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Development of a competency framework for Entrepreneurship
Education Programmes in Sierra Leone

By

Alfred Mbeteh

A Thesis Submitted in partial fulfillment of the requirements of the

University of West London for the Degree of Doctor of Philosophy

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UNIVERSITY OF
WEST LONDON

Statement of Originality

This is to certify that to the best of my knowledge, the content of this thesis is my own work. This thesis has not been submitted for any degree or other purposes. I certify that the intellectual content of this thesis is the product of my own work and that all the assistance received in preparing this and sources have been acknowledged.

Signature…Alfred Mbeteh…………………….

Date………25/02/19…………………………..

Preface

This thesis came out of my concern about the alarming rate of graduate youth unemployment in Sierra Leone. Growing up in Sierra Leone, I have personally witnessed the massive rate of graduate youths unemployment despite the nationally held belief that academic education will open doors of employment for graduates. The government and other Non-Governmental Organisations (NGOs) within the country have proposed entrepreneurship education as a strategy to considerably reduce the level of youth unemployment in the country. However, the level of unemployment, especially among graduates, is still on the rise.

Thus, when I was offered an acceptance at the university to carry out a Ph.D. research, I set out to understand whether entrepreneurship education is indeed a strategic tool to mitigate the high rate of youth unemployment in Sierra Leone with specific reference to graduate youths.

In this thesis, I will demonstrate that entrepreneurship education (in its present form) does have a limited positive effect on graduate youth unemployment in Sierra Leone. This outcome is largely due to the nature, type and scope of competencies being taught, including the pedagogical approaches used to deliver these competencies. I will present an entrepreneurship competency framework and related pedagogies to be used to develop these competencies.

Abstract

Entrepreneurship has been widely recognised as a major tool in fighting youth unemployment. The literature suggests that entrepreneurship can be taught and as a result, there has been a proliferation of entrepreneurship education programmes, especially in developing countries where graduate youth unemployment, in particular, seems to be higher. However, not much has been done in terms of fully understanding the effects of such programmes on the intentions of youths toward entrepreneurial activities. Also, there is currently no unanimous agreement on the specific skill sets and pedagogical approaches that need to be embedded in an entrepreneurship education curriculum. Most importantly, a large number of entrepreneurship education, research conducted thus far has been carried out in western settings, using western participants.

To this end, the aim of the study is to assess the effect of entrepreneurship education on youths' entrepreneurial intentions and to develop a unique set of entrepreneurial competency framework for entrepreneurial education programs within the context of developing countries using Sierra Leone as a case study. In order to achieve this aim, the study firstly analyses the current state of entrepreneurship education programmes in Sierra Leone in terms of their learning outcomes, context, characteristics, and their target audience.

The result of the analysis shows that most programmes seek to develop fragmented sets of competencies with the primary goal of getting the learners to engage in entrepreneurial activities. Secondly, the study assessed the effect of entrepreneurship education on youths' entrepreneurial intentions using Ajzen theory of Planned Behaviour. A validated questionnaire was distributed to three groups of

graduate youths at the beginning and the end of the respective programmes. The result, in a nutshell, shows that entrepreneurship education has a positive effect to the intentions of graduates. However, there was a very minor positive effect of entrepreneurship education on specifically the skills of the participants. To this end, a focus group session (including students and lecturers) and personal interviews with practitioners were conducted in order to understand what key entrepreneurial competencies and pedagogical methods are needed within the context of Sierra Leone. The questionnaires were developed using the European Commission Entrepreneurship Competencies Framework (EntreComp). The result from the analysis shows that there are 11 core competencies that are needed within the context of Sierra Leone. A detailed framework with the relevant pedagogical approaches is embedded within this work.

The study contributes to the body of knowledge on entrepreneurship education in several ways. First, the context of Sierra Leone is under-researched, while such activities may have a strong impact on the amelioration of the youth unemployment situation in the country. Second, the assessment of intentions developed through these programmes can provide recommendations to stakeholders on the appropriateness of the initiatives in combating youth unemployment across Sierra Leone. Third, the development of the entrepreneurial competency framework can help educators of Entrepreneurship Education Programmes to design curricula and effectively deliver programmes using appropriate pedagogies. Fourth, the study will assist future researchers in advancing research on entrepreneurship education and its antecedents within developing countries in particular.

Acknowledgments

This entire journey started with the dream of one man; my hero, mentor, and a dad who sadly passed away towards the very end of this project. He always wanted me to be an academic doctor and laid the solid foundation that allowed me to carry on. I owe him a depth of gratitude for making me the man I am today; may his gentle soul rest in perfect peace.

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A special thanks to the management and staff of Nelson College London for their unwavering support throughout this process.

To my entire family, I say a massive thank you for both your moral and financial support that you continue to give me. I remain grateful.

Dissemination

Articles and Conferences

- Mbeteh A., and Pellegrini M.M., (2018). Unemployment in Africa and Entrepreneurial Education: A Critical Assessment of Entrepreneurship Education Programmes in Sierra Leone, *International Journal of Business and Globalisation*. (Accepted for Publication)

- Mbeteh A., Pellegrini M.M.,and Roed, J., (2018). A Contextual Competencies Framework for Entrepreneurship Education Programmes in Developing Countries: A Study from Sierra Leone, *Education + Training*. (Work in Progress).

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- Mbeteh A., and Pellegrini M.M., (2018). The ABC of Harvard Referencing for Undergraduates. London: De VICTORS. ISBN: 978-197-349-7851
- Mbeteh, A., (2017). 7 Billion People! 7 Continents! What Made 7 People The Most Successful? London: De VICTORS. ISBN: 978-197-341-5220

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Lists of Abbreviations

AfP	Agenda for Prosperity
AU	African Union
BIS	Business, Innovation and Skills
CAPS	Career and Advisory, Placement Services
EC	Entrepreneurial Competence
EE	Entrepreneurship Education
EEP	Entrepreneurship Education Programme
EI	Entrepreneurial Intention
EntreComp	Entrepreneurship Competence
ET	Entrepreneurship Training
EU	European Union
GDP	Gross Domestic Product
GEDI	Global Entrepreneurship And Development Institute
GEI	Global Entrepreneurship Index
GoSL	Government of Sierra Leone
HE	Higher Education
HEI	Higher Education Institution
HTEI	Higher and Tertiary Institution
ILO	International labour Organisation
IMF	International Monetary Fund
NAYCOM	National Youth Commission
OECD	Organisation for Economic Co-operation

	and Development
SWOT	Strengths, Weaknesses, Opportunities, Threats
TPB	Theory of Planned Behaviour
UNDP	United Nations Development Programme
QAA	Quality Assurance Agency
WASSCE	West African Senior School Certificate Education

Chapter One

Background of the Study

1.1 Introduction

"It is not easy to be young in the labour market today" (ILO, 2013, p.1).

According to the International Labour Organisation (ILO), 2015 report, 73.3 million young men and women (age between 15-24) are unemployed across the world; this accounts for about 41% of the total number of people unemployed globally. Though this number fell to 70.9 million in 2017, the International Labor Organization (ILO) estimated that the youth unemployment rate will continue to increase in many regions of the world (2018). The situation is severe in developing countries; for instance, youth unemployment in developing countries is expected to increase in 2018 and 2019 and a persistent poor-quality employment and poverty pose huge challenges to a nation's growth (ILO, 2018). In Sierra Leone approximately 70% of the youth population are unemployed (UNDP 2018). This negatively impacts the economic development of a country, and poor employment alternatives in the early stages of a young person's career can harm future personal development for life (Agbor *et al.*, 2012; ILO, 2015). Indeed, youth unemployment, especially amongst graduates, has been one of the major challenges facing nations in specifically developing nations (ILO, 2015).

With this growing concern in many African countries, governments and non-governmental agencies have been searching for the best strategies to fight youth unemployment. One of such strategies is the introduction of entrepreneurship education programmes to help sustain and enhance entrepreneurial culture, spirit

and competencies among people in a community in order to help them establish businesses and create jobs (Kirby, 2004; Hytti and O'Gorman, 2004; Henry, 2005; Gibb, 2005; Nwosu, 2009; Volkmann *et al.*, 2009; World Bank, 2008; Gerba, 2012; Ojeifo, 2013; ILO, 2015).

Entrepreneurship can be defined as a process of exploiting market opportunities through technical or innovative ways (Schumpeter, 1965). It is about taking the risk (Knight, 1921) and a dynamic process of vision, change, and creation (Kuratko and Hodgetts, 2004). There is a general consensus among researchers that some key aspects of entrepreneurship can be taught successfully (Henry and Leitch, 2005). This belief according to Fayolle *et al.* (2006) gave rise to the concept of entrepreneurship education programmes.

Indeed, in a country characterised by a limited labour demand from the private sector, entrepreneurship education could be an important driver for both potential and existing entrepreneurs (Botha *et al.*, 2006). For instance, studies conducted by Blattman *et al.* (2015) examining the effectiveness of government-backed entrepreneurship programmes aimed at assisting the poor and reducing unemployment among youths in Uganda found that the intervention increase earnings by 38%, business assets by 57% and working hours 17%. Also, Premand *et al. (2012)* concluded in their research that entrepreneurship education successfully led to an increased rate of self-employment among youths in Tunisia. More specifically, recent studies by Cho *et al.* (2016) on the evaluation of skills programmes on business development and self-employment in Malawi, Uganda and Sierra Leone found out that entrepreneurship education programmes have a positive

impact for youth and on business practice and knowledge. Fostering entrepreneurship is therefore perceived to be a critical policy agenda to create jobs, increase earning opportunities and reduce unemployment (Luthje and Franke, 2003; Cho and Honorati, 2013).

Entrepreneurship education is the process of equipping participants with the additional knowledge, skills, and attributes needed to set up a new venture or business (QAA, 2012). It includes "any pedagogical programme or process of education for entrepreneurial attitudes and skills, which involves developing certain personal qualities" (Fayolle *et al.,* 2006, p.702). The main objective of entrepreneurship education is to create or increase the intentions of participants towards entrepreneurial activities (Henry *et al.,* 2013; Fayolle and Gailly 2015; Nabi *et al.,* 2017). Accordingly, there have been great interests from researchers on the impact of entrepreneurship education on particularly entrepreneurial intentions (Liñán and Chen, 2007, Souitaris *et al.*, 2007; Matlay, 2008; Oosterbeek *et al.,* 2010) and the nature of entrepreneurial competencies and pedagogical approaches in general (Katz and Green, 2007; Ahmad *et al.,* 2010; Malebana; 2012; Morris *et al.*; 2013).

 Entrepreneurial intention is the "self-acknowledged convictions by individuals that intend to set up new business ventures and consciously plan to do so at some point in the future" (Thompson, 2009, p.676) and entrepreneurial competencies refer to the range of skills associated with spotting or creating opportunities, the ability to capitalise on identified opportunities and a range of skills associated with developing and implementing business plans to enable such opportunities to be realised (BIS,

2015). Hägg and Peltonen, (2014) define entrepreneurial pedagogy as the combination of different methods that are geared towards achieving the intended objectives of entrepreneurship.

However, most of the studies on entrepreneurship were conducted in western nations using western institutions and participants (Gerba, 2012). Unfortunately, research on entrepreneurship education and its antecedents is very limited in Africa when compared to research in Western nations and elsewhere in the world (Naude and Havenga, 2005). It should be noted that the call for taking context into consideration whilst conducting research in entrepreneurship is not a new phenomenon (Matlay, 2005; Welter, 2011; Maritz and Brown, 2012; Balan and Metcalfe, 2012). According to Welter (2011, p. 167) context can be defined as "circumstances, conditions, situations, or environments that are external to the respective phenomenon and enable or constrain it" (Welter, 2011, p. 167). In other words, context comprises of forces that tend to either positively or negatively impact the outcome of an entrepreneurial activity. The most important context for entrepreneurship are the social context (family, networks), institutional contexts (political system, society, culture), business context (industry, market and spatial context (geographical) (Welter, 2011).

Gartner (1995, p. 70) calls for entrepreneurship research to recognise the context in which entrepreneurial activities take place, as researchers "have a tendency to underestimate the influence of external factors and overestimate the influence of internal or personal factors when making judgements about the behaviour of other individuals," while in a similar vein Baumol (1990, p. 898) warned that the rules for

entrepreneurship "*do* change dramatically from one time and place to another." Recently, Jones *et al* (2018) in their special issue titled: 'Emerging themes in entrepreneurial behaviors, identities and contexts' calls for future researchers to consider the context in which entrepreneurial activities are carried out. Furthermore, Fayolle and Gailly (2008) emphasize the need to reconsider the context in conducting entrepreneurial research. Several entrepreneurship education programmes are delivered within non-business disciplines (Hynes, 1996) as well as the international contexts (Fayolle, 2010). The literature abounds with contextualisation of key components of entrepreneurship (Maritz and Brown, 2012), including but not limited to, programme outcomes (Matlay, 2008); audience (Fayolle and Gailly, 2008); pedagogies (Fayolle, 2010) and competencies (skills, knowledge and attitude) (Matlay, 2008).

Also, most entrepreneurship studies in Africa focus on issues like the opportunities and challenges facing entrepreneurs, but less on entrepreneurial intention, competencies, and pedagogies (Naude and Havenga, 2005; Singh and Belwal, 2008). With reference to the geographical distribution of these studies in Africa, South Africa has the highest number of entrepreneurship studies (61.2%), followed by Zimbabwe (5.0%), Nigeria (3.8%) and Kenya (3.7%) (Naude and Havenga, 2005). There are, however, very few scholarly studies on entrepreneurship education in Sierra Leone e.g. education and human security in Sierra Leone; discourses of failure and reconstruction (Krech and Maclure, 2003), and education and women's employment; a study of their status and impact on the informal sector in Sierra Leone (Pessima *et al.,* 2009). Also, most of the studies are in the form of reports

written by organisations like the United Nations Development Programme (UNDP), International Labour Organisations (ILO) and the World Bank.

Additionally, in Sierra Leone, the positive effects of entrepreneurship education programmes are not clearly evident. For example, in the Global Entrepreneurship Index (GEI) report for 2018, Sierra Leone is ranked 132 out of the 137 countries surveyed in terms of the level of entrepreneurial activities. Entrepreneurial activities in this context comprise of the triple A's: Attitudes, Abilities, and Aspirations (GEDI, 2018). It has also been noted that the country has a very low number of youths who have either the intention or competencies in engaging in entrepreneurial activities (UNDP, 2015). It is therefore important to understand why so relatively a small proportion of individuals in the region intend to get involved in entrepreneurial activities and the nature of the current entrepreneurial competencies being taught.

Drawing on this premise, the aim of this research is to assess the effect of entrepreneurship education on youths' entrepreneurial intentions and to develop a set of entrepreneurial competencies for entrepreneurship education programmes within the context of Sierra Leone.

1.2 Research Question

The overarching research questions for this study are:

RQ1: What is the current state of entrepreneurship education in Sierra Leone and its impact on youths' entrepreneurial intentions?

RQ2: What are the key sets of entrepreneurial competencies and related pedagogies that are appropriate within the context of Sierra Leone?

1.3 Research Objectives

The key objectives of the study are to:

Critically analyse the current state of entrepreneurship education programmes in Sierra Leone (RQ1)

Critically assess the extent to which entrepreneurship education programmes impact on youths' entrepreneurial intentions (RQ1)

Develop a set of entrepreneurial competencies and related pedagogies for entrepreneurship education programmes within the context of Sierra Leone (RQ2)

Provide recommendations to stakeholders on the appropriateness of entrepreneurship education initiatives in addressing the chronic and unabating youth unemployment across Sierra Leone (RQ1 and RQ2)

1.4 Theoretical Framework for the Study

In order to achieve the aim and objectives of this study, the World Bank Conceptual Framework for Entrepreneurship Education and Training (2014), the Theory of Planned Behaviour (TPB) (Ajzen, 1991) and the European Union (EU) Entrepreneurship Competence Framework (2016) otherwise known as EntreComp are used.

First, the World Bank conceptual framework is used to analyse the current state of Entrepreneurship Education Programmes (EEPs) in Sierra Leone by looking at the various Entrepreneurship Education Programmes being offered in terms of their intended outcomes, participants, programme characteristics, and context.

Secondly, Ajzen (1991) Theory of Planned Behaviour is used to assess the effect of entrepreneurship education on youths' entrepreneurial intentions.

Thirdly, the EntreComp framework has been used to first understand the key elements of entrepreneurial competencies and second to help develop a set of entrepreneurial competencies and related pedagogies for entrepreneurship education within the context of Sierra Leone.

1.5 Structure of the Thesis

The content of this thesis is organised around the following chapters:

Chapter one introduces the research topic, aims, questions and objectives of the study. It further discusses the key theoretical frameworks that have been used in this research. The chapter ends with the structure of the thesis.

Chapter two covers the context of Sierra Leone with specific reference to its history, challenges related to graduate youth unemployment and the economy and the concept of Entrepreneurship Education within the Higher Education sector in Sierra Leone. The chapter also highlights the level of entrepreneurial activities based on the GEDI Surveys and institutional support for start-up and Small Medium Enterprises in Sierra Leone.

Chapter three presents an introduction to the concept of entrepreneurship, entrepreneurship education and a review of different studies on the impact of entrepreneurship education. The chapter further reviews the entrepreneurial intentions and competencies theories and the theoretical frameworks that underline

the study is chosen and discussed. The chapter ends with a summary of the research questions and objectives.

Chapter four presents and describes the research paradigm used, the population of the study, how the data was collected as well as measurement intervals of the entrepreneurial intentions dependent variable. The chapter ends with how data were analysed and an explanation of the ethical considerations within the research.

Chapter five presents the results for the analysis of data collected for an overview of entrepreneurship education programmes in Sierra Leone

Chapter six presents and discusses the results of data collected through the validated Entrepreneurship Intention Questionnaires (EIQ).

Chapter seven presents and discusses the qualitative findings from interviews (focus group and one to one) conducted to ascertain the key entrepreneurial competencies needed within the context of Sierra Leone and their associated pedagogical approaches.

Chapter eight presents the conclusion to the study with specific reference to the key contributions and a discussion of the key recommendations to stakeholders on the appropriateness of entrepreneurship education programmes in reducing youth unemployment problems. Also, the chapter presents the relevant recommendations for future researchers. The study ends with a list of appendices and reference lists as shown in the table of content.

1.6 Chapter Summary

This chapter has presented the key research problem of this study, research questions, research objectives, theoretical frameworks and the structure of the thesis. There is a high rate of youth unemployment, especially among graduate youths in developing country with specific reference to youths in Sierra Leone. Studies have shown that Entrepreneurship Education (EE) is a powerful tool for reducing the high rate of youth unemployment. However, most of these studies were conducted in western nations using western participants and institutions.

Thus, the study seeks to explore the effects of entrepreneurship education programmes on graduate youths' entrepreneurial intentions and to develop a set of competencies and associated pedagogies for entrepreneurship education programmes within the context of Sierra Leone. To achieve this, the chapter highlighted two key research questions and four key objectives. The research questions seek to answer questions about the effect of entrepreneurship education on entrepreneurial intentions and the key sets of competencies and pedagogies that are needed to be developed/use within entrepreneurship programmes in the context of Sierra Leone. The research objectives, on the other hand, seek to review the different entrepreneurship education programmes, present a critical assessment of the effects of entrepreneurship education on entrepreneurial intentions, develop a framework of entrepreneurial competencies and related pedagogies needed within the context of Sierra Leone and provide appropriate recommendations to stakeholders on the relevance of entrepreneurship education.

The chapter discussed the key theoretical models used in this study and ended with the structure of the study.

Research Background – Sierra Leone Context

2.0 Introduction

The preceding chapter provides an introduction, research questions, objectives, theoretical frameworks, contribution to knowledge, research scope and structure of the thesis. The study aims to assess the effects of entrepreneurship education on youths' entrepreneurial intentions and to develop a set of entrepreneurial competencies and associated pedagogies for entrepreneurship education programmes within the context of Sierra Leone. Most studies on the determinants of entrepreneurial intentions and entrepreneurial competencies were conducted in developed countries, and this largely limits the generalisability of findings elsewhere (Fayolle and Liñán, 2014; Nabi and Liñán, 2011). This chapter in the context of Sierra Leone highlights a brief history and culture of the country, the structure of Sierra Leone's economy and the challenges of youth unemployment, current government initiatives in combatting youth unemployment, entrepreneurial activity in Sierra Leone based on the Global Entrepreneurship Development Institute (GEDI) Survey, graduate unemployment and entrepreneurship, the status of EE in Higher Education (HE) institutions and a conclusion.

2.1 Sierra Leone: a Brief History and Socio-Cultural Context

Sierra Leone is located in the western part of Africa. The country is divided into four provinces: southern, eastern, northern and western (see figure 1 for a map of Sierra Leone).

Figure 1: Map of Sierra Leone

Adapted from Brolin *et al.* (2016)

As shown in figure 1 above, the country shares a boundary with Guinea and Liberia and it is divided into four key areas: northern, eastern, southern and western area. The capital city, Freetown is located in the Western area, with other key cities in other areas of the country.

Sierra Leone was colonised by the British but got its independence in 1961. According to the World Bank (2017) report, the country currently has a population of about 7.3 million people. The country has a growing young population; about 40% of the population are of school-going age (3-17 years) and 75% are under 35 years

(World Bank, 2017). It is endowed with many natural resources, including diamonds, bauxites, iron ore, gold, abundant fertile agricultural land, and natural harbour amongst others.

The country has gone through some huge downturns, including the rebel war that lasted for 10 years and the recently ended Ebola disease that killed hundreds of people. Both situations also led to the departure of many foreign-owned companies contributing to the existing rise in youth unemployment.

Further, the country is one of the most urbanised countries in the West African region. There are currently more people living in the capital city than anywhere in the country (World Bank, 2017). The influx of people to the capital began in the colonial days and it has massively increased during the 10 years' war where people were primarily moving away from rebel-held rural areas to the capital city Freetown. As a result of this influx, the diverse ethnic groups in the country now peacefully co-exist and interact with each other. Also, the city, in particular, has been exposed to western cultures via the internet and other technological devices. This has led to a modern Sierra Leone, where traditions are neatly combined with modern cultures.

According to Hofstede (2018), national culture consists of core value systems that are specific to a society or set of people and motivate them to behave in a unique way. Geert Hofstede seminal work on cross-cultural comparison is according to Bhagat and McQuaid (1982, p.2) "undoubtedly, the most significant cross-cultural study of work-related value". Hofstede presented six main national cultural dimensions: power distance, individualism, masculinity/Feminity, uncertainty

avoidance, pragmatism and indulgence (Hofstede, 2018; Shinnar *et al.*, 2012). The term power distance deals with "the extent to which the less powerful members of institutions and organisations within a country expect and accept that power is distributed unequally" (Hofstede, 2018, p.1) whereas individualism deals with "the degree of independence a society maintains among its members" (Ibid). Masculinity/feminity, on the other hand, does not absolutely refer to the dominance of gender. To Hofstede, it simply refers to the degree in which core masculine traits like, assertiveness, authority, toughness, performance are preferred to feminine traits like personal relationships, modest, welfare, service and high concern for the quality of life. Masculine societies heavily focus on success, competition and achievement whilst feminine societies focus on care for others in a community and the society at large (Hofstede, 1991). According to Hofstede (2005; p. 120) "a society is called feminine when emotional gender roles overlap: both men and women are supposed to be modest, tender, and concerned with the quality of life".

 Uncertainty avoidance has been described as "the extent to which the members of a culture feel threatened by ambiguous or unknown situations and have created beliefs and institutions that try to avoid these" (Hofstede, 2018, p. 1) whereas the culture of pragmatism describes a national culture that maintains some sort of link with past events while dealing with the numerous challenges of the present and the future (Shinnar *et al.*, 2012). An indulgence national culture describes a culture where citizens try to control their impulses and desires based on their upbringing (Hofstede, 2018). Hofstede referred to a relatively weak control culture as an indulgence and a relatively strong culture as "Restraint".

