered questionnaires, 20 got spoilt, 12 were blank while 17 were never returned. This translated to a response rate of 72 per cent. This response rate ensured sufficient data was available which could be generalized to determine the study variables. Orodho (2009) observes that a response rate of above 50per cent contributes towards gathering of sufficient data that could be generalized to represent the opinions of respondents about the study problem. Sekaran (2008) argues that any response above 75 per cent is classified as best.

### **4.3 Background Information**

This section presents the descriptive statistics of the biographic data of the selected graduates with physical challenges with higher education and training qualifications operating enterprises in Kiambu County in Kenya. Biographic data provided preliminary results (frequency distributions, mode, and standard deviation) of the study that were used to supplement entrepreneurial competencies, Business External Environment constructs and Entrepreneurship Performance constructs data. Data covered were from business category, subsector of business, years of business operation, gender, age bracket, number of employees, position held in business, academic qualification, business ownership, entrepreneurship training, and finally, form of disability.

Cross tabulation was carried out to relate the biographic data with Entrepreneurship Performance since the information gathered using general questions in the questionnaire generated such rich information that the researcher found it necessary to carry out cross tabulation. Cross tabulating certain aspects for instance, age of the person, level of education, form of disability, number of years in business, and knowledge in entrepreneurship with the dependent variable Entrepreneurship Performance helped to transform the bio-data into a representative representation of the research findings. The cross tabulation generated useful information that assisted in coming up with in-depth recommendations in the last chapter.

#### **4.3.1 Business Category**

This question intended to capture various categories of businesses that persons with physical challenges operate. It categorized businesses into four major categories according to the number of employees. Micro enterprise consisted of 1-4 employees including where the manager run the business single-handedly. Small enterprise consisted of 5-9 employees while medium enterprise consisted of 10-49 employees and, a large enterprise consisted of business with more than 50 employees. Table 4.1 indicates that micro enterprises that formed the smallest category of business reported 51.2 per cent showing that majority of persons with physical challenges had

their businesses classified as micro. Small businesses followed closely with 44.7 per cent, while medium category businesses registered 4.1 per cent. There were no forms of businesses categorized as large enterprises.

**Table 4.1: Distribution of Business Category**

	Frequency	Percent
Micro	63	51.2
Small	55	44.7
Medium	5	4.1
Total	123	100.0

#### **4.3.2 Subsector of Business**

The findings from Table 4.2 depicted trade sub sector having the most number of respondents with 46.3 per cent. This was followed by the service industry with 34.1 per cent respondents and, with a 10.6 per cent came the agro-based sector. With the least number of respondents was “other” with 4.9 per cent which comprised of respondents in the fields of; Construction, Information Technology, Musicians, Artists and those operating institutions of learning for instance, nursery schools. The subsector with the fewest number of respondents was manufacturing which captured only 4.1 per cent of response rate. This comprised of detergent or food manufacturing.

**Table 4.2: Distribution of Sub-sector of Business**

Subsector	Frequency	Percent
Agro-based	13	10.6
Service Industry	42	34.1
Trade	57	46.3
Manufacturing	5	4.1
Other	6	4.9
Total	123	100.0

### **4.3.3 Years of Business Operation**

The number of years of experience in business depicted that most respondents had less than 10 years of experience with a 58.5 per cent response rate, see Table 4.3. Respondents in this category had other means of earning income such as from formal employment or just trying out their hand in business. They kept switching in-between businesses and were not stable in one business. Mostly, they run their businesses single handedly with one or no employee. This was followed by those between 11-20 years of experience with a response rate of 11 per cent. This category comprised of persons who considered their businesses as a source of livelihood. Their businesses were well established and with employees.

Respondents with 21-30 years of experience had 5.7 per cent response rate and this group comprised of lifestyle businesses. Finally, respondents with above thirty years of experience had 3.3 per cent response rate. This comprised of persons who had prior training in their area of expertise for instance tailoring, electrical, hair dressing and leather work.

**Table 4.3: Distribution of Years in Operation**

	Frequency	Percent
Less than 10 years	72	58.5
11 - 20 years	40	32.5
21 - 30 years	7	5.7
30 years and above	4	3.3
Total	123	100.0

#### **4.3.4 Gender**

From Table 4.4 it is clear that male gender dominated with a response rate of 59.3 per cent. Female gender followed with a response rate of 40.7 per cent. This means that there are more men than women with physical challenges operating businesses in Kiambu County in Kenya.

**Table 4.4: Distribution of Gender**

	Frequency	Percent
Male	73	59.3
Female	50	40.7
Total	123	100.0

#### **4.3.5 Age Bracket**

Table 4.5 shows the distribution of age among the physically challenged persons in business. The greatest number of respondents was in the range of 31-40 years of age with 43.1 per cent. The age bracket 41-50 years followed with 32.5 per cent respondents whereas, the respondents below thirty years of age occupied 13.0 per cent. This implied that the younger a person with physical challenges is, the more unlikely to drive a successful business. This may be as a result of opting to pursue other preferred careers in life. The ages between 31-40 years were respondents with already established careers and run their businesses as part time engagement having to employ someone.

The age bracket of 41-50 years comprised of persons with prior training and had the expertise in their forms of business that served as their source of livelihood. This group consisted of very ambitious respondents with majority expressing a need to enlarge as well as opening new branches elsewhere. The age bracket with the least number of respondents was fifty years and above with a response rate of 11.4 per cent. This group had established businesses that could be well described as “lifestyle businesses” that neither grew nor expanded. They preferred operating the businesses regardless of their profitability.

**Table 4.5: Distribution of Age**

	Frequency	Percent
Less than 30 years	16	13.0
31 – 40 years	53	43.1
41 – 50 years	40	32.5
51 years and above	14	11.4
Total	123	100.0

#### **4.3.6 Number of Employees**

Table 4.6 describes the number of employees per business. The highest response rate was between 1-4 employees which were categorized as micro enterprise with 85.4 per cent. This meant that majority of the physically challenged graduates operated very small businesses that required the owner manager and one employee. This was followed by the bracket of 5-9 employees which was categorized as small enterprise and had 12.2 per cent response rate. The least number of respondents were in the bracket of 10-49 employees with 2.4 per cent which is categorized as a medium enterprise. There was no response drawn for the category of large enterprise.

**Table 4.6: Distribution of Number of Employees in Business**

	Frequency	Percent
1- 4	105	85.4
5 – 9	15	12.2
10 – 49	3	2.4
Total	123	100.0

#### 4.3.7 Position Held in Business

Table 4.7 indicates the distribution of positions in business. The research established that majority of the respondents were owner managers with 87.0 per cent. This was evident in the micro enterprises where owner managers run their businesses single handedly or with one or two employees. This was followed by the general manager with 8.9 per cent response rate. This category was for businesses categorized as small enterprises with five to nine employees. The general manager controlled all the resources of the business. The respondents who run their spouse's businesses occupied 4.1 per cent. These were businesses whereby the owner was not directly involved in the daily running of the business thus delegated to the spouse.

**Table 4. 7: Distribution of Position Held in Business**

	Frequency	Percent
Owner manager	107	87.0
General manager	11	8.9
Spouse	5	4.1
Total	123	100.0

### 4.3.8 Academic Qualification

Table 4.8 shows the academic qualifications of the respondents. The researcher set to find out the relationship between Entrepreneurial Competencies of graduates with physical challenges and Entrepreneurship Performance. This was based on the argument that entrepreneurship is a compulsory course unit undertaken at higher education and learning institutions therefore, students had developed these competencies through education. The highest number of respondents had certificate level qualification with 34.1 per cent; followed closely by respondents with diploma level qualification at 31.7 per cent. Respondents at degree level of academic qualification were 26.8 per cent followed by respondents with masters qualifications at 1.6 per cent. The researcher obtained 5.7 per cent response from persons with physical challenges with basic education qualifications of secondary education.

**Table 4. 8: Distribution of Academic Qualifications**

	Frequency	Percent
Certificate level	42	34.1
Diploma level	39	31.7
Degree level	33	26.8
Masters level	2	1.6
Basic education	7	5.7
Total	123	100.0

### 4.3.9 Business Ownership

Table 4.9 shows the type of ownership of businesses among persons with physical challenges. Sole proprietor got the highest response rate with 75.6 per cent. This was followed by partnership form of business with 13.8 per cent response rate. The category known as “other” came third with 5.7 per cent response rate. It included the respondents running family businesses. Limited company recorded the least number of respondents with 4.9 per cent response rate.

**Table 4. 9: Distribution of Business Ownership**

	Frequency	Percent
Limited company	6	4.9
Partnership	17	13.8
Sole proprietor	93	75.6
Other	7	5.7
Total	123	100.0

**4.3.10 Entrepreneurship Training Undertaken**

Table 4.10 shows responses towards entrepreneurship training. Respondents with knowledge in entrepreneurship occupied 60.2 per cent. They indicated that they had learnt entrepreneurship education in college and university while pursuing their courses. Respondents without the knowledge of entrepreneurship had 39.8 per cent response rate. They were advanced in age and may have not had the opportunity to learn entrepreneurship education. Some respondents with basic education indicated that they had received entrepreneurship education through trainings offered by various financial institutions or in their merry-go-round groups. A small percentage of graduates indicated that they had not learnt entrepreneurship education while pursuing their courses. This shows that not all institutions of higher education and learning offer Entrepreneurship Skills course.

**Table 4. 10: Distribution of Knowledge in Entrepreneurship**

	Frequency	Percent
Yes	74	60.2
No	49	39.8
Total	123	100.0

#### 4.3.11 Form of Disability

Table 4.11 shows form of disability that graduates with physical challenges had. Respondents with acquired form of disability which means they were not born disabled but acquired it in the course of life through accidents or disease had 69.1 per cent response rate. Those with congenital form of disability which means that they were born disabled had 30.9 per cent response rate.

The argument by Shapero and Sokol (1982) that human behavior tends to be characterized by inertia that is, it does not change its course until an event or a series of events positive or negative occur that break such inertia was thus supported. Their model assumes that some type of displacing events may be necessary to stimulate the process. This event triggers a change in behavior, offering the actor a set of alternatives (Katz, 2001). The choice depends on the credibility that a person attributes to each of the alternatives. Entrepreneurship offers an alternative when formal employment may be threatened by the onset of disability.

**Table 4. 11: Distribution of Form of Disability**

	Frequency	Percent
Acquired	85	69.1
Congenital	38	30.9
Total	123	100.0

#### 4.4 Entrepreneurship Performance Descriptive Statistics

This section reports on the findings of Entrepreneurship Performance constructs sales and profits. Findings of the constructs of Entrepreneurship Performance are presented in frequency distribution tables. Factor analysis loadings and Cronbach's Alpha are presented to show that the scales used were reliable to the constructs intended for measurement. The descriptive and inferential statistics are presented as well.

#### **4.4.1 Sales Constructs**

The findings of the seven sales construct issues on a five point Likert scale, ranging from “Strongly disagree” to “Strongly agree” denoted that majority of respondents agreed that Entrepreneurial Competencies and Business External Environment constructs- Access to Finance and Business Location, affected sales construct of Entrepreneurship Performance of graduates with physical challenges. The issue, “Ability to recognize and take advantage of opportunities led to increased sales” experiencing highest frequency value of 83 or 67.5 per cent and the issue “Easy Access to Finances led to increased market share” having the least frequency value of 48 or 39.0 per cent. Table 4.12 shows the rating on sales of the businesses.

**Table 4. 12: Factor Rating on Sales**

S/No.	Sales	S.D per cent	D per cent	N.S per cent	A per cent	S.A Mode per cent	Mean	Median	
a	My ability to recognize and take advantage of opportunities has increased my sales volumes.	2.4	8.1	3.3	67.5	18.7	3.92	4.00	4
b	My efficiency in service delivery has improved my sales volume.	0.8	4.1	3.3	63.4	28.5	4.15	4.00	4
c	My relationship with my customers and suppliers has led to increased sales of my products/services.	0	0.8	3.3	48.8	47.2	4.42	4.00	4
d	I come up with new ideas on how to sell a product/service that does not move as fast as I want.	4.9	30.9	4.9	43.9	15.4	3.34	4.00	4
e	I have well laid strategies on how to improve my market share.	1.6	18.7	8.9	48.0	22.8	3.72	4.00	4
f	I am fully committed to satisfy my customers' needs.	0	0.8	2.4	49.6	47.2	4.43	4.00	4
g	Easy Access to Finances has led to increased market share.	16.3	30.9	2.4	39.0	11.4	2.98	4.00	4
	TOTAL		123						

Key: 1. Strongly Disagree 2. Disagree 3. Not Sure 4. Agree 5. Strongly Agree

In the Sales construct of Entrepreneurship Performance, majority of the respondents agreed that “Ability to recognize and take advantage of opportunities had increased their sales volumes” recording the highest frequency value of 83 or 67.5 per cent.

When this aspect was cross tabulated with the level of education of the respondents, those with certificate level of education scored the most with 34 or 80.95 per cent respondents out of 42 respondents with certificate qualifications agreeing that ability to recognize and take advantage of opportunities had increased their sales volumes. It was therefore, concluded that seeing and taking advantage of opportunities could not only be tagged to academic qualifications.

On the contrary, “Easy Access to Finances had led to increased market share” scored the least frequency value of 48 or 39.0 per cent. The respondents with degree level of education scored well in this aspect with 14 out of 33 respondents or 42 per cent, agreeing that easy Access to Finances had led to increased market share. Those with certificate level qualifications scored the least with 13 out of 42 respondents or 31 per cent agreeing to the statement. It was concluded that the more education a person had, the easier it was to access finance from financial institutions. The researcher deduced that attaining high qualifications in education may at times lead to formal employment. This income makes the financial institutions to trust such a person because of the capability to repay loans. Education adds knowledge and helps a person to make informed decisions concerning sources of capital during business formation and growth stages.

A frequency total value of 106 or 86.2 per cent agreed as well as strongly agreed thus, demonstrated that they practiced one of the most important aspect of an entrepreneur; one that clearly distinguishes an entrepreneur from a business person. Ability to recognize opportunities as they unfold from various means, work on the potential opportunities by thorough assessment and turn them into feasible opportunities has been hailed as an aspect of a competent entrepreneur by many entrepreneurship scholars. McClelland (1987) finds “To see and act on opportunities” as one of the competencies for successful entrepreneurs; Bwisa (2011) echoed that one of the most important entrepreneurial roles, is the ability to recognize and envision taking advantage of opportunities.

Shapero (1981) introduced the notion of entrepreneurial potential. He noted that potential entrepreneurs surface and take initiative when an attractive opportunity presents itself. Individuals perceive opportunities and for an opportunity to be seized, someone must first recognize it as a personally viable opportunity. When potential entrepreneurs and opportunities coincide, entrepreneurial behavior may take place and a new firm may eventually be founded.

A good response rate was recorded in the respondents' Efficiency in service delivery which as a result contributed to their improvement in sales volume. Considering that the respondents had physical disabilities, it was notable that disability was not a major hindrance to effective service delivery with a frequency total value of 113 or 91.9 per cent agreeing as well as strongly agreeing. While this aspect was cross tabulated with form of disability, it emerged that a 66 per cent of those with congenital form of disability and 62 per cent with acquired form of disability agreed that though they are persons living with disability, they are efficient in service delivery.

The researcher concluded that having a disability doesn't hinder one from effectively practicing activities of the business; it may be a little bit slower as compared to a person without disability but eventually work gets done therefore, disability is not inability. They tried all means possible to offer good services to their customers. They also chose opportunities that were desirable as well as feasible to them. This aspect concurs with Shapero and Sokol (1982) displacement event model also known as the "trigger" or "precipitating" event, that demonstrates having a disability can bring about a "push" or a "pull" to change course and much of which reflected on persons with physical disability since disability is limiting.

Respondents with a frequency total value of 118 or 96 per cent agreed and strongly agreed that their relationship with their customers and suppliers had led to increased sales of their products or services. Respondents comprising 54 per cent with diploma qualifications strongly agreed that their good relationship with customers had led to increased sales. Respondents with acquired form of disability comprising 49 per cent and those with congenital form of disability comprising 47 per cent also agreed.

These relationships were essential in the survival of their businesses and were related to person-to-person or individual-to-group-based interactions, for instance, as Thomas and Lau (2000) puts it; building a context of cooperation and trust, using contacts and connections, persuasive ability, communication and interpersonal skills. The relationships went broader to encompass business associates and networks. Respondents agreed with a frequency value of 73 or 59.3 per cent that they came up with new ideas of selling products that did not move as fast as they wished. Various responses like changing location, improving appearance of the product, and discounting on price surfaced.

A frequency total value of 44 or 35.8 per cent disagreed as well as strongly disagreed that there were other ways of selling products that did not move as fast as they wished other than carrying them home. Innovativeness is an aspect that distinguishes an entrepreneur from a business person. Innovativeness reflects a firm's tendency to engage in and support new ideas, novelty, experimentation, and creative processes that may result in new products, services or technological processes (Lumpkin & Dess, 1996). There was very little of these tendencies among the respondents and this may have contributed to the "not-so-good" Entrepreneurship Performance.

Small firms are one of the vehicles in which entrepreneurship thrives Wennekers (1999). Among those who agreed to have come up with new ideas as well as new ways of doing things were 19 respondents out of 39 or 49 per cent with diploma level qualifications. 42.42 per cent or 14 out of 33 respondents with degree level qualifications also agreed while 50 per cent (1 out of 2) respondents with master's qualification agreed. It seemed the higher the education, the more innovative one became. Among this, 45 per cent of respondents with congenital form of disability and 44 per cent of acquired form of disability concurred with the statement.

A response frequency total value of 87 or 70.8 per cent agreed as well as strongly agreed to have had well laid strategies on how to improve their market share. Having a bigger picture of the business was a response many had in mind. Setting short term goals that culminated in long term goal was a view many upheld. Many respondents had set strategies on how to obtain capital for restocking their businesses. A few

respondents had business plans which were presumed to have been made for the sole purpose of acquiring government funds like Uwezo Fund and Youth Fund. A business plan is an important document that serves as a blue print or a road map for a business.

Majority kept records of their sales and could be able to tell the direction of their enterprises by analyzing their sales history. Respondents with degree qualifications formed a response rate of 58 per cent of those that agreed to have well laid strategies of improving market share. This compared badly with respondents with certificate qualification with 16 out of 42 or 38.0 per cent agreeing to the same. The researcher concluded that the more educated one was, the much easier it was to lay strategies for improving market share. Strategic management is an aspect that is mostly acquired through education and training and therefore persons with physical challenges need to be encouraged to search for knowledge in business.

Respondents comprising of a frequency total value of 119 or 96.8 per cent agreed and strongly agreed that they were fully committed to satisfying their customers' needs. Responses that were recorded comprised "Treating their customers with courtesy and honesty, addressing customer complaints effectively, offering customer's after-sales-services, offering quality goods and services, efficiency in service delivery, stocking highly demanded goods, and offering goods on credit". Others felt that they needed to enroll for some training in order to sharpen their skills in the areas of insufficiency. Respondents from all over the academic divide strongly agreed with 50 per cent and above that they were fully committed to satisfy their customers' needs. It was concluded that when it came to commitment to one's business, it did not matter what qualifications one had. Commitment Competence did not come through acquiring more education qualifications but, 'may be' with greater qualifications and greater pursuit of knowledge, one could decide to be committed to a course.

Competing responses arose under the issue "Easy Access to Finances led to increased market share" with a frequency total value 62 or 50.4 per cent agreeing as well as strongly agreeing while a frequency value of 58 or 47.2 per cent disagreed as

well as strongly disagreed with the issue. Respondents who were not sure had a frequency value of 3 or 2.4 per cent. Respondents with degree qualifications formed a 42 per cent response rate that agreed that easy Access to Finance had led to increased market share. Those with certificate qualification had the least response rate that agreed, otherwise, majority strongly disagreed. It was concluded that there exists a correlation between level of education and Access to Finance from financial institutions. Graduates with physical challenges who had been formally employed and with better educational qualifications were in a position to offer collaterals thus, they easily accessed bank loans as opposed to those who were purely self-employed and with lower educational qualifications.

The issue of Access to Finances was one of the major issues that determined the success or failure of businesses of graduates with physical challenges. Many respondents complained of financial institutions and their discriminating practices on basis of disability. Persons with disabilities are made to fill up so many documents as they get loan advancements from banks. In some banks they are totally unwelcome, however, where they get welcomed, stringent measures are put in place in order to disqualify them whenever small doubt arises. The percentage that agreed were respondents that got financial help from the Sacco Societies whereby they have membership belonging.

The Cronbach's Alpha coefficient of the Sales construct was .749 denoting that the measures were reliable since they were more than .700; hence, the measurements were regarded as good. Table 4.13 shows the factor loadings, Cronbach's alpha of Sales constructs.

**Table 4. 13: Factor Loadings and Cronbach's Alpha of Sales**

<b>S/No.</b>	<b>Scale</b>	<b>Factor Loadings</b>
a	My ability to recognize and take advantage of opportunities has increased my sales volumes.	0.451
b	My efficiency in service delivery has improved my sales volume.	0.572
c	My relationship with my customers and suppliers has led to increased sales of my products/services.	0.696
d	I come up with new ideas on how to sell a product/service that does not move as fast as I want.	0.707
e	I have well laid strategies on how to improve my market share.	0.803
f	I am fully committed to satisfy my customers' needs.	0.631
g	Easy Access to Finances has led to increased market share.	0.648
	<b>Total</b>	<b>123</b>
	<b>Cronbach's Alpha</b>	<b>0.749</b>

#### 4.4.2 Profit Construct

The results of seven profit constructs issues on a five point Likert scale, ranging from “Strongly disagree” to “Strongly agree” denoted that majority of respondents agreed that the Entrepreneurial Competencies and Business External Environment constructs affected Profit construct of the businesses of graduates with physical challenges with the issue, “Ability to take risks when a new opportunity arises maximizes profits” having the highest rating value of 56.9 per cent and the issue “Necessary resources (financial, human, technical) that makes the production cost lowered thereby raising profits” having the least rating of 18.7 per cent. Table 4.14 reports the rating on profit of businesses.

**Table 4. 14: Factor Rating on Profit**

S/No.	Scale	S.D per cent	D per cent	N.S per cent	A per cent	S.A per cent	Mean	Median	Mode
a	My ability to take risks when a new opportunity arises has led to increased market share thus raising my profits.	1.6	5.7	5.7	56.9	30.1	4.08	4.00	4
b	My good relationship with my customers, suppliers and business networks has led to growth of my income.	2.4	0	2.4	48.8	46.3	4.37	4.00	4
c	The improvement of my products/services has led to more demand thus maximizing on profits	2.4	19.5	0.8	45.5	31.7	3.85	4.00	4
d	My regular attendance to business training has enabled me attain knowledge that I need in my business thus improving my profits.	11.4	22.8	4.9	26.8	34.1	3.50	4.00	5
e	I have the necessary resources (financial, human, technical) that I need in my business that makes the production cost lowered thereby raising profits.	28.5	39.0	6.5	18.7	7.3	2.37	2.00	2
f	I plan to open a new branch in order to meet the customers' demands so as to improve on profits.	10.6	22.0	14.6	39.0	13.8	3.24	4.00	4
g	The external environment of my business (Access to Finance and Business Location) makes me identify strategies to improve my income.	12.2	27.6	4.1	44.7	11.4	3.15	4.00	4
TOTAL									
123									

Key: 1. Strongly Disagree 2. Disagree 3. Not Sure 4. Agree 5. Strongly Agree

In the Profit construct of Entrepreneurship Performance, majority of the respondents agreed that “Ability to take risks when a new opportunity arose had led to increased market share thus raising their profits”, with a frequency value of 70 (56.9 per cent). When age was cross tabulated with “Ability to take risks when a new opportunity arises” the results indicated that respondents within the age bracket of 31–40 years

agreed with the highest frequency of 31 (58.49 per cent) out of 53 respondents in the age bracket. Moreover, within the same age bracket, 17 (32.07 per cent) respondents strongly agreed to the statement. However, the age bracket of 41–50 also had good responses to the statement with 23 (57.5 per cent) respondents out of 40 agreeing and 17 (42.5 per cent) respondents strongly agreeing to be able to take risks when a new opportunity arose.

Responses were low among respondents that belonged to the bracket of less than 30 years and those above 51 years of age. The researcher concluded that the most favorable age for a person with physical challenges to be able to spot opportunities and pursue them is that of 31-50 years. The sectors under research namely; agro-based, service industry, trade, manufacturing and “other” were cross tabulated with ability to spot opportunities. Manufacturing sub sector scored the least, whereas trade industry proved to be the subsector where most graduates with physical challenges were able to spot opportunities.

The issue “I have the necessary resources (financial, human, and technical) that I need in my business that makes the production cost lowered thereby raising profits” scored the least frequency value of 23 (18.7 per cent). Respondents occupying a frequency total value of 107 (87 per cent) agreed as well as strongly agreed to the issue, however, they noted that they took risks whenever it was necessary to do so. The researcher avoided the question regarding the amount of profit obtained since the respondents could not have been sincere in their responses. This was fuelled by the fact that the respondents could not easily believe that the research was purely academic and not for some Government or a Non-Governmental Organizations aiming at disbursing funds.