Hofstede evaluated the culture of various countries based on a scale of 1 (lowest) to 100 (highest) on each of the six dimensions. Should a country score 50 on any of the dimensions, the implication is that such a country is difficult to classify with respect to that dimension (Siu and Lo, 2013). A masculine, individualistic culture that ranks low on uncertainty avoidance and high on power distance would help create a favorable environment for entrepreneurship which will, in turn, lead to high rate of self-employment (Busenitz and Lau, 1996; Shinnar *et al.* 2012).

With regards to Sierra Leone, first, the score on power distance is 70 which simply means that people in Sierra Leone accept a hierarchical order in which everyone has a specific place that needs no further justification (Hofstede Insights, 2018). In this type of culture, the centralisation of power is popular and subordinates are expected to be told what to do. There are also very huge inequalities in this type of culture (Busenitz and Lau, 1996). In a nutshell, this is a typical description of the culture in Sierra Leone; where the bosses or people in authority are seen as demigods. The mere mention of a title/position is sufficient to scare away subordinates from freely expressing themselves for fear of punishment if they, for instance, say something that is not in line with what the agenda of the boss.

Secondly, the country score on individualism is 20; meaning Sierra Leone is a largely collectivist society where members closely commit themselves to a member group (Hofstede, 2018). In Sierra Leone, these groups take different forms ranging from an extended or immediate family, friends or colleagues at work and most members of a community, etc. In collectivist societies like Sierra Leone, people are heavily loyal to their group members which imply that the approval or disapproval of the group in

decision making is highly critical. The notion of group conformity according to Shinnar *et al.*, (2012) may adversely affect the level of entrepreneurial activities in a country.

Thirdly, Sierra Leone's score on Masculinity is 40 which is apparently low. A low score suggests that the country is a feminine society; which predominantly focuses on "working in order to live" (Hofstede, 2018). In essence, in Sierra Leone people (especially graduates) strongly believe in the concept of working in banks or in public institutions in order to make ends meet. On the other hand, ordinary people in Sierra Leone for instance, strongly value equality and quality in their working lives. According to Hofsetede (2018) managers in such societies normally strive for consensus. In other words, the conflicts in this type of society are normally resolved by negotiation and compromise between the parties involved. Whilst this sort of culture has a positive effect on the lives of people in terms of their relationship with one another, scholars like Shinnar *et al.* (2012) suggest that such a culture is likely to have a lower rate of entrepreneurial activities among its people. This is perhaps because people are predominantly focused on working for others rather than developing businesses that can create jobs for others.

Fourthly, the country is currently scoring 50 on the dimension of uncertainty which means that the country is difficult to classify in terms of its members' preference for avoiding uncertainty (Hofstede, 2018). Hofstede postulated that countries that have a low uncertainty avoidance maintain a more relaxed attitude towards work and life in general. In this type of culture, people do not believe in more rules and regulations and believe the rules that are ambiguous should be changed or abandoned

altogether (Hofstede, 2018). Although the score shows that no generalisation can be reached as to whether or not Sierra Leoneans have a tendency to embrace risk-taking, uncertainty, and innovation (Hofstede, 2018), it is important to note that Sierra Leoneans, in general, are risk averse. They prefer certainty over uncertainty; hence the vast majority of the population will naturally seek to secure employment over owning and running risky ventures.

However, there is currently no score for Sierra Leone in terms of the pragmatism and indulgence dimensions. Meanwhile, neighboring countries like Ghana, Nigeria, etc., which shares similar characteristics with Sierra Leone, have relatively low scores on pragmatism and high scores on indulgence. A low score on pragmatism simply suggests that the people in those countries are more normative than pragmatic (Hofstede, 2018). In other words, individuals in these countries show great respect for traditions, have a strong concern for the truth and have a high propensity to achieve short-term goals. On the other hand, a high rating on indulgence suggests that the people in those countries hugely exhibit a willingness to realise their desires and impulses with regard to having fun or generally enjoying life (Hofstede, 2018). It also implies that they have a high tendency and positive attitude towards optimism. Additionally, they place much more emphasis on leisure time, spend money as they wish and act as they please. Scholars (Shinnar *et al*. 2012) suggest that such a culture has a very negative impact on entrepreneurship initiatives. Whilst this might be true for some members of a society like Sierra Leone, the assumption doesn't hold for most Sierra Leoneans. Sierra Leoneans, especially after the war, has placed much emphasis on developmental projects such as building and educating

themselves and children. Thus, they do not necessarily spend money as they wish as Hofstede tend to suggest.

Meanwhile, despite the praise that Hofstede's seminal work has received from scholars in decades, some scholars have criticised his cultural dimensions. Hofstede's assumes that the population within a specific country is a homogenous whole. However, most nations have groups of ethnic units, each of which practice a culture that is significantly different (Nasif, *et al*, 1991, Redpath, 1997). Hofstede tends to overlook the significance of communities and the variations within them. There are 16 ethnic groups in Sierra Leone for instance and out of this 16, there are two largest groups (the Temenes and the Mendes) that practice a significantly different culture. For example, the Temenes are predominantly business people and the vast majority of them are engaged in petty trading. They simply use business as an escape route out of poverty. The Mendes on the other hand, predominantly believe that the best way out of poverty is to go through the formal education system, get a degree/certificate and look for white collar jobs. Thus, the outcome of any analysis carried out with the assumption that a society is a homogenous whole tend to have a possibility of arbitrariness.

Also, some scholars (Søndergaard, 1994) note that the outcomes of Hofstede's research which specific reference to masculinity and uncertainty avoidance may have been sensitive to the timing of the survey. Jones (2007) pointed out that as at the time of the survey Europe was engulfed in the cold war and haunted by memories of the Second World War. In a similar vein, there was an insurgency in Africa, Asia, and Europe as at the time of the research. Thus, as a result of these

political instabilities, the sample lacks data from Third World Countries like Sierra Leone, hence the result may not adequately represent the cultural dimensions of these countries.

Additionally, McSweeney (2002) criticised Hofstede's approach in several ways: his main criticisms are that surveys are not the most suitable way and nations are not the best units to examine cultural differences. McSweeney also stated that it will be methodically questionable to use a single employee of a company to represent an entire nation.

In relation to the masculinity/feminity dimension, scholars have raised concern about the labeling of this dimension (Jeknić, 2014). Schooler (1983, p. 167) noted that ""the nature of the relationships between the questionnaire items and the concepts they are supposed to measure", because, "masculinity-femininity" dimension was originally labelled "ego-social" for its "factor loadings apparently contrasted ego-enhancing and socially comforting work goals" (Schooler, 1983, p. 167). Schooler is of the view that sticking to the original labeling in the questionnaire item was a far better solution as a change in "names represents a profound shift in the level of generalization" (Schooler, 1983, p. 167). Also, some criticised Hofstede for as "being sexist", and promoting gender stereotypes. This issue "could relatively easily be solved by changing the name of the dimension to something like "career success/quality of life to avoid confusion" (Adler, in Chiang, 2005, p. 1547).

However, despite these criticisms, Hofstede's research is the most widely used and robust pieces of research among practitioners and scholars (Furrer, 2000)

framework for doing national culture research and Hofstede's work can still be seen as the most comprehensive. Søndergaard (1994) found out that Hofstede's seminal work received 1,036 citations while a study conducted by his contemporary Miles and Snow received only 200 citations.

2.2 Structure of Sierra Leone's Economy and its Challenges

The economy of Sierra Leone proved resilient in the two consecutive major shocks in 2014/15: the Ebola outbreak and the collapse of iron prices (World Bank, 2018). The economic growth has since resumed with the new investments in agriculture, fisheries, and mining (World Bank, 2018). According to the International Monetary Fund (IMF) projections, the economic growth is expected to remain stable over the medium term. The GDP (Gross Domestic Product) growth of the economy is expected to recover from -20.6% in 2015 to 5.4% in 2017. In 2018 and 2019, the GDP growth is expected to be at 6.1% and 6.5%, respectively (African Development Bank, 2018). The lower level of export created a shortage in the country's foreign exchange reserve, which led to a sharp depreciation of its currency against the United States dollar by an average of 20% in the year 2016 (African Development Bank, 2018, World Bank, 2018). This effect, in turn, led to a high inflation rate of 11.5% in 2016 and about 18.4% in 2017.

Meanwhile, though there is a prospect of the country getting back on its feet, there is still a widespread level of poverty. According to the United Nations Development Programme (2018, p.1), "poverty remains widespread with more than 60% of the population living on less than US$ 1.25 a day and unemployment and illiteracy levels remain high, particularly among youths". Consequently, Sierra Leone continues to be

one of the poorest countries in the World ranking 179th out of 187th countries in the Human Development Index (UNDP, 2018). In 2013, the Government of Sierra Leone (GoSL) launched its five-year poverty reduction strategy called the Agenda for Prosperity (AfP) which clearly spelled out the following:

"Sierra Leone's Vision for 2013 to 2035 is to become a middle-income country. It would be an inclusive, green country, with 80% of the population above the poverty line. It would have gender equality, a well-educated, healthy population, good governance and rule of law, well-developed infrastructure, macroeconomic stability, with private-sector, export-led growth generating wide employment opportunities; there would be a good environmental protection, and responsible natural resource exploitation" (GoSL, 2013).

To achieve this, the AfP laid down eight core pillars: managing natural resources; accelerating human development; international competitiveness; strengthening of social protection systems; governance and public sector reform; gender equality and women's empowerment; labour and employment and economic diversification to promote inclusive growth (GoSL, 2013). Given this vision, it is vital for the Higher Education sector to revamp its programmes and start promoting the necessary skills needed to stir the economic growth and competitiveness of the country (World Bank, 2017).

The development of a country's economy comprises of changes in the character and quantity of economic value added (Lewis, 1954) which in turn result in a higher level of productivity and per capita incomes (Mwiya, 2014). It is important to note that

predominant entrepreneurial and economic activities may be different based on whether an economy is an innovation or factor-driven (Kelley *et al*. 2012).

Innovation-driven economies are characterised by research and development and knowledge creation activities (Mwiya, 2014). This type of economies is also hugely service-driven, thus the service sector majorly contributes to the GDP of the economy (Mwiya, 2014). The increase in the number of service institutions in such economies is a result of the increase in the needs of its affluent population. Mwiya (2014) suggests that as long as institutions are able to support innovative ideas, entrepreneurs will act as agents of creative destruction. Also, in this type of economies, there are normally a lower number of unregistered businesses and most entrepreneurs start up their own enterprises to exploit the vast opportunities that exist therein (Williams, 2009).

Factor-driven economies, on the other hand, are heavily reliant on the extractive industries (e.g. Diamonds, Iron Ore, bauxite etc.) and subsistence agricultural activities (Kelley *et al*., 2012). The general trend is that as the activities in the extractive industry grow, people in the agriculture sector tend to move to the extractive sector. According to the Global Entrepreneurship Monitor (GEM) (2012) report, it is usual for factor-driven economies to have a high level of unregistered (informal) businesses. The reason for such influx is as Kelley *et al*. (2012) noted the lack of alternative means to work and as such self-employment seems to be the only route to survival.

In line with the above descriptions of the various economies (innovation-driven and factor-driven), Sierra Leone perfectly fits the description of a factor-driven economy. This is because the greatest wealth is in its natural resources: the extractive industries of petroleum, mining, and agriculture. Within the agriculture sector, principal growth sectors are expected to be in palm oil, fisheries, cocoa, forestry, coffee, rice, food processing and storage and food production (U.S Department of State, 2013, African Economic Outlook, 2017). The African Economic Outlook (2017) report states that Agriculture remains the backbone of the economy of Sierra Leone "accounting for 61.3% GDP in 2015" (p3). The agricultural activities in the country are predominantly controlled by smallholders who are mainly engaged in subsistence farming with very limited value added (African Economic Outlook, 2017). This firstly implies that the government does not have to get the required tax needed as most of these smallholders of farming are unregistered.

Secondly, unregistered businesses don't contribute to the country's national social security schemes. Thirdly, informal businesses do hardly record their activities and hence access to services like banking and other opportunities are limited. All of these serve as an impediment to the country's economic growth (Woodruff, 2001). Also, the over-reliance on the extractive industries alone is partially responsible for the slow growth of the country's economy. Figure 2 below shows the country's GDP by sector. As the African Economic Outlook (2017) report pointed out, "a principal constraint to high and sustainable, inclusive growth in Sierra Leone is the relatively undiversified structure of the economy, with a few sectors dominating" (p.4). The report thus recommends that there is a need to diversify into other sectors such as fisheries, manufacturing, and tourism.

Figure 2: GDP by Sector (percentage of GDP at current prices)

	2011	2016
Agriculture, forestry, fishing and hunting	56.7	60.9
of which fishing	10.5	12.4
Mining and quarrying	4.3	2.7
of which oil	...	...
Manufacturing	2.3	1.9
Electricity, gas and water	0.2	0.2
Construction	1.3	1.0
Wholesale and retail trade; Repair of vehicles; Household goods; Restaurants and hotels	10.2	9.9
of which hotels and restaurants	0.4	0.4
Transport, storage and communication	5.6	4.2
Finance, real estate and business services	3.2	2.9
Public administration and defence	4.7	6.9
Other services	11.4	9.4
Gross domestic product at basic prices / factor cost	**100.0**	**100.0**

Source: African Economic Outlook (2017)

From the above discussions, it can be seen that there is a need for a formalised type of entrepreneurial activities in the country. Such a formalised sector will encourage entrepreneurs graduating from entrepreneurship education programmes to meaningfully engage with the sector. Thus the key drivers of entrepreneurial activities need to be effectively examined. This will help policymakers, practitioners and scholars alike effectively understand the role of entrepreneurs in particular (De Clercq *et al.*, 2011; Rideout and Gray, 2013).

2.3 Challenges of Unemployment for the Youth

According to UNDP (2014), the rate of youth unemployment in Sierra Leone stands at 70% of the overall youth population. Agbor *et al.* (2012) averred that youth unemployment breeds vices such as crimes and negatively affects the economic growth of a country. Alemu (2016) pointed out that the key challenges of youth unemployment in Sierra Leone are the use of drugs and related substances, crimes

and loss of income from the underutilised youthful population. The challenges also include the ever increasing level of teenage pregnancy and the poor health conditions (UNDP, 2014, Alemu, 2016).

Further, the World Bank (2013) suggests that the reason for a large number of unemployed youths is either because they lack the requisite skills needed by the labour market or simply the lack of jobs in the economy. Alemu (2016, p.21) also stated that "skills mismatch between the demand and supply side of the workforce", access to quality education, ethics… low level of education, lack of work experience.." are among the core reasons for the level of youth unemployment in Sierra Leone. An Investment Climate Survey by the United States Embassy in Sierra Leone identified the lack of appropriate skills as one of the main challenges (U.S. Embassy, 2013). The survey highlighted that:

"Most young to middle-aged Sierra Leoneans (25-35 years old), the prime labor demographic needed by business, government, and civil society, are today's victims of the war and poverty. Few have more than four years of education, fewer are trained in a vocational skill, and even fewer have management skills. The result is a critical void of talented Sierra Leoneans available to manage local staff and assist in navigating the cultural, governmental, and logistical challenges which foreign industry faces in the country" (U.S Department of State, 2013).

Similarly, according to the UNDP (2014) report, there is a limited amount of jobs in the formal sector which is primarily why graduate youths, in particular, are increasingly faced with the challenge of getting paid jobs. A survey on the perception of employment opportunities found that respondents in the urban region of the

country largely prefer traditional jobs like doctors, teachers and government jobs (Hatloy, *et al.* 2013). In the rural areas, the preferred choice of job is farming. The survey also found that only about 17% of people in the urban area were actively engaged in a paid job, whilst almost no one was actively engaged in a paid job in most parts of the rural areas. This has negatively impacted the economic growth of the country (World Bank, 2013; Berrian, 2016). It also poses a huge challenge to the security of the country as unemployed youths will end up engaging in anti-social behaviours.

2.3 21st century competencies for the job market

Though there is no agreed definition of what actually constitutes competencies needed to effectively embark on paid jobs and other self-employment opportunities, there has been an attempt by several scholars and institutions in developing a coherent skill set sets (World Bank, 2017). For example, Finegold and Notabartolo (2010) presented five 21st century skill sets: (1) interpersonal skills (communication, collaboration, leadership and responsibility), (2) analytic skills (critical thinking, problem solving, decision making inquiry and research); (3) information processing skills (media literacy, information literacy, digital citizenship, ICT operations and concepts); (4) capacity for change (innovation, flexibility, creativity, adaptive learning); (5) ability to execute (initiative and self-direction, productivity). In the context of Sierra Leone, the World Bank conducted a survey on what skills and competencies that are vital for graduates using the 18 skills set provided by the Association of American Colleges and Universities (AACU) (World Bank, 2017). The survey was conducted using 23 employers, 43 students, and 15 Higher Education officials. Participants were specifically asked to select five important skills from the

list of 18. The results of the survey, which is shown in table 1 show some similarities as well as differences. For instance, graduates, administrators, and managers have similar expectations about what constitutes the core competencies that graduates are required to possess: computer skills, teamwork, and ability to solve problems and think analytically and teamwork. On the differences, 70% of the employers selected "sense of values, principles, and ethics" as a top 5 competency which was not chosen by the students and Higher and Tertiary Education Institution (HTEI) administrators. Similarly, 48 of the employers targeted to rank writing and oral/speaking skills among the top skills for graduates whilst 40% of students think oral/speaking skills are among the top five skills.

Table 1: Top 5 skills and competencies for graduates as selected by students, HTEI administration, and employers (% of respondents that chose the stated skill as one of their Top 5)

Skills and Competencies	Students	HTEI	Employers[a]
A sense of maturity and how to succeed on your own	26%	27%	13%
Improved ability to solve problems and think analytically	44%	53%	48%
Time-management skills	49%	20%	65%
Independent and critical thinking/reasoning skills	19%	67%	39%
Strong work habits	19%	20%	43%
Greater commitment to being involved in the community and more informed about contemporary social and civic issues	21%	13%	0%
Strong writing and oral/speaking skills	40%	40%	48%
Tangible business skills, and a specific expertise and knowledge in your field of focus	14%	13%	26%
Competency in computer skills	51%	53%	52%
Expanded understanding of science and its relevance to other areas of study	21%	13%	4%
Expanded knowledge of Sierra Leonean culture and history	9%	7%	4%
Expanded knowledge of cultures and societies outside Sierra Leone	2%	0%	4%
Knowledge of and respect for people of other backgrounds, ethnicities, and lifestyles	26%	7%	4%
Teamwork skills and the ability to get along with and work with people different from yourself	44%	47%	48%
Exposure to the business world	9%	0%	13%
Sense of values, principles, and ethics	19%	40%	70%
Leadership skills	40%	53%	9%
Self-discipline	47%	27%	22%

Source: Finegold and Notabartolo (2010)

The HTEI administrators predominately selected critical thinking and leadership skills among their top five skills needed for graduates within Sierra Leone (World Bank, 2017). The report further highlighted that the majority of employers targeted feel graduates lack the highlighted skills needed to effectively enter the labour market (World Bank, 2017). In a nutshell, the soft skills (interpersonal, relational, etc.) prevails over the hard skills (technical and content-skills).

2.4 Institutional Support for Start-ups and SMEs

Great efforts have been made by both governments and non-governmental agencies in promoting entrepreneurship education across the country in order to help reduce the staggering level of unemployment that it faces. Specifically, in 2013, the Government of Sierra Leone (GoSL) sets its five year development agenda which it referred to as, '*The Agenda for Prosperity*' (PRSPII 2013-2018). The aim of the plan is to help reduce poverty, create jobs and increase economic growth (GoSL, 2013). This agenda mainstream youth employment initiative as key to reducing youth unemployment in the country (GoSL, 2013). The government has also set up a special ministry for youths to develop youth-friendly policies that will help train, educate and empower youths to behave in an entrepreneurial way. This includes setting up businesses and/or be creative whilst working for private, public or social companies.

Further, the government established the National Youth Commission (NAYCOM by an Act of Parliament (No 11 of 2009) which aim is to empower youths to develop their potential, creativity, and skills for national development (NAYCOM, 2009). The commission is also set up to ensure a sustainable implementation of youth development and empowerment opportunities (Alemu, 2016). These with many other policies have helped drive the number of entrepreneurship education programmes across the country. However, despite the proliferation of these programmes, there is still a large number of youth unemployment in particular in the country. The current UNDP reports show that 70% of the youth population are either unemployed or underemployed (UNDP, 2018). Thus, according to the International Policy Centre for Inclusive Growth 2016 report "the establishment of an integrated,

systematic institutional approach along with the formulation of youth-friendly systems, frameworks and structures can help to coordinate youth development efforts" and hence create more job and self-employment opportunities.

Meanwhile, Sierra Leone is currently ranked 160 out of 190 economies in terms of the ease of doing business (World Bank, 2018). When compared to neighbouring countries like Guinea, Ghana, and Kenya, the World Bank ranking show that Sierra Leone is one of the least performing countries in terms of the ease of doing. See figure 3.

Figure 3: Comparative Analysis of the Ease of Doing Business SL and other Frontiers

DB 2018 Distance to Frontier (DTF)

0   100

65.15: Kenya (Rank: 80)

57.24: Ghana (Rank: 120)

50.43: Regional Average (Sub-Saharan Africa)

49.80: Guinea (Rank: 153)

48.18: Sierra Leone (Rank: 160)

41.45: Guinea-Bissau (Rank: 176)
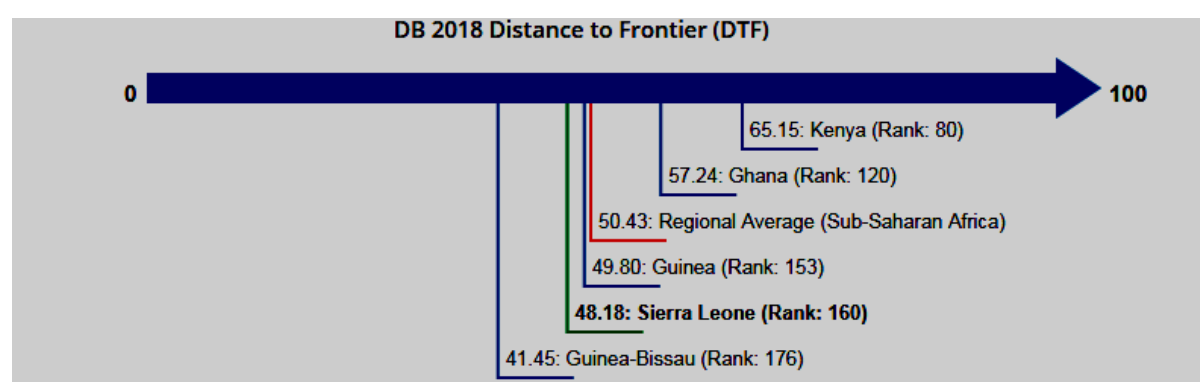
Source: World Bank (2018)

The diagram above shows a comparative analysis of the ease of doing business in Sierra Leone with countries like Guinea, Kenya etc. From the diagram, it can be seen that Sierra Leone is the second lowest country in terms of the ease of doing business. The Distance to Frontier (DTF) (which is the best performance observed on each of the indicators across all economies) for Sierra Leone is 48.18 compared to Kenya (65.15), Ghana (57.24) and Guinea (49.80) (World Bank, 2018). DTF simply shows the level of performance of a specific country in terms of doing

business which is measured on a scale of 0-100; 0 representing lowest performance and 100 representing the highest performance. The number of procedures to be followed in registering a new business is 5 which is five times the number of procedures required by the best-performing country in New Zealand (1). Also, the number of days taken to register a new business is 11 which is much higher than the best-performing country, the United Kingdom (0.00). Further, the cost of registering a new business is 36.2% of the country's per capita income compared to the best performing economies e.g. United Kingdom (3.1%), New Zealand (8.5%) (World Bank, 2018). However, the country is among one of the best performers in terms of the amount required to deposit in a bank before starting a new business; the current amount needed is 0% (Ibid).

2.5 Entrepreneurial Activity in Sierra Leone based on GEDI Surveys

Entrepreneurial activity is normally measured in terms of the relative share of the economic activity accounted for by the number of self-employed registrations, small firms and the market participants (Kelley *et al.*, 2012). However, entrepreneurial activity in this context comprises of the level of entrepreneurial attitudes, abilities, networking etc. (GEDI, 2018). The Global Entrepreneurship Index compiled by The Global Entrepreneurship and Development Institute (GEDI) comprises of key indicators of the health of the entrepreneurship ecosystem in a given country. The index measures both the depth and extent of the key supporting entrepreneurial ecosystem and the quality of entrepreneurship in a country (GEDI, 2018). The index has in total 14 core pillars, each of which measures the level of entrepreneurial activities in a given country. The 14 core components alongside the key questions asked around each *v*ariable are shown in appendix 1 below.

Whilst the GEDI report clearly shows a global increase in the level of entrepreneurial activities, Sierra Leone has been yet among the lowest ranked countries in the world. According to the GEDI 2018 report, Sierra Leone is ranked at 132 out of 137 countries in the world in terms of entrepreneurial activities (see figure 4).

Figure 4: GEDI Ranking of Entrepreneurial Activity in Sierra Leone

Pillar	Pillar score		Percentage of total new effort for a 10 point improvement in GEDI score
Start-up Skills	0.014616		0%
Risk Acceptance	0.024286		0%
Risk Capital	0.054630		0%
Process Innovation	0.096329		0%
Human Capital	0.106058		0%
Competition	0.116309		0%
Opportunity Perception	0.122848		0%
Internationalization	0.160457		0%
Opportunity Startup	0.16662		0%
Tech Sector	0.175713		0%
High Growth	0.179268		0%
Networking	0.191429		0%
Cultural Support	0.202136		0%
Product Innovation	0.216111		0%

Source: GEDI (2018)

As shown above, there are 14 key pillars that constituents an entrepreneurial activity in a country. Start-up skills are ranked the lowest on the chart whereas the production of innovation is the highest. The percentage of total new effort made from the previous year across all ranking scores at 0%. More specifically, the country is ranked 26 out of 30 countries in the Sub-Saharan Africa region in terms of entrepreneurial activities (see figure 5 below).

Figure 5: Regional results: Sub-Saharan Africa

GEI ranks within the Sub-Saharan Africa region

Regional component averages

1. Opportunity Perception		34%
2. Startup Skills	8%	
3. Risk Acceptance	11%	
4. Networking	24%	
5. Cultural Support	27%	
6. Opportunity Startup	21%	
7. Technology Absorption	16%	
8. Human Capital	17%	
9. Competition	23%	
10. Product Innovation	28%	
11. Process Innovation	17%	
12. High Growth	24%	
13. Internationalization	15%	
14. Risk Capital	11%	

Regional ranks and scores

		GEI
1	Botswana	35%
2	South Africa	33%
3	Namibia	31%
4	Gabon	25%
5	Swaziland	24%
6	Rwanda	21%
7	Ghana	21%
8	Nigeria	20%
9	Zambia	20%
10	Senegal	19%
11	Côte d'Ivoire	19%
12	Kenya	18%
13	Ethiopia	18%
14	Tanzania	16%
15	Gambia, The	16%
16	Mali	16%
17	Liberia	16%
18	Cameroon	15%
19	Angola	14%
20	Mozambique	14%
21	Madagascar	14%
22	Benin	13%
23	Burkina Faso	13%
24	Guinea	13%
25	Uganda	13%
26	Sierra Leone	12%
27	Malawi	12%
28	Burundi	12%
29	Mauritania	11%
30	Chad	9%

Source: GEDI (2018)

This suggests there is an acute lack of relevant skills that entrepreneurs in Sierra Leone need to effectively engage in self-employment opportunities; hence there is a need to examine them.

2.6 Graduate Unemployment and Entrepreneurship

This section covers a brief statistics on graduate youth unemployment in Sierra Leone. The section also covers the concept of graduate entrepreneurship.

2.6.1 Graduate Unemployment

The ILO Work4Youth 2015 School-to-Work transition survey shows that Sierra Leone has one of the highest youth unemployment/underutilisation rate in the world

(ILO, 2017). The report shows that 72.8% of young women and 59.9% of young men are unemployed. The report further shows that the most disadvantaged group in finding a job after finishing education are those at the secondary level, followed by university graduates (ILO, 2018). For the purpose of this study the term graduate youths refer to individuals who have either started a higher education programme and/or have successfully completed a module/course in entrepreneurship or other disciplines.

Further, out of the 5000 graduate youths leaving university each year, only a few gained employment (Sierra Leone National Youth Commission, 2013). Similarly, research conducted by the Career and Advisory, Placement Services (CAPS) between 2010 and 2012 on the employment status of recent graduates shows that 55% of students were still looking for a job, 16% were employed, 16% were actively engaged in further education, 5% were self-employed and 7% were recorded not doing anything (World Bank, 2013).

In addition, data collected through the Sierra Leone Core Welfare Indicators Survey Questionnaire (CWIQ) pointed out it takes about an average of 3.5 years for the youths of Sierra Leone at all levels of education to find a job after graduation (World Bank, 2017). This calls for youths to engage in self-employment activities by first acquiring the relevant skills through entrepreneurship education. To effectively do this, the Higher Education institutions have an important role to play in terms of developing the right infrastructure and training trainers.

2.6.2 Graduate Entrepreneurship

Graduate entrepreneurship has primarily focused on the extent to which graduates engage in entrepreneurial activities (Nabi and Liñán, 2011). Scholars, as well as policy makers, are beginning to recognise that graduate entrepreneurship is of critical importance for the economic development of a country (ISBA Consortium, 2004). Meanwhile, there has been an exodus of some of the brightest youths in developing country to Europe and other developed countries with the hope for a better employment and education (Garson and Loizillon, 2003). This exodus has left developing nations in Africa in particular with a high skill shortage in terms of graduate entrepreneurship and expertise (UNDP, 2012).

However, most developing nations are designing entrepreneurship courses that will help the graduate entrepreneur to fully engage in entrepreneurial activities (Nabi and Liñán, 2011).

In Sierra Leone, the State of Entrepreneurship 2017 report produced by the Sierra Leone Opportunities for Business Action (SOBA) highlighted that:
"academic entrepreneurship' is taught in Sierra Leone's universities at the expense of practical skills, making entrepreneurs reluctant to hire young graduates to fill management positions. Generally, there is poor alignment between the educational content delivered in schools and what the private sector is looking for" (p. 17).

The report also notes that the omission of skills training elements within the Higher Education institutions and the lack of graduates exposure to apprenticeship opportunities in Sierra Leone leave young graduates unequipped for activities in the

labour market. In response to these, there has been a rise in alternative institutions who put forward solutions that will help graduates to learn the basic skills needed to engage in entrepreneurial activities (SOBA, 2017).

One of such recent examples is the Freetown Business School, which was founded in 2017 to offer Continuing Professional Development training and networking opportunities for young professionals (SOBA, 2017). The medium-term goal of the institution is to provide standalone courses in accounting, leadership, and entrepreneurship. Another is a branch of Malaysia's Limkokwing University that was set up with the primary aim to produce industry-ready graduates (Ibid). The university promises it graduates a strong network of industry partners locally and internationally. Another is the Global MBA in Entrepreneurship offered by the University of Makeni in partnership with E4impact and the Italian university called Università Cattolica del sacro cuore (E4impact, 2018). The MBA programme is run on a part-time basis with the sole aim of providing "active and aspiring Sierra Leonean entrepreneurs with results-oriented education, coaching and interaction with the local business community and potential investors" (E4impact, 2018, p.1).

Meanwhile, studies on graduate entrepreneurship have been predominantly focused on countries in developed countries (Souitaris *et al.*, 2007; Nabi and Liñán, 2011; Solesvik *et al.*, 2013). Thus, there is a need to carry out studies on graduate entrepreneurship and its determinants in developing nations, hence researchers may reach either a similar or different conclusion from those undertaken in developed nations (Mwiya, 2014). Fayolle and Liñán (2014) supported this notion simply because of the different environmental and cultural differences that exist in both

developed and developing countries. Mwiya (2014) stated that the levels of support for graduate entrepreneurs that intends to engage in entrepreneurial activities and their skill sets, for instance, might differ from country to country.

2.7 Entrepreneurship Education in Higher Education Institutions in Sierra Leone and its Challenges

As already noted, entrepreneurship education has been widely recognised to create jobs, thereby reducing the level of unemployment in a country. Maina (2013) rightly stated that "Entrepreneurship Education could play a vital role in equipping the individual with necessary intellectual capacity, skills and the right type of work habit and attitude to be able to create jobs for the growth" of a developing economy. In a similar vein, the African Union's (AU) action plan for the Second Decade of Education (2006-2015) recognize the importance of entrepreneurship education-related programmes "as a means of empowering individuals to take control of their lives and suggests the integration of vocational training into the general education system" (Kingombe, 2012).

Higher Education institutions are mediums through which developing countries empower individuals with entrepreneurial capacities that help in driving economic growth and thus reduce youth unemployment especially among graduates (World Bank, 1994). In the context of Sierra Leone, Higher Education refers to any formal education provided to students that have met the minimum entry qualification i.e. the West African Senior School Certificate Education (WASSSCE) or its equivalent (Education Act, 2004). The country has decades of history in Higher Education; Fourah Bay College (FBC) was founded by the Church Missionary Society (CMS) in

the year 1827 primarily for the training of clergies (World Bank, 2017). The institution is the oldest tertiary institution in West Africa. It began awarding degrees in 1867 through its partnership with the University of Durham, United Kingdom (World Bank, 2017).

The programmes of Higher Education Institutions in Sierra Leone include (i) university programmes, leading to bachelor, master's and doctorate degrees; (ii) teacher training programmes, leading to Teacher Certificate (TC) and Higher Teacher Certificate (HTC); (iii) polytechnics, leading to ordinary Diploma and Higher National Diploma (HND) (iv) Professional courses leading to professional certificate and general practice in the field (World Bank, 2017). A list of Higher Education Institutions registered with the Tertiary Education Commission (the body responsible for quality assurance for Higher Education in the country) delivering these programmes in both the public and private sector are shown in appendix 2 below.

As shown in appendix 2, the majority of Higher Education Institutions are based in the western urban region of the country with few other regions. However, at least each region has one public Higher Education Institution (World Bank, 2013). It is important to note that the University of Sierra Leone has three main constituent colleges (Fourah Bay College (FBC), College of Medicine and Allied Health Sciences (COMAHS) and the Institute of Public Administration and Management (IPAM) (World Bank, 2013). This makes it the largest university in the country in terms of a number of students and operations.

As earlier mentioned, the country is going through some economic challenges and as such the government has developed key policies to help stimulate growth. The Agenda for Prosperity (AfP) (discussed above) provides the first step in ensuring the country regains its economic status (World Bank, 2013). In addition, the Government of Sierra Leone (GoSL) recently passed a Local Content Policy (LCP) to encourage and protect local participation in the private sector; namely the extractive and industrial sectors (World Bank, 2017). The policy helps to ensure that all Sierra Leoneans take advantage of the opportunities in the private sector. In order for this objective to be archived, there is an urgent call for the effective development of the institutional and human capacity through education, training, and transfer of relevant skills (World Bank, 2017). The Local Content Policy offers some guidance in this direction:

"Transform the education curriculum of tertiary, vocational, technical and commercial education institutions to prioritize science and technology, according to the skills requirements of the industrial sector. Align the education curriculum of tertiary, vocational, technical and commercial education institutions with the growth sectors of the economy, such as mining, oil, and gas, fisheries, agriculture, etc. produce a skilled workforce for these sectors by 2025. Encourage private sector investments in the development of entrepreneurship and management training institutes. Provide incentives for sector-specific training and skills development in entrepreneurship and management, in public and private sector training institutions as well as within industry associations and at the firm-level" (GoSL, 2012, cited in World Bank, 2013).

In addition, the government has also produced a Private Sector Development (PSDS) policy that specifically calls for the development of entrepreneurship skills through the Higher Education Institutions (Ministry of Trade and Industry, 2010, World Bank, 2017). This call is also in line with the achievement of the Millennium Development Goals (MDG) which emphasises skills development especially among youths (UNDP, 2014). Given this background, there has been a proliferation of entrepreneurship education and training programmes across the country.

Meanwhile, the effective implementation and integration of entrepreneurship education programmes across a developing country like Sierra Leone remain a key challenge (Kingombe, 2012). The main aspects are (Kingombe, 2012; Maina, 2013):

Cultural Perception: promoting African entrepreneurship is a long-term process, involving overcoming negative cultural perceptions regarding entrepreneurship (Kingombe, 2012).Unfortunately, it seems that entrepreneurship education and vocational programmes are not yet fully understood in developing countries. One of the reason is the societal views and sentiments on entrepreneurship that is regarded as a second-class choice when compared to other professions e.g. medicine, law, engineering, accounting etc. (Billet, 2009). Also, entrepreneurship is often seen as something to be engaged in only by those who have dropped out of formal education (Kingombe, 2012). Several studies have been carried out about the relationship between entrepreneurship and national culture (Pinillos and Reyes, 2011; Stephan and Uhlaner, 2010). For example, Mungai and Ogot (2011) studied the perceptions of four ethnic communities in Kenya on entrepreneurship. The study found huge differences among the communities, suggesting that certain cultures may embrace entrepreneurship more than others. Their recommendation to the government was

that frantic efforts should be made to make entrepreneurship as part of the national culture.

Funding: the lack of funding is seen as a major hindrance in effectively promoting entrepreneurship education in Sierra Leone (Kingombe, 2012). Implementing entrepreneurship education programmes in order to achieve its intended objectives requires an adequate level of funding for equipment, state-of-the-art buildings, qualified trainers and funds to help participants execute their business plans. Oketch (2009) pointed out that there is a lot of rhetoric from the government over the importance of entrepreneurship to economic growth, but yet still less is done to fund the idea. A closer look at the Sierra Leone government budget profile for the financial year 2014-2018 can shed some light on the contradiction between the government emphasis on creating jobs through entrepreneurship and the actual funding available for it (Ministry of Finance and Economic Development, 2016). In developing countries, the vast majority of resources available are spent on social services, hence funding for skills development are always scarce (Kingombe, 2012). Also, funding entrepreneurship education programmes in Sierra Leone is based on a '*tripartite mechanism'* that includes the government, individuals, and employers (including Non-Governmental Organisations) (NGOs) (Kingombe, 2012). This current trend calls for the role of individuals and enterprises in contributing to the costs of skills development and this arrangement is indeed a hindrance as most youths do not have the resources to commit in acquiring skills.

Governmental Policies: there is currently no national policy that makes it compulsory for entrepreneurship education to be part of the national curriculum and

syllabus (Nyalley, 2010). There was a call from the Sierra Leone Ministry of Education, Youth and Sport to make this a priority if we are to benefit from the objectives of entrepreneurship-related programmes (Kingombe, 2012). However, this call has not been adequately responded to.

Indeed, the integration of entrepreneurship education into national curricula has been a successful choice in both developed and developing countries (European Commission, 2012; Achor and Kate, 2013). For instance, the European Commission through its '*Europe 2020 Strategy*' has stressed the need to embed innovation, creativity, and entrepreneurship into its education systems (European Commission, 2012). This is highlighted in three key flagship programmes: Innovation Union, Youth on the Move and Agenda for New Skills and Jobs (European Commission, 2012). This strategy helps the integration of entrepreneurship education programmes nationwide. Probably, similar results would be secured by Sierra Leone too; with the inclusion of entrepreneurship programs/modules in the national curriculum, this may also contribute to the general cultural acceptance of entrepreneurship as a profession and a viable and respectable source of income.

Lack of Experienced Trainers: There is a shortage of skilled staff that is required to effectively design, deliver and assess entrepreneurship education programmes in Sierra Leone (Kingombe, 2012). Teachers and/or educators play a very significant role in ensuring that the intended goals of entrepreneurship education are met. Hence, they have to be given the opportunity to acquire the relevant knowledge, skills, and attitude required to design, deliver and assess entrepreneurship education programmes in enabling environment (EU, 2014).

2.8 Chapter Summary

This chapter has covered a brief history of Sierra Leone and its unique culture, an overview of the economy and key challenges including the challenges of youth unemployment in the country. The chapter also covers some of the various institutional supports that government provides for start-up and presented an overview of entrepreneurial activity based on the Global Entrepreneurship Development Institute survey. The chapter ended with the concept of graduate entrepreneurship, the key unemployment challenges faced by graduates and a review of Higher Education Institutions in Sierra Leone and its challenges.

Chapter Three

3. Literature Review

3.1 Objective

This chapter presents the relevant literature which helps to build a strong theoretical foundation to answer the key research questions and cover the research objectives. The chapter presents information derived from relevant journal articles and relevant secondary sources relating to entrepreneurship, entrepreneurship education, entrepreneurial intentions and the nature of entrepreneurial competencies and pedagogies.

The chapter starts with an introduction to the concept of entrepreneurship and entrepreneurship education. This is followed by the objectives, impact, and approaches of entrepreneurship education and its key challenges in Higher Education Institutions. Further, the chapter presents a review of entrepreneurship education impact studies with the primary goal of identifying research gaps. The chapter also presents theories and models relating to entrepreneurial intentions, competencies, and pedagogies. A selection and discussion of the strengths of the key theoretical framework used within the work will be presented. The chapter concludes with a summary of the research questions and objectives.

3.2 The Concept of Entrepreneurship

The purpose of this section is to explore the meaning and concept of entrepreneurship through the different school of thoughts. This helps in selecting an

appropriate definition of the study and in understanding whether the subject of entrepreneurship can be taught or not.

The concept of entrepreneurship may be linked to three major intellectual traditions (Wennekers and Thurik, 1999) that first appeared in the writings of Richard Cantillon (Hébert and Link, 1989; Bull and Willard, 1993). As Wennerkers and Thurik (1999, p.31) note, the first tradition of entrepreneurship is "the German tradition of von Thünen, Schumpeter and Baumol, the second is the neo-classical tradition of Marshall, Knight and Schultz and the third is the Austrian tradition of Menger, von Mises, and Kirzner". Though these traditions share a similar heritage, they look at different aspects of an entrepreneur. For instance, the German tradition which is also called Schumpeterian tradition focuses on the entrepreneur as a creator of instability whilst the neo-classical tradition focuses on the role of the entrepreneur in leading markets to equilibrium through entrepreneurial activities (Wennerkers and Thurik, 1999). The Austrian tradition, however, focuses on the abilities of the entrepreneur to perceived profit opportunities.

Meanwhile, the definition of entrepreneurship poses a challenge in entrepreneurial research as there is no agreed definition (Busenitz *et al.*, 2000; Bruyat and Julien, 2001; Kirby, 2004). This has led to some criticism in the field as it causes confusion among researchers (Matlay, 2005). The definition of entrepreneurship itself has evolved through five different schools of thoughts: classical, neo-classical, sociological, psychological and processual school of thought otherwise known as approaches. These are briefly described below.

3.2.1 Classical Approach

The classical approach originated from the discipline of economics (Matlay 2005; Mwiya, 2014). The principle of economics states that there are three factors of production: land, labour, and capital (Smith, 1759). The classical views of entrepreneurship are that the organisation of these factors of production to produce a rate of return involves taking risks and managing uncertainty (Mwiya, 2014). Thus, according to the classical views, the entrepreneur is seen as an organiser of resources, manager of risk and uncertainty and taking the role as a project manager (Osborne, 1995).

A major proponent of the description of an individual entrepreneur as an organiser of resources is Richard Cantillon (1755). Cantillon believes that the best way to convert the factors of production in any economy is to freely allow the individual entrepreneur to make decisions on what best suits the consumer (Smith, 1759). In other words, he believes that allowing the entrepreneur to act in his best self-interest will help to effectively and efficiently regulate an economy better than a government would (Cantillon, 1755). Cantillon views the concept of entrepreneurship as a self-employment opportunity that citizens in a nation can embark on (Ibid). He categorises two types of entrepreneurs; those that provide services market and those that require capital for their entrepreneurial activities (Mwiya, 2014). The former describes people who render their services to the marketplace in exchange for a return (e.g. Lawyers, teachers, painters, doctors, etc.). They don't require capital to start, but only need their technical skills to profitably engage in commercial activities (Gibcus *et al.*, 2012). The latter on the other hand, require capital to effectively engage in any sort of commercial activity (e.g. Manufacturers, traders,

etc.). Traders, for instance, require money to buy goods at a certain price and sell it at a higher price. Meanwhile, Cantillon notes that both types of entrepreneurs have to deal with some sort of risks and uncertainty in their various undertakings. His writings have been regarded as the first systematic work in the field of entrepreneurship (Schumpeter, 1934).

The entrepreneur as a manager of risk and uncertainty defines someone who is willing to accommodate uncertainty and take risks (Knight, 1921; Mwiya, 2014). Many scholars view the concept of entrepreneurship as a way of managing, risk, uncertainty, and resources to meet the needs of the market (Mescon and Montanari, 1981; Reynolds *et al.*, 2000). Knight (1921) averred that entrepreneurs bear the greatest responsibility and consequences under risk and uncertainty. He defines risk as the knowledge of the probability that a specific event will occur and that that event is insurable. Knight, however, pointed out that uncertainty, which depicts a situation where something is unknown, is immeasurable and thus cannot be insured against. Thus the unique uncertainty of entrepreneurship cannot be insured against (Knight, 1921).

Furthermore, the classical theorists of entrepreneurship view the individual entrepreneur as a project manager (Osborne, 1995). The entrepreneur as a project manager describes a situation where the entrepreneur neither owned nor financed a specific project (Hisrich *et al.*, 2005). A typical example would be a contract won by the entrepreneur which is fully funded by the government. The role of the entrepreneur in such a situation is more managerial in nature. He tends to plan, coordinate, organise and effectively control the resources (Hisrich *et al.*, 2005).

3.2.2 Neo-Classical Approach

The neo-classical views of entrepreneurship are primarily focused on the aggregate economic results (e.g. the aggregate demand and supply) rather that than a mere adjustment to processes at a micro level that Cantillon and his colleagues focused on (Guzman-Cuevas, 1994, Mwiya, 2014). Neo-classical theorists merged the function that capitalist play in an economic activity with that of the role of the entrepreneur. In the neo-classist view, the individual entrepreneur is seen as a distinctive figure that is very much unconcern with what happens to the firm he or she operates (Greenfield and Strickon, 1986). Neo-classist like Walras viewed the function of an entrepreneur as an administrator of capital and production activities (Walras and Jaffé, 1977). On the other hand, neo-classist like Keynes perceived the entrepreneur as someone who is responsible to make key decisions about investment and make forecasts about an uncertain future (Keynes, 1936). Meanwhile, the most prominent neo-classical view is that of Kirzner and Schumpeter.