Respondents representing a frequency total value of 117 (95.1 per cent) attributed their good relationship with their customers, suppliers and business networks to the growth of their income. Relationships seemed to thrive in the age bracket of 31-40 years with 29 (54.72 per cent) out of 53 respondents strongly agreeing that their good relationship with customers and suppliers had led to growth of their income. All the same the age bracket between 41-50 years had 21 (52.5 per cent) respondents

agreeing to the statement. It was concluded that relationships amongst graduates with physical challenges thrived because the networks were so strong and regular meetings in their various disability groups were often.

Respondents with a frequency total value of 95 (77.2 per cent) agreed as well as strongly agreed that the improvement of their products or services had led to more demand thus maximizing on profits. A cross tabulation between age and innovativeness was carried out and it was found that those belonging to 31-40 years of age were more active in improving their products and services with 26 (49.05per cent) respondents agreeing and 15 (28.3per cent) respondents strongly agreeing that the improvement of their goods and services had led to more demand and this had translated to profits. More so, those between 41-50 years agreed with 21 (52.5per cent) respondents and 14 (35per cent) strongly agreeing to the statement. The researcher concluded that innovativeness was an aspect that was reflected along all age groups but mostly among the younger generation that is not rigid in their thought process and love experimenting with new ideas and technologies. They are open to receive any advice that they deem vital in business through all means possible.

Respondents belonging to the manufacturing sector admitted that they repackaged their products better in order to look new and thus sold them faster. For those in transport industry, they improved on their services for instance, by installing cell phone numbers in their public transport vehicles whereby customers would call to air their grievances. Those that required to sharpen their skills in their areas of expertise were prepared to do so whenever they stumbled on an opportunity. Concerning the issue “My regular attendance to business training has enabled me attain knowledge that I need in my business thus improving my profits”, respondents agreed as well as strongly agreeing with a total frequency value of 75 (60.9 per cent).

Cross tabulation between age and business training attendance in search for knowledge indicated that this was an activity carried out among graduates with physical challenges. In the age bracket of 31-40 years, 16 (30.19 per cent) disagreed having attended any training in order to improve their businesses, however, 14 (26.42 per cent) agreed while 20 (37.74 per cent) strongly agreed. In the age bracket of 41-

50 years it was no different with 8 (20 per cent) respondents strongly disagreeing while 17 (42.5per cent) strongly agreed. The researcher concluded that the younger generation searched for knowledge as opposed to older ones who may have felt that they were experts in business. It is true that knowledge is not static and one should keep themselves well versed in dynamics of current information and technologies. Knowledge should be made available for those seeking it in order to experience growth in business.

Most of the trainings that the respondents claimed to have attended were those addressing the government funds like the Uwezo Fund since persons with disabilities are among the stipulated beneficiaries of the fund. Others claimed that they invited trainers to their small groups whenever they found it necessary. The trainings had positive effect on their businesses since they were able to apply knowledge learned that translated to improved profits.

The issue “I have the necessary resources (financial, human, technical) that i need in my business that makes the production cost lowered thereby raising profits” had the most respondents disagreeing as well as strongly disagreeing with a frequency total value of 83 or 67.5 per cent. A cross tabulation between age and resources revealed that all across age brackets respondents disagreed to have had the necessary resources. The age bracket of below 30 years had 9 or 56.25 per cent disagreeing. The age bracket of 31-40 years indicated that 17 or 32.08 per cent strongly disagreed while 22 or 41.51 per cent disagreed. The age bracket of 41-50 had 9 or 22.5 per cent strongly disagreeing while 13 or 32.5 per cent disagreed to have the resources needed to carry out business effectively.

The researcher concluded that the issue of resources needed in order to carry out a successful business needs much attention and proper consideration by those concerned. Policies addressing the plight of persons with physical challenges in business need to be written. The policy could address among others, issues touching on interest rates charged on this minority group and opt to lower it or scrap it altogether.

Majority of businesses sampled were micro and small enterprises which did not have the capacity to acquire resources due to financial constraints. Financial resource was the greatest hurdle to overcome because without enough finances, it was almost impossible to have the human resource, it was notable that most businesses were run by owner managers. A response frequency total value of 32 or 26 per cent was the category that agreed as well as strongly agreeing that they had the necessary financial, human and, technical resources needed. These were respondents belonging to medium enterprises.

The issue “I plan to open a new branch in order to meet the customers’ demands so as to improve on profits” scored lowly among the respondents who agreed as well as strongly agreed with a frequency total value of 65 or 56.1 per cent. A frequency total value of 40 or 32.6 per cent disagreed as well as strongly disagreed that they planned to open up business elsewhere. A cross tabulation between age and plans to open up new branches indicated that those below 30 years were undecided or not sure, while 26 or 49.06 per cent of the age bracket 31-40 years agreed. For the age bracket of 41-50 years, 16 or 40 per cent agreed while 7 or 17.5 per cent strongly disagreed. From these findings, the researcher concluded that the younger generation needed more time to try their hand in business as they experience growth along the way so that in their 30’s they would make decision concerning business expansion. This young age also meant that one could still be depending on parents or guardians thus lacked freedom in making independent decisions.

The biggest expansion in business was experienced in age bracket of 41-50. At this age one is expected to have matured, has a family/home and is independent in decision making. Those above 50 years wished to expand but preferred mostly to put more effort in their current businesses, to make them give better returns. Failure to expand their businesses could be attributed to lack of financial resources. Lack of this very prime resource meant that growth was very minimal.

Performance is reflected in some level of growth, as indicated in firm’s sales and income Maragia (2008), graduates with physical challenges who planned to expand their businesses reflected this in business. However there were those who focused on

non-financial measures of success which included job satisfaction, flexibility, balance between work and family responsibilities and career progress as pointed by Kuratko *et al.* (1997), this category comprised of graduates with physical challenges who were strongly opposed to expanding their businesses. Success is more than money and the pursuit of financial goal involves some aspects of intrinsic reward for the entrepreneurs themselves.

Respondents responded to the issue “The external environment of my business (Access to Finance and Business Location) makes me identify strategies to improve my income” by agreeing as well as strongly agreeing with a frequency total value of 69 or 56.1 per cent. A frequency total value of 49 or 39.8 per cent disagreed as well as strongly disagreed that the external environment was a factor in their Entrepreneurship Performance. A cross tabulation between age and Business External Environment was carried out and the outcome was that the age bracket of 31-40 years had 25 or 47.17 per cent respondents agreeing while 18 or 33.96 per cent respondents disagreed. In the age bracket of 41-50 years 19 or 47.5 per cent agreed while 8 or 20 per cent strongly agreed that Access to Finance and Business Location helped them to find strategies to improve their income.

The researcher concluded that location of business was an issue of concern in Entrepreneurship Performance of graduates with physical challenges. A location could either be advantageous or disadvantageous to a person with physical challenges. The percentage that agreed to the statement had studied their environment in terms of terrain prior to starting their businesses and had settled for a convenient place that was easily accessible. Respondents in prime locations where target customers were available seemed to perform better in business contrary to those that chose “near home” as their Business Location. A Business Location that was near one’s home (where assistance was available) lacked customers and this led to minimal Entrepreneurship Performance.

Financial support was lacking from banking institutions and most respondents blamed the banks for failure to evaluate competency and give equal opportunities to disabled and non-disabled alike. They urged the financial institutions to introduce a

special package tailor-made for persons with disabilities that offered a waiver on some financial charges. They also urged the banks to be easily accessed by persons with disabilities by introducing ramps and rails as well as proper floors. The Cronbach's Alpha coefficient of the Profit construct was .788 denoting that the measures were reliable since they were more than .700, hence, the measurements were regarded as good. Table 4.15 shows the factor loadings, Cronbach's alpha of Profit construct.

**Table 4. 15: Factor Loadings and Cronbach's Alpha of Profit**

S/No.	Profit	Factor Loadings
a	My ability to take risks when a new opportunity arises has led to increased market share thus raising my profits.	0.681
b	My good relationship with my customers, suppliers and business networks has led to growth of my income.	0.702
c	The improvement of my products/services has led to more demand thus maximizing on profits	0.817
d	My regular attendance to business training has enabled me attain knowledge that I need in my business thus improving my profits.	0.717
e	I have the necessary resources (financial, human, technical) that I need in my business that makes the production cost lowered thereby raising profits.	0.580
f	I plan to open a new branch in order to meet the customers' demands so as to improve on profits.	0.583
g	The external environment of my business (Access to Finance and Business Location) makes me identify strategies to improve my income.	0.641
	<b>Total</b>	<b>123</b>
	<b>Cronbach's Alpha</b>	<b>0.788</b>

#### 4.4.3 Reliability Test for Business External Environment

Table 4.16 reports on the findings of the moderating variable Business External Environment which had Access to Finance as one of its constructs. Reliability test findings are presented in the table. Factor loadings and Cronbach's Alpha are

presented to show that the scales used were reliable to the constructs intended for measurement. The Cronbach's Alpha coefficient of the Access to Finance construct of Business External Environment was .780 denoting that the measures were reliable since they were more than .700; hence, the measurements were regarded as good.

**Table 4. 16: Reliability Results for Access to Finance**

<b>Component Matrix</b>	
	Component 1
Income tax waiver for PWDs has impacted positively on the performance of my business.	.816
Easy Access to Finances from banks has resulted to better performance in business.	.796
Lack of discrimination on the basis of disability by loan guarantors has impacted positively on my performance in business.	.796
I have Access to Finances from my SACCO thus improving my Entrepreneurship Performance.	.734
I have the financial resources that I need to boost my business to better performance.	.789
Social cultural considerations about the issue of disability have been critical in getting funds from financial institutions	.410
I have benefited from government funds like Uwezo, Women and Youth funds	.404
Extraction Method: Principal Component Analysis. a. 1 components extracted.	
<b>Reliability Statistics</b>	
Cronbach's Alpha	N of Items
.780	7

Table 4.17 shows factor loadings, Cronbach's alpha of Business Location construct of the moderating variable Business External Environment. The Cronbach's Alpha coefficient of the Business Location construct of Business External Environment was .700 denoting that the measures were reliable since they met the threshold of .700, hence, the measurements were regarded as good.

**Table 4. 17: Reliability Results for Business Location**

<b>Component Matrix</b>	
	Component 1
I encounter no barriers in the environment as I access my Business Location therefore I save on time thus improving my performance in business.	.601
The building where my business is located is “disability friendly” whereby I am able to carry out my activities thus contributing to my performance.	.421
The safe location of my business has contributed to better performance in business.	.564
The location of my business greatly contributes to the sales of my products/services thus improving on performance.	.762
The fact that I am situated along a busy street has impacted positively to performance	.806
The location of my business dictates my operations hours thus it greatly affects my performance	.465
My customers are not bothered by the location of my business	.798
Extraction Method: Principal Component Analysis. a. 1 components extracted.	
<b>Reliability Statistics</b>	
Cronbach's Alpha	N of Items
.700	7

#### **4.5 Inferential Statistics**

The statistical models in this study demonstrated the regression analysis of the data for graduates with physical challenges running businesses in Kiambu County in Kenya. The models included the overall model that involved all the independent variables, and the statistical model that involved the moderating variable against all the independent variables. These statistical models were:

**Model 1**

$$Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \epsilon \dots \dots \dots 1$$

$Y_i$  = Entrepreneurship Performance (the dependent variable)

$\beta_0$  = the regression coefficient

$\beta_1 \beta_2 \beta_3 \beta_4 \beta_5 \beta_6$  = slopes of the regression equation

$X_1$  = Opportunity Competence

$X_2$  = Relationship Competence

$X_3$  = Conceptual Competence

$X_4$  = Organizing Competence

$X_5$  = Strategic Competence

$X_6$  = Commitment Competence

$\epsilon$  = the error term which is distributed about a mean of zero.

To test the influence of the moderating variable, the following model was used to describe the proportion of the X-Y relation that was attributable to Z, in this case it was Business External Environment that moderated the model.

**Model 2**

$$Y = \beta_0 + a X + b Z + cXZ + \epsilon \dots \dots \dots 2$$

Where a, b and c are unstandardized regression coefficients

Z = Business External Environment

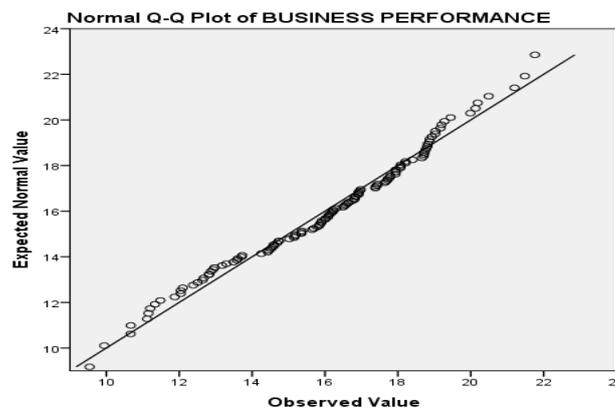
The effect of this intervention was being considered and the results indicated a significant change in multiple R<sup>2</sup> for model 1 and 2.

#### 4.5.1 Test on Normality of Entrepreneurship Performance

The Gaussian distribution is one of the methods used to determine how well the data is distributed. The best way to evaluate how far data deviates from the Gaussian is to look at the graph and see if the distribution deviated grossly from a bell-shaped normal distribution (Graphpad, 2011). Lapan *et al.* (2012) observe that in order to fit a linear model, the dependent variable has to be normally distributed. The Kolmogorov-Smirnov (KS) test was used to confirm normality in this study. The Q-Q plot was drawn as discussed below.

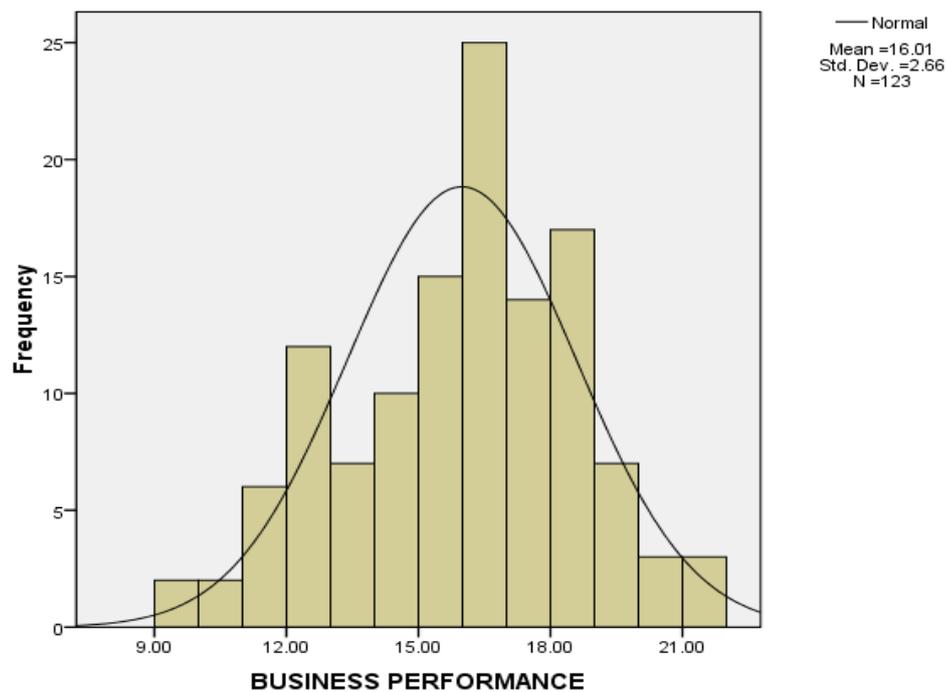
#### 4.5.2 The Quantile-Quantile (Q-Q) Plot of Entrepreneurship Performance

The Q-Q plot is a reliable way to determine whether the data deviate from other distributions and is mostly interested in the normal distribution. The resulting scatter plot shows the relationship between the actual observed values and what those values would be expected when the data is normally distributed. Graphpad (2011) observe that the potential to have normal residuals is to have a dependent variable which is normally distributed. For data to be normally distributed, the observed values should be spread along the straight diagonal line. This is shown in figure 4.1 which indicated that most of the observed values were spread very closely to the straight line. There was, therefore, a high likelihood that the data was normally distributed.



**Figure 4. 1: The Q-Q Plot of Entrepreneurship Performance**

The Q-Q plot for normality test showed that the normality condition for the dependent variable was fulfilled since most of the expected normal values fell on the linear line.



**Figure 4. 2: Histogram of Normality Test of Entrepreneurship Performance**

The normality of the dependent variable was further confirmed by the results in the histogram which had a bell shape see Figure 4.2. In order to evaluate how far data was from Gaussian distribution, it was best done by looking at the graph and seeing if the distribution deviated grossly from a bell shaped normal distribution. In this study there was no gross deviation thus the data was normal. The results indicated a bell shaped distribution as presented in figure 4.2 which confirmed that the dependent variable which was Entrepreneurship Performance was normally distributed among graduates with physical challenges running businesses in Kiambu County in Kenya.

### 4.5.3 Kolmogorov-Smirnov Test on Entrepreneurship Performance

The Kolmogorov-Smirnov test is a non-parametric test that can be used to test the underlying distribution of a given random variable. The Kolmogorov-Smirnov test was used to determine normality in this study. To test whether the dependent variable was normal in distribution, the following hypotheses were considered:

$H_0$ : The dependent Variable is normally distributed.

$V_s$

$H_1$ : The dependent Variable is not normally distributed.

Based on the above concept, we reject the null hypothesis when the significance level is less than 0.05 otherwise we fail to reject the null in favor of the alternative hypothesis.

**Table 4. 18: Kolmogorov-Smirnoff Test**

One-Sample Kolmogorov-Smirnov Test		ENTREPRENEURSHIP PERFORMANCE
N		123
Normal Parameters <sup>a,b</sup>	Mean	16.0142
	Std. Deviation	2.66026
	Absolute	.076
Most Extreme Differences	Positive	.053
	Negative	-.076
Kolmogorov-Smirnov Z		.839
Asymp. Sig. (2-tailed)		.483

*a. Test distribution is Normal.*

*b. Calculated from data.*

The summaries in table 4.18 showed that the test statistic was  $Z = 0.839$  with a p-value of 0.483. The study therefore failed to reject the null hypothesis and concluded that the dependent variable (Entrepreneurship Performance) was normally distributed

and therefore fitting a linear model to the data was justified. The table further showed that Entrepreneurship Performance was approximately normally distributed with a mean of 16.0142, standard deviation of 2.66026 and the total number of respondents were 123. The dependent variable should be normally distributed since the study used multiple linear regression models. Lapan (2012) argues that for such multiple linear regression models, the condition of normality must be satisfied for accuracy in data analysis to be achieved.

## **4.6 Opportunity Competence and Entrepreneurship Performance**

### **4.6.1 Reliability Test for Opportunity Competence**

In order to measure the reliability of the gathered data, Cronbach's Alpha was applied. According to Zinbarg (2005), Cronbach's alpha is a coefficient of reliability that gives an unbiased estimate of data generalizability. An alpha coefficient of 0.70 or higher indicates that the gathered data is reliable as it has a relatively high internal consistency and can be generalized to reflect opinions of all respondents in the target population (Zinbarg, 2005). The following is the reliability test of Opportunity Competence which is related to recognizing market opportunities through various means. These competencies are distinguished into three clusters of identifying, assessing and seeking market opportunities. Table 4.19 contains leading statements that were used to capture this competence area.

**Table 4. 19: The Reliability Results for Opportunity Competence**

<b>Component Matrix</b>	
	Component 1
Seize high-quality business opportunities.	.861
Perceive unmet consumer needs.	.777
Look at old problems in new ways.	.880
Identify goods or services customers want.	.912
Treat new problems as opportunities.	.774
Actively look for products or services that provide real benefit to customers.	.909
Have marketed very many new lines of products or services in the past 3 years.	.472

Extraction Method: Principal Component Analysis.  
a. 1 components extracted.

<b>Reliability Statistics</b>	
Cronbach's Alpha	N of Items
.878	7

To test the first null hypothesis ( $H_{01}$ ) that stated that, there is no significant relationship between Opportunity Competency and Entrepreneurship Performance of graduates with physical challenges in Kiambu County, a reliability test was carried out. The test indicated a Cronbach's Alpha Coefficient of the Opportunity Competence in Table 4.19 was .878 indicating that the measures were reliable since they were more than .700 therefore, regarded as very good and was the coefficient that recorded the best. This translated to mean that the research tools were well constructed and measured what they purported to measure.

#### 4.6.2 Factor Rating on Opportunity Competence

Factor analysis was adopted in order to reduce the number of indicators or factors under each research variable and retain only those indicators relevant in explaining the study variables. Factor analysis is an exploratory tool used to help the researcher make decisions on whether the variables under investigation explain the dependent variable (Field, 2005).

Table 4.20 contains the statements that were used to capture information in this competence area. Responses are indicated in form of percentages and measures of dispersion being mean, median and the mode. It indicates the different responses from the research respondents.

**Table 4.20: Factor Rating on Opportunity Competence**

S/No	Issue	S.D per cent	D per cent	N.S per cent	A per cent	S.A	Mean	Median	Mode
a	Seize high-quality business opportunities.	4.9	6.5	3.3	42.3	43.1	4.12	4.00	5
b	Perceive unmet consumer needs.	0.8	4.9	4.9	53.7	35.8	4.19	4.00	4
c	Look at old problems in new ways.	1.6	5.7	8.1	54.5	30.1	4.06	4.00	4
d	Identify goods or services customers want.	0	3.3	0.8	42.3	53.7	4.46	5.00	5
e	Treat new problems as opportunities.	1.6	8.9	4.9	53.7	30.9	4.33	4.00	4
f	Actively look for products or services that provide real benefit to customers.	0.8	4.1	1.6	48.0	45.5	4.33	4.00	4
g	Have marketed very many new lines of products or services in the past 3 years.	14.6	30.9	4.1	27.6	22.8	3.13	4.00	2
TOTAL		123							

The rating on Opportunity Competence issues on a five point Likert scale indicated that majority of respondents agreed that Opportunity Competence affected financial

performance of businesses of graduates with physical challenges with the issue, “Look at old problems in a new way” recording a highest frequency value of 67 or 54.5 per cent. All levels of education qualifications agreed to the statement with respondents at certificate level agreeing at 25 or 59.52 per cent, respondents at diploma level agreed at 24 or 61.54 per cent. Among the respondents, those that had undergone entrepreneurship education were 39 or 52.70 per cent that agreed to have looked at old problems in a new way, while 28 or 57.14 per cent respondents who did not undergo entrepreneurship education also agreed.

This could be translated to mean that even without entrepreneurship education, one could still be able to look at a problem in a new and better way but of course, with entrepreneurship knowledge one attains a better and wider view. Among the respondents with acquired form of disability 47 or 55.3 per cent agreed to look at old problems in a new way whereas, 20 or 52.63 per cent respondents with congenital form of disability agreed. The researcher deduced that having acquired, or congenital form of disability did not hinder one from having a positive view of problems. This could be an aspect of behavior or psychological make-up of a person; a person’s character.

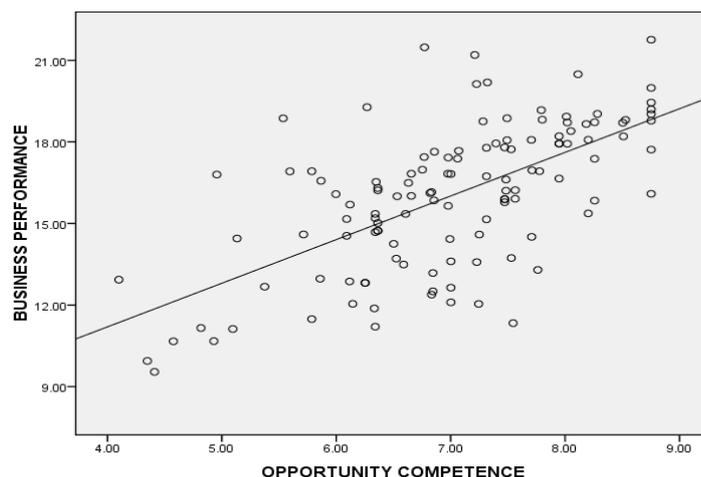
The issue, “Have marketed many new lines of products or services in the past three years” recording the least frequency value of 28 or 27.6 per cent. Table 4.20 reports rating on Opportunity Competence. The respondents that agreed to have marketed new lines of products gave issues like creating websites for their business or installing television and radio in their commercial vehicles for better marketing, these were mostly from service industry. Respondents looking at old problems in a new way had diverse reasons to support their claim, for instance, many claimed that if a product was not moving as fast as expected some of the ways to curb such was to reduce its production, rebrand, change display location, or lower product’s price.

Respondents were generally not looking for opportunities not readily available to them which forms a major requirement in this competence field. The usual ways for doing that is by carrying out promotional activities like advertising, participating in exhibitions, and using the internet. This is not an inborn attribute rather it calls for

acquirable skills and knowledge like assessing, marketing, collecting market information, and understanding the market situation Thomas *et al.*, (2000). The core knowledge created by entrepreneurship education includes, but not limited to; the ability to recognize opportunities in one's life, ability to pursue such opportunities by generating new innovative ideas (Bwisa, 2014). This competence area was supported by the Resource Based View (RBV) theory that assumes that organizational competencies that are immobile and heterogeneous lead to sustainable competitive advantage and they must be valuable to enable the firm neutralize threats and exploit opportunities in the competitive environment; and, only few firms in a specific competitive environment possess these competencies.

#### **4.6.3 Scatter Plot on Opportunity Competence versus Entrepreneurship Performance**

This study used a combination of scatter plot diagrams and correlation table 4.s to show the correlation analysis results. A scatter plot diagram is a graph that shows the relationship between two quantitative variables. Scatter plots are used to investigate the possible relationship between two variables.



**Figure 1.3: Scatter Plot on Opportunity Competence versus Entrepreneurship Performance**

Opportunity Competence was the first variable suggested to have a determining role in Entrepreneurship Performance of graduates with physical challenges in Kiambu County in Kenya. Among the objectives of the study was to assess the relationship between Opportunity Competency and Entrepreneurship Performance of graduates with physical challenges in Kiambu County. Figure 4.3 indicated that there was a positive linear relationship between Opportunity Competence and Entrepreneurship Performance with a positive gradient of 1.605 (see Table 4.24). It reflected a positive gradient indicating that Opportunity Competence had an influence on Entrepreneurship Performance.

The second quadrate and the line of best fit showed an estimate line that was positively increasing. This implied that increased Opportunity Competence would lead to increased performance and the opposite is true that a decrease in Opportunity Competence would lead to decrease in Entrepreneurship Performance. A conclusion was reached at that Opportunity Competence was vital for any business to perform optimally. This led to the rejection of the first null hypothesis that, there is no significant relationship between Opportunity Competence and Entrepreneurship Performance, therefore, concluded that the relationship existed.

#### **4.6.4 Correlation between Opportunity Competence and Entrepreneurship Performance**

Crossman (2013) note that correlation analysis results give a correlation coefficient which measures the linear association between two variables. Mugenda and Mugenda (2003) explain that correlation analysis tests the strength of association or relationship between the research variables.

**Table 4.21: Correlation between Opportunity Competence and Entrepreneurship Performance**

		ENTREPRENEURSHIP OPPORTUNITY	
		PERFORMANCE	COMPETENCE
ENTREPRENEURSHIP PERFORMANCE	Pearson	1	.634**
	Correlation		
	Sig. (2-tailed)		.000
	N	123	123
OPPORTUNITY COMPETENCE	Pearson	.634**	1
	Correlation		
	Sig. (2-tailed)	.000	
	N	123	123

\*\**. Correlation is significant at the 0.01 level (2-tailed).*

Correlation analysis between Opportunity Competence and Entrepreneurship Performance constructs was carried out. Table 4.21 shows the correlation of Opportunity Competence and Entrepreneurship Performance variable indicating a .634 that denoted a very strong and positive linear relationship between Opportunity Competence and Entrepreneurship Performance. This indicated that in order for business to perform in terms of profits that would translate to growth, one must be able to seize opportunities that keep unfolding in the business environment. These findings provided a strong support of the alternative hypothesis, that there is a significant relationship between Opportunity Competence and Entrepreneurship Performance of graduates with physical challenges in Kiambu County in Kenya.

#### 4.6.5 Regression Analysis

Regression analysis is a statistics process of estimating the relationship between variables (Green & Salkind, 2003). Regression analysis helps in generating equation that describes the statistical relationship between one or more predictor variables and the response variable. This study carried out regression analysis to establish the statistical significance relationship between the independent variable, Opportunity Competence on the dependent variable, Entrepreneurship Performance. The regression analysis results have been presented using regression model summary, Analysis of Variance (ANOVA), and beta coefficients.

**Table 4.22: Model Summary of Opportunity Competence versus Entrepreneurship Performance**

<b>Model Summary</b>			
R	R Square	Adjusted R Square	Std. Error of the Estimate
.634	.402	.397	2.06626

**Predictors: (Constant), Opportunity Competence**

Table 4.22 shows the regression model on Opportunity Competence versus Entrepreneurship Performance, the coefficient of determination R square was .402 and R was .634 at 0.05 significance level. The coefficient of determination indicated that 40.2 per cent of the variations on Entrepreneurship Performance was explained by Opportunity Competence. This percentage was significant and showed how dismal performance would be if Opportunity Competency was to be ignored. This implied that there existed a positive relationship between Opportunity Competence and Entrepreneurship Performance. This competence area explained considerably significant variations of Entrepreneurship Performance and it was ranked the second best among other variables meaning that 59.8 per cent was explained by other variables other than Opportunity Competence.

**Table 4.23: Analysis of Variance between Opportunity Competence versus Entrepreneurship Performance**

<b>ANOVA</b>					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	346.791	1	346.791	81.227	.000 <sup>a</sup>
Residual	516.599	121	4.269		
Total	863.390	122			

**Predictors: (Constant), Opportunity Competence**

**Dependent Variable: Entrepreneurship Performance**

From table 4.23, the Analysis of Variance results on Opportunity Competence versus Entrepreneurship Performance for the regression coefficient indicated that the significance of the F- statistics 81.227, was 0.000 which was less than 0.05 implying that there was a significant relationship between Opportunity Competence and Entrepreneurship Performance. Due to this the null hypothesis  $\beta_1 = 0$  was rejected and the alternative hypothesis  $\beta_1 \neq 0$  failed to be rejected. This implied the model  $Y = \beta_0 + \beta_1 + X_1 + \varepsilon$  is significantly fit.

**Table 4.24: Regression Coefficients of Opportunity Competence and Entrepreneurship Performance**

<b>Coefficients</b>					
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	4.778	1.261		3.791	.000
OPPORTUNITY COMPETENCE	1.605	.178	.634	9.013	.000

**Dependent Variable : Entrepreneurship Performance**

Table 4.24 represents the regression coefficients of Entrepreneurship Performance and Opportunity Competence. The coefficient of Opportunity Competence was 1.605 implying a positive and significant influence on Entrepreneurship Performance. A single unit change in Opportunity Competence increased Entrepreneurship Performance by 1.605 units. A constant coefficient of 4.778 represents the intercept of Entrepreneurship Performance implying that without Opportunity Competence, Entrepreneurship Performance could be explained by other variables up to 4.778 units. The fitted model  $Y=4.778+1.605*X_1$  explained that even when Opportunity Competence was non-existent, Entrepreneurship Performance was still positive at 4.778 indicating that there were other drivers of Entrepreneurship Performance.

## **4.7 Relationship Competence and Entrepreneurship Performance**

### **4.7.1 Reliability Test for Relationship Competence**

In order to measure the reliability of the gathered data, Cronbach's Alpha was applied. An alpha coefficient of 0.70 or higher indicates that the gathered data is reliable as it has a relatively high internal consistency and can be generalized to reflect opinions of all respondents in the target population (Zinbarg, 2005).

The following is the reliability test of Relationship Competence which is related to person-to-person or individual-to-group-based interactions for instance, building a context of cooperation and trust, using contacts and connections, persuasive ability, communication and interpersonal skills (Thomas & Lau, 2000). Table 4.25 contains leading statements that were used to capture this competence area.

**Table 4. 25: Reliability Results for Relationship Competence**

<b>Component Matrix</b>	
	Component 1
Develop long-term trusting relationships with others.	.465
Negotiate with others.	.776
Interact with others with similar business as mine	.665
Maintain a personal network of work contacts.	.541
Utilize business network to grow my business.	.612
Understand what others mean by their words/actions.	.719
Respond to constructive criticism.	.703
Extraction Method: Principal Component Analysis.	
a. 1 components extracted.	
<b>Reliability Statistics</b>	
Cronbach's Alpha	N of Items
.746	7

To test the second null hypothesis (Ho<sub>2</sub>) which stated that, there is no significant relationship between Relationship Competence and Entrepreneurship Performance of graduates with physical challenges in Kiambu County in Kenya, a reliability test was carried out. Table 4.25 indicates a Cronbach's Alpha Coefficient of .746 denoting that the measures were reliable since they met the threshold of .700 therefore, regarded as fairly good.

#### **4.7.2 Factor Rating on Relationship Competence**

Table 4.26 contains the statements that were used to capture information in this competence area. Responses are indicated in form of percentages and measures of dispersion being mean, median and the mode. It indicates the different responses from the research respondents. The method helped to develop factors that assisted in explaining the role of Relationship Competence in Entrepreneurship Performance.

**Table 4. 26: Factor Rating on Relationship Competence**

S/No.	Issue	S.D per cent	D per cent	N.S per cent	A per cent	S.A Mode per cent	Mean	Median	
a	Develop long-term trusting relationships with others.	0.8	0.8	0	47.2	51.2	4.47	5.00	5
b	Negotiate with others.	1.6	0.8	0	58.5	59.0	4.33	4.00	4
c	Interact with others with similar business as mine	0.8	0	2.4	49.6	47.2	4.42	4.00	4
d	Maintain a personal network of work contacts.	0.8	4.1	0	49.6	45.5	4.35	4.00	4
e	Utilize business network to grow my business.	0.8	7.3	0	52.8	39.0	4.22	4.00	4
f	Understand what others mean by their words/actions.	0	0	5.7	61.8	32.5	4.27	4.00	4
g	Respond to constructive criticism.	0	1.6	4.1	64.2	30.1	4.23	4.00	4
TOTAL		123							

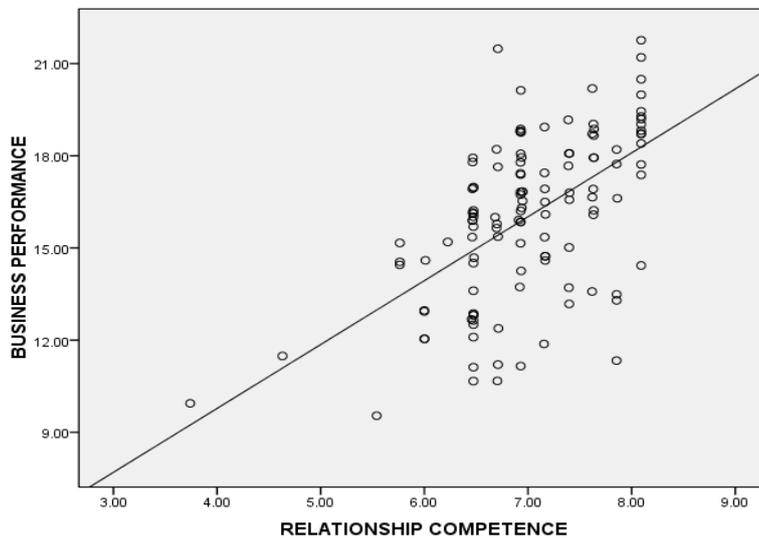
The rating on Relationship Competence issues on a five point Likert scale indicated that majority of respondents agreed that Relationship Competence affected Entrepreneurship Performance of graduates with physical challenges with the issue, “Respond to constructive criticism” posting the greatest frequency value of 79 or 64.2 per cent. A cross tabulation between level of education and response to constructive criticism was carried and the outcome had 23 or 58.97 per cent respondents with diploma qualification agreeing. Respondents with certificate qualifications strongly agreed with 29 or 69.04 per cent while 19 or 57.58 per cent respondents with degree qualifications strongly agreed. This could be translated to mean that at all levels of education respondents responded well to criticism. The manner in which one responds to criticism is an aspect of behavior and character which may not be attributable to level of education. Issues emerging from this competence field had majority of the respondents embracing positive criticism.

They were ready to change or improve in whatever aspect that did not please their customers. That is, if the criticism did not border on discrimination on basis of disability; and if the views were relevant and meant to improve the business.

“Develop long-term trusting relationship with others” posted the least frequency value of 58 or 47.2 per cent. Respondents with certificate level qualifications 25 or 59.52 per cent; as well as 18 or 46.25 per cent at diploma level strongly agreed while 17 or 51.52 per cent at degree level also strongly agreed to the same. Respondents with acquired form of disability strongly agreed with 41 or 48.24 per cent, and those with congenital form of disability strongly agreed with 22 or 57.89 per cent. Respondents seemed not to want to develop long term relationship with the non-disabled persons due to the negative attitude the mainstream of the society displays towards persons with disability. Relationships thrived amongst themselves since they encountered similar challenges and quite often they met in their small groups. They related well with one another as well as assisting each other where possible. Their networks mostly comprised of persons with disability and due to close networking within themselves, they were not able to acquire information that could be vital but outside their circles of interactions.

This competence area was anchored on Network Competency theory that addresses the need of the firm to develop and manage relations with their suppliers, customers, and other organizations, and to deal effectively with the interactions among these relations. Such relationships with external parties involve competitive and cooperative elements which may reflect on the person’s ability to compete and cooperate with others in similar businesses. Entrepreneurship should drive firms to competitiveness thus, entrepreneurship education is supposed to instill the necessary attitudes as firms compete with each other.

### 4.7.3 Scatter Plot on Relationship Competence versus Entrepreneurship Performance



**Figure 4.4: Scatter Plot on Relationship Competence versus Entrepreneurship Performance**

Relationship Competence was the second variable suggested to have had a determining role in Entrepreneurship Performance of graduates with physical challenges in Kiambu County in Kenya. Among the objectives of the study was to assess the relationship between Relationship Competency and Entrepreneurship Performance of graduates with physical challenges in Kiambu County in Kenya. Figure 4.4 indicated that there was a positive linear relationship between Relationship Competence and Entrepreneurship Performance with a positive gradient of 2.079 (see Table 4.30). The second quadrante of the line of best fit had the most plots crowded showing an estimate line that was positively increasing. A few outliers could be noticed on the lower left side away from the other plots that were concentrated on the upper right side.

It showed a positive gradient indicating that Relationship Competence had an influence on Entrepreneurship Performance. This also implied that increased Relationship Competence would lead to increased performance and the opposite is true that a decrease in Relationship Competence would lead to decrease in Entrepreneurship Performance. A conclusion was reached at that Relationship Competence was vital for any business to perform optimally. This led to the rejection of the second null hypothesis that, there is no significant relationship between Relationship Competence and Entrepreneurship Performance, therefore, concluded that the relationship existed.

#### **4.7.4 Correlation between Relationship Competence versus Entrepreneurship Performance**

Mugenda and Mugenda (2003) explain that correlation analysis tests the strength of association or relationship between the research variables. Table 4.27 shows the results of correlation between Relationship Competence and Entrepreneurship Performance.

**Table 4.27: Correlation between Relationship Competence versus Entrepreneurship Performance**

		Entrepreneurship Performance	Relationship Competence
Entrepreneurship Performance	Pearson	1	.572**
	Correlation		
	Sig. (2-Tailed)		.000
	N	123	123
Relationship Competence	Pearson	.572**	1
	Correlation		
	Sig. (2-tailed)	.000	
	N	123	123

\*\**. Correlation is significant at the 0.01 level (2-tailed).*

A correlation analysis between Relationship Competence and Entrepreneurship Performance constructs was conducted. The analysis found that there was a strong positive linear relationship between Relationship Competence and Entrepreneurship Performance. A coefficient value of .572 confirmed this. Table 4.27 highlights this correlation to be slightly lower than that of Opportunity Competence which was .634. Based on this findings therefore, the null hypothesis, that there is no significant relationship between Relationship Competence and Entrepreneurship Performance was not supported.

#### 4.7.5 Regression Analysis

Regression analysis helps in generating equation that describes the statistical relationship between one or more predictor variables and the response variable (Green & Salkind, 2003). The regression analysis results have been presented using regression model summary, Analysis of Variance (ANOVA), and beta coefficients.

**Table 4.28: Model Summary of Relationship Competence versus Entrepreneurship Performance**

Model Summary			
R	R Square	Adjusted R Square	Std. Error of the Estimate
.572	.327	.321	2.19184

Predictors: ( Constant), Relationship Competence

Table 4.28 shows the regression model on Relationship Competence versus Entrepreneurship Performance, the coefficient of determination R square was .327 and R was .572 at 0.05 significance level. The coefficient of determination indicated that 32.7 per cent of the variations on Entrepreneurship Performance was explained by Relationship Competence. It was concluded that Relationship Competence played a role in Entrepreneurship Performance. While Opportunity Competence explained 40.2 percent variations of Entrepreneurship Performance, Relationship Competence explained 32.7 per cent of the same. This implied that there existed a positive relationship between Relationship Competence and Entrepreneurship Performance. This competence area explained significant variations of Entrepreneurship Performance however, it was ranked as fourth among other variables meaning that the rest 67.3 percent was explained by other variables other than Relationship Competence thus, Relationship Competence was vital in predicting Entrepreneurship Performance.

**Table 4.29: Analysis of Variance between Relationship Competence and Entrepreneurship Performance**

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	282.088	1	282.088	58.718	.000 <sup>a</sup>
Residual	581.302	121	4.804		
Total	863.390	122			

Predictors: (Constant), Relationship Competence

Dependent Variable: Entrepreneurship Performance

From table 4.29, the Analysis of Variance results on Relationship Competence versus Entrepreneurship Performance for the regression coefficient indicated that the significance of the F value, 58.718, was 0.000 which was less than 0.05 implying that there was a significant relationship between Relationship Competence and Entrepreneurship Performance.

**Table 4.30: Regression Coefficients of Relationship Competence and Entrepreneurship Performance**

Coefficients					
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	1.461	1.910		.765	.446
RELATIONSHIP COMPETENCE	2.079	.271	.572	7.663	.000

Dependent Variable: Entrepreneurship Performance

Table 4.30 represents the regression coefficients of Relationship Competence and Entrepreneurship Performance. The coefficient of Relationship Competence was 2.079 implying a positive and significant influence on Entrepreneurship Performance. A single unit change in Relationship Competence increased Entrepreneurship Performance by 2.079 units. The fitted model  $Y=1.461+2.079*X_2$  explains that even when Relationship Competence was non-existent, Entrepreneurship Performance was still positive at 1.461 indicating that there were other drivers of Entrepreneurship Performance.

## **4.8 Conceptual Competence and Entrepreneurship Performance**

### **4.8.1 Reliability Test for Conceptual Competence**

In order to measure the reliability of the gathered data, Cronbach's Alpha was applied. According to Zinbarg (2005), Cronbach's alpha is a coefficient of reliability that gives an unbiased estimate of data generalizability. The following is the reliability test of Conceptual Competence which is related to different conceptual abilities which are reflected in the behavior of entrepreneurs for instance, decision making skills, understanding complex information, risk taking and innovativeness Lau *et al.* (2000). Table 4.31 contains leading statements that were used to capture this competence area.

**Table 4. 31: Reliability Results for Conceptual Competence**

**Component Matrix**

---

	Component
	1
Explore new ideas that are helpful to my business.	.486
Make decisions concerning my business.	.654
Take reasonable job-related risks in my business.	.834
Monitor progress toward objectives in risky actions.	.768
Prioritize tasks to manage my time.	.647
Apply ideas I get from my business to different contexts.	.417
Make decisions concerning my business very fast	.766

---

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

**Reliability Statistics**

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Cronbach's Alpha	N of Items
.741	7

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To test the third null hypothesis ( $H_{03}$ ) that stated that, there is no significant relationship between Conceptual Competence and Entrepreneurship Performance of graduates with physical challenges in Kiambu County in Kenya, a reliability test was carried out and it gave a Cronbach's Alpha Coefficient of .741 as indicated in table 4.31 denoting that the measures were reliable since they met the threshold of .700 hence the measurements were regarded as fairly good. It was concluded that the research tool was well constructed.

#### 4.8.2 Factor Rating on Conceptual Competence

Table 4.32 contains the statements that were used to capture information in this competence area. Responses are indicated in form of percentages and measures of dispersion being mean, median and the mode. The method helped to develop factors that assisted in explaining the role of Conceptual Competence in determining Entrepreneurship Performance.

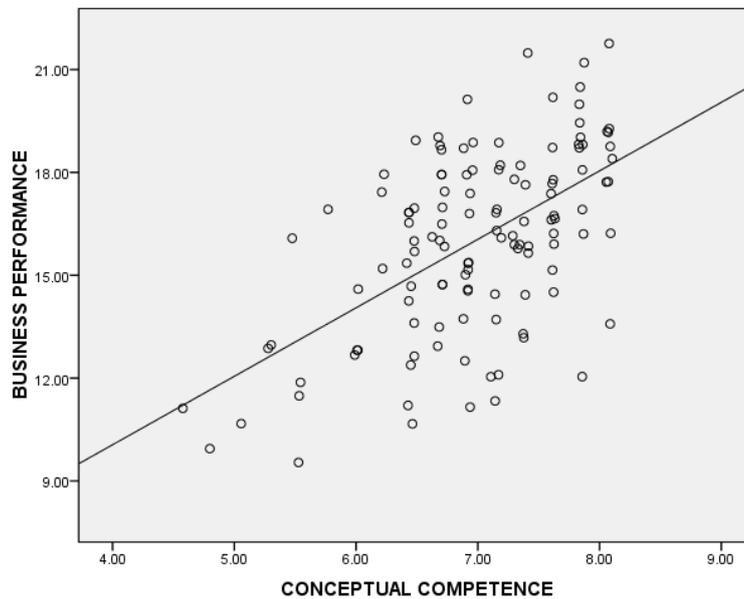
**Table 4. 32: Factor Rating on Conceptual Competence**

S/No.	Issue	S.D per cent	D per cent	N.S per cent	A per cent	S.A per cent	Mean	Median	Mode
a	Explore new ideas that are helpful to my business.	0	4.9	4.1	43.9	47.2	4.33	4.00	5
b	Make decisions concerning my business.	0.8	0.8	0	41.5	56.9	4.53	5.00	5
c	Take reasonable job-related risks in my business.	0.8	8.1	2.4	48.8	39.8	4.19	4.00	4
d	Monitor progress toward objectives in risky actions.	0.8	0.8	3.3	67.5	27.6	4.20	4.00	4
e	Prioritize tasks to manage my time.	0	2.4	3.3	47.2	47.2	4.39	4.00	4
f	Apply ideas I get from my business to different contexts.	0.8	8.1	5.7	50.4	35.0	4.11	4.00	4
g	Make decisions concerning my business very fast	0.8	0	4.9	34.1	60.2	4.53	5.00	5
TOTAL		123							

The rating on Conceptual Competence issues on a five point Likert scale indicates that majority of respondents agreed that Conceptual Competence affected Entrepreneurship Performance of graduates with physical challenges with the issue, “Monitor progress towards objectives in risky actions” recording a highest frequency value of 83 or 67.5 per cent, and the issue, “Make decisions concerning my business very fast” recording the least frequency value of 42 or 34.1 per cent. Table 4.32 reports rating on Conceptual Competence. Issues emerging from this competence area had the respondents not being risk averse and they only risked when it was necessary. “Make decisions concerning my businesses” and “Make decisions concerning my business very fast” were strongly agreed to with 56.9 and 60.2 per cent respectively.

Making decisions was the responsibility of the owner manager. Sole proprietorship kind of business ownership dominated with a frequency value of 93 or 75.6 per cent. Majority agreed that their businesses were their first priority and they valued them therefore, they were able to prioritize tasks to manage their work. Majority operated business following their laid down schedules concerning opening and or closing time and closely monitored their activities. They were keen on taking stock as well as ordering for more for replenishing purposes.

### 4.8.3 Scatter Plot on Conceptual Competence versus Entrepreneurship Performance



**Figure 4.5: Scatter Plot on Conceptual Competence versus Entrepreneurship Performance**

Relationship Competence was the third variable suggested to have a determining role in Entrepreneurship Performance of graduates with physical challenges in Kiambu County in Kenya. Among the objectives of the study was to assess the relationship between conceptual competency and Entrepreneurship Performance of graduates with physical challenges in Kiambu County in Kenya. Figure 4.5 indicated that there was a positive linear relationship between Conceptual Competence and Entrepreneurship Performance with a positive gradient of 1.997 (see Table 4.36). The second quadrante of the line of best fit has the most plots crowded showing an estimate line that is positively increasing. It showed a positive gradient indicating that Conceptual Competence had an influence on Entrepreneurship Performance. This also implied that increased Conceptual Competence would lead to increase in Entrepreneurship Performance and the opposite is true that a decrease in Conceptual Competence would lead to a decrease in Entrepreneurship Performance (Moberg *et al.*, 2014). A conclusion was reached at that Conceptual Competence is vital for any

business to perform optimally. This led to support of the alternative hypothesis, that there is a significant relationship between Conceptual Competence and Entrepreneurship Performance of graduates with physical challenges in Kiambu County in Kenya, hence, rejecting the null hypothesis.

#### 4.8.4 Correlation between Conceptual Competences versus Entrepreneurship Performance

Crossman (2013) notes that correlation analysis results give a correlation coefficient which measures the linear association between two variables. Table 4.33 reports the findings.