Kirzner (1979) describes the entrepreneur as someone who takes advantage of opportunities through the identification of gaps, mismatches in information and knowledge that has not yet been exploited. Ideally, the entrepreneur spots an opportunity in products or process deficiencies and swiftly acts on it (Hayek, 1945). The alertness of the entrepreneur in spotting these opportunities puts him in a prime position to perceive and act on them well before others do (Kirzner, 1979; Kirzner and Israel, 1997). This ability according to Mises (1949) rewards the entrepreneur with profits. The core argument of Kirzner and his colleagues is that markets are in a constant state of disequilibrium and that the only person capable to bring it back to

equilibrium is the entrepreneur. In a nutshell, entrepreneurs do not create disequilibrium; they in fact fight to bring it back to where it should be (equilibrium).

In addition to this view, Schultz (1982) averred that the market does not automatically readjust itself to equilibrium following a shock from the system. Schultz (1975, p. 829) stated that "regaining equilibrium takes time, and how people proceed over time depends on their efficiency in responding to any given disequilibrium and on the costs and returns of the sequence of adjustments available to them". Schultz further notes that the continual emergence of disequilibria presents a perfect state for the entrepreneur to spot opportunities. In essence, the major source of opportunities is disequilibria (1982). In Schultz's view, the role of entrepreneurs is to adjust, re-adjust or reallocate resources in direct response to the changes in the external environment (Schultz, 1979). According to Cook (2008), the ability of an entrepreneur to identify and exploit opportunities can be enhanced through investment in knowledge and skills. Several authors now believe that entrepreneurial skills can be developed through effective education and training (Holmes and Schmitz Jr, 1990; Klein and Cook, 2006). This notion is very much in line with the human capital theory which clearly states that human skills can be enhanced through education and training (Unger *et al.*, 2011).

Lastly, the Schumpeterian entrepreneurship named after neo-classist Schumpeter (1934) view an entrepreneur as someone who conceives and acts upon new ideas. Schumpeter himself is regarded as the father of entrepreneurship largely because of his major contribution to the key theories of entrepreneurship (Gedeon, 2010). One of his theories is that entrepreneurs are majorly responsible for technological

changes and innovative activities in a country. He uses the German word Unternehmen *or Unternehmergeist*', to describe the entrepreneurial spirit that entrepreneurs display. Also, entrepreneurship is literally taken from the German word "*entreprendre*" which means to undertake some activity. Schumpeter asserts that entrepreneurs are responsible for the execution of major activities in the economy. In another of his theory, he postulated that bigger organisations produce a lot of the innovations we see around simply because they have the capacity to effectively engage in research and development activities. However, these very organisations are constantly threatened by creative destructions; which occur as a result of the continuous introduction of superior, innovative products that quickly displaces inferior technology (Schumpter, 1935; Mwiya, 2014). Schumpeter argues that markets that constantly innovate could provide a better economic outcome than the price of the competition and the invisible hand. He stated that:

"…the function of entrepreneurs is to reform or revolutionise the pattern of production by exploiting an invention or, more generally, an untried technological possibility for producing a new commodity or producing an old one in a new way, by opening up a new source of supply of materials or a new outlet for products, or by reorganising an industry and so on… This kind of activity is primarily responsible for the recurrent "prosperities" that revolutionise the economic organism and the recurrent "recessions" that are due to the dis-equilibrating impact of the new products or methods. To undertake new things is difficult and constitutes a distinct economic function, first, because they lie outside of the routine tasks which resist in many ways… from simple refusal either to finance or to buy a new thing, to physical attack on the man who tries to produce it" (Schumpeter, 1942, p. 132).

According to Schumpeter, entrepreneurs are individuals who are daring, creative, innovative and have the desire and self-confidence to break routines. His definition of creative destruction is that entrepreneurs acquire wealth through the process of destabilising the status quo, thereby creating disequilibria that can be leveraged upon. Schumpeter's view about the role of the entrepreneur in the market differs from those of Kirzner. Kirzner himself noted that "Schumpeter's entrepreneur acts to disturb an existing equilibrium situation. By contrast, my own treatment of the entrepreneur emphasises the equilibrating aspects of his role" (Kirzner, 1973, p72-73).

In summary, the classical and neo-classical approaches to entrepreneurship largely focus on the effective role of entrepreneurs in developing the market (Cope, 2005). Among the different classical and neo-classical theorists, Schumpeter was the only one who viewed the individual entrepreneur as someone who is engaged in a creative destruction process (Shane *et al.,* 2003).

3.2.3 Sociological Approach

This approach, which is based on social behaviuor theories largely focuses on the behaviour of the individual entrepreneur within the context of his environment (Shapero and Sokol, 1982; Mueller and Thomas, 2001; Mauer *et al.,* 2009). The key difference between social learning theory and other psychological theories is that the latter assumes that human behaviour is caused by either internal depositions or certain environmental factors, whereas the former assumes that human behaviour is primarily shaped by the interactions between the environment and other personal factors (Bandura, 1977).

Additionally, the social learning theory postulates that the differences in behaviour largely emanate from the differences in the types of learning experiences faced in the course of growing up (Bandura, 1989). Such learning experiences for instance, influences one's beliefs about his or her ability to successfully start and run a venture. In the social learning theory, human behaviour is formed through experience, observation of role models and the influence of peer groups (Scherer *et al.,* 1989; Krueger and Dickson, 1994).

Further, Chell *et al.* (2001) averred that people develop values and expectancies from the social experiences they encounter which in turn influence their perception of the role and value of entrepreneurship. Mwiya (2014) stated that the sources of an individual's behaviour towards entrepreneurship are family background, situational and environmental factors. Within the family background, parents play a significant role in shaping the behaviour of their children. Some key factors such as social status, the relationship between the children and their parents have been identified as factors that encourage people to embark on entrepreneurial activities (Scherer *et al.*, 1989). Several authors have supported the notion that individuals who have been exposed to the activities of entrepreneurship are more likely to engage in it than those who have not (Hisrich and Peters, 1995; Zellweger *et al.*, 2011; Falck *et al.*, 2012).

On the other hand, scholars put forward that factors such as social marginality, age, gender and prior experience all help shape the entrepreneurial mindset of individuals. The concept of social marginality postulates that individuals who are on

the periphery of a social system are more than more, likely to engage in entrepreneurial activities than those who are not (Deakins *et al.*, 1997). These sets of people because of their minority status or social deprivation may opt for entrepreneurial activities as an escape route from poverty. In Sierra Leone, for instance, the self-employment rate among school dropouts is larger than any other groups (UNDP, 2014).

Furthermore, a displacement event such as loss of a job, frustration or redundancy may lead individuals to engage in entrepreneurial activities (Shapero, 1975). Also, situational factors such as the political, economic, socio-economic and legal factors that support entrepreneurship will help promote entrepreneurial activities in a nation (Krueger and Brazeal, 1994; De Clercq *et al.*, 2011). Scholars such as Mauer *et al.* (2009) and Cheng *et al.* (2004) support the notion that an individual's perceived capability and attitude toward entrepreneurial activities is likely to be positive if they believe the environmental factors are conducive to entrepreneurial activities.

3.2.4 Psychological Approach

In general, the psychological approach is also referred to as the personality and trait approach and it is also the oldest of the paradigms. The psychological approach suggests that some individuals have key characteristics that allow them to be naturally attracted to entrepreneurial activities (McClelland, 1965; Shane, 2003). Schumpeter (1954) observes that people who are more likely to become entrepreneurs require certain aptitude or traits. Smiles (1859) highlighted key psychological traits that attract an individual to start a new venture: perseverance, conscientiousness, courage, integrity, self-discipline, self-respect, self-learning, and patience. Research conducted by Costa and McCrae (1992) in the psychology

literature grouped personality traits into five factors: openness to experience, extraversion (extroversion or introversion), conscientiousness (related to need for achievement), neuroticism (emotional instability) and agreeableness. The literature shows that individuals who score high on conscientiousness, extraversion, openness to experience (risk-taking and innovativeness), and low on agreeableness and neuroticism are more likely to engage in entrepreneurial activities (Zhao *et al.*, 2010). Furthermore, Mwiya (2014) identified a broad range of psychological factors in the literature as shown in table 2 below:

Table 2: A range of Psychological Factors

CHARACTERISTICS	LITERATURE
A. Personality and Motives	
Need for achievement/ conscientiousness	(McClelland, 1961; Volery *et al.*, 2013; Zhao et al., 2010a)
Risk taking propensity/ openness to experience	(Brockhaus Sr, 1980; Frank *et al.*, 2007; Knight, 1921)
The desire for freedom/independence	(Burke *et al.*, 2000; Caird, 1991; Meredith et al., 1982)
Disagreeableness/deviancy	(Barrick and Mount, 1991; Brodsky, 1993; De Vries, 1977; Deakins *et al.*, 1996)
Extraversion	(Barrick and Mount, 1991; Bhide, 2000; Zhao and Seibert, 2006; Zhao et al., 2010a)
B. Core- Self Evaluation	

Internal locus of control/emotional stability/proactivity	(Bonnett and Furnham, 1991; Rauch and Frese, 2007; Rotter, 1966; Shapero, 1975)
Generalised self-efficacy	(Ainuddin *et al.*, 2006; Bandura, 1977; Chen *et al.*, 1998; Rauch and Frese, 2007)
C. Cognitive Characteristics	
Over-confidence	(Arabsheibani *et al.*, 2000; Busenitz and Barney, 1997)
Representativeness	Busenitz and Barney (1997)
Intuitiveness	(Allinson *et al.*, 2000; Busenitz and Barney, 1997)

Adapted from Mwiya (2014)

From the table above, both personality and motives and core self-evaluation are key characteristics that an individual need to endure and/or respond to difficult situations (Rauch and Frese, 2007). Cognitive characteristics such as intuitiveness, over-confidence, and representativeness are also some key attributes that help to influence the decision of an entrepreneur to effectively engage in entrepreneurial activities.

3.2.5 Processual Approach

The processual school of thought focuses on the process that is involved in the establishment of a new business. It is primarily focused on what the entrepreneurs do and how they do it rather than the individual entrepreneurs themselves (Shane, 2003). From an entrepreneurial process perspective, an entrepreneur recognises an

opportunity, formulates a business concept, identify and acquire resources, launch a venture and make adjustments (Morris *et al.,* 2013). Gartner argued that entrepreneurship is a process where individuals engage in the creation of firms. Supporting this view, scholars like Schumpeter (1934), and Carree and Thurik, (2010) concluded that most entrepreneurs today exhibits their true entrepreneurial spirit during a certain stage of their career.

Gartner (1985) further highlighted six key activities in the entrepreneurial process: identification of business opportunities; critically evaluating this opportunity; identify and acquire resources; developing the product/service; marketing it; building a firm; and effectively responding to key stakeholders, including the government, communities etc. In a nutshell, several authors believe that entrepreneurship is a process that starts from the recognition, evaluation, and exploitation of opportunities to the introduction of new services or products to new or existing markets through an organised effort (Knight, 1921; Schumpeter, 1934; Kirzner, 1973; Shane and Venkataraman, 2000). The processual approach therefore largely focuses on the process that entrepreneurs go through to establish ventures that might end up creating significant impacts.

As can be seen in the foregoing discussions, the definition of entrepreneurship poses a challenge in entrepreneurial research as there is no agreed definition (Shane and Venkataraman, 2000; Bruyat and Julien, 2001; Busenitz *et al.*, 2003; Kirby, 2004). This has led to some criticism in the field as it causes confusion among researchers (Matlay, 2005). For example, the following classic meanings have been

associated with the concept of entrepreneurship: Risk bearing (Knight, 1921), innovation (Schumpeter, 1965).

Meanwhile, for the purpose of this study, Rae (2015, p.5) definition of entrepreneurship will be used. Rae (2015, p.5) defined entrepreneurship as "the ability to turn ideas into action; the subject of enterprise and entrepreneurs, encompassing both practical and conceptual knowledge, skills and techniques used in being an entrepreneur." Rae further made a distinction between an entrepreneur and enterprise defining the former as "a person who acts in an enterprising way, and who identifies or creates and acts on an opportunity," and the later as "the application of creative ideas to practical situations" (p.5).

3.3 Concepts of Entrepreneurship Education

The preceding sections explored the different school of thoughts on the definition of entrepreneurship with the aim of arriving at a definition for the purpose of the study. Meanwhile, the literature abounds with discussions and theories on whether entrepreneurs are born or made which leads to the question of whether the concept of entrepreneurship can indeed be taught (Fiet, 2000). However, many scholars now believe that the concept of entrepreneurship can indeed be taught; that entrepreneurs are made and not born. Kuratko (2003, p. 12) noted that "the question of whether entrepreneurship can be taught is obsolete." This has led to the proliferation of entrepreneurship education programmes around the world (Gibb, 2005) hence there is a need to study the nature of entrepreneurship.

This section, therefore, looks at the concept of entrepreneurship education, including its definition, objectives, impact on specifically graduate youth unemployment, its key

approaches, and challenges within Higher Education Institutions. This gives a clear picture of the concept which will in turn help in answering research question 1 and research objectives 1 and 2 as stated in chapter one.

The introduction of an academic debate on the concept of entrepreneurial education can be dated back to 1938 by a pioneer teacher, Professor Shigeru Fuji of Kobe University, Japan (Alberti *et al.,* 2004). Conversely, the first ever MBA programme in entrepreneurship was launched in February 1947 at Harvard University with the enrollment of 188 students. Also, the first ever undergraduate programme majoring in entrepreneurship was introduced by Babson College in 1968 (Vesper, 1985). Ever since then there has been a proliferation of entrepreneurship education programmes around the world offered by universities and some other prominent bodies such as the ILO, UNDP (Valerio *et. al.,* 2014).

It is important to note that the rise in the provision of entrepreneurship education is first as a result of the fact that the concept of entrepreneurship has been recognised by many governments and institutions as a major source of creativity and job creation (Vesper and Gartner, 1997). Secondly, as Drucker (1985) noted "Entrepreneurship is not magic, it is not mysterious and it has nothing to do with genes. It is a discipline. And, like any discipline, it can be learned."

Many viewed entrepreneurs as people who are greedy, selfish, and disloyal and are always bent on exploiting others (Vesper and Gartner, 1997). In the present day, however, becoming an entrepreneur is seen as a good career choice (Xavier *et al.,* 2012).

Also, early research posited that entrepreneurs are born and not made (Fisher and Koch, 2008). This implies that the concept of entrepreneurship cannot be taught, but as Drucker (1985) noted entrepreneurship can indeed be taught through carefully planned programmes.

In teaching entrepreneurship, some scholars proposed a behavioural approach where the emphasis is on entrepreneurship as a process (Gartner, 1988). For Gartner, entrepreneurship education should be about the creation of a new venture where many influences interact in the emergence process. Morris (1998) viewed entrepreneurship as a process of identifying an opportunity, developing it, carefully understanding the resource requirements, acquiring resources, developing a business plan, implementing the plan, effectively managing the venture and exiting from it.

In the behavioural approach, the entrepreneur is seen as a part of an interrelated process. Thus, entrepreneurship education using the behavioural approach should focus on what the entrepreneur does as opposed to who he or she is. However, Neck *et al.* (2014, p.1) averred that "behaviours across samples of entrepreneurs are very idiosyncratic, so it became difficult to generalise this research for teaching purposes." This position is supported by Edelman *et al.* (2008) who in their research found out that there was very little overlap in the behaviours of nascent entrepreneurs. Despite this, the teaching of entrepreneurship as a process has made its way into classrooms around the world.

A major influence on teaching entrepreneurship as a process was the proliferation of strategy scholars in the field (Shane and Venkataraman, 2000). Both strategic and entrepreneurial scholars felt the need to distinguish themselves and for entrepreneurship, the space for this distinction was put forward by Venkataraman (1997). Venkataraman called for entrepreneurship educators and researchers to confront this simple but important question, "What is the distinctive contribution of our field to a broader understanding of business enterprise?" He continued, "To the extent that our answer to this question is unclear, delayed and overlaps with other sub-fields, our legitimacy and our very survival in the world of business research and education is seriously threatened" (p. 119). To this end, Shane puts forward a definition of entrepreneurship that has now become the most cited (Aldrich and Cliff, 2003). They defined entrepreneurship as "the identification, evaluation, and exploitation of opportunities" (Shane, 2012, p. 12).

Meanwhile, the quest for finding appropriate ways of teaching entrepreneurship has led to the re-emergence of studying the individual entrepreneur, though this time it is not from a trait perspective. The cognitive approach, as opposed to the trait approach, seeks to uncover patterns in how entrepreneurs think (Mitchell *et al.,* 2002). Mitchell *et al.* defined it as "the knowledge structures that people use to make assessments, judgments, or decisions involving opportunity evaluation, venture creation, and growth" (p.97). Most research on entrepreneurial cognition, focus on why individuals make entrepreneurial decisions with specific reference to their knowledge and beliefs they hold. Another stream of research on entrepreneurial cognition seeks to look at barriers to entrepreneurship, especially in starting a new venture.

The entrepreneurial cognitive approach thus moves the discussion away from whether an individual can be an entrepreneur to how can an individual become entrepreneurial (create opportunities and act on them). For Sarasvathy (2008) entrepreneurship is about the mindset. He believes that entrepreneurs develop a mindset that enables them to see the world as a place of endless possibilities where they can fabricate and/or recognise the opportunities, accept and learn from failures. He continues by saying that entrepreneurs do all these with the sole purpose of creating the future rather than trying to predict it.

Currently, Neck *et al.* (2014) have put forward the notion that entrepreneurship should be taught as a method which requires a set of practices. They believe that through these practices, students will able to think entrepreneurially.

Additionally, other scholars have proposed the constructivist approach in teaching the concept of entrepreneurship (Fiet, 2001; Bechard and Gregoire 2005; Kyrö 2005; Löbler 2006). The constructivist approach assumes that knowledge is in the heads of individuals who construct what they know base on their experience (Löbler, 2006). The constructivist believes that what we make of our individual experiences constituents the world we consciously live in. For the constructivists, knowledge is the ability to use information in a meaningful way. Table 3 summaries the key features of the constructivists view.

Table 3: Constructivist solutions to some of the key issues of entrepreneurship education

Key issues in Entrepreneurship Education	Answers provided by constructivism	Sources in literature
Role of the learner	Active constructors and co-constructors of knowledge and meaning, based on experiences in the world	Löbler (2006); Béchard and Grégroire (2005); Kyrö (2005)
Objectives	To be defined by the learner To evaluate (conclude/criticize); to create (reorganize knowledge to act) Critical Thinking	Löbler (2006) Béchard and Grégoire (2005)
Role of the educator	Coach/ Developer: facilitating learning experiences; providing a learning environment and possibilities for reflection	Béchard and Grégoire (2005); Löbler (2006) ; Kyrö (2005)
How can learning be initiated?	Through the open learning process and process	Löbler (2006)

	driven pedagogies / to allow for the creation of new roadmaps	

Source: Löbler (2006)

As shown in table 3 above, the role of the learner in the learning process is not to passively receive information, but rather to actively participate in the construction of their own world (Béchard and Grégroire, 2005; Löbler, 2006; Sánchez 2011). Concurrently, the role of the educator is not to merely present information and assess students, but to guide them to consider novel ways of thinking about events and phenomena (Löbler, 2006). In order to ensure this happens, the trainer/teacher should have an understanding of what prior thoughts and ideas that the learner brings to the whole learning experience (Kyrö 2005). Also, learning can be best initiated through process-driven pedagogical methods that allow for the creation of new ideas and/or concepts.

Meanwhile, like entrepreneurship, there is no single generally accepted definition of entrepreneurship education as a field of study; however, researchers are contributing to an evolving definition (Isaacs *et al.*, 2007). For example, Valerio *et al.* (2014 p. 1) define entrepreneurship education as an "academic education... that shares the broad objective of providing individuals with the entrepreneurial mindsets and skills to support participation and performance in a range of entrepreneurial activities."
Similarly, Fayolle's *et al.* (2006, p. 702) defines Entrepreneurship Education (EE) as "any pedagogical programme or process of educating for entrepreneurial attitudes and skills, which involves developing certain personal qualities".

In the context of this study, however, Entrepreneurship Education has been defined as any type of education that seeks to develop the relevant knowledge, skills, and attitude of graduates towards entrepreneurial activities including but not limited to starting a business, creating innovative products and services and providing solutions to community, societal and global problems etc. This definition makes clear that the objective of an entrepreneurship education programme is not entirely centered on the creation of a new business but the development of certain personal qualities that can be used to solve societal, personal or organisational problems.

It is also important to note the differences between entrepreneurship education programmes and entrepreneurship training programmes as shown in figure 6.

Figure 6: Differences between Entrepreneurship Education and Entrepreneurship Training
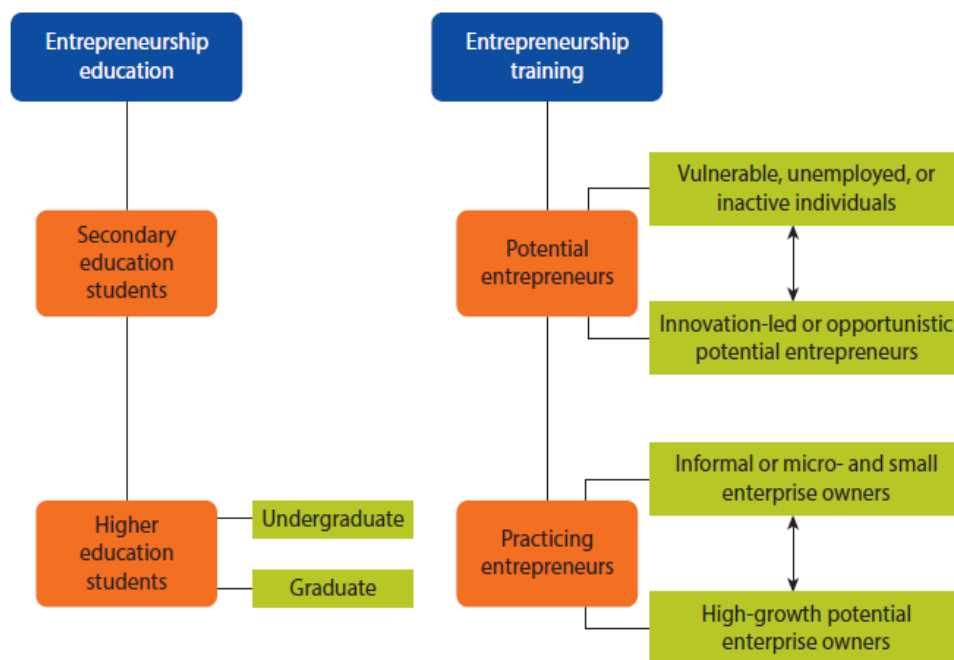
Source: Valerio *et al.* (2014)

Entrepreneurship Education Programmes otherwise referred in this study as EEP, focuses on understanding and developing an individual's capacity for the pursuit of entrepreneurial behaviours, skills, and attributes in their widely different contexts (Gibb, 2005). It is "a process of providing individuals with the ability to recognize commercial opportunities and the insight, self-esteem, knowledge, and skills to act on them" (Jones and English, 2004, p.416). It targets both secondary and Higher Education institutions' students; the former focuses mainly on people below the ages of 18 and the latter focuses on graduates and undergraduates that are enrolled in a formal degree-granting programs (Valerio *et al.,* 2014).

On the other hand, Entrepreneurship Training Programmes otherwise known in this study as ETP focuses on developing the requisite knowledge and skills specifically for the purpose of starting or operating an enterprise (Volkmann *et al.*, 2009). Its target audience includes potential entrepreneurs (vulnerable, unemployed or inactive individuals and innovation-led or opportunistic potential entrepreneurs) and practicing entrepreneurs (informal or micro and small enterprise owners and high-growth potential enterprise owners), (Valerio *et al.*, 2014).

3.4.1 Objectives of Entrepreneurship Education Programmes (EEP)

The foregoing discussions have primarily focused on the brief history of entrepreneurship education, the key approaches in teaching entrepreneurship education and the definition used within the context of this study. This section highlights the key objectives of entrepreneurship education put forward by different scholars with the aim of analysing the current state of entrepreneurship education programmes in Sierra Leone (RQ1).