**Table 4.33: Correlation between Conceptual Competences versus Entrepreneurship Performance**

		Entrepreneurship performance	Conceptual competence
Entrepreneurship performance	Pearson Correlation	1	.566**
	Sig. (2-tailed)		.000
	N	123	123
Conceptual competence	Pearson Correlation	.566**	1
	Sig. (2-tailed)	.000	
	N	123	123

\*\**. Correlation is significant at the 0.01 level (2-tailed).*

Correlation analysis between Conceptual Competence and Entrepreneurship Performance constructs was conducted. The analysis in table 4.33 showed a statistically significant positive linear relationship with a coefficient value of .566. This was slightly lower compared to coefficient value of .572 for the Relationship Competence.

#### 4.8.5 Regression Analysis

Regression analysis helps in generating equation that describes the statistical relationship between one or more predictor variables and the response variable (Green & Salkind, 2003). The regression analysis results have been presented using regression model summary, Analysis of Variance (ANOVA), and beta coefficients.

**Table 4.34: Model Summary of Conceptual Competence versus Entrepreneurship Performance**

<b>Model Summary</b>			
R	R Square	Adjusted R Square	Std. Error of the Estimate
.566	.320	.315	2.20198

**Predictors: (Constant), Conceptual Competence**

From table 4.34 the regression model on Conceptual Competence versus Entrepreneurship Performance, the coefficient of determination R square was .320 and R was .566 at 0.05 significance level. The coefficient of determination indicated that 32.0per cent of the variations on Entrepreneurship Performance was explained by Conceptual Competence. This implied that there existed a positive relationship between Conceptual Competence and Entrepreneurship Performance. This competence explained considerably significant variations of Entrepreneurship Performance however, it was ranked the fifth among other variables meaning that the rest 68 per cent was explained by other variables of the study other than Conceptual Competence however, it was vital in predicting Entrepreneurship Performance.

**Table 4.35: Analysis of Variance between Conceptual Competence and Entrepreneurship Performance**

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	276.695	1	276.695	57.066	.000 <sup>a</sup>
Residual	586.695	121	4.849		
Total	863.390	122			

**Predictors: (Constant), Conceptual Competence**

**Dependent Variable : Entrepreneurship Performance**

From Table 4.35, the Analysis of Variance results on Conceptual Competence versus Entrepreneurship Performance for the regression coefficient indicated that the significance of the F value, 57.066, was 0.000 which was less than 0.05 implying that there was a significant relationship between Conceptual Competence and Entrepreneurship Performance.

**Table 4.36: Regression Coefficients between Conceptual Competence and Entrepreneurship Performance**

Coefficients					
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
(Constant)	2.067	1.857		1.113	.268
Conceptual Competence	1.997	.264	.566	7.554	.000

## **Dependent Variable : Entrepreneurship Performance**

Table 4.36 represents the regression coefficients of Entrepreneurship Performance and Conceptual Competence. The coefficient of Conceptual Competence was 1.997 implying a positive and significant influence on Entrepreneurship Performance. A single unit change in Conceptual Competence increased Entrepreneurship Performance by 1.997 units. The fitted model  $Y=2.067+1.997*X_3$  explained that even when Conceptual Competence was non-existent, Entrepreneurship Performance was still positive at 2.067 indicating that there were other drivers of Entrepreneurship Performance.

## **4.9 Organizing Competence and Entrepreneurship Performance**

### **4.9.1 Reliability Test for Organizing Competence**

In order to measure the reliability of the gathered data, Cronbach's Alpha was applied. According to Zinbarg (2005), Cronbach's alpha is a coefficient of reliability that gives an unbiased estimate of data generalizability. An alpha coefficient of 0.70 or higher indicates that the gathered data is reliable as it has a relatively high internal consistency and can be generalized to reflect opinions of all respondents in the target population. The following is the reliability test of Organizing Competence which is related to among others managerial competence, human resource management competence (Brownell, 2006). Table 4.37 contains leading statements that were used to capture this competence area.

**Table 4. 37: Reliability Results for Organizing Competence**

<b>Component Matrix</b>	
	Component 1
Delegate duties to my employees.	.506
Keep the records of my business.	.594
Plan the operations of my business.	.786
Always ensure my business runs smoothly.	.831
Coordinate tasks.	.841
Motivate people.	.827
Plan the organization of different resources.	.640

Extraction Method: Principal Component Analysis.  
a. 1 components extracted.

<b>Reliability Statistics</b>	
Cronbach's Alpha	N of Items
.805	7

To test the fourth null hypothesis ( $H_{04}$ ) that stated that, there is no significant relationship between Organizing Competence and Entrepreneurship Performance of graduates with physical challenges in Kiambu County in Kenya, a reliability test was carried out on Table 4.37 and it indicated a Cronbach's Alpha Coefficient of .805 indicating the measures were reliable since they were more than .700. The measurements were therefore regarded as very good and the tool used was well constructed and it measured what it purported to measure.

#### 4.9.2 Factor Rating on Organizing Competence

Table 4.38 contains the statements that were used to capture information in this competence area. Responses are indicated in form of percentages and measures of dispersion being mean, median and the mode. The method helped to develop factors that assisted in explaining the role of Organizing Competence in determining Entrepreneurship Performance.

**Table 4. 38: Factor Rating on Organizing Competence**

S/No.	Issue	S.D per cent	D per cent	N.S per cent	A per cent	S.A Mode per cent	Mean	Median	
a	Delegate duties to my employees.	14.6	16.3	0.8	35.0	33.0	3.56	4.00	4
b	Keep the records of my business.	10.6	12.2	0	36.6	40.7	3.85	4.00	5
c	Plan the operations of my business.	1.6	0	0	45.5	52.8	4.48	5.00	5
d	Always ensure my business runs smoothly.	0	0	3.3	38.2	58.5	4.55	5.00	5
e	Coordinate tasks.	0	1.6	1.6	57.7	39.0	4.34	4.00	4
f	Motivate people.	0	13.8	6.5	56.9	22.8	3.89	4.00	4
g	Plan the organization of different resources.	4.1	2.4	2.4	62.6	28.5	4.09	4.00	4
	TOTAL	123							

The rating on Organizing Competence issues on a five point Likert scale indicated that majority of respondents agreed that Organizing Competence affected Entrepreneurship Performance of graduates with physical challenges with the issue,

“Coordinate tasks” recording a highest frequency value of 71 or 57.7 per cent, and the issue, “Delegate duties to my employees” scoring the lowest response with a frequency value of 43 or 35.0 per cent. Table 4.38 reports these findings. Reasons as to why “Delegating duties to the employees” had the least percentage among the respondents who “agreed” could be attributed to the fact that very few disabled persons had employees. Most of their businesses were micro, barely addressing their basic need thus they could not afford hiring one.

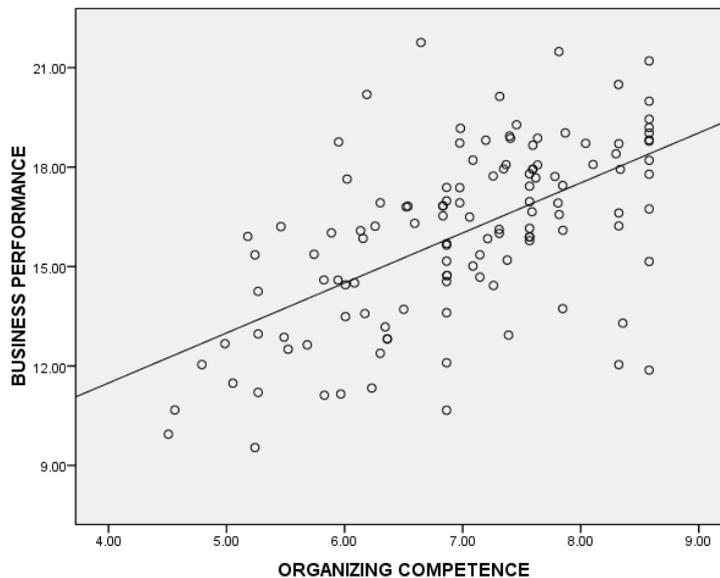
Most of the micro and small enterprises have only a single person who is usually the owner manager, therefore, he or she must possess both technical and managerial skills Neuberger & Rathke (2009). However, these skills are rare in people with disabilities and this leads to low engagement in entrepreneurial activities. Eighteen respondents comprising of 14.6 per cent strongly disagreed to have delegated duty. Quite a considerable response frequency of 20 or 16.3 per cent disagreed to have delegated duties, while a frequency value of 1 or 0.8 per cent were not sure whether they delegated duties or not; the term “delegate” was not clear to them.

Respondents comprising of a frequency value of 13 or 10.6 per cent strongly disagreed that they kept any records concerning their business activities. In entrepreneurship, record keeping is paramount in helping entrepreneurs track their performance. Two respondents comprising of 1.6 per cent strongly disagreed that they planned the operation of their businesses. The question one would ask silently is how they run their businesses. Close to this category of respondents was a frequency value of 4 or 3.3 per cent that was not sure whether their businesses run smoothly or not, they were not bothered that their businesses would collapse in the near future. A frequency value of 17 or 13.8 per cent<sup>89</sup> disagreed to have motivated people be it customers, suppliers or any other outside relations.

This competence field was informed by the Resource Dependent theory that is concerned with firm’s requirements to gain resources from other actors in its environment and states how scarcities of firm’s resources force it to introduce new innovations that utilize alternative resources. Wilkinson and Young (2002) supports the idea that firms should establish cooperative relationships with their counterparts

such as suppliers and customers that help them to create competitive advantages by creating value for the customers.

#### 4.9.3 Scatter Plot on Organizing Competence versus Entrepreneurship Performance



**Figure 4.6: Scatter Plot on Organizing Competence versus Entrepreneurship Performance**

Organizing Competence was the fourth variable suggested to have a determining role in Entrepreneurship Performance of graduates with physical challenges in Kiambu County in Kenya. Among the objectives of the study was to assess the relationship between organizing competency and Entrepreneurship Performance of graduates with physical challenges in Kiambu County in Kenya. On figure 4.6 it is indicated that there was a positive linear relationship between Organizing Competence and Entrepreneurship Performance with a positive gradient of 1.509 (see table 4.42). It showed a positive gradient indicating that Organizing Competence had an influence on Entrepreneurship Performance. The second quadrate and the line of best fit showed an estimate line that was positively increasing. This also implied that

increased Organizing Competence would lead to increased performance and the opposite was true that a decrease in Organizing Competence would lead to a decrease in Entrepreneurship Performance. A conclusion was reached at that Organizing Competence was vital for any business to perform optimally. This led to support of the alternative hypothesis, that there is a significant relationship between Organizing Competence and Entrepreneurship Performance of graduates with physical challenges in Kiambu County in Kenya, hence, rejecting the null hypothesis.

#### **4.9.4 Correlation between Organizing Competence versus Entrepreneurship Performance**

Evans and Oslon (2000) describe correlation as a measure of strength of linear relationship between two variables. The measure of relationship between Organizing Competence and Entrepreneurship Performance was determined in Table 4.39.

**Table 4.39: Correlation between Organizing Competence versus Entrepreneurship Performance**

		Entrepreneurship Performance	Organizing Competence
Entrepreneurship Performance	Pearson Correlation	1	.586**
	Sig. (2-Tailed)		.000
	N	123	123
Organizing Competence	Pearson Correlation	.586**	1
	Sig. (2-Tailed)	.000	
	N	123	123

\*\**. Correlation Is Significant At The 0.01 Level (2-Tailed).*

Correlation analysis between Organizing Competence and Entrepreneurship Performance constructs was conducted. The analysis in the table 4.39 showed a coefficient value of .586 indicating a statistically significant strong and positive linear relationship between Organizing Competence and Entrepreneurship Performance.

#### 4.9.5 Regression Analysis

Regression analysis helps in generating equation that describes the statistical relationship between one or more predictor variables and the response variable (Green & Salkind, 2003). Regression analysis helps in generating equation that describes the statistical relationship between one or more predictor variables and the response variable.

**Table 4.40: Model Summary of Organizing Competence versus Entrepreneurship Performance**

<b>Model Summary</b>			
R	R Square	Adjusted R Square	Std. Error of the Estimate
.586	.344	.338	2.16410

Predictors: (Constant), Organizing Competence

From table 4.40 the regression model on Organizing Competence versus Entrepreneurship Performance, the coefficient of determination R square is .344 and R was .586 at 0.05 significance level. The coefficient of determination indicated that 34.4 per cent of the variations on Entrepreneurship Performance was explained by Organizing Competence. This implied that there existed a positive relationship between Organizing Competence and Entrepreneurship Performance. This competence area explained considerably significant variations of Entrepreneurship Performance moreover, it was the third best among other variables meaning that the rest 65.6 per cent was explained by other variables other than Organizing Competence.

**Table 4.41: Analysis of Variance between Organizing Competence versus Entrepreneurship Performance**

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	296.709	1	296.709	63.354	.000 <sup>a</sup>
Residual	566.681	121	4.683		
Total	863.390	122			

Predictors: (Constant), Organizing Competence

**Dependent Variable: ENTREPRENEURSHIP PERFORMANCE**

From table 4.41, the Analysis of Variance results on Organizing Competence versus Entrepreneurship Performance for the regression coefficient indicated that the significance of the F value, 63.354, was 0.000 which was less than 0.05 implying that there was a significant relationship between Organizing Competence and Entrepreneurship Performance.

**Table 4.42: Regression Coefficients of Organizing Competence versus Entrepreneurship Performance**

Coefficients					
	Unstandardized		Standardized		
	Coefficients		Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	5.452	1.341		4.065	.000
Organizing Competence	1.509	.190	.586	7.960	.000

### **Dependent Variable: Entrepreneurship Performance**

Table 4.42 represents the regression coefficients of Entrepreneurship Performance and Organizing Competence. The coefficient of Organizing Competence was 1.509 implying a positive and significant influence on Entrepreneurship Performance. A single unit change in Organizing Competence increased Entrepreneurship Performance by 1.509 units. The fitted model  $Y=5.452+1.509*X_4$  explains that even when Organizing Competence was non-existent, Entrepreneurship Performance was still positive at 5.452 indicating that there were other drivers of Entrepreneurship Performance.

### **4.10 Strategic Competence and Entrepreneurship Performance**

#### **4.10.1 Reliability Test for Strategic Competence**

In order to measure the reliability of the gathered data, Cronbach's Alpha was applied. According to Zinbarg (2005), Cronbach's alpha is a coefficient of reliability that gives an unbiased estimate of data generalizability. An alpha coefficient of 0.70 or higher indicates that the gathered data is reliable as it has a relatively high internal consistency and can be generalized to reflect opinions of all respondents in the target population. The following is the reliability test of Strategic Competence which is related to setting, evaluating and implementing the strategies of a firm Lau *et al.*, (2000). Table 4.43 contains leading statements that were used to capture this competence area.

**Table 4. 43: Reliability Results for Strategic Competence**

<b>Component Matrix</b>		Component 1
Plan ahead of time about solving anticipated problems as well as tackling opportunities		.638
Know the projected direction of the industry and how changes might impact on my business		.551
Am very often the first to introduce new products/services as compared to my competitors		.739
Strictly follow my laid down goals In whatever I undertake to do in my business.		.623
My short-term goals or day-to-day tasks are in line with my long-term goal.		.723
Weigh the costs and benefits that I intend to get In every action that I undertake in my business.		.667
Evaluate results against my strategic goals.		.699
Extraction Method: Principal Component Analysis.		
a. 1 components extracted.		
<b>Reliability Statistics</b>		
Cronbach's Alpha	N of Items	
.770	7	

To test the fifth null hypothesis (Ho<sub>5</sub>) that stated that, there is no significant relationship between Strategic Competence and Entrepreneurship Performance of graduates with physical challenges in Kiambu County in Kenya, a reliability test was conducted on table 4.43 that culminated to a Cronbach's Alpha Coefficient of .770 indicating the measures were reliable since they were more than .700. The measurements were therefore regarded as moderately good.

#### **4.10.2 Factor Rating on Strategic Competence**

Table 4.44 contains the statements that were used to capture information in this competence area. Responses are indicated in form of percentages and measures of dispersion being mean, median and the mode. The method helped to develop factors that assisted in explaining the role of Strategic Competence in determining Entrepreneurship Performance.

**Table 4. 44: Factor Rating on Strategic Competence**

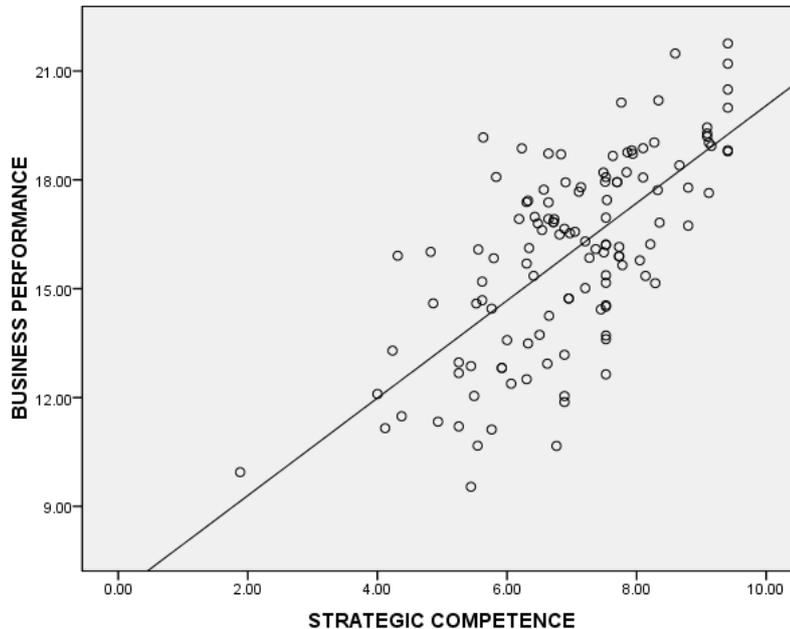
S/No.	Issue	S.D per cent	D per cent	N.S per cent	A per cent	S.A Mode per cent	Mean	Median	
a	Plan ahead of time about solving anticipated problems as well as tackling opportunities	5.7	13.0	7.3	52.8	21.1	3.71	4.00	4
b	Know the projected direction of the industry and how changes might impact on my business	5.7	24.4	6.5	48.8	14.6	3.42	4.00	4
c	Am very often the first to introduce new products/services as compared to my competitors	8.9	30.9	13.0	32.5	14.6	3.13	3.00	4
d	Strictly follow my laid down goals In whatever I undertake to do in my business.	2.4	11.4	1.6	60.2	24.4	3.93	4.00	4
e	My short-term goals or day-to-day tasks are in line with my long-term goal.	3.3	7.3	7.3	56.9	25.2	3.93	4.00	4
f	Weigh the costs and benefits that I intend to get In every action that I undertake in my business.	0.8	2.4	4.1	61.0	31.7	4.20	4.00	4
g	Evaluate results against my strategic goals.	2.4	10.6	5.7	53.7	27.6	3.93	4.00	4
	TOTAL								
	123								

The rating on Strategic Competence issues on a five point Likert scale indicated that majority of respondents agreed that Strategic Competence affected Entrepreneurship Performance of graduates with physical challenges with the issue, “Strictly follow my laid down goals in whatever I undertake to do in my business” recording a highest frequency value of 74 or 60.2 per cent, and the issue, “I am very often the first to introduce new products/services as compared to my competitors” scoring the lowest response with a frequency value of 40 or 32.5 per cent. Table 4.44 reports these findings. Majority of respondents believed that they were following their laid

down objectives however, a frequency value of 14 or 11.4 per cent disagreed that they strictly followed laid out goals in whatever they undertook in their businesses.

Some respondents confirmed that they did not plan ahead of time with 7 respondents or 5.7 per cent strongly disagreeing while 16 respondents or 13.0 per cent disagreeing. Moreover, 9 respondents or 7.3 per cent were not sure whether they planned ahead of time. This could be attributed to the decrease in performance in business. Respondents having a frequency value of 30 or 24.4 per cent disagreed that they knew the projected direction of the industry and how changes could impact on their businesses. “Am very often the first to introduce new products/services as compared to my competitors”, the response rate was worrying because a frequency value of 38 or 30.9 per cent disagreed; 11 or 8.9 per cent strongly disagreed and, 16 or 13.0 per cent were not sure. A total frequency value of 65 or 52.8 per cent, that is, more than half of the respondents did not come up with new products or services. Majority of respondents reported that they had well laid down strategies that could enable them to sell more than their competitors, for instance, not compromising on quality, advertising their products or services, selling at a value pricing, out sourcing products, and ensuring there were new products in the business. This competence field was anchored on Resource Based View that addresses a firm as possessing specific and valuable competencies that are immobile and heterogeneous in order to have a sustainable competitive advantage.

#### 4.10.3 Scatter Plot on Strategic Competence versus Entrepreneurship Performance



**Figure 4.7: Scatter Plot on Strategic Competence versus Entrepreneurship Performance**

Strategic Competence was the fifth variable suggested to have had a determining role in Entrepreneurship Performance of graduates with physical challenges in Kiambu County in Kenya. Among the objectives of the study was to assess the relationship between strategic competency and Entrepreneurship Performance of graduates with physical challenges in Kiambu County in Kenya. Figure 4.7 indicated that there was a positive linear relationship between Strategic Competence and Entrepreneurship Performance with a positive gradient of 1.344 (see Table 4.48). It shows a positive gradient indicating that Strategic Competence had an influence on Entrepreneurship Performance. The second quadrante of the line of best fit had the most plots crowded showing an estimate line that was positively increasing. A few outliers could be noticed on the scatter plot while most plots were concentrated at the upper right side. This also implied that increased Strategic Competence would lead to increased performance and the opposite is true that a decrease in Strategic Competence would

lead to a decrease in Entrepreneurship Performance. This led to the rejection of the fifth null hypothesis that, there is no significant relationship between Strategic Competence and Entrepreneurship Performance, therefore, concluded that the relationship existed.

#### 4.10.4 Correlation between Strategic Competences versus Entrepreneurship Performance

Crossman (2013) notes that correlation analysis results give a correlation coefficient which measures the linear association between two variables. Evans & Osion (2000) describe correlation as a measure of strength of linear relationship between two variables. The Pearson Product-Moment correlation coefficient is used as a measure of the relationship strength.

**Table 4.45: Correlation between Strategic Competence and Entrepreneurship Performance**

		Entrepreneurship Performance	Strategic Competence
Entrepreneurship Performance	Pearson Correlation	1	.685**
	Sig. (2-Tailed)		.000
	N	123	123
Strategic Competence	Pearson Correlation	.685**	1
	Sig. (2-Tailed)	.000	
	N	123	123

\*\**. Correlation Is Significant At The 0.01 Level (2-Tailed).*

Correlation analysis between Strategic Competence and Entrepreneurship Performance constructs was conducted. Table 4.445 depicts this relationship with a coefficient value of .685 showing a statistically significant positive linear relationship between Strategic Competence and Entrepreneurship Performance. This was the coefficient with the greatest correlation value among all competencies. It was concluded that strategic competency was the best predictor of Entrepreneurship Performance. This is the ability to systematically plan how to meet short and long-

term goals through developing plans which anticipates obstacles and evaluates alternative tasks by taking logical and systematic approach to activities. This is also being able to identify new and potentially unique ideas to reach goals and allow one to switch to alternative strategies.

#### 4.10.5 Regression Analysis

Regression analysis helps in generating equation that describes the statistical relationship between one or more predictor variables and the response variable (Green & Salkind, 2003).

**Table 4.446: Model Summary of Strategic Competence versus Entrepreneurship Performance**

<b>Model Summary</b>			
R	R Square	Adjusted R Square	Std. Error of the Estimate
.685	.469	.464	1.94709

**Predictors: (Constant), Strategic Competence**

From table 4.46, the regression model on Strategic Competence versus Entrepreneurship Performance, the coefficient of determination R square was .469 and R was .685 at 0.05 significance level. The coefficient of determination indicated that 46.9per cent of the variations on Entrepreneurship Performance was explained by Strategic Competence. This implied that there existed a positive relationship between Strategic Competence and Entrepreneurship Performance. This competence explained almost a half of the variations of Entrepreneurship Performance, it had the greatest percentage as compared to other competencies meaning that the rest 53.1 per cent was explained by other variables other than Strategic Competence. This competence therefore, was considered as the best predictor of Entrepreneurship Performance among the subjects of the research study.

**Table 4.47: Analysis of Variance between Strategic Competences versus Entrepreneurship Performance**

<b>ANOVA</b>					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	404.659	1	404.659	106.738	.000 <sup>a</sup>
Residual	458.731	121	3.791		
Total	863.390	122			

**Predictors: (Constant), Strategic Competence**

**Dependent Variable: Entrepreneurship Performance**

From Table 4.47, the Analysis of Variance results on Strategic Competence versus Entrepreneurship Performance for the regression coefficient indicated that the significance of the F value, 106.738, was 0.000 which was less than 0.05 implying that there was a significant relationship between Strategic Competence and Entrepreneurship Performance. This competence had the greatest F value as compared to the rest.