Setting clear and specific objectives is one of the first major steps in designing an entrepreneurship education programme and a good understanding of the objectives leads to a better design and evaluation of the programme (Hytti and O'Gorman, 2004). There are several objectives of Entrepreneurship Education Programmes (Mwasalwiba, 2010). For example, some authors (e.g. Kirby, 2004; Henry *et al.,* 2005; Gibb, 2005) state that the objectives of entrepreneurship education programmes are to increase or create entrepreneurial culture, spirit and attitudes among participants and the communities in general whilst others (e.g. Henry *et al.,* 2005; Matley, 2005) believe that the key objective of any entrepreneurship education

programme is to stimulate a participant's intention towards creating new ventures and jobs.

Similarly, authors such as Fayolle *et al.,* (2006); Venkatachalam and Waqif, (2005) believe that some of the key objectives of entrepreneurship education programmes are to change the state of individual behaviour and intention towards entrepreneurship and to become entrepreneurial in nature, a process that will conversely lead to the creation of new businesses as well new job opportunities. Liñán (2004) stated that the primary objective of Entrepreneurship Education Programmes is to create awareness about entrepreneurship education. Creating awareness generally leads to an increase in self-employment opportunities amongst graduates in particular. Garavan and O'Cinneide (1994) have also put forward the following objectives of Entrepreneurship Education Programmes: to stimulate the entrepreneurial mindsets of participants; to develop techniques and skills that can be used to analyse business situations; to encourage the launch of new ventures, to assess and cope with risky situations and to generally acquire knowledge about entrepreneurs and entrepreneurship. In a similar vein, Gibb (1999) stated that there are three main objectives of Entrepreneurship Education Programmes: to teach participants about the concept of entrepreneurship; stimulate the entrepreneurial spirit in participants and help participants to become entrepreneurs.

Furthermore, the objectives of entrepreneurship education programmes can be classified into three key areas: education for, about and in entrepreneurship (Hytti and O'Gorman, 2004). Education for entrepreneurship aims at developing both present and potential entrepreneurs with the relevant skills and knowledge that will

help them to either create new ventures or enhance existing ones (Mwasalwiba, 2010). It is aimed at developing the following skills: personal and social skills, skills relating to financial literacy and business start-up (OECD, 2009). On the whole, it "is concerned with the inculcation of a range of skills and attributes, including the ability to think creatively, to work in teams, to manage risk and handle uncertainty" (OECD, 2009, p. 5).

 On the other hand, education about entrepreneurship focuses on ensuring that there are a good knowledge and understanding of entrepreneurship among different stakeholders, including students, policymakers and the general community (Hytti and O'Gorman, 2004). Lastly, training in entrepreneurship seeks to achieve the objective of making individuals become more innovative and/or entrepreneurial in either their existing firms or place of work (Henry *et al.,* 2005).

Further, scholars such as Johannisson, (1991) and Matlay (2008) have classified the objectives of Entrepreneurship Education Programmes into three broad categories: social, economic and pedagogical goals. Social goals help in developing the right entrepreneurial culture of a country/region and help to improve the role and image of entrepreneurs in the society (Fayolle and Gailly, 2008). Economic goals, on the other hand, are focused on creating new ventures and jobs whereas pedagogical goals seek to educate potential entrepreneurs about the concept of entrepreneurship (Fayolle and Gailly, 2008).

3.4.2 The Impact of Entrepreneurship Education on Graduate Youth Unemployment

The preceding section has presented the key objectives of an entrepreneurship education programme with the sole aim of generally understanding what a typical entrepreneurship education programme should entail. The purpose of this chapter, however, is to present the key impacts of entrepreneurship education on specifically graduate youth unemployment, which is the major concern for most developing countries.

The definition of youth in Africa varies from country to country (Temba and DeWaal, 2002). The term youth, according to Chigunta *et al.* (2005) is normally defined in terms of age brackets (e.g. 15-30, 15-35 etc.) Moreover, international organisations such as the United Nations and the Commonwealth have tried to come up with a standardised age category to define who a youth is. For example, the United Nations defines a youth as anyone between the ages of 15-24, whilst the Commonwealth defines a youth as anyone between the ages of 15-29 (Chigunta *et al.,* 2005).

 However, for the purpose of this study, the Commonwealth definition of youth will be used, being anyone with the age bracket of 15-29 years.

Meanwhile, according to the International Labour Organisation (ILO) Global Trends for Youth 2013 report "the world is facing a worsening youth employment crisis: young people are three times more likely to be unemployed than adults and almost 73 million youth worldwide are looking for work"(p.1). In Africa, 60% of the 200 million youth population is unemployed (Agbor *et al.,* 2012). The problem is severe

amongst graduate youths as employers demand for graduates to possess more entrepreneurial attributes and skills to help them gain competitive advantage (Collins, *et al.* 2004; Galloway *et al.*, 2005; Mitra, 2011; Wilson *et al.,* 2009; Msigwa and Kipesha, 2013). Thus the competition for jobs amongst graduates has become intense, as the traditional education system is no longer a passport for graduates to gain secure employment in the 21st century (Nabi and Bagley, 1999; Collins, *et al.,* 2004; Mwiya, 2014). This leaves unemployed graduate youths to proactively seek for programmes that will help them acquire entrepreneurial attributes and skills that align with the demands of employers (Woodier-Harris, 2010). There is, therefore, a need to design mechanisms that help young graduates to acquire the necessary skills that will lead to employment (Lungu *et al.,* 2007).

To this end, key stakeholders in developing countries have shown strong interest in entrepreneurship education as a tool for fighting graduate youth unemployment (Ekpoh and Edet, 2011; Henry, 2013; ILO, 2015; Volkmann *et al.*, 2009; World Bank, 2008).

 In particular, policymakers, as well as researchers, have recognised the important role that entrepreneurship education plays in equipping graduates with entrepreneurial attributes and skills (Harrison and Leitch, 2010). The government of Sierra Leone, for instance, has implemented a new legislation for youth-friendly initiatives that focus on creating an environment that is conducive to youth employment (World Bank, 2013). Among such initiatives is the development and implementation of Entrepreneurship Education Programmes (EEP) as a means of reducing graduate youth unemployment in the country (World Bank, 2013).

Also, several scholars (e.g. Mwasaliba, 2010; Isaacs *et al.,* 2007) believe entrepreneurship education plays a significant role to achieve graduate youth employment. Bennell (2000) for instance called for governments and non-governmental agencies that are focused on improving the livelihoods of youths to do so through entrepreneurship education. Maina (2013) averred that by helping individuals to create small businesses, entrepreneurship education helps in reducing graduate youth unemployment across a nation.

Similarly, Bygrave (2004) stated that a better understanding of the nature of starting a business will help the unemployed graduate to create businesses on their own thereby reducing the level of unemployment in a country. Wiklund and Shepherd (2003), Charney and Liecap (2000) all assert that there is a positive relationship between entrepreneurship education and business creation which invariably leads to a reduction of graduate youth unemployment.

Studies by Ogundele *et al.* (2012) found that entrepreneurship education in Nigeria encourages youths to be job creators rather than job seekers. Olorunmolu (2010) also averred that entrepreneurship education helps to produce entrepreneurs who in turn reduce the problem of youth unemployment and other social related problems in a country. Maina (2013) believes that the entrepreneurs (created through the entrepreneurship education process) do not only create jobs for themselves, but does for others, hence helping to reduce the unemployment levels in a country.

Researchers (Solomon, *et al.*, 2002; Gibb, 2005; Packham *et al.,* 2010; Rae *et al.,* 2012) argue that entrepreneurship education helps in developing an entrepreneurial mindset, enterprising skills, a wide understanding and application of the concept of entrepreneurship and capabilities to start, sustain and grow a venture.

Concurrently, studies conducted in the UK and USA has indicated that individuals who are more educated in entrepreneurship are likely to be successfully engaged in entrepreneurship activities than the less educated ones (Robinson and Sexton, 1994; Pickernell *et al.*, 2011). Research conducted by Blanchflower and Shadforth, (2007) concluded that in the UK most self-employed individuals who own and effectively run their businesses hold a university degree compared to their counterparts. Also, the findings of a study carried out by Gibcus *et al.* (2012) show that entrepreneurship education alumni have the significantly higher knowledge, skills, and perception towards entrepreneurship. They also found that graduates who were engaged in entrepreneurship education programmes went on to start their own businesses within 7 months after graduation while those who were not engaged entrepreneurship education programmes started 2.8 years after graduation. Thus, there is a positive relationship between entrepreneurship education and youth unemployment.

3.4.3 Approaches of Entrepreneurship Education

This section presents the key approaches of entrepreneurship education. In the foregoing discussions it is evident that there is an increase in the amount of youth unemployment across the world, particularly in developing nations (ILO, 2015; Volkmann *et al.*, 2009; World Bank, 2008). Many youths are still unable to complete secondary school and obtain the necessary knowledge and skills for employment

(Garcia and Fares, 2008). Even among completers of secondary and tertiary education, unemployment remains high (Nafukho and Muyia, 2010). Entrepreneurship education is therefore seen as a major solution to youth unemployment (Mwasaliba, 2010).

However, to effectively assess the impact of entrepreneurship education on youth unemployment, it will be important to understand its approaches, some of which are: the neoliberal human capital approach and the capability approach (DeJaeghere and Baxter 2014). The neoliberal human capital approach is rooted in the assumptions that education develops human capital and that if youths learn the necessary skills they can effectively participate in the labour market (DeJaeghere and Baxter 2014). This approach emphasizes the importance of flexible forms of production and assumes that individuals that are equipped with the appropriate skill sets have the autonomy and freedom to improve their lives (DeJaeghere and Baxter 2014). Entrepreneurship within this approach, therefore, appears to stress the behavioural aspects of skills, risk-taking and innovation for formulating and managing new businesses and is primarily associated with the goal of self-employment (Naudé, 2012). As the labour market becomes more volatile, entrepreneurship education programmes increasingly emphasise the need for creating jobs and assuming the risks from unstable markets, and the human capital approach takes on a neoliberal orientation in which social structures and supports that help minimise risks particularly for youths in poverty are not a key priority.

In contrast to the neoliberal human capital approach, Sen's (2009) capabilities approach provides a framework for understanding the role of material, institutional

and social conditions in mediating how youths effectively convert skills learned in entrepreneurship education programmes in their day to day survival and future well-being (DeJaeghere and Baxter 2014). This understanding draws attention to the significance of developing the social supports and capabilities that can enable youths that are unemployed to pursue entrepreneurship as a viable career choice rather than a necessity in the absence of alternative earning opportunities (Gries and Naudé, 2011). The capability approach to education further stress the importance of *valued* forms of production and assumes that an increase in an individual's skill does not necessarily or automatically translate into expanded livelihood capabilities and functionings (Sen, 2009). The key distinction between functionings and capabilities is that functionings are achieved outcomes e.g. acquiring entrepreneurial skills, having the intention to start a new business whereas capabilities are the potential to achieve these functionings e.g. opportunity to attend entrepreneurship education programmes and living in a society where entrepreneurship is part of the culture etc, for example, having been taught to read; having books or newspapers (Walker and Unterhalter, 2007).

Rizvi and Lingard (2009: 201) suggest that Sen's (2009) capabilities approach is 'a promising avenue for exploring an alternative imaginary of globalization', and in this case, alternative education policies and programmes aimed at responding to the effects of unemployment and poverty on youths' lives.

Therefore, understanding these different approaches of entrepreneurship education is important because it will help the researcher to critically assess the extent to which entrepreneurship education programmes impact youth unemployment, since those

programmes specifically target marginalised youth in sub-Saharan Africa in efforts to address the interrelated problems of unemployment and poverty alleviation (DeJaeghere and Baxter 2014).

3.5 Entrepreneurship Education in Higher Education Institution: Key challenges

Having looked at the objective, impact and approaches of entrepreneurship education in the sections above, it is important to note that entrepreneurship education programmes are not delivered in a vacuum; Higher Education Institutions are at the forefront of embedding and delivering such programmes (Libombo and Dinis, 2012). This section specifically reviews the key challenges faced by the Higher Education in delivering entrepreneurship education. This will help to provide appropriate recommendations to the relevant stakeholders.

Entrepreneurship education serves as a key driver in creating wealth and stimulating a country's economic growth; through entrepreneurship education graduates who are equipped to take advantage of opportunities and promote systemic entrepreneurship and innovative practices within a country (Petridou *et al.,* 2009). In order to understand the impact of entrepreneurship education on the creation of new businesses by graduates, several scholars have carried out studies on, for instance the relationship between graduates' perceptions and entrepreneurial intentions (Makgosa and Ongori, 2012; Rengiah and Sentosa, 2015). Others (Woollard *et al.,* 2007; Yaghoubi, 2010; Ebewo and Shambare, 2012) have studied the prevalence of business planning skills and entrepreneurial support by Higher Education Institutions (HEI) as factors that affect entrepreneurial activity. Others focus on the key

challenges encountered to improve EE in the Higher Education Institutions (HEI) (Libombo and Dinis, 2012).

According to Fayolle and Gailly, (2008) designing entrepreneurship education programmes, requires Higher Education Institutions (HEI) to consider the following questions: Why (targets and objectives), Who (the public), for what results (examinations, assessments), What (content), and How (pedagogical approaches). Fayolle and Gailly (2008) further state that the effectiveness of an Entrepreneurship Education Programme is heavily reliant on the clarity and consistency of the answers provided to these questions. Consequently, Higher Education Institutions across the world have faced several challenges in appropriately answering these questions. For instance, Niyonkuru (2005) stated that there are no standardised techniques for assessing the outcome of an entrepreneurship education programme. Also, Libombo and Dinis, (2012) note that the pedagogical approaches used in HEIs need to be clearly understood. For Rocha and Bachi (2010) and Yaghoubi *et al.* (2011), the lack of descriptive details on EE programmes and the poor assessment tools used are considered some of the key barriers in effectively implementing the content of entrepreneurship education programmes. Others (Rahimi and Mokhber, 2010; Razavi *et al.,* 2012; Shambare, 2013) averred that the inappropriate nature of the curriculum, educational planning and content are some of the key difficulties faced in effectively achieving the intended purpose of EE programmes. Further, several authors (Mohammadi *et al.*, 2007; Yaghoubi *et al.*, 2011; Razavi *et al.*, 2012; Shambare, 2013) particularly highlight the lack of appropriate pedagogical methods used to deliver the contents of Entrepreneurship Education Programmes (EEP) such as the extensive use of theoretical methods like business plans and lectures. Rocha

and Bachi (2010) note that the extensive and frequent use of traditional theory-driven methods such as lectures, exams to the detriment of other practical approaches like case studies, games etc. does not help in realising the core purpose of EE programmes. Scholars such as Ebewo and Shambare, (2012) and Makgos and Ongori, (2012) observe that when graduates are not exposed to real life practical business operations it will be difficult for them to choose entrepreneurship as a profession. Similarly, Rahimi and Mokhber (2010) points out that most Entrepreneurship Education Programmes are focused on producing graduates with academic qualifications rather than engaging them in practical activities. In other words, Entrepreneurship Education Programmes are largely theory driven. The 2008 European Commission report shows that the reasons why most graduates do not get involved in entrepreneurial activities after completing their programmes are because they were not exposed to real-life business experience and their self-confidence was not fully developed as a result. Researchers such as Kiro and Carrier, (2005) and Kirby, (2006) observe that the traditional methods of entrepreneurship education programmes do not have innovative contents which in turn inhibit the development of entrepreneurial skills in graduates.

Furthermore, the shortage of educators/trainers with a background in entrepreneurship, motivational speaking skills is another key challenge highlighted by several scholars (Rahimi and Mokhber, 2010; Razavi *et al.* 2012; Morris *et al.,* 2013). The vast majority of entrepreneruship educators in Sierra Leone for instance, only hold degrees in general business management and have little or no prior business knowledge. Another key challenge noted by Shambare (2013) is the lack of institutional support in promoting entrepreneurial activities, especially in developing

countries. Scholars such as Ebewo and Shambare, (2012) and Costa, (2013) highlight key barriers like the bureaucracy of government institutions, the economic environment and lack of appropriate seed capital as barriers that stifle the engagement of graduates in entrepreneurial activities.

In order to overcome these barriers, Lima *et al.* (2012) suggest that HEIs should encourage learning by doing and networking amongst graduates. Lima *et al.* (2012) also recommend robust and practically oriented pedagogical approaches, improve the teaching content, trainers, expose graduates to real life entrepreneurial projects and provide appropriate funding opportunities for all graduates. Meanwhile, little is known about what specific challenges that Higher Education Institution face in implementing entrepreneurship education programmes. Particularly, little is known about the key competencies that programmes seek to develop and the methods used to develop them. This study thus aims at filling this gap.

3.6 Research on the Impact of Entrepreneurship Education

This section presents an overview of research on entrepreneurship education impact studies which will help to further identify gaps in the current literature that needs to be filled.

3. 6.1 An overview of Impact Studies

There have been several studies on a comprehensive review of the impact of entrepreneurship education on the relevant dependent variables (Lorz *et al.*, 2013). Lorz *et al.* (2013) noted that two of the first ever reviews were conducted by Dainow (1986) and Gorman *et al.* (1997). Dainow (1986) carried out a review of

entrepreneurship education impact studies that were conducted within a period of 10 years with the sole purpose of presenting an overview of the current state of the art. His conclusion was that there was a need for more empirical studies, use of a more robust methodology and a systematic data collection.

Gorman *et al.* (1997) carried out a similar review of the literature on impact studies between 1985 and 1994. They concluded that the research on impact studies was still in an exploratory stage and that before (ex-ante) and after (ex-post) measurement was not widely used across the 63 articles they reviewed. They also noted that entrepreneurship programmes positively influenced entrepreneurial attributes.

Further to these studies, Dickson *et al.* (2008), Mwasalwiba, (2010) and Martin *et al.* (2013) carried out separate studies assessing the impact of entrepreneurship education.

Dickson *et al.* (2008) analysed the impact of entrepreneurship education programmes on a host of different entrepreneurial activities including venture creation, intentions, and attitudes. They reviewed 21 articles published between 1995 and 2006 and concluded that "there was a significant and positive correlation between participation in the [entrepreneurship] educational programs and selection into entrepreneurship" (Dickson *et al.,* 2008, p. 245). They also like Gorman *et al.* (1997) noted that there has been a limited use of ext-ante (before) and ex-post (after) methodologies.

Mwasalwiba (2010) covered 17 studies and focused on five main themes amongst which were evaluation and impact indicators. Mwasalwiba (2010) concluded that entrepreneurship education has a positive impact on most of the outcomes across the 17 studies.

Martin *et al.* (2013) conducted a meta-analysis of the outcomes of entrepreneurship education programmes. Their findings were that there is a significant relationship between entrepreneurship education and entrepreneurship intentions, competencies and outcomes.

Additionally, Lorz *et al.* (2013) conducted a systematic review of the methods in entrepreneurship education impact studies. In their review, they were able to develop a database of 39 entrepreneurship education impact studies published in English.

Most recently, Nabi *et al.* (2017) did a systematic empirical review (using the teaching excellence framework) of the impact of Higher Education entrepreneurship education-based programmes on a range of outcomes published in the last decade. The review also examined the degree of the relationship between specific outcomes achieved and the pedagogical methods used. Nabi *et al.* (2017) found that the majority of research conducted were still focused on what they called lower level/short-term/subjective impact indicators like entrepreneurial intentions, perceived feasibility, and knowledge than other objective indicators e.g. emotion, intention to transition, socio-economic impact, venture performance etc. They also found that there were contradictory findings on the impact of EE programmes on the different indicators being studied and put forward that such contradictions might be

as a result of "the nature and context of pedagogical interventions as well as contextual factors" (Nabi *et al.*, 2017, p.278). Meanwhile, their findings show that there are currently very few studies on context. Furthermore, they discovered that there is currently very little research on Entrepreneurship Education in high education and the effectiveness of pedagogical methods being used in EE programmes.

3.6.2 Review of Impact Studies

The overview of entrepreneurship education impact studies highlighted above strongly suggests that there is a positive impact of an entrepreneurship education programme on the various variables being studied, i.e. intentions, skills, knowledge, etc. Overall 30 out of the 39 studies indicated that there is a positive impact of an entrepreneurship education programme on the variables being studied. Eight of the studies reported a mixed result, i.e. a combination of positive, negative and not significant results (Lorz *et al.*, 2013). Only one study out of the 39 reported a not significant result. Lorz *et al.* (2013, p. 134) also note that "across all analyzed studies a positive impact was reported for a total of 67 dependent variables" and two studies conducted by Oosterbeek *et al.* (2010) and Von Graevenitz (2010) reported a negative impact on three outcome variables, including entrepreneurial intention, skills, and knowledge.

With this initial information at hand, the literature review of impact studies will primarily look at which variables, research designs, data analysis methods were used and what research gaps exist. These will now be investigated.

a) Which variables were used?

The key independent variable being examined across all the studies is an entrepreneurship education programme. However, there are a number of differences in the key elements of this independent variable i.e. the scope, duration, pedagogies and objectives of the programmes (Lorz *et al.* 2013).

The scope of the programmes ranges from a comprehensive entrepreneurship education programme (Lee *et al.,* 2005) to a singular course or module (Galloway *et al.*, 2005; DeTienne and Chandler, 2004).

Also, the scope of the programmes varied from one day (Fayolle *et al.*, 2006) to 12 months (Oosterbeek *et al.*, 2010). The most common pedagogy was classroom teaching and the key objectives of the programmes included increasing entrepreneurial intentions and the attitudes of participants towards risk-taking (Bakotic and Kruzic, 2010), creation of a business venture (Kolvereid and Moen, 1997) and developing entrepreneurship skills and knowledge in participants (DeTienne and Chandler, 2004).

All studies used one or more dependent variable as shown in appendix 3 below. The most common among those variables that were used in those studies are perceptions and attitudes. Among those studies, there were a total of 11 cases that reported a no significant impact of an entrepreneurship programme on participants' attitudes and perceptions and 19 cases report positive effects on perceptions and attitudes. However, none of the studies reported a negative impact on these two variables (Lorz *et al.* 2013).

Further, variables related to nascency and performance, skills and knowledge and intentions were largely used. On the whole, a vast majority of the studies reported a positive effect whilst very few reported not significant, unclear and negative result.

b) Which research designs were used?

The majority of the studies reviewed used a quantitative design to measure the impact of entrepreneurship education programmes on the relevant dependent variables, only a few used qualitative and mixed design (Lorz *et al.* 2013). Also, studies such as those conducted by Menzies *et al.,* (2003); Menzies *et al.,* (2002) and Kolvereid *et al.*, (1997) were overly reliant on ex-post designs, which tend to measure the impact of an entrepreneurship education programme at the end of the programme.

Further, most impact studies used the concept of self-efficacy (Bandura, 1997), the theory of planned behaviour (Ajzen, 1991) and the entrepreneurial event model (Shapero and Sokol, 1982) as their main theoretical anchors. Also, the majority of the studies did not use control groups to measure the impact of entrepreneurship education on the stated variable (Lorz *et al.*, 2011). Lorz *et al.* (2013) also noted that 18% of the studies they analysed targeted practicing entrepreneurs, whilst 13% targeted adults. Most studies drew their samples from one geographical area with only a few (e.g. Souitaris *et al.,* 2007; Lee *et al.*, 2005) studying samples across several countries. The average sample size across most studies was *n*= 262. It is important to note that studies that used both ex-ante and ex-post designs had an

average sample size of *n*=80 whilst those that used only ex-post design had a sample size of *n*=343 (Lorz *et al.*, 2013).

c) Which data analysis methods were used?

Factor analysis was the largest statistical method used to verify construct validity. To ensure reliability, the majority of impact studies used one or multiple methods e.g. usage pre-tested scales, multiple methods, etc. Most studies used ANOVA and t-tests to effectively compare the means of two or more groups. Regression and correlation analysis was also the most widely used data analysis methods. Table 4 shows an overview of the statistical methods used across studies.

Table 4: Statistical Data Analysis Methods used in Entrepreneurship Education

	Descriptive Statistics	Comparisons of Means Using *t*-Tests	Anova Variance Analyses	Correlation Analysis	Regression Analysis	Logistical Regression	Factor Analysis	Structured Equation Model
Ex ante/ex post (n = 12)	12	7	5	3	5	0	1	1
Ex post (n = 27)	27	5	5	7	2	2	3	1
Total	39	12	10	10	7	2	4	2

Source: Lorz *et al.* (2013)

d) What research gaps exist?

A review of the literature clearly shows that most authors are calling for more entrepreneurship education impact studies for several reasons.

Firstly, authors like Gorman (1997), Pittaway *et al.* (2007), Oosterbeek *et al.* (2010) averred that research in the area of the impact of entrepreneurship education is still

at its infancy stage and therefore calls for more rigorous research in the field. Similarly, Von Graevenitz (2010) pointed out that little is known about the impact of entrepreneurship education programmes on participants' intentions to engage in entrepreneurial activities.

Secondly, Lorz *et al.* (2013) call for the utilisation of ex-ante and ex-post measurements in order to effectively assess the impact of entrepreneurship education programmes at the beginning and the end of the programmes and to avoid self-selection biases. Currently, most studies only rely on an ex-post assessment.

Thirdly, there is a need to conduct more impact studies in developing countries (Gerba, 2012). As already noted, most impact studies have been carried out in the West using western participants (Naude and Havenga, 2005, Gerba, 2012). The contextualisation of impact studies is relevant due to the various cultural, political and socio-economic differences that exist between countries (Baumol, 1990, Welter, 2011). Gartner (1995, p. 70) highlighted that researchers "have a tendency to underestimate the influence of external factors and overestimate the influence of internal or personal factors when making judgments about the behaviour of other individuals". Of more interest is the contextualisation of entrepreneurial intention and skill sets needed in developing countries (Naude and Havenga, 2005; Singh and Belwal, 2008).

Fourthly, there is a need to measure the stability of the effects of entrepreneurship education on non-behavioral variables (e.g. intentions and attitudes). In other words, how long does a participant intention to engage in an entrepreneurial activity stay

stable? This will require measuring impact months or years after the end of an entrepreneurship programme. To date, only Friedrich *et al.* (2006) have attempted to directly answer this question by measuring the impact of a training programme using an ex-ante and ex-post control design after 6 months. Additionally, some studies (e.g. Menzies and Paradi, 2002; Kolvereid and Moen, 1997) have provided some insights into the stability of the effects of entrepreneurship education in the long run. The results from Menzies and Paradi, (2002) and Kolvereid and Moen, (1997) show that there is a positive relationship between participating in an entrepreneurship education programme and becoming an entrepreneur.

Further, there is a need to test the effectiveness of different types of pedagogies (methods used to teach entrepreneurship programmes) used in an entrepreneurship education programme (Nabi *et al.*, 2017). To date, very few studies (DeTienne and Chandler, 2004; Chrisman *et al*, 2005; Liao and Gartner, 2007, Lekoko, 2012; Sirelkhatima *et al*; 2015; Sipon *et al.*, 2015) Radu and Loué, 2008; have researched on what content or pedagogies are appropriate for delivering entrepreneurship education and training programmes. It is therefore important to research into what pedagogy works best for delivering entrepreneurship education programmes.

Lastly, Nabi *et al.* (2017) call for EE impact studies to consider contextual factors in Higher Education (e.g. type of institution, type of course, etc.) and expand existing research on the relationship between culture and national context. They also suggest that there is a need to "explore underexamined fast-growing/emerging countries/continents in our sample, e.g., Brazil, Russia, Africa, and Australia" (Nabi *et al.*, 2017, p. 289).

Additionally, Rideout and Gray (2013, p. 348) succinctly addressed key areas that researchers should look into by stating:

"The real question we need to answer is: what type of EE, delivered by whom, within which type of university, is most effective for this type of student, with this kind of goal, and under these sets of circumstances (or contexts). Even at this elementary stage in its development for EE research, it is clear that if we are going to address the needs of policymakers and the constituencies and taxpayers they are responsible to, EE researchers will need to strive to answer this kind of complex question."

3.7.0 The Nature of Entrepreneurial Intentions

In the foregoing discussions, it can be clearly seen that entrepreneurship education does have a positive impact on especially the entrepreneurial intentions of the participants. In other words, participants of entrepreneurship education programmes are likely to engage in entrepreneurial activities after the intervention. The following sections will, therefore, present a discussion on the nature of entrepreneurial intentions and the relevant models/frameworks used in this study. This is done in order to understand what constitutes entrepreneurial intentions and select an appropriate model that enables the researcher to interpret the relevant data and present precise findings.

Bird (1988) stated that entrepreneurial intentions are the foundations for understanding the process of creating a new venture. They are a key predictor of a planned behaviour (Kolvereid, 1996; Liñán, 2004).

Entrepreneurial intentions can be defined as a "self-acknowledged convictions of individuals that they intend to set up new business ventures and consciously plan to do so at some point in the future" (Thompson, 2009, p. 676). It is the force that drives people to choose self-employment over traditional salary based employment (Gerba, 2012).

Several authors believe that participating in an entrepreneurship education programme can increase a participant's intention to become an entrepreneur (Kurakto, 2005; Fayolle, 2008; Lorz *et al.*, 2013). For example, a study conducted by Wilson *et al.* (2007) concluded that there is a positive relationship between entrepreneurship education and entrepreneurial intentions. Also, a study conducted by Dickson and colleagues (2008) shows that there is a very strong and positive correlation with participation in an entrepreneurship education programme and intend to start a career in entrepreneurship.

In particular talking about a similar context of this study, research conducted by Owusu-Ansah (2004) in Ghana on the impact of entrepreneurship education on career intentions and aspirations of students in tertiary education concluded that 77.9% of respondent surveyed had an intention to start a career in business. The study also concluded that 86.7% of respondents felt empowered with the relevant skills and competencies to start and run a business. Also, research conducted by Ebewo (2013) on 343 final year students at the University of Botswana concluded that participation in entrepreneurship education has a positive influence on students' intention to become entrepreneurs by changing their observed attitude towards entrepreneurship.

3.7.1 Entrepreneurial Intentions Models

As shown above, scholars (Bird, 1988; Gerba, 2012) have argued that entrepreneurial intentions are the foundation for understanding the entrepreneurial process. This section presents some of the key models of entrepreneurial intentions with the sole aim of selecting an appropriate model that enables the researcher to analyse the effect of entrepreneurship education on entrepreneurial intentions within the context of this study.

Often, entrepreneurial intentions are studied using intention models (Gerba, 2012) which offer robust frameworks that help in understanding the entrepreneurial process (Krueger, 1993). Though there are several intentions-based models in the entrepreneurship literature (Bird, 1988; Boyd and Vozikis, 1994; Krueger and Brazeal, 1994), this section will discuss two main intention models: Ajzen's (1991) theory of planned behaviour and Shapero and Sokol's (1982) entrepreneurial event theory.

Fayolle *et al.* (2006) notice that intention models have been specifically applied within the context of entrepreneurship education. Shapero and Sokol (1982) note that researchers have investigated and identified the role of education and teaching variables in the developing the perceptions about the feasibility and desirability of entrepreneurial behaviour. In essence, an entrepreneurship education programme can have a direct and positive impact on the antecedents of intention found in the theory of planned behaviour and the Shapero and Sokol (1982) Entrepreneurial Event model described below (Krueger and Carsurd, 1993).

Meanwhile, for the purpose of this study, Ajzen's theory of planned behaviour has been chosen because of its widespread use in predicting a range of individual behaviours, including electoral choices and intention to stop smoking to name but a few (Martin *et al.,* 2013) and its recent application in the field of entrepreneurship (Fayolle, 2006). It serves as a useful framework to analyse how for example an entrepreneurship education programme might influence participants' entrepreneurial intentions (Fayolle *et al.,* 2006). In essence, entrepreneurship education programmes impact participants by changing their attitudes and consequently their intentions towards entrepreneurship. The model will enable the researcher to assess how an entrepreneurship education programme influences one or more antecedents of intention.

Theory of Planned Behaviour (TPB)

TPB is among a larger family of intention based models, some of which include Bird's (1988) model and Shapero and Sokol (1982) model (Shook *et al.*, 2003). TPB shown in figure 7 is an intention-based expectancy model of decision making and behaviour proposed by Ajzen (1991). It is rooted in the Theory of Reasoned Action (TRA) put forward by Fishbein and Ajzen (Fishbein and Ajzen, 1975).

Figure 7: Theory of Planned Behaviour (TPB)
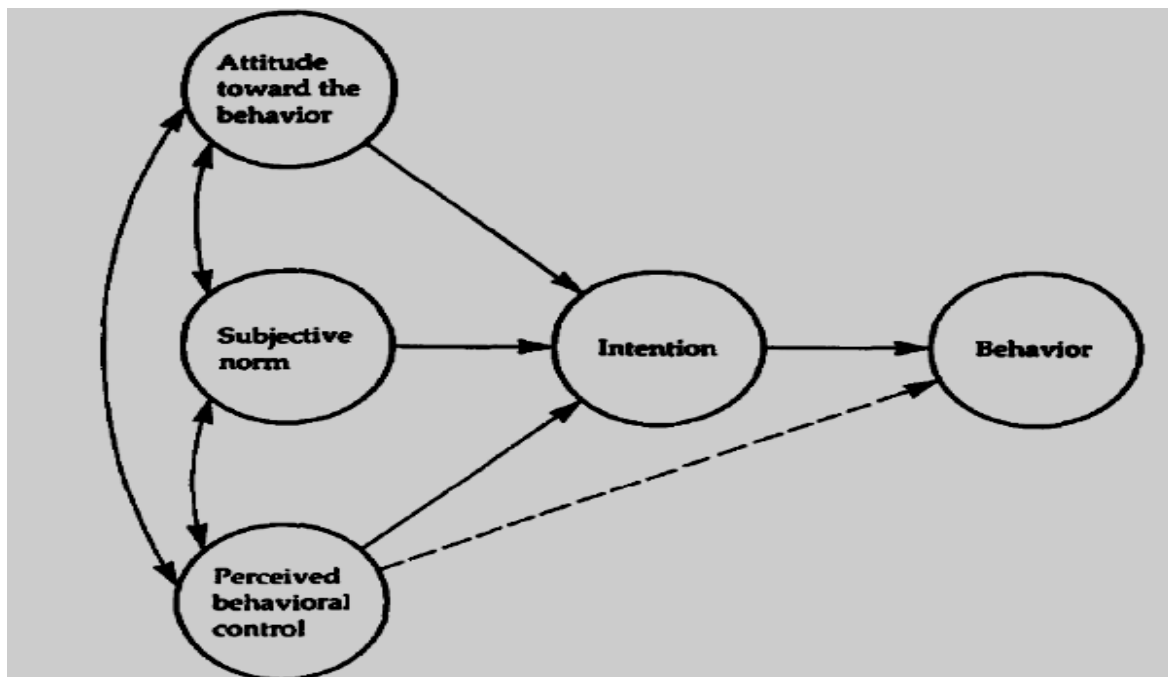
Source: Ajzen (1991)

TPB assumes that the social behaviour of humans is a planned, reasoned or controlled activity; it takes into account the likely consequences of the considered behaviour (Ajzen and Kloba, 2013). The model further assumes that the behaviour of an individual is influenced by the individual's intention (Ajzen, 1991). The formation of intention, on the other hand, depends on the individual's attitude towards a behaviour, subjective norms and perceived behavioural control (Fayolle *et al.*, 2006; Ajzen, 1991).

The attitude toward the behaviour represents the degree to which an individual has an unfavourable or favourable appraisal of his/her behaviour in question (Ajzen, 1991). In evaluating and/or appraising one's behaviour when an issue arises, people often draw on their beliefs and because beliefs themselves carry evaluative implications, attitudes are formed automatically (Fayolle *et al.,* 2006).

Subjective norms are the perceived social pressures to perform the behaviour or not (Ajzen, 1991). In other words, it is the perception of what other people think about the proposed behaviour to be performed. Put simply, the subjective norms of an individual largely depend on his or her perception about the thoughts of people he or she values (e.g. family members, friends, colleague, and the immediate supervisor) who thus directly impact on their performed behaviour (Brouwer *et al.,* 2009; Vermeulen *et al.*, 2011). The subject's perceptions are hugely influenced by his or her normative beliefs (Ajzen, 1991).

Perceived behavioural control, on the other hand, refers to the perceived difficulty or ease of exhibiting behaviour (Ibid). It is the perceived belief of an individual control over their behaviour. This concept is very similar to the concept of perceived self-efficacy proposed by Bandura (1977). The concept of perceived self-efficacy refers to individuals' beliefs about their abilities to effectively exercise control over their own activities and other events that influence their lives (Bandura, 1977).

In the context of entrepreneurship, TPB affirms that entrepreneurial intention is highly dependent on; an individual's attitude toward the desirability of an entrepreneurial career; subjective norms, including perceived expectations and beliefs to perform the behaviour, and perceived behavioural control or the perceived ability to execute the intended behaviour of entering entrepreneurship (Kume *et al.,* 2013).

The application of TPB to the field of entrepreneurship was first done by Krueger and Carsrud (1993). They tried to make Ajzen's (1991) theory compatible with other theories, especially that which was proposed by Shapero and Sokol (1982). Krueger and Dickson (1994) among other researchers have proven that an increase in an individual's behavioural control directly increases the perception of opportunity (Fayolle *et al.,* 2006).

However, some authors (Boyd and Vozikis, 1994; Davidson, 1995; Kolvereid, 1996; Thackev and Kolvereid, 1999) believe that there are other factors that predict and/or determine individual intention. For instance, Kolvereid (1996) and Davidsson (1995) argue that the mastery of social influences and vicarious experience are two of the major factors that affect an individual's intention or decision to start a business. Boyd and Vozikis (1994) averred that the presence of an entrepreneurial model and influence from close relatives increases the intention of an individual towards entrepreneurial activities. Tkachev and Kolvereid (1999) further state that the entrepreneurial role model is a primary factor used in predicting whether an individual would for instance be self-employed, run their own businesses or become an employee.

Despite these arguments, the theory of planned behaviour still remains one of the most relevant frameworks in predicting intention (Fayolle *et al.,* 2006). Krueger and Casrud (1993, p.327) particularly advise that "researchers might use this model [TPB] to analyse how the process of doing a business plan or entrepreneurial education affects intentions".

Shapero and Sokol (1982) Entrepreneurial Event

Shapero and Sokol (1982) model of the entrepreneurial event (shown in figure 8) are aimed at designing a model that will support the formation of an entrepreneurial event. The model assumes that most people are bound to a given life path by inertia, but that major life changes otherwise called triggers or displacements (e.g. attending an EE programme, loss of job, etc.) alter the binding inertia (Shapero and Sokol, 1982). Shapero and Sokol (1982) categorise these life changes and/or displacements into three, 1. negative displacements, 2. between things and 3. positive pull.

Negative displacements include things like getting divorced, being fired from work, being forcefully emigrated etc. Between things include situations like graduating from university or college, being released from jail or finishing a formal military training. Lastly, the positive pull refers to pull from one's mentor, partner, customer, investors etc.

Further, Shapero and Sokol postulate that people's answers to the external events and/or displacements described above will depend on their perceptions about the available alternatives and their propensity to act (Liñán, 2004). There are two basic kinds of perceptions: perceived feasibility and perceived desirability (Liñán, 2004):

Perceived feasibility refers to the level of competence that an individual is perceived to have to start a business. It is the confidence that a person has in his or her abilities and skills to execute a task (Fayolle *et al.,* 2006).

Several authors (Chen *et al.*, 1998; and Krueger *et al.,* 2000; Segal *et al.;* 2002; Peterman and Kennedy, 2003; Baughn, 2006) believe that self-efficacy is the core anchor of an individual feasibility perception and intention to start a business. Entrepreneurial self-efficacy has been described by Zhao and colleagues (2005) as the confidence that an individual has in his/her ability to start a business successfully.

Perceived desirability, on the other hand, can be defined as the level to which an individual finds the idea of starting a business attractive. In other words, it shows one's affection towards self-employment through entrepreneurship (Krueger, 1993). From Krueger's (1993) viewpoint, the component (attitude toward behaviour) embedded in Ajzen (1991) model encompasses the notion of perceived desirability.

Figure 8: Shapero and Sokol's Entrepreneurial Event Model

Negative Displacements	Perceptions of Desirability	Perceptions of Feasibility	Company Formation
◎ Forcefully emigrated ◎ Fired ◎ Insulted ◎ Angered ◎ Bored ◎ Reaching middle age ◎ Divorced or widowed **Between Things** ◎ Out of army ◎ Out of school ◎ Out of jail **Positive Pull** ◎ From partner ◎ From mentor ◎ From investor ◎ From customer	◎ Culture ◎ Family ◎ Peers ◎ Colleagues ◎ Mentor	◎ Financial Support ◎ Demonstration Effect ◎ Models ◎ Mentors ◎ Partners	

Source: Shapero and Sokol (1982, p. 83)

Lastly the propensity to act refers to an individual predisposition to act on an idea, decision and/or business venture (Shapero and Sokol, 1982). It has been defined by Shane *et al.* (2003) as an individual willingness to take a risk and/or action in the midst of uncertainty.

Meanwhile, despite the validity and richness of Shapero and Sokol's (1982) intention based model, it has not been used in this study because it largely focuses on the idea of new venture creation and not on other outcomes of entrepreneurial activities (Kruege and Brazeal, 1994, Foyolle *et al.,* 2006) which this study goes beyond. Also, Shapero and Sokol's model is closely related to the Theory of Planned Behaviour (Krueger and Brazeal, 1994).

3.8.0 Entrepreneurial Competence Theories

Meanwhile, having looked at the key model used in this study to predict the intention of participants towards entrepreneurial activities, this section presents the relevant literature on the nature of entrepreneurial competencies including its definition, types, key components of entrepreneurial competencies, argument against whether it can be taught or not, pedagogical approaches in teaching entrepreneurial competencies with specific reference to the bridge between practice-based learning and theory and the key theoretical framework in the entrepreneurial competencies literature. This is done in order to address the research question: what are the key sets of entrepreneurial competencies and related pedagogies that are appropriate within the context of Sierra Leone? (RQ2).

3.8.1 Definition and Types of Entrepreneurial Competence

The notion of competence has many applications and faces and virtually all models of entrepreneurial competence are grounded to it (Mitchelmore and Rowley, 2009). Entrepreneurial competency provides a framework for educators, policymakers, programme directors as well as researchers to predict venture outcomes (Bird, 1995). More importantly, it serves as a tool for turning new ventures around and for facilitating potential entrepreneurs (Bird, 1995). Similarly, Katz and Green (2007) stated that they are important for the successful creation and running of a venture.

However, the term entrepreneurial competencies have many connotations and no generally accepted definition (Hayton and McEvoy, 2006; Sánchez, 2013). For example, Man *et al.* (2002, p.124) define entrepreneurial competencies as "higher-level characteristic encompassing personality traits, skills, and knowledge that can be seen as the total ability of the entrepreneur to perform a job role successfully."

Similarly, scholars such as Stuart and Lindsay, (1997); Ghoshal, (1997); Lau *et al.* (1999) and Sánchez, (2011) describe entrepreneurial competencies as any personal attributes/traits, skills/abilities, and knowledge/experience (including, talent, facts, information) acquired through education; observation of facts/events etc.). (See table 5 for other key definitions of entrepreneurial competence).

Table 5: Conceptualisations of Entrepreneurial competence

Authors	Conceptualization of entrepreneurial competence
Johannisson (1993)	Ability to envisage new realities and making them come true – know why (attitudes, values, motives), know how (skills), know who (social skills), know when (insights) & know what (knowledge)
Chandler & Hanks (1994)	Ability to recognize and envision taking advantage of opportunity and ability to see the venture through to fruition
Bird (1995)	Ability to sustain temporal tension, strategic focus and intentional posture combined with entrepreneurial bonding, ability to create and restructure relationships
Erikson (2002)	Ability to recognize and envision taking advantage of opportunity combined with

	the ability to acquire and utilize resources
Man (2002)	Opportunity recognition & market development, relationship, conceptual, organizing, strategic & commitment competencies
Lans, Biemans, Mulder, and Verstegen (2010)	New pathways for achieving innovation-related business targets & ability to identify and pursue opportunities
Rasmussen, Mosey, Wright (forthcoming)	Opportunity refinement, leveraging competence and championing competence

Source: Markowska (2011)

As shown in table 5, different scholars present different definitions of entrepreneurial competence; for example, Chandler and Hanks (1994) defines it as the ability to recognise opportunities and take appropriate actions whilst Lans *et al.* (2010) defines it as the process of finding new pathways to achieve innovation related business targets.

However, in the context of this study entrepreneurial competence can be defined as the appropriate knowledge, skills and attitude needed to either start a business or be enterprising; enterprising meaning the formation and application of ideas in business as well as professional settings.

In discussing the concept of entrepreneurial competence, Bird (1995) makes an important distinction between competence as a minimum standard/threshold/baseline and competence as contributing to excellence in performance. She distinguishes the two by stating that the competencies needed to start a business/venture may be regarded as "baseline" for most entrepreneurship programmes, whereas those needed for the survival and growth of the business may be regarded as contributing to excellence in performance for most programmes. She further calls for researchers to agree on a standard for threshold competency (say starting a business) and recognise that additional competencies similar to high flying managers are found in very successful entrepreneurs.

Strebler *et al.* (1997) also aver that the term competency can take two main forms; competency as minimum standards of performance and competency as behaviours that an individual show. Further, in the UK, a competence is regarded as something that an individual should be able to acquire and/or demonstrate in a given field of study or work, whereas in the US, a competence is seen as the underlying characteristic of an individual that leads to superior performance in a given job (Cheng and Dainty, 2003; Mitchelmore and Rowley, 2009, Offorma, 2012).

Also, some scholars (Lerner and Almor, 2002; Chandler and Hanks, 1994) have distinguished between entrepreneurial competencies and managerial competencies. Mitchelmore and Rowley, (2009) for instance aver that entrepreneurial competencies are required to start a new venture, whilst managerial competencies are needed to sustain and grow a business venture. Man *et al.* (2002) however, state that both competencies are required by successful entrepreneurs.

Further, researchers have made attempts to distinguish between "stable" and "dynamic" competencies (Leiba- O'Sullivan 1999; Tannenbaum and Yukl 1992). Stable competencies, such as emotional stability and natural ability, are relatively fixed and may constrain one's ability to develop a skill (Morris *et al.*, 2013). On the other hand, dynamic competencies such as self-efficacy, knowledge of a particular topic, or stress management skills are those that can be acquired and developed (Morris *et al.*, 2013). More importantly, the dynamic competencies are subject to learning and developmental processes and can be enhanced with effective training and practice (Bryant and Poustie 2001; Bergevoet and Van Woerkum, 2006).