**Table 4.48: Regression Coefficients of Strategic Competence versus Entrepreneurship Performance**

<b>Coefficients</b>					
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	6.611	.927		7.132	.000
Strategic competence	1.344	.130	.685	10.331	.000

**Dependent Variable: Entrepreneurship Performance**

Table 4.48, represents the regression coefficients of Entrepreneurship Performance and Strategic Competence. The coefficient of Strategic Competence was 1.344

implying a positive and significant influence on Entrepreneurship Performance. A single unit change in Strategic Competence increased Entrepreneurship Performance by 1.344 units. The fitted model  $Y=6.611+1.344*X_5$  explained that even when Strategic Competence was non-existent, Entrepreneurship Performance was still positive at 6.611 indicating that there were other drivers of Entrepreneurship Performance. This competence had the greatest coefficient values at the Y intercept (6.611 units) being explained by other factors in its absence.

#### 4.11 Commitment Competence and Entrepreneurship Performance

##### 4.11.1 Reliability Test for Commitment Competence

In order to measure the reliability of the gathered data, Cronbach's Alpha was applied. According to Zinbarg (2005), Cronbach's alpha is a coefficient of reliability that gives an unbiased estimate of data generalizability.

**Table 4.49: Reliability Results for Commitment Competence**

<b>Component Matrix</b>	
	Component 1
Dedicate all my efforts to make my business work.	.553
Refuse to let my business fail under any circumstance.	.752
Commit to long-term business goals.	.819
Possess an extremely strong internal drive.	.610
Go out of my way to learn new ideas about my business.	.594
Apply learned skills and knowledge into practice.	.883
Always maintain a positive attitude in my business.	.802
Extraction Method: Principal Component Analysis.	
a. 1 components extracted.	
<b>Reliability Statistics</b>	
Cronbach's Alpha	N of Items
.817	7

To test the sixth null hypothesis ( $H0_6$ ) that stated that, there is no significant relationship between Commitment Competence and Entrepreneurship Performance of graduates with physical challenges in Kiambu County in Kenya, a reliability test

was carried out on Table 4.49 which gave a Cronbach's Alpha Coefficient of .817 indicating that the measures were reliable since they were more than .700 therefore, regarded as very good. This coefficient was ranked the second best among the rest and this meant that the research tool capturing this competence field was well constructed.

#### 4.11.2 Factor Rating on Commitment Competence

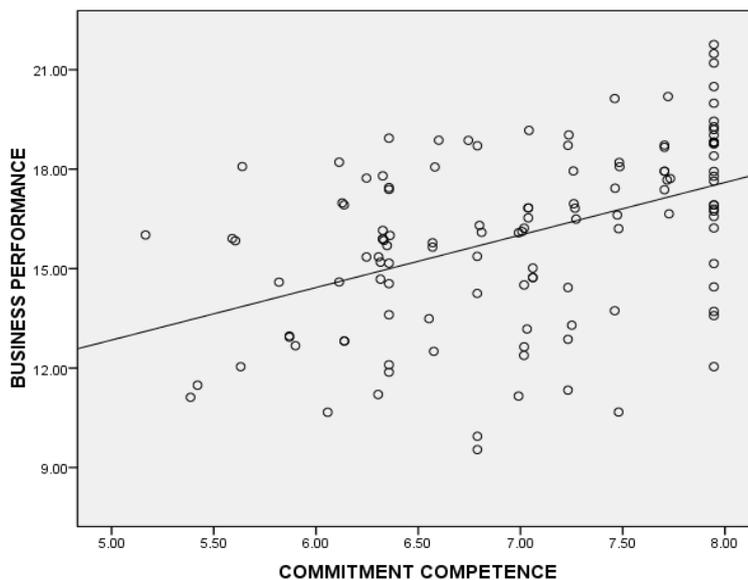
Table 4.50 contains the statements that were used to capture information in this competence area. Responses are indicated in form of percentages and measures of dispersion being mean, median and the mode. The method helped to develop factors that assisted in explaining the role of Commitment Competence in determining Entrepreneurship Performance.

**Table 4.50: Factor Rating on Commitment Competence**

S/No.	Issue	S.D per cent	D per cent	N.S per cent	A per cent	S.A Mode per cent	Mean	Median	
a	Dedicate all my efforts to make my business work.	0	0.8	0.8	39.8	58.5	4.56	5.00	5
b	Refuse to let my business fail under any circumstance.	0	0	0.8	29.3	69.9	4.69	5.00	5
c	Commit to long-term business goals.	0.8	2.4	2.4	47.2	47.2	4.37	4.00	4
d	Possess an extremely strong internal drive.	0	1.6	0	49.6	48.8	4.46	4.00	4
e	Go out of my way to learn new ideas about my business.	2.4	9.8	6.5	37.4	43.9	4.11	4.00	5
f	Apply learned skills and knowledge into practice.	0	8.1	3.3	55.3	33.3	4.14	4.00	4
g	Always maintain a positive attitude in my business.	0	0	1.6	39.6	59.3	4.58	5.00	5
	TOTAL		123						

The rating on Commitment Competence issues on a five point Likert scale indicated that majority of respondents strongly agreed that Commitment Competence affected Entrepreneurship Performance of graduates with physical challenges with the issue, “Refuse to let my business fail under any circumstance” recording a highest frequency value of 86 or 69.9 per cent, and the issue, “Apply learned skills and knowledge into practice” recording the least frequency value of 41 or 33.3 per cent. Table 4.50 reports rating on Commitment Competence. A frequency value of 12 or 9.8 per cent disagreed that they went out of their way to learn new ideas about their businesses, whereas, 8 or 6.5 per cent were not sure whether they did so.

#### 4.11.3 Scatter Plot on Commitment Competence versus Entrepreneurship Performance



**Figure 4.8: Scatter Plot on Commitment Competence versus Entrepreneurship Performance**

Commitment Competence was the sixth variable suggested to have a determining role in Entrepreneurship Performance of graduates with physical challenges in Kiambu County in Kenya. Among the objectives of the study was to assess the relationship between commitment competency and Entrepreneurship Performance of graduates with physical challenges in Kiambu County in Kenya. On figure 9 it is

indicated that there was a positive linear relationship between Commitment Competence and Entrepreneurship Performance with a positive gradient of 1.584 (see Table 4.54). It showed a positive gradient indicating that Commitment Competence had an influence on Entrepreneurship Performance. The second quadrate of the line of best fit showed an estimate line that was positively increasing. This also implied that increased Commitment Competence would lead to increased performance and the opposite is true that a decrease in Commitment Competence would lead to a decrease in Entrepreneurship Performance. This led to the rejection of the sixth null hypothesis that, there is no significant relationship between Commitment Competence and Entrepreneurship Performance, therefore, concluded that the relationship existed. While looking at the line of best fit one would notice that its gradient was not as steep as the gradients of best fit of the other competencies, also the plots were scattered all over. A conclusion was reached at that there were much variations in the responses.

#### **4.11.4 Correlation between Commitment Competence versus Entrepreneurship Performance**

Crossman (2013) notes that correlation analysis results give a correlation coefficient which measures the linear association between two variables. Evans & Oslon (2000) describe correlation as a measure of strength of linear relationship between two variables.

**Table 4.51: Correlation between Commitment Competences versus Entrepreneurship Performance**

		Entrepreneurship Performance	Commitment Competence
Entrepreneurship Performance	Pearson Correlation	1	.450**
	Sig. (2-Tailed)		.000
	N	123	123
Commitment Competence	Pearson Correlation	.450**	1
	Sig. (2-tailed)	.000	
	N	123	123

\*\**. Correlation is significant at the 0.01 level (2-tailed).*

Correlation analysis between Commitment Competence and Entrepreneurship Performance constructs was conducted. The correlation results in Table 4.51 generated a coefficient value of .450 showing a statistically significant positive linear relationship between Commitment Competence and Entrepreneurship Performance. This was the least coefficient value among all the other coefficients and it translated to mean that Commitment Competence was the least predictor of Entrepreneurship Performance.

#### 4.11.5 Regression Analysis

Regression analysis helps in generating equation that describes the statistical relationship between one or more predictor variables and the response variable (Green & Salkind, 2003). Regression analysis helps in generating equation that describes the statistical relationship between one or more predictor variables and the response variable.

**Table 4.52: Model Summary of Commitment Competence versus Entrepreneurship Performance**

<b>Model Summary</b>			
R	R Square	Adjusted R Square	Std. Error of the Estimate
.450	.203	.196	2.38537

Predictors: (Constant), Commitment Competence

Table 4.52 shows the regression model on Commitment Competence versus Entrepreneurship Performance, the coefficient of determination R square was .203 and R was .450 at 0.05 significance level. The coefficient of determination indicated that 20.3 per cent of the variations on Entrepreneurship Performance was influenced by Commitment Competence. This implied that there existed a positive relationship between Commitment Competence and Entrepreneurship Performance. This competence so far had the least percentage of variations that explained Entrepreneurship Performance meaning that the rest 79.7 per cent was explained by other variables therefore, it was the least predictor of Entrepreneurship Performance.

**Table 4.53: Analysis of Variance between Commitment Competence and Entrepreneurship Performance**

<b>ANOVA</b>					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	174.903	1	174.903	30.739	.000
Residual	688.487	121	5.690		
Total	863.390	122			

Predictors: (Constant), Entrepreneurship Performance

Dependent Variable: Entrepreneurship Performance

Table 4.53 shows the Analysis of Variance results on Commitment Competence versus Entrepreneurship Performance. The regression coefficient indicated that the significance of the F value, 30.739, was 0.000 which was less than 0.05 implying that there was a significant relationship between Commitment Competence and Entrepreneurship Performance.

**Table 4.54: Regression Coefficients of Commitment Competence and Entrepreneurship Performance**

	<b>Coefficients</b>				
	Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.
(Constant)	4.924	2.012		2.448	.016
Commitment Competence	1.584	.286	.450	5.544	.000

Dependent Variable: Entrepreneurship Performance

Table 4.54 represents the regression coefficients of Entrepreneurship Performance and Commitment Competence. The coefficient of Commitment Competence was 1.584 implying a positive and significant influence on Entrepreneurship Performance. A single unit change in Commitment Competence increased Entrepreneurship Performance by 1.584 units. The fitted model  $Y=4.924+1.584*X_6$  explained that even when Commitment Competence was non-existent, Entrepreneurship Performance was still positive at 4.924 indicating that there were other drivers of Entrepreneurship Performance.

#### 4.12 Combined Effect Model

Table 4.55 shows the results of all the six independent variables and their relationship with the dependent variable Entrepreneurship Performance.

**Table 4. 55: Model Summary of the Combined Effect Model**

<b>Model Summary</b>			
R	R Square	Adjusted R Square	Std. Error of the Estimate
.995	.989	.989	1.70930

Predictors: Commitment Competence, Strategic Competence, Opportunity Competence, Organizing Competence, Conceptual Competence, Relationship Competence

The combined model had an R square of .989 and a coefficient of determination of .995 implying that all independent variables put together explained 98.9 per cent of the variations of Entrepreneurship Performance.

**Table 4. 56: Analysis of Variance of the Combined Effect Model**

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	32065.274	6	5344.212	1829.135	.000
Residual	341.841	117	2.922		
Total	32407.114	123			

Predictors: commitment competence, strategic competence, opportunity competence, organizing competence, conceptual competence, relationship competence

The combined effect model had an F statistics of 1829.135 and a significant level of 0.000 implying that the combined variables had a significant relationship with Entrepreneurship Performance.

**Table 4. 57: Regression Coefficients of the Combined Effect Model****Coefficients**

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
Opportunity Competence	.587	.209	.256	2.815	.006	.11	9.181
Relationship Competence	.354	.288	.154	1.231	.221	.6	1.725
Conceptual Competence	.249	.277	.108	.900	.370	.6	1.589
Organizing Competence	.316	.198	.138	1.597	.113	.12	8.265
Strategic Competence	.728	.155	.320	4.689	.000	.19	5.153
Commitment Competence	.056	.242	.024	.230	.819	.8	1.220

Dependent Variable: Entrepreneurship Performance

From the regression coefficients of the combined effect model, all the variables had a Variance Inflation Factor of above five and below ten which was acceptable meaning that there was no multicollinearity and every variable measured what it purported to measure resulting to less interference with one another. From the results on Table

4.57, only Opportunity Competence and Strategic Competence were significant with ( $p = .006, .000$ ) respectively which was less than 0.05.

#### **4.13 Moderating Effect of Business External Environment on the relationship between Entrepreneurial Competencies and Entrepreneurship Performance**

##### **How to Model Moderation**

Moderation examines under what conditions the X and Y variations varies, while mediation examines why the X and Y relation occurs. Moderation indicates that the X – Y relation differs by the levels of Z. When using multiple regression include X, Z and interaction term between X and Z as predictors of Y. If the regression coefficient of this interaction term is significant, it suggests that Z modifies the X – Y relation.

$$Y = b_0 + a X + b Z + c XZ + \varepsilon$$

a - indicates the effect of X when Z is zero

b - indicates the effect of Z when X is zero

c - indicates how much the effect of X changes as Z changes one unit

##### **4.13.1 Opportunity Competence and Business External Environment**

Table 4.58 shows the results of Opportunity Competence before moderation was carried out. The results indicate that it was significant at .000.

**Table 4. 58: Coefficients of Opportunity Competence and Entrepreneurship Performance**

Coefficients	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
(Constant)	4.778	1.261		3.791	.000
Opportunity Competence	1.605	.178	.634	9.013	.000

**Dependent Variable: Entrepreneurship Performance**

The study showed that Opportunity Competence predicted Entrepreneurship Performance with a coefficient 1.605 and p-value .000 implying a positive and significant influence on Entrepreneurship Performance (see Table 4.58). A constant coefficient of 4.77 meant that even without the Opportunity Competence, Entrepreneurship Performance could be influenced by other variables up to 4.77 units. These variables could be other competencies that formed the independent variables that the researcher had hypothesized; or other factors that were not included as research variables referred to as the “error term” and symbolized as ( $\epsilon$ ) in statistical models.

**Table 4.59: Model Summary of Opportunity Competence and Business External Environment**

**Model Summary**

R	R Square	Adjusted R Square	Std. Error of the Estimate
.720	.518	.506	1.86973

Table 4.59 shows the coefficient determination of R square that was .518 and R was .720 at .005 significance level. The coefficient of determination indicated that 51.8per cent of the variations on Business External Environment is influenced by Opportunity Competence. This implies that there existed a positive relationship between Opportunity Competence and Business External Environment. In order for persons with physical challenges to spot a viable business opportunity the environment around must be a friendly and a barrier free one. A barrier free environment for persons with disabilities is that one that has information, attitudinal and environmental constraints being addressed. This would enable such persons to go on and take in the business opportunity in the offing.

**Table 4.60: Analysis of Variance of Opportunity Competence and Business External Environment**

ANOVA					
	Sum	of	Mean Square	F	Sig.
	Squares	df			
Regression	447.377	3	149.126	42.657	.000 <sup>a</sup>
Residual	416.013	119	3.496		
Total	863.390	122			

Predictors: (Constant),

Opportunity\_Competencebusiness\_External\_Environment

Table 4.60 shows an F value of 42.657 at 0.000 significance level which was less than 0.05 implying that there was a significant relationship between Opportunity Competence and Business External Environment.

**Table 4.61: Coefficients of Opportunity Competence and Business External Environment**

<b>Coefficients</b>					
	Unstandardized Coefficients	Std. Error	Beta	T	Sig.
(Constant)	-14.081	7.394		-1.904	.059
Opportunity Competence	3.388	1.037	1.338	3.266	.001
Business External Environment	1.384	.482	1.247	2.873	.005
Opportunity_Competencebusiness_External_Environment	-.139	.066	-1.481	-2.104	.037

Dependent Variable: Entrepreneurship Performance

When Opportunity Competence (X) was regressed with Business External Environment (Z) and the interaction term of Opportunity Competence and Business External Environment (X,Z) as predictors of Entrepreneurship Performance (Y), as indicated in Table 4.61 the coefficient of this interaction was found to have p-value .037 which was significant since it was less than p-value 0.05. This meant that Business External Environment had a significant moderating effect on the relationship between Opportunity Competence and Entrepreneurship Performance of graduates with physical challenges in Kenya. Business External Environment constructs being Business Location and Access to Finance contributed greatly to the ability to spot a business opportunity since entrepreneurship concerns the noticing and pursuing of opportunities Miller, (2011). Thus, if market opportunities are worthwhile, persons with physical challenges would improve on them by acquiring necessary capital and this would eventually lead to better performance in business.

Persons with physical challenges are affected to a great extent by the terrains in the environment thus they need an environment that is free of physical barriers. Access to financial services is as vital for persons with physical challenges just as is for other people without disability. If their businesses have to perform to their maximum capacity, financial institutions must therefore not discriminate on basis of disability as they avail loans to their clients. This is a comment from one of the respondents;

*“When a person with a physical disability visits the bank and is queuing together with the other non-disabled clients, a bank attendant often approaches him or her interrogating their purpose for visiting the bank and curiously flipping through their bank forms. This is dehumanizing since everybody should be treated with respect”*

#### **4.13.2 Relationship Competence and Business External Environment**

Table 4.62 shows the results of Relationship Competence and Entrepreneurship Performance before moderation which was significant at .000.

**Table 4.62: Coefficients of Relationship Competence and Entrepreneurship Performance**

<b>Coefficients</b>					
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
(Constant)	1.461	1.910		.765	.446
Relationship Competence	2.079	.271	.572	7.663	.000

The study showed that Relationship Competence predicted Entrepreneurship Performance with a coefficient 2.079 and p-value .000 implying a positive and significant influence on Entrepreneurship Performance (see Table 4.62). A constant coefficient of 1.461 meant that even without the Relationship Competence in the picture, Entrepreneurship Performance could be influenced by other variables up to

1.461 units. These variables could be other competencies that formed the independent variables that the researcher had hypothesized; or other factors that were not included as research variables referred to as the “error term” and symbolized as ( $\epsilon$ ) in statistical models.

**Table 4.63: Model Summary of Relationship Competence and Business External Environment**

**Model Summary**

R	R Square	Adjusted R Square	Std. Error of the Estimate
.993	.985	.985	1.98632

Predictors: Relationship\_Competencebusiness\_External\_Environment

From Table 4.63, the coefficient determination of R square was .985 and R was .993 at .005 significance level. The coefficient of determination indicated that 98.5per cent of the variations on Business External Environment was influenced by Relationship Competence. This implies that there exists a positive relationship between Relationship Competence and Business External Environment.

**Table 4.64: Analysis of Variance between Relationship Competence and Business External Environment**

**ANOVA**

	Sum of Squares	df	Mean Square	F	Sig.
Regression	31933.656	3	10644.552	2697.908	.000 <sup>a</sup>
Residual	473.458	120	3.945		
Total	32407.114 <sup>b</sup>	123			

Predictors: Relationship\_Competencebusiness\_External\_Environment

Table 4.64 shows an F value of 2697.908 at 0.000 significance level which was less than 0.05 implying that there was a significant relationship between Relationship Competence and Business External Environment.

**Table 4.65: Coefficients of Relationship Competence and Business External Environment**

Coefficients	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
Relationship competence	1.313	.188	.569	6.991	.000
Business external environment	.327	.123	.325	2.665	.009
Relationship_competencebus siness_external_environment	.014	.017	.101	.843	.401

Dependent Variable: Entrepreneurship Performance

When Relationship Competence (X) was regressed with Business External Environment (Z) and the interaction term of Relationship Competence and Business External Environment (X,Z) as predictors of Entrepreneurship Performance (Y), (see Table 4.65), the coefficient of this interaction was p-value .401 which was not significant since it was more than p-value 0.05. This meant that Business External Environment constructs that is; Business Location and Access to Finance did not have a significant moderating effect on the relationship between Relationship Competence and Entrepreneurship Performance. With or without access to the financial institutions; good or poor location of business, relationships among the research subjects thrived.

Mpofu *et al.* (2011) notes that persons with disabilities must keep vibrant relations with their customers, suppliers and others in their networks and must not expect people to purchase from them out of pity. Person-to-person or individual-to-group-based interactions should be encouraged among this minority group. A comment from one of the respondents;

*“I prefer borrowing money from my friends and relatives or from my chama other than going to the banks or other micro finance institutions where i am likely to be humiliated and end up with no financial assistance that i needed for my business”*

Another response from one of the respondents;

*“I don’t believe that my location dictates my sales because if the products/services that I offer are needed, customers will come to where I am. As long as I can be able to reach my Business Location without much trouble, I wouldn’t put more considerations on my Business Location”*

#### **4.13.3 Conceptual Competence and Business External Environment**

Table 4.66 indicates the results of Conceptual Competence and Entrepreneurship Performance before moderation was carried out. The results were significant at .000.

**Table 4.66: Coefficients of Conceptual Competence and Entrepreneurship Performance**

Coefficients	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	2.067	1.857		1.113	.268
Conceptual Competence	1.997	.264	.566	7.554	.000

#### **Dependent variable: Entrepreneurship Performance**

The study showed that Conceptual Competence predicted Entrepreneurship Performance with a coefficient 1.997 and p-value .000 implying a positive and significant influence on Entrepreneurship Performance (see Table 4.66). A constant coefficient of 2.067 meant that even without the Conceptual Competence, Entrepreneurship Performance could be influenced by other variables up to 2.067

units. These variables could be other competencies that formed the independent variables that the researcher had hypothesized; or other factors that were not included as research variables referred to as the “error term” and symbolized as ( $\epsilon$ ) in statistical models.

**Table 4.67: Model Summary of Conceptual Competence and Business External Environment**

**Model Summary**

R	R Square	Adjusted R Square	Std. Error of the Estimate
.993 <sup>a</sup>	.986	.986	1.92635

Predictors: Conceptual\_Competencebusiness\_External\_Environment

From Table 4.67, the coefficient determination of R square was .986 and R was .993 at .005 significance level. The coefficient of determination indicated that 98.6per cent of the variations on Business External Environment was influenced by Conceptual Competence. This implied that there existed a positive relationship between Conceptual Competence and Business External Environment.

**Table 4.68: Analysis of Variance between Conceptual Competence and Business External Environment**

**ANOVA**

	Sum of Squares	df	Mean Square	F	Sig.
Regression	31961.816	3	10653.939	2871.049	.000 <sup>a</sup>
Residual	445.298	120	3.711		
Total	32407.114 <sup>b</sup>	123			

Predictors: Conceptual\_Competencebusiness\_External\_Environment

Table 4.68 shows an F value of 2871.049 at 0.000 significance level which was less than 0.05 implying that there was a significant relationship between Conceptual Competence and Business External Environment.

**Table 4.69: Coefficients of Conceptual Competence and Business External Environment**

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
Conceptual Competence	1.226	.174	.530	7.028	.000
Business External Environment	.314	.110	.313	2.863	.005
Conceptual_Competence bussiness_External_Environment	.022	.016	.153	1.328	.187

**Dependent Variable: Entrepreneurship Performance**

When Conceptual Competence (X) was regressed with Business External Environment (Z) and the interaction term of Conceptual Competence and Business External Environment (X, Z) as predictors of Entrepreneurship Performance (Y), (see Table 4.69) the coefficient of this interaction was found to be p-value .187 which was not significant since it was more than p-value 0.05. Therefore, Business External Environment did not have a significant moderating effect on the relationship between Conceptual Competence and Entrepreneurship Performance. Conceptual competencies are related to different conceptual abilities which are reflected in the behaviors of entrepreneurs, for instance, decision making skills, absorbing and understanding complex information, risk taking and innovativeness (Lau *et al.*, 2000; Man *et al.*, 2002). This skills would rarely be affected by the location of business or access to financial institutions; it is either one has them or not.

**4.13.4 Organizing Competence and Business External Environment**

Table 4.70 shows the results of Organizing Competence before moderation was carried out. The results indicate that it was significant at .000.

**Table 4.70: Coefficients of Organizing Competence and Entrepreneurship Performance**

Coefficients	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
(Constant)	5.452	1.341		4.065	.000
Organizing Competence	1.509	.190	.586	7.960	.000

**Dependent Variable: Entrepreneurship Performance**

The study showed that Organizing Competence predicted Entrepreneurship Performance with a coefficient 1.509 and p-value .000 (see Table 4.70). A constant coefficient of 5.452 meant that even without the Organizing Competence, Entrepreneurship Performance could be influenced by other variables up to 5.452 units. These variables could be other competencies that formed the independent variables that the researcher had hypothesized; or other factors that were not included as research variables referred to as the “error term” and symbolized as ( $\epsilon$ ) in statistical models.

**Table 4.71: Model Summary of Organizing Competence and Business External Environment**

**Model Summary**

R	R Square	Adjusted R Square	Std. Error of the Estimate
.686	.471	.458	1.95887

Predictors: (Constant) Organizing\_Competencebusiness\_External\_Environment

From Table 4.71, the coefficient determination of R square was .471 and R was .686 at .005 significance level. The coefficient of determination indicated that 47.1 per cent of the variations on Business External Environment was influenced by

Organizing Competence. This implied that there existed a positive relationship between Organizing Competence and Business External Environment.

**Table 4.72: Analysis of Variance between Organizing Competence and Business External Environment**

**ANOVA**

	Sum of Squares	df	Mean Square	F	Sig.
Regression	406.764	3	135.588	35.335	.000 <sup>a</sup>
Residual	456.626	119	3.837		
Total	863.390	122			

Predictor: (Constant), Organizing\_Competencebusiness\_External\_Environment

Table 4.72 shows an F value of 35.335 at 0.000 significance level which was less than 0.05 implying that there was a significant relationship between Organizing Competence and Business External Environment.