3.8.2 Key Constituents of Entrepreneurial competencies

There are several studies on what actually constitutes entrepreneurial competencies (Katz and Green, 2007; Malebana; 2012). For instance, authors such as Man and Lau, (2005) and Ahmad *et al.,* (2010) postulate that entrepreneurial competencies include learning competencies, conceptual competencies, opportunity competencies, personal strength competencies, strategic competencies, organising competencies, analytical competencies, and related competencies. Izquierdo and Buyens (2008) and Onstenk (2003) identify networking, communication and the ability to identify and evaluate opportunities as the most crucial in the entrepreneurial process. Winterton (2002) presents three sets of competencies that entrepreneurs should possess: functional competencies (e.g. budgeting), cognitive competencies (e.g. knowledge acquisition), meta-competencies (e.g. coping with uncertainty) and personal competencies (being ethical and communicating effectively). Wong *et al.* (2005) suggest that the essential competencies needed to start-up an enterprise include risk-taking and the need for achievement. For Kellermanns *et al.* (2008)

networking skills and opportunity identification are among the two main competencies that enable a firm to effectively adapt and respond to changes in the external environment.

Mitton (1986) identifies nine clusters of competencies required for managers as well entrepreneurs: possessing special knowledge, seeing the bigger picture, spotting unique opportunities, needing tight control, making a total commitment to their venture, utilitarian view of what's right, welcoming uncertainty, embracing competency of others and using contacts and connections. Hood and Young (1993) also state that the ability to effectively communicate is one of the most essential and frequently mentioned competencies for entrepreneurial success. Wright (2011) puts forward three sets of competencies out of their examination of several case studies of technology commercialisation within a university setting: resource leveraging, opportunity refinement and championing. In their study of entrepreneurial competencies of Dutch dairy farmers, Bergevoet and Van Woerkum (2006) classify entrepreneurial competencies into five main categories: strategy, relationship competencies, organising, conceptual, opportunity. Mitchelmore and Rowley (2010) suggest four main competencies that are needed to be developed in an entrepreneurship education programme: human relations, business management, relationship and conceptual competencies.

Further, Morris *et al.* (2013) determine 13 sets of competencies that are central to the discipline of entrepreneurship [See table 6 below].

Table 6: Entrepreneurial Competencies

1. Opportunity Recognition: the capacity to perceive changed conditions or overlooked possibilities in the environment that represent potential sources of profit or return to a venture

2. Opportunity Assessment: the ability to evaluate the content structure of opportunities to accurately determine their relative attractiveness

3. Risk Management/Mitigation: the taking of actions that reduce the probability of a risk occurring or reduce the potential impact if the risk were to occur

4. Conveying a Compelling Vision: the ability to conceive an image of a future organizational state and to articulate that image in a manner that empowers followers to enact it

5. Tenacity/Perseverance: ability to sustain goal-directed action and energy when confronting difficulties and obstacles that impede goal achievement

6. Creative Problem Solving/Imaginativeness: the ability to relate previously unrelated objects or variables to produce novel and appropriate or useful outcomes

7. Resource Leveraging: skills at accessing resources one does not necessarily own or control to accomplish personal ends

8. Guerrilla Skills: the capacity to take advantage of one's surroundings, employ unconventional, low-cost tactics not recognized by others, and do more with less

9. Value Creation: capabilities of developing new products, services, and/or business models that generate revenues exceeding their costs and produce sufficient user benefits to bring about a fair return

10. Maintain Focus yet Adapt: the ability to balance an emphasis on goal achievement and the strategic direction of the organization while addressing the need to identify and pursue actions to improve the fit between an organization and

developments in the external environment

11. Resilience: the ability to cope with stresses and disturbances such that one remains, well, recovers, or even thrives in the face of adversity

12. Self-Efficacy: the ability to maintain a sense of self-confidence regarding one's ability to accomplish a particular task or attain a level of performance

13. Building and Using Networks: social interaction skills that enable an individual to establish develop and maintain sets of relationships with others who assist them in advancing their work or career

Source: Morris *et al.* (2013, p. 358)

As shown in table 6, their study points to both behavioural competencies, such as opportunity assessment, resource leveraging, opportunity recognition, and developing business models, as well as attitudinal competencies, include tenacity, self-efficacy, and resilience (Morris *et al.,* 2013).

Also, there is a good number of very significant entrepreneurial competencies that have been identified in earlier literature: risk-bearing (Mill, 1848), innovation (Schumpeter, 1934), need for achievement (McClelland, 1961), rational management and decision making (Cantillion, circa 1700, Cited in Kilby, 1971), leadership, responsibility, commercial, production and marketing experience (Gasse and d'Amboise, 1997), opportunity refinement, leveraging, and championing (Rasmussen *et al.*, 2011). A comprehensive list of entrepreneurial competencies extracted from Rezaei-Zadeh *et al.* (2014) is shown in appendix 4.

Other authors (Liñán, 2004; Smith *et al.*, 2012; Ciappei *et al.* 2014; Gielnik *et al.*, 2015) distinguish between soft and hard entrepreneurial competencies. Soft competencies largely focus on stimulating the mindsets of participants towards entrepreneurial activities (Jack and Anderson, 1999). The core skills within the soft category of competencies affect participants' attitudes towards behavior and subjective norms. Soft competencies include cognitive abilities like creativity, opportunity spotting, vision, positive thinking and personal characteristics like resilience, self-motivation, tolerance for ambiguity and need for achievement (Hood and Young 1993; Fayolle and Gally, 2015). Soft competencies primarily target two key areas: personal attitudes and meta-competencies (Ciappei *et al.* 2014).

Personal attitudes cover the inner preferences and attitudes of participants toward a behavior (Morris *et al.* 2013). Some personality traits include the need for achievement and autonomy (Vesper and McMullan, 1988); propensity to act, proactiveness, tolerance for ambiguity (Florin *et al.*, 2007), tenacity, perseverance, and resilience (Morris *et al.* 2013). Others include openness to learn, conscientiousness, and emotional stability (Zhao and Seibert, 2006).

Meta-competencies on the other hand, help to develop participants' abilities in the areas of divergent and creative thinking (Smith *et al.*, 2012; Ciappei *et al.* 2014; Armstrong, 2014). Hytti and O'Gorman (2004) describe meta-competencies as the inner base for effectively selecting and evaluating behaviours related to entrepreneurship. It also seeks to develop the relevant interpersonal and leadership skills that will help participants to effectively manage relationships with both internal and external stakeholders (Garalis and Strazdienė, 2007; Chell, 2013; Collins *et al.*,

2006). Developing meta-competencies like self-efficacy and risk-taking, help to make participants feel confident about acting on opportunities (Kuehn, 2008).

Hard competencies, on the other hand, seek to develop practical knowledge and skills that will help participants to tap into entrepreneurial opportunities (Chell, 2013; Morris *et al.*, 2013). Krueger and Brazeal (1994) averred that hard competencies encourage participants to spot opportunities and aptly take action. Hard competencies are built around participants' content knowledge (e.g. marketing, finance, human resource management, accounting, etc.) and key managerial skills (e.g. planning, organising, coordinating, directing, controlling etc.) all of which seek to prepare participants to successfully engage in entrepreneurial activities (Chang and Rieple, 2013; Morris *et al.*, 2013). A summary of the outcomes of other studies conducted on entrepreneurial competencies is shown in table 7.

Meanwhile, as earlier stated there is now a widely held belief that entrepreneurship can indeed be learned. The following sections, thus present information on teaching entrepreneurship and the different pedagogical methods used in teaching entrepreneurship.

Table 7: Summary of some other studies focusing on Entrepreneurial Competencies

Author	Year	Method	Key finding(s)
Man and Lau	2000	19 entrepreneurs from SMEs in the Hong Kong services sector; Semi-structured Interviews assessing the impact of entrepreneurial competencies on firms' performance	35 entrepreneurial competencies were identified and classified into six competency areas. They report how these competencies have a positive impact on SMEs' performance.
Man *et al*.	2002	Reviewing the academic literature; measuring the impact of entrepreneurial competencies on constructs of SME competitiveness	The opportunity, organising, strategic, commitment, relationship, and conceptual competencies of the entrepreneur are positively related to the competitive scope, organizational capabilities, and performance of an SME.
Ahmad	2007	20 entrepreneurs from Australia and Malaysia were interviewed in the first phase and 250 entrepreneurs were surveyed in the second phase measuring entrepreneurial	Entrepreneurial competencies were strong predictors of business success in SMEs for both Australia and Malaysia.

		competencies and their impact on business success	
Obschonka et al	2010	In a cross-sectional sample of 496 German scientists, using structural equation modeling (SEM), they investigated a path model for the effects of entrepreneurial personality, control beliefs, and recalled early entrepreneurial competence in adolescence on entrepreneurial intentions	Entrepreneurial personality and early entrepreneurial competence predicted entrepreneurial intentions. Furthermore, they revealed indirect effects via control beliefs
Rasmussen *et al.*	2011	Longitudinal multiple comparative case-study of four university spin-off processes in the UK and Norway in order to examine the impact of entrepreneurial competencies on creating new ventures within the non-commercial academic environment	Three entrepreneurial competencies of opportunity refinement, leveraging and championing appeared crucial for the university ventures to gain credibility.
Sánchez	2011	Using a pre-test-post-test quasi-	The higher the self-efficacy, proactiveness, and

| | | experimental design, data were collected from 864 university students of Castilla & León (Spain), from 863 students (403 taking the programme and 460 in a control group) | risk-taking with respect to self-employment, the stronger the students' intention to become self-employed |

3.8.3 Can Entrepreneurial Competencies be learnt?

Several scholars (Man *et al.,* 2002; Bird, 1995; DeTienne and Chandler, 2004; Baron and Ensley, 2006; Morris *et al.,* 2013; Vollery *et al.,* 2013) believe that entrepreneurial competence can be learned and developed. The ability of an individual to learn and develop entrepreneurial competence has been suggested to play a crucial role in entrepreneurial success (Markowska, 2011). Though learning and development are often used interchangeably in the literature, Kolb and Fry (1975) believe that the two terms should be treated separately. To this end, learning has been defined as the result of interacting with an environment and can be regarded as a skill, whereas development reflects the level that an individual has reached in his/her ability to learn (Kolb and Fry, 1975).

Learning has been defined as an operational process that allows individuals to make sense from cues and effectively interact with the external environment, whilst development is a strategic process that is focused on developing the mindset of an individual which will enable him/her to learn and adopt new insights. This distinction shows the relevance of situational factors in enabling learning and the processual nature of learning itself.

Additionally, acquiring entrepreneurial competence requires individuals to have the ability to spot opportunities, act on opportunities and acquiring the necessary resources that will enable them to do so successfully (Johannisson, 1993; Chandler and Hanks; 1994; Erikson, 2002). Johannisson (1993) argue that entrepreneurial competence (except for skills (know how) and knowledge (know what) also demands

the development of appropriate motives (know why), social skills (know who), insights (know when and attitudes.

3.8.4 Pedagogical Approaches for Entrepreneurship Education

Also, interests in how entrepreneurship education is taught or the different methods/pedagogies used to deliver entrepreneurship education programmes have increased over the past years (Gibb, 1999, Kirby, 2004, Mwasalwiba, 2010). Morris *et al.* (2013, p. 353) point out that the "action-based nature of entrepreneurship suggests that development of such competencies may require pedagogical approaches that move beyond traditional lecture, discussion, and exam formats". Meanwhile, Fayolle and Gailly (2008, p. 571) observe that "there is no common framework or agreed on good practices regarding how to teach or educate".

Entrepreneurial pedagogy can be referred to as a collection of different teaching techniques that are aimed at achieving the intended goals of the entrepreneurship programme (Hägg and Peltonen, 2014). In the context of this study, entrepreneurial pedagogy is defined as any strategy or combination of strategies used to develop the relevant entrepreneurial competencies within a participant or group of participants engaged in an entrepreneurship programme.

However, there appears to be some disagreement between academic and business practitioners on what is the best method for teaching entrepreneurship (Neck and Greene, 2011). Academics support a theory-based approach to teaching entrepreneurship, which focuses on engaging students into theories of how to become an entrepreneur (Neck *et al.*, 2014; Yasu *et al.*, 2016). Yasu *et al.* (2016) aver that theoretically based pedagogical approach uses nascent entrepreneurship

and strategic theories to teach participants about the theoretical paradigm of entrepreneurship. The goal of theory-based entrepreneurship pedagogy is to enhance the participants' conceptual understanding of entrepreneurship while harnessing their analytical skills (Cobham, 2000). On the other hand, practitioners are largely in support of a practice-based entrepreneurship pedagogy which focuses on developing the entrepreneurial skills of participants by using real-life case studies of entrepreneurs and allowing students to use their individual experiences (Necker *et al.,* 2014). The practiced based pedagogical approach is based on the singular premise that entrepreneurship is about doing and hence the only participants can learn about how to become entrepreneurs is by allowing them to apply themselves (Yasu, *et al.*, 2016).

Meanwhile, Davies and Gibb (1991) state that entrepreneurship programmes are still being delivered using traditional education methods, e.g. lectures, exams, etc. Others such as Jack and Anderson, (1999) and Fayolle and Gally, (2015) have called for more innovative ways of teaching entrepreneurship. Specifically, experimental learning and mentorship programmes have been suggested as a way of enhancing soft competencies like self-awareness, positive and divergent thinking within participants of an entrepreneurship education programme (Spencer and Spencer, 1993; Harmeling *et al.*, 2009; Gondim and Mutti, 2011; Watts and Wray, 2012). Scholars (Erikson, 2003; Rae, 2005; Morris *et al.*, 2012) suggested telling stories of the life experiences of successful entrepreneurs as an effective pedagogical approach to awaken participants' aspirations and motivation. Haiti and O'Gorman (2004) averred that field trip to entrepreneurial ventures will help develop the soft competencies within participants whereas Florin *et al.* (2007) stated that

designing a curriculum that encourages students to do extracurricular activities and do formal assignments are effective strategies in stimulating their innovative spirit. Similarly, Chang *et al.* (2014) and Smith *et al.*, (2012) recommend the use of presentation of participants' work in front of a panel made up of external judges, whilst others (Watts and Wray, 2012) suggested the use of business games and simulation. Gondim and Mutti, (2011) and Kirkwood *et al.*, (2014) believe that business plans and self-reflection assignments focused on entrepreneurial projects can help to stimulate the entrepreneurial spirits within participants. Scholars (Kuehn, 2008; Gilbert, 2012) have also cited the use of feedback from entrepreneurs, managers at incubators' centers and trainers of entrepreneurship education programmes to develop the relevant competencies. Other pedagogical approaches include apprenticeship (Hytti and O'Gorman; 2004; Collins *et al.*; 2006), case studies (Brink and Madsen, 2015) and participation in entrepreneurial projects like business fairs (Change *et al.* 2014; Smith *et al.*, 2012).

The foregoing discussions tend to suggest the use of theory and practical methods to teach the content of an Entrepreneurship Education Programme. However, Necker *et al.* (2014) noted that a good theory without an action is busy work and an action without a theory is not worth learning. Thus, both theory and practice-based pedagogies are required to effectively teach the concept of entrepreneurship; the two are the *sine qua none* too effectively teaching entrepreneurship programmes. Flanagan (2000) for instance, describes practice-based learning as the interface between self-knowledge, expertise in practice and the formal knowledge acquired through theories. Hynes *et al.* (2011) note that practice-based learning involves providing solutions to real-life problems using both experience and formal

knowledge. According to Revans (1982), practice-based learning builds on theory-based learning in that it uses the requisite knowledge gained through theories to develop practical solutions to real life problems. Hynes *et al.* (2011) aver that the interface between theory-based and practice-based learning can be achieved via the use of pedagogical approaches like complex assignments or projects in the workplace setting. Scholars (Kelly, 1997; Hytti and O'Gorman, 2004; Brennan, 2005) caution that experiential learning goes beyond field work or the acquisition of knowledge in a structured classroom setting; it extends to a deeper cognitive learning in which the concept of learning is seen as reflective and experiential. Practice-based learning can also be done by giving tasks to a group of learners and allow peer's reflection after the completion of the task (Ramsey, 2005; Higgins, 2008). Teamwork activities firstly helps build a good relationship between graduates and the educators and foster a positive learning environment that enables students to maximise their potentials (Hynes *et al.*, 2011).

This type of active form of learning encourages graduates to effectively think and proffer creative solutions to problems in unfamiliar situations (Tenenbaum *et al.*, 2001). In assigning team projects, educators should take note of two factors: intrinsic factors (gender, age, personality, experience and attitude) and extrinsic factors (resources, environment and time constraints); the former focus on the features of the team whilst the latter focus on factors outside the team (Ancona and Bresman, 2007). Stein (2006) highlights some key benefits of working on real-life projects in teams: helps build self-esteem, increases the relevance of the work, improves networking skills and makes work more enjoyable. It also helps in developing a

range of skills, including but not limited to reasoning skills, communication skills, leadership skills and listening skills (Hynes *et al.* 2011).

Furthermore, some scholars (King, 2002; Hynes *et al.* 2011) lay emphasis on reflective and/or integrative learning which encourages graduates to reflect on their past and present experiences in the light of the new information presented to them in the form of theories. In ensuring this is achieved, educators play a very vital role in facilitating graduates to relate their past and presence experiences to current knowledge being delivered. King (2002) describes reflection as a deliberate process in which the graduate takes time within the course of the delivery of the entrepreneurship education programme to focus on their performance and effectively think about the very thinking that led to that performance in order to inform what they will do in the future. Hynes *et al.* (2011) point out that the application of pedagogical reflective learning and assessment approaches facilitate a graduate centered learning, whilst allowing group learning to co-exist simultaneously. For experiential learning to occur, graduates need to move away from a passive mode of learning to one that requires them to take complete control of their own learning. Graduates need to understand that they are their own business and no one is responsible for their own personal development. In other words, graduates need to assume key roles of decision makers, conflict managers, problem solvers, negotiators, and communicators (Hynes *et al.*, 2011).

The foregoing discussion calls for the design of innovative pedagogical methods that develop the appropriate entrepreneurial skills in graduates.

3.8.5 Models of Entrepreneurial Competencies

The foregoing discussions has looked into the nature of entrepreneurial competencies with specific reference to its definitions, composition, whether it can be taught or not and the key pedagogical approaches used to teach them. Meanwhile, while acknowledging the diverse entrepreneurial competencies within the entrepreneurship research, this section will primarily focus on discussing the EntreComp framework that has been used within the context of this study. The section will further briefly present analysis of other frameworks and the reason(s) why they were not adopted.

Entrepreneurship Competence Framework (EntreComp)

The EntreComp framework has been adopted because of its recent introduction to educators, policyholders and researchers of entrepreneurship education to understand and evaluate the key competencies that are required in an entrepreneurship programme. The contemporary nature of the framework will enable the researcher to have a good knowledge of the key competencies required (EU, 2016).

The EntreComp framework was developed by the Joint Research Centre (JRC) of the European Commission under the direction of the Directorate General for Employment, Social Affairs and Inclusion (DG EMPL). The Entrecomp framework was developed to help all stakeholders involve in entrepreneurship education understand the key components of entrepreneurial competence (EU, 2016). The framework can be used as a reference point by any initiative that aims at fostering entrepreneurial learning. For example "EntreComp could inspire the reform of

curricula in the formal education and training sector, the design of practical entrepreneurial experiences in non-formal learning contexts or the development of tools for citizens to self-assess their entrepreneurial proficiency" (EU, 2016, p.5).

The framework consists of three competency areas: 'Into Action,' 'Resources,' 'Ideas and opportunities,' an 8 level progression model and 442 learning outcomes (see appendix 6 for the full framework).

The Three Competence Areas

As shown in figure 10, each of the three competence areas consists of five competencies which together serve as building blocks for entrepreneurship as a competence (EU, 2016). Each key area and their accompanying competencies are coloured differently: green for the competences in the 'Into action' area, orange for those in the 'Resources' area and blue for the competences in the 'Ideas and opportunities' area.

The three competency areas have been clearly highlighted to stress, entrepreneurship competence as the ability to turn opportunities and ideas into action by mobilising resources. The three main areas and their related competencies are closely interrelated and should therefore be treated as parts of a whole.

Figure 9: Areas and Competencies of EntreComp Conceptual Framework
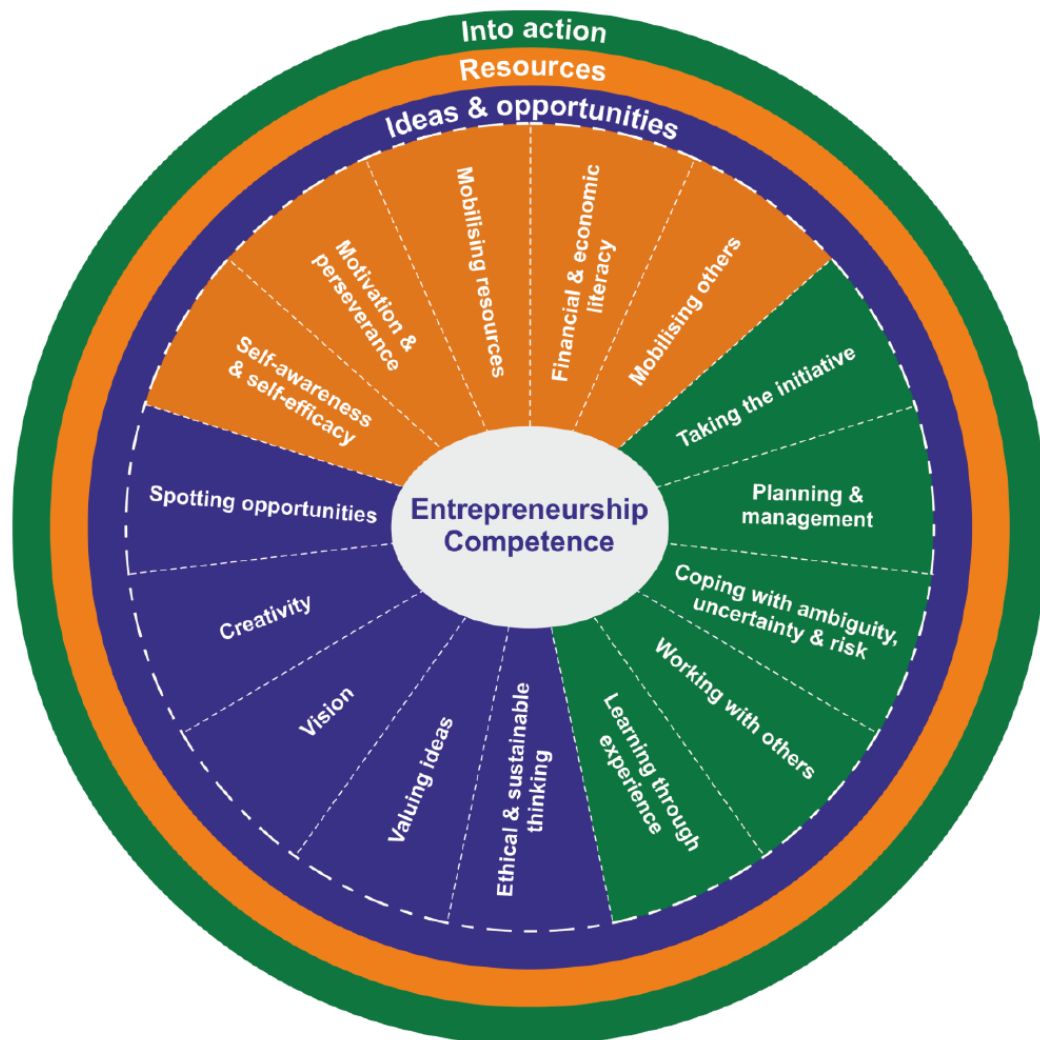
Source: European Commission (2016)

It is important to note that the framework develops all competencies along an 8-level progression model.

The Progression Model

The competencies were developed along an 8-level progression model as shown in table 8. The model provides a guide for the development of proficiencies ranging

from the creation of value through external support, up to the transformative value creation (EU, 2016). The progression model consists of four key levels: Foundation, Intermediate, Advanced and Expert level (Ibid). As can be seen in table 8, each level is divided into two sub-levels. Entrepreneurial value is created with the help of external support at the Foundation level and with increasing autonomy at the Intermediate level. Conversely, at the Advanced level, the responsibility to convert ideas into action is developed, whereas at the Expert level the value created has a huge impact on its reference domain (EU, 2016).