**Table 4.73: Coefficients of Organizing Competence and Business External Environment**

**Coefficients**

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
(Constant)	-8.903	8.339		-1.068	.288
Organizing Competence	2.562	1.158	.995	2.213	.029
Business External Environment	1.105	.550	.995	2.009	.047
Organizing_Competencebusiness_External_Environment	-.095	.075	-.987	-1.259	.210

### **Dependent Variable: Entrepreneurship Performance**

When Organizing Competence (X) was regressed with Business External Environment (Z) and the interaction term of Organizing Competence and Business External Environment (X, Z) as predictors of Entrepreneurship Performance (Y), (see Table 4.73) the coefficient of this interaction was found to be p-value .210 which was not significant since it was more than p-value 0.05. Therefore, Business External Environment did not have a significant moderating effect on the relationship between Organizing Competence and Entrepreneurship Performance. Organizing Competencies are related to the organization of different internal and external human, physical, financial and technological resources, including team building, leading employees, training and controlling (Brinckmann *et al.*, 2011). The location of business does not affect the mentioned aspects that constitute Organizing Competence.

### **4.13.5 Strategic Competence and Business External Environment**

Table 4.74 shows the results of Strategic Competence before moderation was carried out. The results indicate that it was significant at .000.

**Table 4.74: Coefficients of Strategic Competence and Entrepreneurship Performance**

Coefficients	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	6.611	.927		7.132	.000
Strategic Competence	1.344	.130	.685	10.331	.000

### **Dependent Variable: Entrepreneurship Performance**

The study showed that Strategic Competence predicted Entrepreneurship Performance with a coefficient 1.344 and p-value .000 (see Table 4.74). A constant

coefficient of 6.611 meant that even without the Strategic Competence, Entrepreneurship Performance could be influenced by other variables up to 6.611 units. These variables could be other competencies that formed the independent variables that the researcher had hypothesized; or other factors that were not included as research variables referred to as the “error term” and symbolized as ( $\epsilon$ ) in statistical models.

**Table 4.75: Model Summary of Strategic Competence and Business External Environment**

**Model Summary**

R	R Square	Adjusted R Square	Std. Error of the Estimate
.994	.989	.988	1.75453

Predictors: Strategic\_Competencebusiness\_External\_Environment

From Table 4.75, the coefficient determination of R square was .989 and R was .994 at .005 significance level. The coefficient of determination indicated that 98.9 per cent of the variations on Business External Environment was influenced by Strategic Competence. This implied that there existed a positive relationship between Strategic Competence and Business External Environment.

**Table 4.76: Analysis of Variance between Strategic Competence and Business External Environment**

**ANOVA**

	Sum of Squares	df	Mean Square	F	Sig.
Regression	32037.710	3	10679.237	3469.121	.000
Residual	369.404	120	3.078		
Total	32407.114	123			

Predictors: Strategic\_Competencebusiness\_External\_Environment

Table 4.76 shows an F value of 3469.121 at 0.000 significance level which was less than 0.05 implying that there was a significant relationship between Strategic Competence and Business External Environment.

**Table 4.77: Coefficients of Strategic Competence and Business External Environment**

Coefficients	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
Strategic Competence	1.411	.159	.619	8.897	.000
Business External Environment	.530	.057	.528	9.301	.000
Strategic_Competencebusiness_External_Environment	-.021	.010	-.149	-2.047	.043

**Dependent Variable: Entrepreneurship Performance**

When Strategic Competence (X) was regressed with Business External Environment (Z) and the interaction term of Strategic Competence and Business External Environment (X, Z) as predictors of Entrepreneurship Performance (Y), (see Table 4.77), the coefficient of this interaction was found to be p-value .043 which was significant since it was less than p-value 0.05. This meant that Business External Environment had a significant moderating effect on the relationship between Strategic Competence and Entrepreneurship Performance of graduates with physical challenges in Kenya. Business External Environment constructs being Business Location and Access to Finance contributed greatly to the ability to set one’s roadmap for their business in order to move towards the set goals. The lack of separation between ownership and control in small firms suggests that business owners themselves are responsible for the direction and the development of their firms Vijay *et al.* (2011). Persons forming a business venture are responsible for its success or failure. If one gets an unfavorable location, it is solely his or her responsibility to make the decision whether to stick or to move to a more favorable

one. It is also ones decision to decide to ask for assistance from financial institutions or to obtain it from friends, *chamas*, well-wishers, sponsors, donors or even family. It is a personal duty to ensure that the set strategies are tried out in order to establish their strengths or weaknesses. One needs to know which strategies to employ when and where.

#### 4.13.6 Commitment Competence and Business External Environment

Table 4.78 shows the results of Commitment Competence before moderation was carried out. The results indicate that it was significant at .000.

**Table 4.78: Coefficients of Commitment Competence and Entrepreneurship Performance**

	Coefficients				
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	4.924	2.012		2.448	.016
COMMITMENT COMPETENCE	1.584	.286	.450	5.544	.000

#### Dependent Variable: Entrepreneurship Performance

The study showed that Commitment Competence predicted Entrepreneurship Performance with a coefficient 1.584 and p-value .000 (see Table 4.78). A constant coefficient of 4.924 meant that even without the Commitment Competence, Entrepreneurship Performance could be influenced by other variables up to 4.924 units. These variables could be other competencies that formed the independent variables that the researcher had hypothesized; or other factors that were not included as research variables referred to as the “error term” and symbolized as ( $\epsilon$ ) in statistical models.

**Table 4.79: Model Summary of Commitment Competence and Business External Environment**

**Model Summary**

R	R Square	Adjusted R Square	Std. Error of the Estimate
.993	.986	.985	1.95955

Predictors: Commitment\_Competencebusiness\_External\_Environment

From Table 4.79, the coefficient determination of R square was .986 and R was .993 at .005 significance level. The coefficient of determination indicated that 98.6 per cent of the variations on Business External Environment was influenced by Commitment Competence. This implied that there existed a positive relationship between Commitment Competence and Business External Environment.

**Table 4.80: Analysis of Variance between Commitment Competence and Business External Environment**

**ANOVA**

	Sum of Squares	df	Mean Square	F	Sig.
Regression	31946.333	3	10648.778	2773.230	.000
Residual	460.782	120	3.840		
Total	32407.114	123			

Predictors: Commitment\_Competencebusiness\_External\_Environment

Table 4.80 shows an F value of 2773.230 at 0.000 significance level which was less than 0.05 implying that there was a significant relationship between Commitment Competence and Business External Environment.

**Table 4.81: Coefficients of Commitment Competence and Business External Environment**

	Unstandardized		Standardized		
	Coefficients		Coefficients		
	B	Std. Error	Beta	t	Sig.
Commitment Competence	.986	.169	.428	5.821	.000
Business External Environment	.374	.105	.373	3.570	.001
Commitment_Compence bussiness_External_Environment	.028	.017	.196	1.604	.111

**Dependent Variable: Entrepreneurship Performance**

When Commitment Competence (X) was regressed with Business External Environment (Z) and the interaction term of Commitment Competence and Business External Environment (X, Z) as predictors of Entrepreneurship Performance (Y), (see Table 4.81), the coefficient of this interaction was found to be p-value .111 which was not significant since it was more than p-value 0.05. Therefore, Business External Environment did not have any moderating effect on the relationship between Commitment Competence and Entrepreneurship Performance. Commitment Competencies call for the ability to sustain one’s dedication to the business in different situations. Such commitment is also exemplified by a strong devotion to work hard, a desire to aim long-term goals rather than short-term gains, as well as an ability to start the business up again after failure; the drive to see firm through to fruition (Bwisa, 2014). Among the research respondents, some expressed the feeling that they would not start their business afresh after failure, others reported that their business was not among their valued priorities in their day-to-day activities. Contrary

to these a good number of respondents were committed to their businesses since they relied on them to meet their daily needs.

#### 4.13.7 Moderating Effect Model

Following are the results of all the six competence fields after being moderated by Business External Environment which had Access to Finance and Location of Business as its constructs.

**Table 4.82: Model Summary of the Moderating Effect**

##### Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.991	.982	.981	2.24149

Predictors: Commitment\_Competencebusiness\_External\_Environment,  
 Strategic\_Competencebusiness\_External\_Environment,  
 Opportunity\_Competencebusiness\_External\_Environment,  
 Organizing\_Competencebusiness\_External\_Environment,  
 Conceptual\_Competencebusiness\_External\_Environment,  
 Relationship\_Competencebusiness\_External\_Environment

The moderating effect model had an R square of .982 and a coefficient of determination of .991 implying that the moderating effect of Business External Environment was 98.2 per cent on the relationship between Entrepreneurial Competencies and Entrepreneurship Performance.

**Table 4.83: Analysis of Variance of Moderation Effect**

**Anova**

	Sum Of Squares	Df	Mean Square	F	Sig.
Regression	31819.276	6	5303.213	1055.522	.000
Residual	587.838	117	5.024		
Total	32407.114	123			

Commitment\_Compentencebusiness\_External\_Environment,  
Strategic\_Compentencebusiness\_External\_Environment,  
Opportunity\_Compentencebusiness\_External\_Environment,  
Organizing\_Compentencebusiness\_External\_Environment,  
Conceptual\_Compentencebusiness\_External\_Environment,  
Relationship\_Compentencebusiness\_External\_Environment

Table 4.83 shows an F value of 1055.522 at 0.000 significance level which was less than 0.05 implying that there was significant moderating effect of Business External Environment on the relationship between the Entrepreneurial Competences and Entrepreneurship Performance.

**Table 4.84: Coefficients of Moderating Effect**

Coefficients	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
Opportunity_Competencebusiness_External_Environment	.014	.017	.100	.803	.424
Relationship_Competencebusiness_External_Environment	-.006	.025	-.045	-.250	.803
Conceptual_Competencebusiness_External_Environment	.041	.023	.288	1.767	.080
Organizing_Competencebusiness_External_Environment	.003	.017	.021	.176	.860
Strategic_Competencebusiness_External_Environment	.011	.013	.079	.857	.393
Commitment_Competencebusiness_External_Environment	.078	.021	.550	3.687	.000

Dependent Variable: Entrepreneurship Performance

The Model Summary on Table 4.84 shows Commitment Competence as the only independent variable (when all variables were put together) that was significantly moderated by Business External Environment on the relationship between Entrepreneurial Competencies and Entrepreneurship Performance since it was statistically significant at 0.00. This led to the rejection of the seventh null hypothesis that there was no significant moderating effect of Business External Environment on the relationship between Entrepreneurial Competencies and Entrepreneurship Performance of graduates with physical challenges in Kiambu County in Kenya, and partially accepting it since one variable was statistically significant.

#### 4.14 Hypotheses report

The study sought to test seven hypotheses as indicated in section 1.5 and illustrated in Table 4.85 on hypothesis results, the variables and the explanations.

**Table 4. 85: Hypotheses test results**

<b>Hypothesis</b>	<b>Variable</b>	<b>Hypothesis results</b>	<b>Explanation</b>
<b>H<sub>1</sub></b>	Opportunity Competence	Not rejected	OC was statistically significant and positively affected EP of graduates with physical challenges in Kiambu County in Kenya.
<b>H<sub>2</sub></b>	Relationship Competence	Not rejected	RC was statistically significant and positively affected EP of graduates with physical challenges in Kiambu County in Kenya.
<b>H<sub>3</sub></b>	Conceptual Competence	Not rejected	CC was statistically significant and positively affected EP of graduates with physical challenges in Kiambu County in Kenya.
<b>H<sub>4</sub></b>	Organizing Competence	Not rejected	OC was statistically significant and positively affected EP of graduates with physical challenges in Kiambu County in Kenya.
<b>H<sub>5</sub></b>	Strategic Competence	Not rejected	SC was statistically significant and positively affected EP of graduates with physical challenges in Kiambu County in Kenya
<b>H<sub>6</sub></b>	Commitment Competence	Not rejected	CC was statistically significant and positively affected EP of graduates with physical challenges in Kiambu County in Kenya
<b>H<sub>7</sub></b>	Business External Environment	Not rejected	BEE was statistically significant and positively moderated the relationship between Strategic and Opportunity competencies and EP of graduates with physical challenges in Kiambu County in Kenya

OC=Opportunity Competence, RC=Relationship Competence, CC=Conceptual Competence, OC=Organizing Competence, SC=Strategic Competence, CC=Commitment Competence BEE=Business External Environment and, EP=Entrepreneurship Performance

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

The aim of the study was to determine the relationship between Entrepreneurial Competencies and Entrepreneurship Performance of graduates with physical challenges of higher education and training in Kiambu County in Kenya. The competencies under focus which also served as the independent variables were: Opportunity Competency, Relationship Competency, Conceptual Competency, Organizing Competency, Strategic Competency and Commitment Competency. All these competencies were scrutinized to establish their effect on the dependent variable which was Entrepreneurship Performance with Sales and Profits constructs. Business External Environment had Access to Finance and Business Location constructs that were included to moderate the relationship between the Competencies and Entrepreneurship Performance.

Business External Environment moderated Opportunity and Strategic Competencies since the results were statistically significant at 0.05. The study had seven objectives and hypothesized relationship between Entrepreneurial Competencies and Entrepreneurship Performance. This chapter presents the summary of the study, conclusions made in the study, recommendations of the study and areas of further research.

#### **5.2 Summary**

To enable the achievement of the study objectives, 172 persons with physical challenges operating businesses in Kiambu County were selected to participate in the study. They provided data through self-administered questionnaires and interviews. The study was anchored on four theories namely; Need for Achievement Theory (N-Ach), Entrepreneurial Competencies and Resource Based View (RBV); Strategic Contingency Theory and finally, the Resource Dependence Theory (RDT) which

were adopted to derive the conceptual framework of interaction of Entrepreneurial Competencies and Entrepreneurship Performance. Research design used was descriptive survey that involved the use of qualitative and quantitative methods of data collection.

Field data was collected on 123 respondents which was a 72 percent representation of graduates with physical challenges operating enterprises in Kiambu County. The data embraced biographic features, Entrepreneurship Performance with its constructs being Sales and Profit, Entrepreneurial Competencies which were: Opportunity, Relationship, Organizing, Conceptual, Strategic and Commitment; and Business External Environment with its constructs being Access to Finance and Business Location. Data was analyzed using descriptive and inferential statistics and the findings presented in form of frequencies and percentage coefficients in table 4.s with the aid of SPSS for windows version 17.0.

The biographic data of graduates with physical challenges operating businesses in Kiambu County in Kenya revealed that most of the businesses could be categorized as micro enterprises which occupied a 51.2 percent with none in the category of large enterprise. Majority of businesses surveyed were from trade sub-sector with 46.3 percent. Service sub-sector followed closely with 34.1 percent, very few businesses were from manufacturing sub-sector. Most businesses were less than ten years in operation with 58.5 percent and they were owned by persons in formal employment. The dominant gender was the male with 59.3 percent and the dominant age bracket was 30-40 years. Respondents below thirty years were few and the researcher attributed this to the fact that in this age bracket, it is the period whereby one pursues higher education and training at colleges and universities. It is also during this age that the idea of running a business is at the gestation stage as one is beginning as a nascent entrepreneur.

Majority of businesses had 1-2 employees but in most cases the owner run the business single handedly. Majority of businesses could be categorized as sole proprietorship type of business. The highest number of respondents had attained certificate level of education, scoring 34.1 percent while very few had master degree

qualification at 1.6 percent. Most respondents had prior work experience in the business they operated with majority having some training in their areas of expertise. Majority of the respondents had the “acquired” form of disability occupying 69.1 percent. They attributed their disability to polio (mostly) cited as the cause of acquired disability, paraplegia, improper administration of injections at the hospitals, organ amputation due to diseases like cancer and lastly, a few cited stroke attack as the cause of their disability. Participants with “congenital” form of disability (born disabled) were 30.9 percent. This category comprised of persons suffering from cerebral palsy, muscular dystrophy, brittle bone and finally, those having extremities in the limbs that is, a limb being longer or shorter than normal.

Further, the inferential statistics (correlation and regression coefficients) were used to test the seven hypotheses of the study in order to determine the fitness of the model. Cronbach’s Alpha for all the items had 0.7 and above denoting that the measures were reliable. All the items had a factor loading of 0.4 and above. All the variables had positive relationship with significance levels of less than 0.05 implying that the relationship was significant.

The seven hypotheses are discussed below.

### **5.2.1 Effect of Opportunity Competence and Entrepreneurship Performance**

**H<sub>01</sub>:** There is no significant relationship between Opportunity Competency and Entrepreneurship Performance of graduates with physical challenges in Kiambu County, Kenya.

This hypothesis was rejected because opportunity competency significantly affected Entrepreneurship Performance of graduates with physical challenges in Kiambu County. Correlation of opportunity competency versus Entrepreneurship Performance denoted a strong and positive linear relationship. The reliability test indicated that the measures were reliable. Majority of the respondents agreed that they looked at old problems in a new way. Most of variations on Entrepreneurship Performance were explained by Opportunity Competence. Opportunity Competence

indicated a significant relationship and a positive effect between it and Entrepreneurship Performance.

One of the most distinguishing competencies for the entrepreneur is the opportunity related competency. These competencies can be broadly distinguished into three clusters of identifying, assessing and seeking market opportunities. These clusters suggest that a competent entrepreneur should be able to identify opportunities from various means, work on the potential opportunities by thorough assessment and turn them into feasible opportunities (Thomas & Theresa, 2000). Bwisa (2011) suggests that one of the most important entrepreneurial roles is the ability to recognize and envision taking advantage of opportunities.

Respondents were able to identify goods (for instance identifying fashions and trends), this was reported by respondents in service industry. They were able to offer services that customers needed at specific times as they sought market opportunities. Noticing a demand gap through networking and carrying out research also helped respondents to utilize opportunities available. Others were made aware of opportunities by their customers as they requested for goods and services. For products that did not move as fast, respondents were able to repackage or rebrand or reduce their production (especially those in manufacturing business), or dispose them at discounted prices (for those in trade industry).

Majority of the respondents had not come up with new products or services since they were trading with already finished goods. This indicates why the issue “I have marketed very many new lines of products or services in the past 3 years” scored the least. To concur with (Pavey, 2006) that disabled persons may benefit if they exploit opportunities and activities that relate to their specific situation, majority of the respondents agreed that they were doing something that directly addressed their disability for instance making special shoes worn by the disabled and/or repair of mobility devices.

### 5.2.2 Effect of Relationship Competence and Entrepreneurship Performance

**H<sub>02</sub>:** There is no significant relationship between Relationship Competency and Entrepreneurship Performance of graduates with physical challenges in Kiambu County, Kenya.

Correlation analysis between Relationship Competence and Entrepreneurship Performance indicated a strong positive linear relationship between it and Entrepreneurship Performance thus, the hypothesis was eventually rejected. Cronbach's Alpha measures were reliable. Majority agreed that they responded to constructive criticism. A few respondents though, felt that criticism bordered on discrimination was not welcome. A considerable percentage of variations on Entrepreneurship Performance were explained by Relationship Competence with a significant relationship and a positive effect on Entrepreneurship Performance.

Relationship Competencies included the ability to build, to keep, and to use networks, relationships, trust and confidence with all stakeholders of the firm including clients, suppliers, employees, family members, partners, and business associations (Man *et al.*, 2002). Some respondents with physical challenges seemed to possess effective communication and negotiation skills in dealing with different people, they were able to build and use networks amongst themselves and with the other non-disabled persons in similar businesses. Majority maintained good relationship with suppliers and build good and trustful relations with customers.

The negative attitude that broader society holds towards persons with disabilities ought to change Pavey (2006). Also the non-disabled ought to stop viewing purchasing products from a disabled person as contracting the disability in question. Likewise, physically challenged persons must deal with products that are worth purchasing and should stop expecting customers to purchase from them out of pity Mpfu *et al.* (2011). This was experienced during the research whereby some graduates with physical challenges felt that customers should purchase their products even though the products were not up to the expected standard. Purchasing products out of pity may not create entrepreneurs out of this minority group. Consequently,

this may also limit the ability to compete effectively with the non-disabled in the market place.

From interviews, a few respondents, reported that they would not want to listen to customers criticize their goods or services since they would feel offended. However, majority of the respondents were positive and indicated that they would take criticism as a way of self-improvement as well as improvement of their products and services. A wide network of business associates was evident from most respondents and majority had suppliers, customers, fellow business persons, lawyers, and donors. The Kenya Power and Lighting Company Limited (KPLC) and Jomo Kenyatta University of Agriculture and Technology (JKUAT), had sponsored a disability group.

### **5.2.3 Effect of Conceptual Competence and Entrepreneurship Performance**

**H<sub>03</sub>:** There is no significant relationship between Conceptual Competency and Entrepreneurship Performance of graduates with physical challenges in Kiambu County, Kenya.

There was a statistically significant strong positive linear relationship between Conceptual Competence and Entrepreneurship Performance therefore, the null hypothesis was rejected and instead the alternative was accepted. The Cronbach's Alpha coefficient measures were also reliable. Majority agreed to monitoring progress towards objectives in risky actions. Thirty two percent variations on Entrepreneurship Performance were explained by Conceptual Competence. There was a significant relationship a positive effect between Conceptual Competence and Entrepreneurship Performance.

The following abilities belong to this competence field: to have a cognitive and analytical thinking, learning, decision making and problem solving, sustaining temporal tension, innovating, coping with uncertainty Lixiang (2009). These abilities are reflected in the behaviors of the entrepreneurs. They represent a category of competencies which are not easily identifiable and are less directly observable

behaviors but are often considered to be important for entrepreneurial success Man *et al.* (2002). They involve high level of conceptual activities and are reflected in the entrepreneur's behaviors when they conduct analysis, learn, make decisions and solve problems. They may also enhance the effectiveness of carrying a task in the present or in the future. Prior research suggest that risk-taking, innovativeness, decision making skills are among the conceptual competencies of entrepreneurs (Man *et al.*, 2002); and the ability to take risks is one of the key success factors to firm performance.

Respondents admitted to being the major decision makers in their businesses. Some of the decisions they made included among others; the decision to open their business daily, consulting when problems arose, purchasing quality goods, consulting with larger and similar businesses, daily checking on stock, handling challenges and monitoring progress. A few respondents were averse to risk as they feared it could be costly. Majority alluded that they would first weigh the risk benefits then proceed with the decision. A few had surpassed their target on sales whereas majority had not. Respondents showed some degree of innovativeness in their products and services; with a considerable number reflecting this in the way they carried out their activities, for instance, utilizing their tri-cycle bicycles as display surfaces. Majority had set goals for stipulated period of time.

#### **5.2.4 Effect of Organizing Competence and Entrepreneurship Performance**

**H<sub>04</sub>:** There is no significant relationship between Organizing Competency and Entrepreneurship Performance of graduates with physical challenges in Kiambu County, Kenya.

A statistically significant strong positive linear relationship between Organizing Competence and Entrepreneurship Performance was evident thus the hypothesis was rejected. The Cronbach's Alpha coefficient indicated that the measures were reliable. Majority agreed that coordinating tasks was quite important. A considerable percentage of variations on Entrepreneurship Performance were explained by

Organizing Competence and this relationship was significant and had a positive effect on Entrepreneurship Performance.

Organizing Competencies are related to the organization of different internal and external human, physical, financial and technological resources, including team building, leading employees, training and controlling. Being the chief managers of their firms entrepreneurs ought to possess organizing competencies, which equip them with skills and knowledge to perform managerial functions of planning, organizing, leading, motivating, delegating and controlling (Thomas & Lau, 2000).

Respondents seemed to be in touch with the daily activities of their businesses by ensuring everything run smoothly. It was common to all that their businesses opened every day without fail unless there was an emergency to be attended to. This was achieved by allocating duties and supervising employees. Delegation was an aspect every business owner carried out on their employees. Majority of the respondents disclosed that they kept transaction based records for daily operations, for instance, receipt books and sales records. A few did not keep any record and as a result they could not clearly account for activities especially about sales thus, their businesses performed poorly.

### **5.2.5 Effect of Strategic Competence and Entrepreneurship Performance**

**H<sub>05</sub>:** There is no significant relationship between Strategic Competency and Entrepreneurship Performance of graduates with physical challenges in Kiambu County, Kenya.

A correlation analysis between Strategic Competence and Entrepreneurship Performance showed a statistically significant strong positive linear relationship. This coefficient had the strongest value among all the other competencies. This eventually led to discarding the null hypothesis and confirmed the existence of a relationship. The Cronbach's Alpha coefficient indicated that the measures were reliable. Majority agreed that they strictly followed their laid down goals in whatever they undertake to do in their business. Most variations on Entrepreneurship

Performance were explained by Strategic Competence. There was a significant relationship and a positive effect between Strategic Competence and Entrepreneurship Performance.

Strategic competencies are related to setting, evaluating and implementing the strategies of the firm Lau *et al.* (2000). In SMEs, the critical resources are likely to be held by the individual entrepreneurs that are reflected in their skills, knowledge, abilities, experience and education. Being the key decision makers, the entrepreneurs have high influence on the formation of business strategy and are responsible to set the roadmap towards the set goals. The lack of separation between ownership and control in small firms suggests that business owners themselves are responsible for the direction and the development of their firms Vijay *et al.* (2011). Being the owner of the firm, the entrepreneur must set direction for the whole company. This category of competencies require the entrepreneur to have a vision or a big picture in their mind for their business, to have clear goals to achieve, or to formulate and implement strategies to achieve these visions and goals Lau *et al.* (2000).

Majority of the interviewed respondents admitted to having been able to view their businesses in a broader picture as well as setting a clear road map. They had set visions and goals for their businesses which they hoped to achieve. Majority were able to achieve short term goals like replenishing products on time and ensuring they kept their competitors on their toes whereas, a good number had no set goals. Majority were able to come up with strategies of selling goods that were not moving fast, for instance, through rebranding or lowering their prices. Respondents in transport industry were able to venture in new routes as well as taking advantage of importing new vehicles tax free which is a privilege enjoyed by persons with disabilities in Kenya.

#### **5.2.6 Effect of Commitment Competence and Entrepreneurship Performance**

**H<sub>06</sub>:** There is no significant relationship between Commitment Competency and Entrepreneurship Performance of graduates with physical challenges in Kiambu County, Kenya.

The correlation results generated a statistically significant weak positive linear relationship between Commitment Competence and Entrepreneurship Performance. This was the weakest coefficient value among all the other coefficients and a conclusion was arrived at that there were much variations in the responses. The Cronbach's Alpha coefficient indicated that the measures were reliable. Majority agreed that they refused to let their business fail under all circumstances. The coefficient determination of R square showed a slight percentage variations on Entrepreneurship Performance being explained by Commitment Competence. There was a significant relationship and a positive effect between Commitment Competence and Entrepreneurship Performance.

Commitment competencies call for the ability to sustain one's dedication to the business in different situations. Such commitment is also exemplified by a strong devotion to work hard, a desire to aim long-term goals rather than short-term gains, as well as an ability to start the business up again after failure. These are competencies that help to drive the business to achieve the set goals (Lerner *et al.*, 1997). This corresponds to the entrepreneurial role of having the drive to see firm through to fruition Bwisa (2014). Another aspect of this competency area is the initiative or proactive orientation, which calls for the entrepreneurs taking action before being asked or forced by events (McClelland, 1987).

Respondents gave varying responses to this competency area though everybody agreed that they would do everything possible to prevent their businesses from collapsing. The variations came in the aspect of prioritizing work above everything else whereby a considerable number said that their business was not their first priority in the activities they carried out daily. This response came from respondents who were in formal employment with side businesses that they viewed as part time source of income.

Majority were proactive since they went out of their way to acquire new information concerning their businesses, for instance, attending trainings, seminars and workshops, tuning to programs in the mass media that address issues concerning their businesses, purchasing newspapers in search of information, attending trade

fairs, searching the internet especially among the respondents who run cyber cafes, and finally, through networking. Respondents belonging to Kiaura Disability Group in Juja reported that they frequently attended trainings at Jomo Kenyatta University of Agriculture and Technology and this had a positive impact on their businesses.

### **5.2.7 Effect of Business External Environment in moderating the relationship between Entrepreneurial Competencies on Entrepreneurship Performance**

**H<sub>07</sub>** There is no significant moderating effect of Business External Environment of Access to Finance and Location of Business on the relationship between the six Entrepreneurial Competencies and Entrepreneurship Performance of graduates with physical challenges in Kiambu County, Kenya.

The model summary of the moderated effect of entrepreneurial competencies on Entrepreneurship Performance depicted opportunity and strategic competencies being statistically significant. The Cronbach's Alpha coefficient of Business External Environment of Access to Finance and Business Location respectively denoted measures that were fairly good thus, reliable. There existed some significant moderating effect on opportunity and strategic competencies therefore, the null hypothesis was rejected.

### **5.3 Conclusions**

Opportunity Competency being the most distinguishing competency for the entrepreneur relates to recognizing market opportunities through various means. This activities comprise of the ability to spot opportunities, to actively seek new opportunities and finally develop the opportunities. This competence was evident among graduates with physical challenges running businesses in Kiambu County in Kenya since they were actively seeking for opportunities which were not readily accessible to them. A competent entrepreneur is the one who is able to identify opportunities from various means, work on the potential opportunities by thorough assessment and turn them into feasible opportunities.

Research findings implied firstly, that graduates with physical challenges in Kiambu County were able to identify, secondly, they were able to assess and thirdly, they were able to seek market opportunities in their daily endeavors. The active pursuit of opportunities regardless of resources under control cannot be overemphasized and is the hall mark of entrepreneurship. It was noted that in actively seeking for business opportunities through promotions and using proper marketing channels, a few graduates with physical challenges did not put enough effort. However, it was notable that Business External Environment moderated the relationship between Opportunity Competence and Entrepreneurship Performance.

The creation of business contacts and connections for business opportunities is highly influenced by Relationship Competence. From the findings it was clear that graduates with physical challenges operating enterprises in Kiambu County were able to keep relationships with suppliers and build good and trustful relations with customers. The researcher also noted that those that were exposed to technology kept strong networking relationships amongst themselves through social media and other forms of communications. Their interactions were business related and fuelled by the fact that they shared similar life experiences. These relations helped in promotions of their products and services as well as building professional image. An area of concern was about solving conflicts that arose in normal negotiations between a buyer and a seller or between competitors. This made the researcher suggest a suitable supporting competency area among persons with disability that could cater for unnecessary aggression, that is, “manage anger” which would help in dealing with uncomfortable situations arising during business interactions. However, Business External Environment did not moderate the relationship between Relationship Competence and Entrepreneurship Performance.

Conceptual Competencies are very necessary and are needed in analyzing and uncovering hidden opportunities as well as solving organizational problems and issues. The researcher noted that graduates with physical challenges operating enterprises in Kiambu County applied a view of the market environment from different angles and assessed risks associated with staying in the market with

unfavorable conditions. They were able to think intuitively and quickly about market opportunities. Few graduates with physical challenges were able to innovate new market entry methods for their goods and services. It was notable that Business External Environment did not moderate the relationship between Conceptual Competence and Business Performance since it was statistically insignificant.

The task of creating organizational capabilities requires Organizing Competencies to gather and organize internal and external resources. It is very important to possess Organizing Competencies as one plans to organize human, financial, information and technical resources of the business. This area was weakly represented by the respondents since majority did not have enough human and financial resources. A considerable number of graduates with physical challenges were owner managers in their businesses therefore, they did not have to recruit, coach, motivate, retain or supervise employees. However, Business External Environment did not moderate the relationship between Organizing Competence and Entrepreneurship Performance.

Strategic Competencies are essential competency areas required for the task of setting the direction of the firm and deciding the actions to take towards that direction. Research findings implied firstly, that graduates with physical challenges in Kiambu County were able to set strategies of running their businesses. Secondly, they were able to apply tactics to customers and competitors. There was a hitch in evaluating oneself in implementing strategies resulting to a noticeable failure in estimating financial feasibility and majority failed to monitor their strategic outcome. However, Strategic Competence was the best predictor of Entrepreneurship Performance in this study. Business External Environment moderated the relationship between Strategic Competence and Entrepreneurship Performance.

An entrepreneur is needed to possess strong Commitment Competencies in order to sustain and enhance firm's performance in the long run. Research results implied firstly, that graduates with physical challenges in Kiambu County sustained effort in their businesses, secondly, they devoted most of their time to their businesses. However, from personal interviews, the researcher noted that they did not commit to long term goals rather they concentrated on short-term gains and worse still, some

did not set goals. The idea that one could not commit to run their businesses without external financial support from donors, well-wishers and sponsors contributed to lack of vision in their businesses. Majority of the respondents in the age bracket of thirty to forty years seemed not to ever want to re-start after failure. Business External Environment did not moderate the relationship between Commitment Competence and Entrepreneurship Performance.

Nusrat *et al.* (2014) studied the relationship between entrepreneurial competencies of SME Owner/managers and Firm Performance on manufacturing companies in Bangladesh. They found out that all competencies had positive relationship with firm performance; when competencies increased, firm performance increased. While strategic competency held the highest level of correlation, conceptual and commitment had no significance to firm performance although they had a positive relationship with firm performance.

In this research, entrepreneurial competencies were found to be important in determining Entrepreneurship Performance of graduates with physical challenges in Kiambu County. However, there were some competencies that bore much impact on Entrepreneurship Performance than others. Strategic Competence and Opportunity Competence were the best predictors of Entrepreneurship Performance among graduates with physical challenges in Kiambu County in Kenya since they had well laid down strategies and were able to see opportunities unfolding from their environment.

#### **5.4 Recommendations**

The study offered a forum for discussing further issues concerning disability and entrepreneurship as it sought to establish the relationship between entrepreneurial competencies and Entrepreneurship Performance of graduates with physical challenges in Kiambu County in Kenya. Based on the findings of the study, the following recommendations were put across.

### **5.4.1 Entrepreneurial Recommendations**

Opportunities availing themselves in the environment need to be pursued as they unfold without having to wait till they cease to be opportunities when everybody has picked them. Graduates with physical challenges should put some effort in seeking for business opportunities through promotions and proper marketing channels. In doing this financial skills and capabilities are vital in order to record any growth and expansion. The researcher recommends online marketing for easy visibility since this has been made globally possible with the current technological advancements.

In order to strengthen relations amongst themselves and with the mainstream in the society, the researcher recommends that persons with physical challenges in entrepreneurship should exercise restraint when it comes to disagreement arising from business interactions. The researcher proposes for a suitable competence area “manage anger” which would help one to handle uncomfortable situations during business interactions that are expected to arise. There were duplications of goods and services emanating from vibrant relationships among the respondents therefore, the researcher recommends that relations should not only be between persons with disabilities alone but should expand to embrace those without disabilities operating similar businesses and sharing similar experiences.

The researcher recommends for more innovations from this minority group since there were very few innovations in the products and services. It is important to note that innovative behavior, characterized by creation of new commodities and bringing them to the market is very essential in successful entrepreneurship. Innovations could solely be developed for this and by this group on handling their work effectively since they experience the barriers first hand. Having different gifting in different areas among this group calls for creativity in whatever one does therefore, stakeholders in this area should put in place measures to stimulate innovativeness and creativity.

Organizing, directing and leading activities of the business is the sole responsibility of the owner as he or she directs personnel if they have any. The researcher recommends for proper organization of resources of enterprises. Financial and human resources were found to be a major challenge to owners who were graduates with physical challenges. Enterprises should have the right resources during the various stages of growth therefore, owner managers should see to it that their enterprises grow as expected.

Laying of strategies in order to achieve set goals is highly recommended. The researcher recommends for closer monitoring of set strategies in order to attain entrepreneurial success. Goal setting was a major setback and some respondents did not meet their set personal goals. Graduates with physical challenges should keep evaluating themselves against their set strategies in order to attain their objectives and goals. Record keeping knowledge is also highly recommended.

The researcher recommends for more commitment to long term goals among entrepreneurs of less than thirty years of age. They were found not fully committed in their daily endeavors towards their work. The urge to re-start after failure of a business is also highly recommended.

#### **5.4.2 Policy Recommendations**

A policy implication emanating from the study is that there is need for stakeholders involved in promoting entrepreneurship among the disadvantaged minorities such as the Government, Non-Governmental Organizations, and Disabled People's Organizations to introduce special programs that will promote entrepreneurship and embrace entrepreneurial spirit and behavior. The goal of improving Entrepreneurship Performance. Such programs should range from training, better financing such as having special loans tailor-made for persons with disabilities with different interest rates much less than the prevailing market rates.

Disabled people should have a platform in the mass media, both electronic and print for marketing their products and services. This should aim at allowing persons with disabilities to access the market with ease. Structures both legal and physical that are obstructive should be removed so as to give persons with disabilities free access to the market.

There is need for a policy document that embraces a disability-inclusive approach to development; that seeks to include people with disabilities in the development process by recognizing their potential, valuing and respecting their contributions and perspectives, honoring their dignity, and effectively responding to their needs.

The National Council for Persons with Disabilities (NCPWD) is charged with disability mainstreaming which is a strategy for making concerns and experiences of persons with disabilities an integral dimension of the design, implementation, monitoring, and evaluation of policies and programs in all political, economic, and societal spheres so that persons with disabilities have the same access as non-disabled people. The council should bring awareness to the public to an extent that ordinary people will see other ordinary people behind the mask of disability. People should see a person first as opposed to seeing the disability.

There should be a policy to address training for anybody that gets into contact with disabled persons either as government workers or privately employed on disability issues. The fact that persons with disabilities feel discriminated upon when they visit financial institutions should stop. Their loan application documents are thoroughly and questionably scrutinized and most of them are denied loans by being asked to bring along collateral.

There should be a Local Purchase Order fund for financing persons with disabilities since they have no source of funds to settle down contracts. This would be of great advantage to persons with disability when they win tenders noting that the government has shown the willingness to accommodate persons with disabilities in the competitive bids to win tenders by allocating thirty percent of the slots during the procurement process to be a preserve for youth, women and persons with disabilities.

During the procurement process, the requirement from a person with disability should be a registered company as opposed to being in a group. This is because one may not be in a position to gather all the disabled persons and convince them to form a group so as to access loans. Disabled people are not a homogenous group. It should be further noted that disability issues cannot be put into groups because disabilities are themselves diverse therefore, must be handled individually as they present themselves.

The law on disability in the Disability Act (2003) came to effect on January 2010 and in it issues related to accessibility of buildings as well as on information by persons with disability are clearly stipulated. Owners of buildings were given a period of five years to comply and it ended in December 2015. By the end of this period there were very few buildings that complied since most buildings are inaccessible up to today. A policy to address the accessibility of mainstream services, including access to buildings, public transport and to information should be assertive since the existing one on accessibility to public facilities is not replicated everywhere. The policy should endorse universal design for all upcoming facilities since some buildings have very steep ramps on which wheelchairs would not ascend with ease. Others have very slippery floors that could lead to serious falls to a person on crutches.

Finally, institutions of higher learning and especially universities and colleges should mainstream disability in their respective directorates.

### **5.5 Areas for Further Research**

The study looked at Entrepreneurial Competencies among graduates with physical challenges of higher education and training institutions operating enterprises in Kiambu County in Kenya. The researcher would recommend similar studies to be carried out in different Counties within Kenya and compare the results. All the Entrepreneurial Competencies showed a statistical significance in their relationship with Entrepreneurship Performance.

Secondly, the researcher only dealt with physical disabilities or impairments associated with mobility defects, and did not delve into other forms of impairments such as hearing impairment, visual impairment as well as intellectual impairment. Research should be carried out to establish the entrepreneurial capabilities among these groups. This would shed some light in these areas.

Thirdly, research should be carried out to establish whether entrepreneurial competencies are present among persons with physical challenges who have not been to any formal educational setting and find out whether competencies are a prerogative of the learned or are also traceable among the “not” educated groups. This would help answer the question whether competencies are learned or acquired through life or are inherent in a person.

Finally, with further studies in the area of disability and entrepreneurship, more complete picture of Entrepreneurial Competencies of persons with disabilities in Kenya will contribute to the development of an appropriate Competency-Based Development programs to fit the needs of the local context.

## REFERENCES

- Ahmad, N.H. (2007). *A cross cultural study of entrepreneurial competencies and entrepreneurial success in SMEs in Australia and Malaysia*. Unpublished Phd thesis, Australia: University of Adelaide.
- Aldrich, H.E. (1999). *Organizations Evolving*. Thousand Oaks: Sage
- Alvarez, S. A., & Barney, J. B. (2007). Discovery and creation: Alternative theories of entrepreneurial action. *Strategic entrepreneurship journal*, 1(1-2), 11-26
- Antoncic, B. & Hisrich, R.D. (2001). Intrapreneurship: Construct Refinement and cross-Cultural Validation. *Journal of Business Venturing*, 16(5), 495-527.
- Barney, J. (1991). Firm resources & sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Baum, J.R., Locke, E.A., & Smith, K.G. (2001). A multidimensional model of venture growth. *Academy of management journal*, 44(2), 292-303.
- Benjamin, J.I. & Rebecca, O.E. (2009). Entrepreneurial Competencies. The Missing Links to Successful Entrepreneurships in Nigeria. *Journal of International Business Research*, 2(2), 62-71.
- Bird, B. (1995). Towards a theory of entrepreneurial competency. *Advances in entrepreneurship, firm emergence and growth*, 2(1), 51-72.
- Brinckmann, J., Salomo, S., & Gemuenden, H.G. (2011). Financial Management Competence of Founding Teams and Growth of New Technology-Based Firms. *Entrepreneurship Theory and Practice*, 35(2), 217-243.
- Brophy, M., & Kiely, T. (2002). Competencies: a new sector. *Journal of European Industrial Training*, 26(2/3/4), 165-176.

- Brownell, J., & Goldsmith, M. (2006). Commentary on meeting the competency needs of global leaders: A partnership approach: An executive coach's perspective. *Human Resource Management, 45*(3), 309-336.
- Bwisa, H. (1998). *How to find and evaluate a business opportunity: A guide to those contemplating starting an own business*. Nairobi: Mukmik consultants.
- Bwisa, H. (2010). Towards the improvement of entrepreneurship education in Africa. *Proceedings from (2010) JKUAT Scientific technological and industrialization conference, (pp. 426-442)*. Nairobi. JKUAT
- Bwisa, H.M., (2011). *Entrepreneurship: Theory and Practice: A Kenyan Perspective*. Nairobi: Jomo Kenyatta Foundation.
- Bwisa, H., & Margaret, M., (2013). Factors Influencing the Success of Physically Disabled Entrepreneurs in their Business Activities: A Survey of Thika Municipality, Kiambu County. *International Journal of Academic Research in Business and Social Science, 3*(1), 280-289.
- Bwisa, H.M. (2014, March Thursday 6th). Kenya's Education System Pose Major Challenges. Nairobi: *The Star Newspaper*. p26
- Chandler, G.N., Jansen, E. (1992). The founder's self-assessed competence and venture performance. *Journal of Business Venturing, 7*(3), 223-236.
- Chandler, G.N., & Hanks, S.H. (1994). Founder competence, the environment, and venture performance. *Entrepreneurship: Theory and Practice, 18*(3), 77-90.
- Chiu, Y.T.H. (2008). How network competence and network location influence innovation performance. *Journal of Business and Industrial Marketing, 24*(1), 46-55.
- Colombo, M. G., & Grilli, L. (2005). Founders' human capital and the growth of New technology - based firms: A competence - based view, *Research Policy, 34*(6), 795- 816.

- Cooper, R.D., & Schindler, P. (2006). *Business Research Methods*. New York: McGraw-Hill.
- Creswell, J.W. (2003). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (2<sup>nd</sup> ed.). London: Sage Publications.
- Cronbach, L.J. (1951). Coefficient alpha and the internal structure of tests. *psychometrika*, 16(3), 297-334.
- Davidsson, P., & Wiklund, J. (2001). Levels of analysis in entrepreneurship research: Current research practice and suggestions for the future. *Entrepreneurship: Theory and Practice* 25(4), 81–99.
- Dornyei, Z. (2007). *Research Methods in Applied Linguistics: Quantitative, Qualitative and Mixed Methodologies*. Oxford: Oxford University Press.
- Eisenberger, R., Jones, J. R., Stinglhamber, F., Shanock, L., & Randall, A. T. (2005). Flow experiences at work: For high need achievers alone? *Journal of Organizational Behavior*, 26(7), 755-775.
- European Commission (1999). *Action Plan to Promote Entrepreneurship and Competitiveness*, Luxembourg: European Commission.
- European Commission, (2003). *Green Paper: Entrepreneurship in Europe, COM (2003) 27 Final*, Brussels: European Commission.
- Fairlie, R., & Meyer, B. (1996). Ethnic and Racial Self-Employment Differences and Possible Explanations. *The Journal of Human Resources*, 31(4), 757-793. doi:10.2307/146146
- Gibb, A.A. (1993). The enterprise culture and education. *International Small Business Journal*, 11(3), 11-34.
- Hesse-Biber, S.N., & Leavy, P. (2011). Focus group interviews. *The practice of qualitative research*, 163-192.

- Hisrich, R.D. (1990). Entrepreneurship/intrapreneurship, *American Psychologist Journal*, 45(2), 209-222.
- Iandoli, L., Landström, H., & Raffa, M. (2007). Introduction: entrepreneurship, competitiveness and local development. *Entrepreneurship, Competitiveness and Local Development*, 1-24.
- International Disability and Development Consortium (IDDC) (2012). *Collaborating globally to promote Inclusive Development. Light for the World*. Amsterdam: IDDC
- International Labour Organization (ILO), (2007). *The employment situation of people with disabilities: Towards improved statistical information, ILO Bureau of Statistics in Collaboration with the ILO Skills and Employability Department (Geneva)*. Geneva: ILO
- International Labour Office (ILO), (2010): *Disability in the workplace: Company practices*. Geneva: ILO.
- Iravo, M., Ongori, J. & Munene, C. (2013). Factors affecting the performance of hotels and restaurants in Kenya. A case of Kisii County. *Interdisciplinary Journal of Contemporary Research in Business*, 4(12), 897-928.
- Jones, M.K. & Latreille, P.L. (2005). Disability and Self-Employment: Evidence from the UK LFS. *WELMERC Discussion Paper*, University of Wales, Department of Economics, Swansea.
- Kamundia, E. (2013). Choice, Support and Inclusion: Implementing Article 19 of the Convention on the Rights of Persons with Disabilities in Kenya. *Afr. Disability Rts. YB*, 1, 49.
- Karimi, A., Ghasem, A. & Maryam, A. (2014). Entrepreneurial Attitude in Students with Hearing Disabilities (The Iranian experience). *Asian Journal of Research in Business Economics and Management*, 4(10), 262-274.

- Kothari, C.R. (2004). *Research Methodology. Methods and Techniques* (2<sup>nd</sup> ed.). New Delhi, India: New Age International Publishers.
- Krueger, N.F., Reilly, M.D., & Carsrud, A.L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5), 411-432.
- Kuratko, D.F. (2005). The emergency of entrepreneurship education: development, trends, and challenges. *Entrepreneurship Theory and Practice* 29(5), 577-598.
- Lau, T., Chan, K.F., & Man, T.Y. (2000). The entrepreneurial and managerial competencies of small business owner/managers in Hong Kong: conceptual and methodological considerations. *Journal of Enterprising Culture*, 8(3), 235-254.
- Li, X. (2009). *Entrepreneurial competencies as an entrepreneurial distinctive: An examination of the competency approach in defining entrepreneurs* (Doctoral dissertation, Singapore Management University (Singapore)).
- Lindgren, M., & Packendorff, J. (2006). Entrepreneurship as boundary work-On the promises and problems of deviating from and belonging to community. *I C. Steyaert & D. Hjorth (red.) Entrepreneurship as Social Change. Cheltenham: Edward Elgar.*
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of management Review*, 21(1), 135-172.
- Man, T. & Lau, T. (2000). Entrepreneurial competencies of SME owner/managers in the Hong Kong service sector: a qualitative analysis, *Journal of Enterprising Culture*, 8(3), 235-254.

- Man, T.W., Lau, T., & Chan, K.F. (2002). The competitiveness of small and medium enterprises: a conceptualization with focus on entrepreneurial competencies. *Journal of Business Venturing*, 17(2), 123-142.
- Manjula, S., John, B., V.N. Umesh. (2008). Outsourcing and Performance in Entrepreneurial Firms: Contingent Relationships with Entrepreneurial Configurations. *Journal of Decision Science*, 39(3).
- Maragia, I. (2008). *Factors that Determine Entrepreneurial Behaviour in Micro and Small Enterprises (MSEs) in Kenya*. Nairobi: Scangraphics Kenya Limited.
- McClelland, D.C., & Koestner, R. (1992). The achievement motive. In C. Smith (Ed.), *Motivation and personality: Handbook of thematic content analysis* (p p. 143 -152). New York: Cambridge University Press.
- McClelland, D. (1961). *The achieving society*. Princeton, NJ: Van Nostrand Company Inc.
- McClelland, D. (1975). *Power: The inner experience*. New York: Irvington.
- McClelland, D. C. (1985). *Human motivation*. Glenview, IL: Scott, Foresman.
- McClelland, D.C. (1987). Characteristics of successful entrepreneurs. *Journal of Creative Behaviour*, 21(1), 18-21.
- McMullan, W.E. & Long, W.A. (1987), Entrepreneurship Education in the Nineties, *Journal of Business Venturing*, 2(3), 261-275.
- Miles, M., & Huberman, A.M. (1994). *Qualitative data analysis: An Expanded source book*. (2<sup>nd</sup> ed.). Newbury Park: CA: Sage.
- Miller, D. (2011). A Reflection on EO Research and Some Suggestions for the Future. *Entrepreneurship Theory and Practice*, 5(35), 873-894.

- Mitchelmore, S., & Rowley, J. (2010). Entrepreneurial Competencies: A literature review and development agenda. *International Journal of Entrepreneurial Behaviour and Research*, 16(2), 92-111.
- Mitton, D.G. (1989). The complete entrepreneur, *Entrepreneurship Theory and Practice*, 13(3), 9-19.
- Moberg, K., Vestergaard, L., Fayolle, A., Redford, D., Cooney, T., Singer, S., & Filip, D. (2014). *How to assess and evaluate the influence of entrepreneurship education: A report of the ASTEE project with a user guide to the tools*. The Danish Foundation for Entrepreneurship–Young Enterprise.
- Mpofu, J., Gasva, D., Gwembire, J., & Mubika, D. (2011). *Introduction to Special Needs Education*. Zimbabwe: Zimbabwe Open University Harare.
- Mugenda, O., & Mugenda, G. (2003). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi: ACTS Press.
- Murray, G. (1996). A synthesis of six exploratory, European case studies of successfully exited, venture capital-financed , new technology-based firms, *Entrepreneurship Theory and Practice*, 20(4), 41-60.
- Mutindi, U., Namusonge, G., & Obwigi, J. (2013). Effects of strategic management drivers on organizational performance: A survey of the hotel industry in Kenyan coast. *International Journal of Arts and Commerce*, 2(11), 83-105.
- Nachmias, C. F., & Nachmias, D. (2008). *Research Methods in Social Sciences* (5<sup>th</sup> ed.). London: Martin Press.
- Namusonge, G.S. (1999). *Entrepreneurship Development Micro and Small Enterprises in Kenya*. Agency for improving the policy environment in Kenya. Nairobi: ICEG & USAID.
- National Council for Persons with Disabilities, (2003). *Persons with Disabilities Act No. 14*. Nairobi: Government Printer.

- Nicholas, W. (2011). *Social Sciences Research Methodology, the basics*. New York: Rutledge.
- Noakes, P. (2006). Disability in Great Britain: Results of the 1996/7 Disability Follow-up to the Family Resources Survey. *Social Research Division, London: Department of Work & Pensions*.
- Nteere, K.K. (2014). *Determinants influencing the performance of entrepreneurship education in public universities in Kenya*, Unpublished PhD thesis, Juja: JKUAT.
- Nusrat, Z.L., & Tarun, K.B. (2014). Relationship between Entrepreneurial Competencies of SME Owners/Managers and Firm Performance: A study on Manufacturing SMEs in Khulna City. *Journal of Entrepreneurship and Management*, 3(3), 1
- Nwachukwu, C.C. (2005). *The practice of entrepreneurship in Nigeria*. Onitsha: Africana-First Publishers Limited.
- Nyamoki, A.M. (2008). *Relevance of vocational training for persons with orthopedic disabilities at the Nairobi industrial rehabilitation center, Kenya* Unpublished PhD thesis, Nairobi: Kenyatta University.
- Ojong, C.M. (2005). Starting a new business. In S.N Udo (ed). *Entrepreneurial development: Principles and Practice*. Calabar, Nigeria: Wusen Press.
- Orodho, J. (2005). *Techniques of Writing Research Proposals and Reports in Education and Social Sciences* (2<sup>nd</sup> ed.). Nairobi: Kanezja HP Enterprises, Maseno.
- Pavey, B. (2006). Human capital, social capital, entrepreneurship and disability. An examination of some current educational trends in the UK. *Journal of Disability and Society*, 21(3), 217-29.

- Peterman, N.E., & Kennedy, J. (2003). Enterprise education influencing students' perceptions of entrepreneurship. *Entrepreneurship Theory and Practice*, 28(2), 129-144.
- Puffer, S.M., McCarthy, D.J., & Boisot, M. (2010). Puffer, S.M., McCarthy, D.J., & Boisot, M. (2010), Entrepreneurship in Russia and China: the impact of formal institutional voids, *Entrepreneurship Theory and Practice*, 34(3), 441-467.
- Robbins, S. P. (2003). *Organizational behavior* (10<sup>th</sup> ed.). Englewood Cliffs, NJ: Prentice – Hall.
- RoK. (2003). *The National Special Needs Education Policy Framework*. Ministry of Education. Nairobi: Government Printer.
- RoK. (2010). *Kenya Vision 2030*. Nairobi: Government Printer.
- Saeedi-Kia, M. (2007). *Entrepreneurship Tenet and Foundations*. Tehran: Kia Publication.
- Schumpeter, J. (1934). *The Theory of Economic Development*. Cambridge: Harvard University Press.
- Sekaran, U. (2003). *Research Methods for Business: A Skill Building Approach* (5<sup>th</sup> ed.). Illinois: Hudson: John Woley & Sons.
- Sekaran, U., & Rodger, B. (2010). *Research Methods for Business. A Skill Building Approach* (5<sup>th</sup> ed.). West Sussex, United Kingdom: Wiley Publishers.
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review Journal*, 25, 217-226.
- Solesvik, M. (2012, May). Entrepreneurial competencies in emerging economy context. In *17th Nordic Conference on Small Business Research, Helsinki.–2012.–23-25 May*.

- Sony, H.P., & Iman, S. (2005). Relationship between entrepreneurial learning, Entrepreneurial competencies and venture success: empirical study on SMEs. *International Journal of Entrepreneurship and Innovation Management*, 5(5), 454-468.
- Stevenson, H., & Jarillo. (1990). Perspective of Entrepreneurship: *Entrepreneurial Management. Strategic Management Journal*, 11(5), 17-24.
- Man, T. W., & Lau, T. (2000). Entrepreneurial competencies of SME owner/managers in the Hong Kong services sector: A qualitative analysis. *Journal of Enterprising Culture*, 8(03), 235-254.
- Todd, R. & Angela, T. (2012). The relationship between McClelland's theory of needs, feeling individually accountable, and informed accountability for others. *International Journal of Management and Marketing Research*, 5, 25-26.
- Vijay, L., & Ajay, V. K. (2011). Entrepreneurial Competency in SME'S. *Bonfring International Journal of Industrial Engineering and Management Science*, 1, 5.
- Wiklund, J., & Shepherd, D. (2003). Knowledge-Based Resources, Entrepreneurial Orientation, and Performance of Small and Medium-sized Businesses. *Strategic Management Journal*, 24, 1307-1314.
- Wiklund, J., & Shepherd, D. (2004). Knowledge based resources. *Strategic Management Journal*, 1307-1314.
- Wiklund, J., & Shepherd, D. (2005). Entrepreneurial Orientation and Small Firm Performance: A Configurational Approach. *Journal of Business Venturing*, 20, 71-91.
- Yamaguchi, I. (2003). The relations among individual differences, needs, and equity sensitivity. *Journal of Managerial Psychology*, 18(4), 324-344.

Yeo, R. (2005). *Disability, poverty and the 'new' development agenda*, *Disability Knowledge and research Programme* (Disability KaR)., from [http://www.disabilitykar.net/research/red\\_new.html](http://www.disabilitykar.net/research/red_new.html)

Zinbarg, R.E., Revelle, W., Yovel, I., & Li. W. (2005). Cronbach's Alpha, Revelle's Beta, McDonald's Omega: Their relations with each other and two alternative conceptualizations of reality. *Psychometrika*, 70(1), 123-133.

## **APPENDICES**

### **Appendix 1: Self Introduction Letter**

Jomo Kenyatta University of Agriculture and Technology,  
College of Human Resource Development  
Department of Entrepreneurship, Technology, Leadership and Management,  
P.O. Box 62000 – 00200,  
NAIROBI.  
September 2015.

Dear Sir/Madam,

#### **SUBJECT:**

#### **RELATIONSHIP BETWEEN ENTREPRENEURIAL COMPETENCIES AND ENTREPRENEURSHIP PERFORMANCE OF GRADUATES WITH PHYSICAL CHALLENGES IN KIAMBU COUNTY IN KENYA**

I am a post graduate student at Jomo Kenyatta University of Agriculture and Technology, carrying out a research in Kiambu County. I would appreciate your support for this project by participating in filling this questionnaire as accurately as possible and to the best of your knowledge. The information will be of importance to scholars, policy makers, National Council for Persons with Disabilities, and owners of firms for them to examine the necessary competencies for Entrepreneurship Performance.

You are one of the identified respondents in this study. Your responses will be treated confidentially and only used for the purposes of this study. No participant will be able to be identified in the final report. Kindly respond as honestly and objectively as possible to all the items.

Thank you.

Yours Faithfully,

**MARGARET W. MWANGI**

**E-mail: wanjikumwangi01@gmail.com**

## Appendix 2: Questionnaire for Business Owners/Managers

Questionnaire Code ( )

### THE RELATIONSHIP BETWEEN ENTREPRENEURIAL COMPETENCIES AND ENTREPRENEURSHIP PERFORMANCE OF GRADUATES WITH PHYSICAL CHALLENGES IN KIAMBU COUNTY IN KENYA

#### INSTRUCTIONS

- i) The questionnaire contains four parts: Parts **A, B, C** and **D**.
- ii) Please answer all the questions as objectively and honestly as possible.
- iii) Answer questions by either inserting a tick (✓) or filling the blank space.
- iv) Do not interfere with the wordings in the questionnaire.

Name of your business \_\_\_\_\_

Location/constituency of your business \_\_\_\_\_

Telephone number \_\_\_\_\_

**PART A: BIOGRAPHIC INFORMATION**

1. What category does your business belong?
  - i. Micro { }
  - ii. Small { }
  - iii. Medium { }
  - iv. large { }
  
2. What is the sub sector of your business?
  - i. Agro-based { }
  - ii. Service industry { }
  - iii. Trade { }
  
  - iv. Manufacturing { }
  - v. Other (specify) \_\_\_\_\_
  
3. Which of the following best describes the number of years in operation of the business?
  - i. Less than 10 years { }
  - ii. 11 – 20 years { }
  
  - iii. 21 – 30 years { }
  - iv. 30 years and above { }
  
4. Which category best describes your age bracket?
  - i. Less than 30 years { }
  - ii. 31 – 40 years { }
  
  - iii. 41 – 50 years { }
  - iv. 51 years and above { }
  
5. What category best describes the number of employees in your business?
  - i. 1- 4 { }
  - ii. 5 – 9 { }
  - iii. 10 – 49 { }
  - iv. 50 and above { }
  
6. What position do you hold in the business?
  - i. Owner manager { }
  - ii. General Manager { }
  - iii. Spouse { }
  
7. Which category best describes your academic qualification?
  - i. Certificate level { }
  - ii. Diploma level { }
  - iii. Degree level { }
  
  - iv. Masters level { }
  - v. Basic education { }



b	Negotiate with others.					
c	Interact with others with similar business as mine					
d	Maintain a personal network of work contacts.					
e	Utilize business network to grow my business.					
f	Understand what others mean by their words/actions.					
g	Respond to constructive criticism.					
15.	<b>Conceptual Competency</b> <b>As the owner manager of this business, i ...</b>	<b>S.D</b> <b>1</b>	<b>D</b> <b>2</b>	<b>N.S</b> <b>3</b>	<b>A</b> <b>4</b>	<b>S.A</b> <b>5</b>
a	Explore new ideas that are helpful to my business.					
b	Make decisions concerning my business.					
c	Take reasonable job-related risks in my business.					
d	Monitor progress toward objectives in risky actions.					
e	Prioritize tasks to manage my time.					
f	Apply ideas I get from my business to different contexts.					
g	Make decisions concerning my business very fast					
16.	<b>Organizing Competency</b> <b>As the owner manager of this business, i ...</b>	<b>S.D</b> <b>1</b>	<b>D</b> <b>2</b>	<b>N.S</b> <b>3</b>	<b>A</b> <b>4</b>	<b>S.A</b> <b>5</b>
a	Delegate duties to my employees.					
b	Keep the records of my business.					
c	Plan the operations of my business.					
d	Always ensure my business runs smoothly.					
e	Coordinate tasks.					
f	Motivate people.					
g	Plan the organization of different resources.					
17.	<b>Strategic Competency</b> <b>As the owner manager of this business, i ...</b>	<b>S.D</b> <b>1</b>	<b>D</b> <b>2</b>	<b>N.S</b> <b>3</b>	<b>A</b> <b>4</b>	<b>S.A</b> <b>5</b>
a	Plan ahead of time about solving anticipated problems as well as tackling opportunities					
b	Know the projected direction of the industry and how changes might impact on my business					

c	Am very often the first to introduce new products/services as compared to my competitors					
d	Strictly follow my laid down goals In whatever I undertake to do in my business.					
e	My short-term goals or day-to-day tasks are in line with my long-term goal.					
f	Weigh the costs and benefits that I intend to get In every action that I undertake in my business.					
g	Evaluate results against my strategic goals.					
18.	<b>Commitment Competency</b> <b>As the owner manager of this business, i ...</b>	<b>S.D</b> <b>1</b>	<b>D</b> <b>2</b>	<b>N.S</b> <b>3</b>	<b>A</b> <b>4</b>	<b>S.A</b> <b>5</b>
a	Dedicate all my efforts to make my business work.					
b	Refuse to let my business fail under any circumstance.					
c	Commit to long-term business goals.					
d	Possess an extremely strong internal drive.					
e	Go out of my way to learn new ideas about my business.					
f	Apply learned skills and knowledge into practice.					
g	Always maintain a positive attitude in my business.					

## PART C: BUSINESS EXTERNAL ENVIRONMENT CONSTRUCTS

### Section 1: Access to Finance

19. To what extent do you agree with the following statements whereas (SD) is Strongly Disagree, (D) Disagree, (NS) Not Sure, (A) Agree and (SA) Strongly Agree that they affect your performance in business? Indicate with a tick (√)

	Statement	S.D	D	N.S	A	S.A
a	Income tax waiver for PWDs has impacted positively on the performance of my business.					
b	Easy Access to Finances from banks has resulted to better performance in business.					
c	Lack of discrimination on the basis of disability by loan guarantors has impacted positively on my performance in business.					
d	I have Access to Finances from my SACCO thus improving my Entrepreneurship Performance.					
e	I have the financial resources that I need to boost my business to better performance.					
f	Social cultural considerations about the issue of disability have been critical in getting funds from financial institutions					
g	I have benefited from government funds like Uwezo, Women and Youth funds					

20. To what extent has the availability of funds affected your performance in your business?

(i) To no extent { }    ii) To a little extent { }    iii) To a moderate extent { }

iv) To a great extent { }    v) To a very great extent { }

21. What changes would you want the financial institutions to put in place in order to meet your expectations as person with disability in business?

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**Section 2: Business Location**

22. The following table contains Business Location issues. You are required to indicate with a tick (√) if you “Strongly Disagree (SD)” or “Disagree (D)” or “Not Sure (NS)” or “Agree (A) or “Strongly Agree (SA)” that they affect your performance in business.

	<b>Statement</b>	<b>S.D</b>	<b>D</b>	<b>N.S</b>	<b>A</b>	<b>S.A</b>
a	I encounter no barriers in the environment as I access my Business Location therefore I save on time thus improving my performance in business.					
b	The building where my business is located is “disability friendly” whereby I am able to carry out my activities thus contributing to my performance.					
c	The safe location of my business has contributed to better performance in business.					
d	The location of my business greatly contributes to the sales of my products/services thus improving on performance.					
e	The fact that I am situated along a busy street has impacted positively to performance					
f	The location of my business dictates my operations hours thus it greatly affects my performance					
g	My customers are not bothered by the location of my business					

23. To what extent do you agree that the location of a business can greatly impact on its performance?

- (i) Very low{ }    (ii) Low{ }    (iii) Moderate{ }    (iv) High{ }    (v) Very High{ }

24. What considerations did you put in place while choosing the location of your business

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**PART D: ENTREPRENEURSHIP PERFORMANCE CONSTRUCTS**

**Section 1: Sales**

25. The following table contains sales issues. You are required to indicate with a tick (√) if you “Strongly Disagree (SD)” or “Disagree (D)” or “Not Sure (NS)” or “Agree (A)” or “Strongly Agree (SA)” that they affect your performance in business.

	Statement	S.D	D	N.S	A	S.A
a	My ability to recognize and take advantage of opportunities has increased my sales volumes.					
b	My efficiency in service delivery has improved my sales volume.					
c	My relationship with my customers and suppliers has led to increased sales of my products/services.					
d	I come up with new ideas on how to sell a product/service that does not move as fast as I want.					
e	I have well laid strategies on how to improve my market share.					
f	I am fully committed to satisfy my customers’ needs.					
g	Easy Access to Finances has led to increased market share.					

26. How well do you replenish products that get out of stock?

- (i) Very rare { }      (ii) Rare { }      (iii) moderate { }  
 (iv) Often { }      (v) Very often { }

27. What strategies have you put in place in order to sell more than your competitors?

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**Section 2: Profit**

28. The following table contains profit issues. You are required to indicate with a tick (√) if you “Strongly Disagree (SD)” or “Disagree (D)” or “Not Sure (NS)” or “Agree (A)” or “Strongly Agree (SA)” that they affect your performance in business.

	<b>Statement</b>	<b>S.D</b>	<b>D</b>	<b>N.S</b>	<b>A</b>	<b>S.A</b>
a	My ability to take risks when a new opportunity arises has led to increased market share thus raising my profits.					
b	My good relationship with my customers, suppliers and business networks has led to growth of my income.					
c	The improvement of my products/services has led to more demand thus maximizing on profits					
d	My regular attendance to business training has enabled me attain knowledge that I need in my business thus improving my profits.					
e	I have the necessary resources (financial, human, technical) that I need in my business that makes the production cost lowered thereby raising profits.					
f	I plan to open a new branch in order to meet the customers’ demands so as to improve on profits.					
g	The external environment of my business (Access to Finance and Business Location) makes me identify strategies to improve my income.					

29. If you were to enlarge your business what resources would you use?

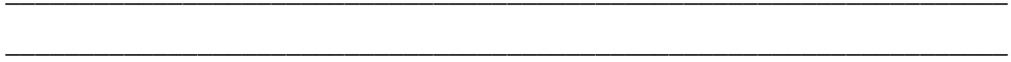
- (i) My Savings { }                      (ii) Profit from the business { }  
 (iii) Have no intentions to enlarge { }                      (iv) Bank loan { }  
 (v) Sacco loan { }    (vi) Group loan { }    (vii) Sponsorship/donation { }

30. What do you think would make your business become more profitable?

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*Thank you for your Time and Participation!*

## **Appendix 3: Interview Guide**

### **A. ENTREPRENEURIAL COMPETENCIES**

#### 1. Opportunity Competency

1. Are you able to identify goods and services that your customers need?
2. What do you do to a product that does not move as fast as you intend?
3. Have you come up with a new product or service of late?

#### 2. Relationship Competency

4. If a customer criticizes your product, how do you handle that?
5. How do you relate with a supplier who fails to deliver goods on time?
6. Who do you network within your business?

#### 3. Conceptual Competency

7. What are the major decisions that you make on daily basis concerning your business?
8. Have you made a decision that you considered risky but you went ahead with it?
9. Have you met your set goal for this year?

#### 4. Organizing Competency

10. How do you carry out operations of your business?
11. Do you delegate and supervise your employees?
12. Do you keep records in your business

#### 5. Strategic Competency

13. How fast do you replenish products that get out of stock?
14. What strategies do you put in place in order to sell more than your competitors?
15. How do you tackle problems that you encounter in your business?

## 6. Commitment Competency

- 16. Is your business your first priority in your everyday plans?
- 17. What do you do to prevent your business from falling?
- 18. Do you go out of your way to get information concerning your business?

## **B. BUSINESS EXTERNAL ENVIRONMENT**

- 19. Do you enjoy tax waiver in your business that you are entitled to as a PWD?
- 20. Have you borrowed money from any financial institution this year?
- 21. Is the location of your business favorable for your business?

## **C. BUSINESS PERFORMANCE**

- 22. How often do you replenish your goods in a month?
- 23. Have you registered profit in your business over the last 3 months?
- 24. If Yes, approximately how much? (Respondent to give profit range)

#### Appendix 4: Disabilities associated with Mobility according to W.H.O

Nature of Disability	Description
Cerebral Palsy	A condition resulting from the central nervous system damage often caused by lack of oxygen (anoxia) before, during, or after birth. Muscles lose movement and function because of the inability of the central nervous system to integrate fixed muscle patterns with brain signals.
Muscular Dystrophy	A slow deterioration of the voluntary muscles. Falling, clumsiness in walking and climbing, and difficulty in rising from the floor, are early symptoms of the disease. Usually occurs in the first ten years of life and is more common among boys but there are some types that affects girls as well.
Spina Bifida	It is a birth defect in which the bones of the spine fail to form completely and cover the spinal cord. This condition is frequently accompanied by hydrocephalus. Spina bifida varies from slight to severe paralysis and loss of feeling of the lower body. Incontinence is common and presents both medical and social problems. Urinary infections and pressure sores are a constant threat.
Arthritis	Chronic rheumatoid arthritis attacks the joints of the body but can also involve organs such as heart, lungs, liver and spleen. Swelling and stiffening of affected joints is the most common symptom, but inflammation of the eyes, skin rash, and stunted growth are sometimes evident too.
Nonfunctional limbs and extremities:	This is loss of function in limbs and extremities as a result of paralysis or neurological impairment. Being born without limbs, or extremities, or have lost them as a result of injury, infection, or disease. The use of prostheses (artificial arm, hand, foot) is prevalent.
Epilepsy	A condition caused by an excess of electrical discharge of nerve cells in the brain. Epileptic seizures usually occur.

Source: WHO (2013)

### Appendix 5: The six Competency Areas identified in the literature

<b>Competency Area</b>	<b>Behavioral Focus</b>	<b>Preliminary Elements</b>
Opportunity Competencies	Competencies related to recognizing market opportunities through various means	Opportunity recognition, opportunity seeking, development Communication,
Relationship Competencies	Competencies related to person-to-person or individual-to-group-based interactions, e.g., building a context of cooperation and trust, using contacts and connections, persuasive ability, communication and interpersonal skills	Relationship building, Net-working
Conceptual Competencies	Competencies related to different conceptual abilities which are reflected in the behaviors of the entrepreneurs, e.g., decision skills, absorbing and understanding complex information, risk-taking, and innovativeness	Analyzing, problem solving and decision making, Innovating, Risk taking
Organizing Competencies	Competencies related to the organization of different internal and external human, physical, financial and technological resources, including team building, leading employees, training and controlling	Organizing, planning, Controlling and Leading
Strategic Competencies	Competencies related to setting, evaluating and implementing the strategies of the firm.	Visioning, Strategic thinking, Goal setting
Commitment Competencies	Competencies that drive the entrepreneur to move ahead with the business	Committing, Drive, Taking initiative

Source: Adopted from Man (2001)

## Appendix 6: Sampling Frame

S/No.	Constituency	Outreach	Number of Enterprises
1	Juja	Gachororo, Juja town, Theta	43
2	Thika	Town, Makongeni, Kiganjo, Landless	57
3	Ruiru	Ruiru town,	55
4	Kiambu	Town, Banana, Gachie and environ	48
5	Gatundu South	Gatundu Town Kiganjo and environ	38
6	Gatundu North	Kamwangi and environ	31
7	Githunguri	Komothai	40
8	Kabete	Wangige, Gikunyi, Gitaru	30
9	Kikuyu	Kikuyu, Kinoo, Muguga	40
10	Limuru	Limuru Town and environ	46
11	Lari	Kimende , Kijabe	52
	<b>Total</b>		<b>480</b>

Sampling frame

## Appendix 7: National Population Census Data (2009)

Disability	Male	Female	Total
Visual	153,783	177,811	<b>331,594</b>
Hearing	89,840	97,978	<b>187,818</b>
Speech	86,783	75,020	<b>161,803</b>
Physical	198,071	215,627	<b>413,698</b>
Mental	75,139	60,954	<b>136,093</b>
Others	44,073	55,233	<b>99,306</b>
<b>Total</b>	<b>647,689</b>	<b>682,623</b>	<b>1,330,312</b>

Source: National Population Census 2009 (Kenya National Bureau of Statistics)

## Appendix 8: Correlations

		Entrepre Perform	Opportunit Comp	Relations Comp	Conceptual Comp	Organize Comp	Strategic Comp	Commitment Comp
Entrepreneurship Performance	Pearson Correlation	1						
	Sig. (2- Tailed)							
	N	123						
Opportunity Competence	Pearson Correlation	.634**	1					
	Sig. (2- Tailed)	.000						
	N	123	123					
Relationship Competence	Pearson Correlation	.572**	.582**	1				
	Sig. (2- Tailed)	.000	.000					
	N	123	123	123				
Conceptual Competence	Pearson Correlation	.566**	.575**	.579**	1			
	Sig. (2- Tailed)	.000	.000	.000				
	N	123	123	123	123			
Organizing Competence	Pearson Correlation	.586**	.555**	.514**	.452**	1		
	Sig. (2- Tailed)	.000	.000	.000	.000			
	N	123	123	123	123	123		
Strategic Competence	Pearson Correlation	.685**	.538**	.491**	.535**	.580**	1	
	Sig. (2- Tailed)	.000	.000	.000	.000	.000		
	N	123	123	123	123	123	123	
Commitment Competence	Pearson Correlation	.450**	.341**	.511**	.514**	.351**	.491**	1
	Sig. (2- Tailed)	.000	.000	.000	.000	.000	.000	
	N	123	123	123	123	123	123	123

\*\* . Correlation Is Significant At The 0.01 Level (2-Tailed).