Table 8: EntreComp Progression Model

Foundation		Intermediate		Advanced		Expert	
Relying on support[6] from others		Building independence		Taking responsibility		Driving transformation, innovation and growth	
Under direct supervision.	With reduced support from others, some autonomy and together with my peers.	On my own and together with my peers.	Taking and sharing some responsibilities.	With some guidance and together with others.	Taking responsibility for making decisions and working with others.	Taking responsibility for contributing to complex developments in a specific field.	Contributing substantially to the development of a specific field.
Discover	Explore	Experiment	Dare	Improve	Reinforce	Expand	Transform
Level 1 focuses mainly on discovering your qualities, potential, interests and wishes. It also focuses on recognising different types of problems and needs that can be solved creatively, and on developing individual skills and attitudes.	Level 2 focuses on exploring different approaches to problems, concentrating on diversity and developing social skills and attitudes.	Level 3 focuses on critical thinking and on experimenting with creating value, for instance through practical entrepreneurial experiences.	Level 4 focuses on turning ideas into action in 'real life' and on taking responsibility for this.	Level 5 focuses on improving your skills for turning ideas into action, taking increasing responsibility for creating value, and developing knowledge about entrepreneurship.	Level 6 focuses on working with others, using the knowledge you have to generate value, dealing with increasingly complex challenges.	Level 7 focuses on the competences needed to deal with complex challenges, handling a constantly changing environment where the degree of uncertainty is high.	Level 8 focuses on emerging challenges by developing new knowledge, through research and development and innovation capabilities to achieve excellence and transform the ways things are done.

Source: European Commission (2016)

The proficiency levels are significant because it helps the reader to look at the various learning outcomes. It should be noted that not all learners will be interested

in developing all the listed competencies to the expert level of proficiency; some might want to develop it into the intermediate level for instance. Institutions, as well as well individuals, are therefore advised to adopt the EntreComp framework to suit their own objectives.

The Learning Outcomes

The framework also provides a comprehensive list of 442 outcomes which can be used by those involved in the design of entrepreneurship education programmes to design a programme on entrepreneurship (EU, 2016). Learning outcomes can be defined as the key knowledge and understanding that a learner is expected to get at the end of a particular educational initiative (EU, 2016). The EntreComp learning outcomes can be used in different learning context to design curriculums, pedagogies, assessment methods and learning environment that encourages entrepreneurial learning. It can also be used to set key performance indicators for an entrepreneurship programme. However, the EntreComp learning outcomes are not designed to be used in measuring students' performance. The EntreComp learning outcomes are shown in appendix 6.

The framework has been adopted because it will help in understanding the key components of entrepreneurship as a competence which will in turn help in developing a tool for measuring the impact of any entrepreneurship learning initiatives (EU, 2016). To date, it has been applied and adapted in more than 70 organisations including universities across Europe (EU, 2018). For example, Birmingham City University is adopting EntreComp to "*provide an international evidence base and credibility to their curriculum or assessment, similar to other examples such as the Chalmers University of Technology (C32), the Vlajo*

EntreComp-based assessment tool (C19) and Working Together (T27) for their employability action supporting adults with HIV" (EU, 2018, p.31). Similarly, the UK's Quality Assurance Agency (QAA) recently updated its guidance for enterprise and entrepreneurship educators in line with the EntreComp framework (EU, 2018). The framework has been validated through multi-stakeholder consultations and is widely accepted by experts (EU, 2016).

Meanwhile, a brief discussion of another two widely used models (i.e. Boyatzis Model of Managerial Competence and Bird (1988) model of intentional action) within the literature of entrepreneurial competencies is shown below.

Boyatzis (1982) Model of Managerial Competence

It is reported that Boyatzis (1982) started the concept of competency by developing the model of managerial competency (Bird, 1995). Boyatzis identified and presented twenty-one competencies which are grouped in four "clusters": 1. leadership (use of oral presentations, self-confidence, logical through conceptualisation), 2. Directing subordinates (spontaneity, developing others, uses unilateral power), 3. human resource management (managing group process, positive regard, accurate self-assessment, use of socialised power), 4. goal and action management (concern with impact, proactivity, efficiency orientation, diagnostic use of concepts). Also, included in the model are three different levels for each competency: unconscious motives and trait level, social role and self-concept level and skill level (see appendix 5).

Unconscious motives and traits are regarded as the deep-rooted beliefs/structures of the mind that are difficult to change. There are mixed results from research about what are the motives and traits of successful entrepreneurs (Bird, 1995).

However, there is a general consensus that the need for control of resources (financial), tolerance of ambiguity and achievement motivation are common traits of successful entrepreneurs (McClelland, 1961), whereas venture growth rather than net earnings are the main motivation of entrepreneurs (Chandler and Jansen, 1992). Similarly, other key traits and motivation of successful entrepreneurs are persistent, integrity, and self-confidence (DuCette, 1986).

Social role and self-concept and behavioural skills, on the other hand, are more and more changeable respectively. The Social role of entrepreneurs includes initiating and managing change, scanning the environment for opportunities and maintaining direct control (Mintzberg and Waters, 1982). Chandler and Jansen (1992) further developed Minzberg and Waters (1982) theory by suggesting that there are two distinct roles of an entrepreneur: 1. the ability to spot, envision and act on opportunity, and 2. the willingness and ability to develop intense effort. Krueger (1994) on the other hand, put forward five major roles for leaders at different stages of the growth of the business: 1.adminsitrator-operator (internal intergroup relations skills, 2. the originator-inventor (perceptual and conceptual skills), 3. planner-organiser (analytic, eternal behavioural skills, 4. developer-implementer (budgeting, scheduling, controlling, internal intergroup relations and successor-reorganiser (all of the above skills).

Finally, at the skill level, several researchers (DuCette, 1986; Hood and Young, 1993) have identified different skill sets of entrepreneurs. Herron and Robison (1990) for example, use literature on managerial skills to put forward seven key skills of an entrepreneur: 1. Spotting opportunities to profitably allocate resources, 2. understanding and adapting in the industry in which the entrepreneur operates, 3. Understanding and producing specific goods or services, 4. Understanding and designing a particular business 5. detailed and comprehensive planning, 6. creating an utilising business networks and 7. motivating organisational staff. Hood and Young (1993) also stated that managing finance, oral communication, marketing and sales, human relations are among the core skills of an entrepreneur.

Bird (1988) model of intentional action

Whilst Boyatzis (1982) provides the laundry list of competencies for main managers, Bird (1988) layout competencies that are related to entrepreneurial success through the model of intentional direction. She identifies three key activities that are vital for entrepreneurship: sustaining temporal tension, sustaining strategic focus and developing intentional posture (see figure 9).

Figure 10: Intention Direction

Focus on	Create &	Choose:
Specific:	Maintain:	
Needs Values Wants	Temporal Tension Strategic	Posture
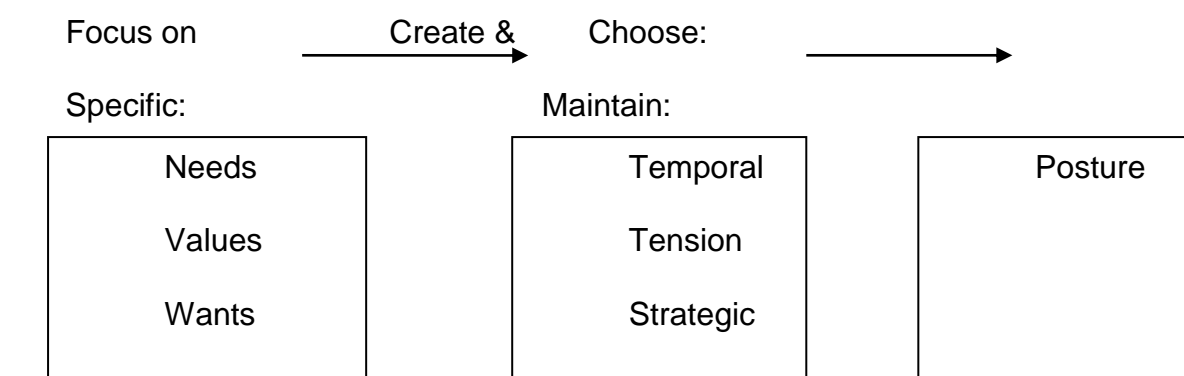
Source: Bird (1988)

Bird (1988) describes the temporal tension as involving the active connection between the present and the future and the timing of the activities to get an advantage. She observes that successful entrepreneurs spend a huge amount of their time in thinking about the present and future and less on the past. Bird (1988) also observed that successful entrepreneurs are expected to have more time complexity, which is measured by future density and temporal intention. To this end, sustaining temporal tension allows successful entrepreneurs to be more intuitive, aware of timing, vigilant and good at recognising patterns in complex data (Bird, 1988).

Sustaining a strategic focus, on the other hand, describes the orientation of entrepreneurs toward the methods and goals of doing business. Bird (1988) postulated that entrepreneurs with very clear business goals typically behave instrumentally and opportunistically and are expected to out-perform entrepreneurs who do not behave this way. She further stated that key traits like cognitive complexity, flexibility, and field independence enables successful entrepreneurs to develop the "strategic zoom lens" which is vital for the creation and growth of new ventures.

Lastly, Bird (1988) refers to sustaining intentional posture as "the entrepreneur's intrapsychic congruence and interpersonal synergy" (p. 60). She avers that the internal alignment of values, beliefs, and needs are greater in successful entrepreneurs than less successful entrepreneurs. She also postulates that successful entrepreneurs are likely to have a lower level of role conflict and better-

developed skills in collaboration, networking, and team building. She adds by saying that successful entrepreneurs are likely to learn from their experiences and keep an open mind than less successful entrepreneurs.

Meanwhile, Boyatzis (1982) model of managerial competence and Bird (1988) model of intentional action is among the widely used models within the competencies literature. However, for the purpose of developing a set of entrepreneurial competencies of entrepreneurship education programmes within the context of Sierra Leone, neither the model of managerial competence nor the model of intentional action is used despite their richness for the following reasons.

Boyatzis (1982) model of managerial competence as the name suggest is purely focused on the competence required by managers and does not therefore specifically address competencies required by entrepreneurs (Bird, 1988).

Also, Bird's (1988) model of intentional action could not be used because it was purely developed to be used for concepts directly relating to intentions and not competencies (Bird, 1988). Further, though the model has been used in studies of competencies, the author herself made mention of the fact that she was not explicit about the differences between successful and less successful entrepreneurs and/or what exactly made them (Bird, 1988).

3.9 A Conceptual Framework to analyse Entrepreneurship Education Programmes

Whilst the preceding section has closely looked at the key model used to understanding the key sets of entrepreneurial competencies and related pedagogies that are appropriate within the context of Sierra Leone (RQ2), this section discusses the key framework that is used to critically analyse the current state of entrepreneurship education programmes in Sierra Leone (research objective 1). As previously stated, there has been a surge in the number of entrepreneurship education programmes that have been rolled out in the country in the wake of the belief that it will help to reduce youth unemployment (Gibb, 2005; Volkmann *et al.*, 2009; World Bank, 2008; Gerba, 2012; ILO, 2015).

In order to analyse the contextual situation of Sierra Leone and its entrepreneurship education programmes, a World Bank conceptual framework developed by the Valerio *et al.* (2014) will be used. The primary purpose of the framework is to synthesise outcomes that an entrepreneurship education programme seeks and the key factors that can influence these outcomes. The Framework (discussed below) is also used for the analysis of existing entrepreneurship education programmes in order to help inform a constructive discussion about what did or did not work and the key lessons learned.

Figure 11: Conceptual Framework for Entrepreneurship Education and Training
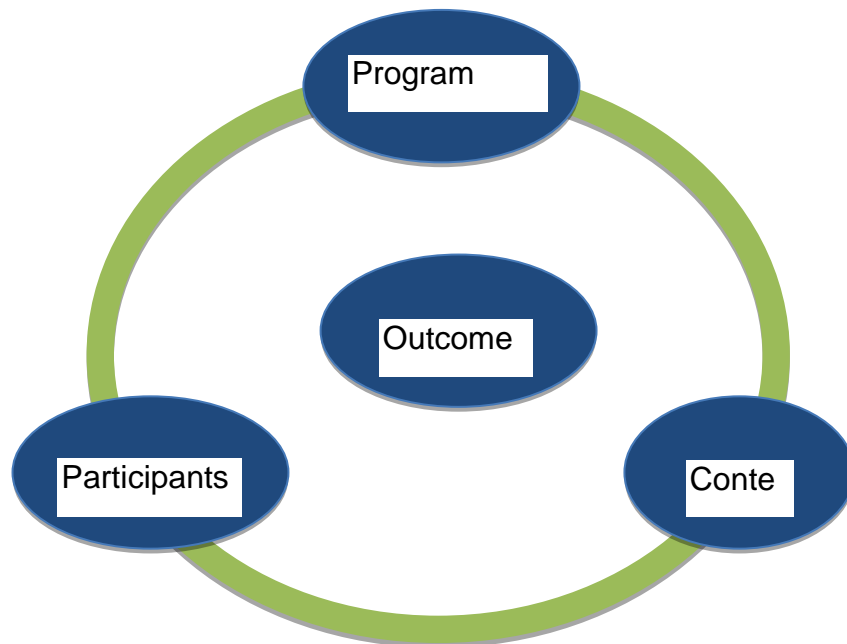
Source: Valerio *et al.* (2014

The framework is divided into four key domains: programme outcomes, programme characteristics, programme context and participants' characteristics.

Programme Outcomes

There are several outcomes that entrepreneurship education programmes seek to achieve e.g. opening a business, behaving in an entrepreneurial way in big corporations, increase entrepreneurial intentions and capabilities etc. More specifically, the conceptual framework categories entrepreneurship education and training outcomes into four key domains: (a) entrepreneurial performance (b) entrepreneurial mindset (c) entrepreneurial capabilities, and (d) entrepreneurial status.

a) **Entrepreneurial Performance**

Entrepreneurial performance can be best described as the positive changes to an organisation's profit, sales, products, and services as a result of an

entrepreneurship education intervention. In other words, an entrepreneurial performance refers to the positive changes that an individual participant makes to a company's profit, sales, products, etc. as a result of his or her exposure to an entrepreneurship programme. Key studies have been carried out to find out whether participants that have been exposed to an entrepreneurship education, treatment are better off applying entrepreneurship principles within an organisation than those who are not (Sigh and Verma, 2010; Cruz *et al.,* 2009; Liao and Gartner, 2007; Matlay, 2008; Petridou and Glaveli, 2008; Alarape, 2007; Souitaris *et al.,* 2007; Friedrich *et al.*, 2006; Chrisman *et al.,* 2005).

b) Entrepreneurial Mindsets

Valerio *et al.* (2014 defines entrepreneurial mindsets as "the socio-emotional skills and overall awareness of entrepreneurship associated with entrepreneurial motivation and future success as an entrepreneur." Some of the socio-emotional skills that are linked to entrepreneurship are resilient, leadership, motivation, self-confidence, risk-taking, self-efficacy and motivation, teamwork (Cloete and Ballard, 2011; Hytti *et al.* 2010; Rauch and Frese 2007).

c) Entrepreneurial capabilities

Entrepreneurial capabilities refer to the key entrepreneurship Knowledge, competencies and technical skills that an entrepreneurship programme seeks to develop in participants (Karlan and Valdivia, 2011). Most entrepreneurship education programmes explicitly state the key competencies, technical skills, and knowledge that it intends to instill in participants.

d) Entrepreneurial status

An entrepreneurial status can be defined as the provisional state of a participant which can be measured through entrepreneurial activities like spotting and swiftly act on opportunities, opening a new venture, becoming social intrapreneurs etc. It refers to both the visible and the invisible impact that an entrepreneurship education programme had had on a participant or a group of participants as the case may be. There have been various studies that try to measure the status of participants on key subjects like intention, skills, knowledge, nascency, performance, attitudes and perceptions (Bakotic and Kruzic, 2010; Osterbeek *et al.* 2010; Cruz *et al.*, 2010; Fayolle *et al.*, 2006; Peterman and Kennedy, 2003).

Programme Characteristics

Programme characteristics refer to the key drivers of a programme, which, according to the framework are: programme design, trainers, and delivery, wrap-around services, content and curriculum (Valerio *et al.* 2014).

The design of a programme refers to the various inputs and arrangements that help to clearly specify the goals, financing model, methods, and scope of a programme. Efforts in designing a programme should be directed to build a close relationship with the relevant institutions in the local community in which the programme will be implemented (Werner and Wallau, 2008).

Trainers and delivery hereby refer to those who will be delivering the programme, i.e. practitioners, academics or a mix of both (Pittaway and Cope 2007a), whilst wrap-around services refers to the extra-curricular elements of a programme that

complements the design and delivery of the programme. Some of these elements may include administrative services, grants, counseling, technical assistance, mentoring, arrangements for networking, and guidance on how to access resources (Volkmann *et al.,* 2009, Ibrahim and Soufani, 2002).

Lastly, the content and curriculum of an entrepreneurship programme is probably the most important element. This is so because other elements already discussed revolve around it (Valerio *et al.,* 2014). The content and curriculum are typically characterised by the key competencies that participants are expected to gain and/or achieve.

 The content and curriculum also include details of how a programme will be taught and/or the pedagogical methods that are used to deliver that programme e.g. lectures, case studies, experiential learning etc. (Pittaway and Cope, 2007). It also shows how participants will be evaluated during the programme and at the end of the programme.

Programme Context

A programme context consists of a series of factors that influence the outcome of a programme (Karimi *et al.*, 2010).The importance of context in entrepreneurship has been highlighted by several authors (Ratten, 2014, Portfiro *et al.* 2016., Jones *et al.* 2018). Ratten (2014) for instance state that the process of entrepreneurship involves the interaction between entrepreneurs and their environment to seize opportunities. Porfirio *et al.* (2016) specifically point out that contexts are very vital for entrepreneurship because they are a characteristic of different stages of development and conditions in industries. Johannisan *et al* (1994) for instance

pointed out that context provides an avenue for an entrepreneur to identify his or her business potential. Fletcher (2011) on the other hand puts forward that context can present some challenges for entrepreneurial ventures to grow.

Cope (2005) averred that the context within which entrepreneurship education programmes are delivered include the society, organisations, and industries all of which has an impact on the cumulative behaviour of an entrepreneur. Pittaway and Cope (2007b) point out that the key factor within an entrepreneurial context that can influence the outcome of a programme are: political, economic and socio-cultural factors. These factors are embedded in the framework too.

The political context refers to the stability of local institutions and society and the leadership required from top government officials in promoting an entrepreneurship programme (Valerio *et al.* (2014). The leadership required from government can take the form of specific policy actions that help in promoting the entrepreneurship e.g. government grants and subsidies, minimal bureaucratic barriers, leveling the playing field to ensure a fair business practice and partnerships from key government ministries (World Bank, 2013). Additionally, the political context can also include support from (NGO's)/community based organisations, the local educational system and the key individuals (e.g. principals, administrators, and teachers) in the community in which the programme is implemented (Kuratko, 2005).

The economic context describes various economic variables that shape the outcome of an entrepreneurship programme (McKenzie and Woodruff, 2012) such as

availability of finance, market opportunities, inflation, tax structures especially related to business start-up and growth.

The socio-cultural context, on the other hand, refers to all factors that are associated with society's perception of entrepreneurship. It also takes into account the attitude of people in a particular society towards success, failure, and risk (Valerio *et al.* 2014).

Participant Characteristics

The characteristics of individual participants are an important driver that shapes the outcome of a programme. Each individual brings into a programme certain personal traits that can directly and positively affect the outcomes of a programme (Rauch and Frese, 2007; Luthje and Franke, 2003).

In addition, the behaviour of each individual can shape programme outcomes. Specifically, the conceptual framework identifies five main categories of participant characteristics: (a) individual experience (b) individual profile (c) participant behaviour (d) interest and intentions (e) education.

Oosterbeek *et al.* (2010) posit that an individual experience refers to his/her employment and work experience. The profile of a participant of an entrepreneurship education programme on the other refers to all demographic and personality traits of the participant. It includes factors such as the background, age, and gender of the individual participant (Wang and Wong, 2004).

Further, the behaviour of a participant describes how an individual participant responds to or perceives the programme on offer. It is important to note that the behaviour of a participant is influenced by certain factors like incentives in the form of money and peer groups. Research shows that a participant is likely to be influenced to join and continue a programme if he or she perceives that others in his/her peers are benefiting from the programme (Botha, 2006). The interest and intentions of a participant refer to the "self-acknowledged convictions by individuals that intend to set up new business ventures and consciously plan to do so at some point in the future" (Thompson, 2009, p.676). Lastly, the educational background of a participant refers to the level of skills and knowledge that the participant has acquired. Studies show that the level of skills and knowledge acquired influences the outcomes of a programme (Oosterbeek *et al.,* 2010).

3.10 Chapter Summary

In summary, this chapter has reviewed the relevant literature relating to the key research questions and objectives. The research questions seek to understand the current state of entrepreneurship education in Sierra Leone and its impact on youths' entrepreneurial intentions and the key sets of entrepreneurial competencies and related pedagogies appropriate within the context of Sierra Leone. Similarly, the research objectives seek to critically analyse the current state of entrepreneurship education programmes in Sierra Leone, the extent to which entrepreneurship education programmes impact youths' entrepreneurial intentions and develop a set of entrepreneurial competencies and related pedagogies for entrepreneurship education programmes within the context of Sierra Leone. In order to achieve this, the chapter first presented the concepts of entrepreneurship and entrepreneurship

education, followed by the impact and approaches to entrepreneurship. This piece of knowledge is vital in interpreting the relevant data within the study. To help in answering research question 1, the chapter presented a section on some of the key challenges of entrepreneurship education in Higher Education Institutions and a review of impact studies in entrepreneurship education with the sole aim of identifying research gaps. This is followed by a section on entrepreneurial intentions and its resultant models.

Additionally, the concepts of entrepreneurial competencies and models were put forward in order to help answer research question 2. A further section on the conceptual framework used to analyse entrepreneurship education programmes in Sierra Leone presented and discussed. The chapter ends with a summary of the key elements discussed within it.

Chapter 4

Research Methodology

4.0 Objective

A vast majority of studies on the effect of Entrepreneurship Education (EE) on Entrepreneurial Intentions (EI) and the key skills that constitute entrepreneurship education programmes were conducted in developed countries, thus limiting the generalisability of the findings (Nabi and Liñán, 2011; Rideout and Gray, 2013). There is, therefore, a need to contextualise EE studies in a wider context. This chapter will be divided into eight sections: research design (4.1), philosophical stance (4.2), research approach (4.3), research methods and strategy (4.4), participants, data collection and analysis techniques (4.5, 4.5.1, 4.5.2, 4.5.3), variable operationalisation (4.6), ethical considerations (4.7 and chapter summary (4.8).

4.1 Justification of Research Design

A research design can be viewed as a strategic plan crafted with the sole purpose of carrying out research (Creswell, 2009). This plan comprises the underpinning philosophies, approaches, strategies and the appropriate methods of inquiry (Creswell, 2014). Other scholars regard it as a framework that helps in generating suitable evidence to answer the research question(s) (Bryman and Bell, 2011; Saunders *et.al.* 2009; Denzin and Licoln, 2011). In this lens, a research design can be viewed as an explicit or an implicit decision taken by the researcher with respects to the most appropriate research philosophy for the study, which turns out to guide the selection of the appropriate research approaches.

Figure 12 clearly shows the interrelationships between a research philosophy, approach, strategy, and method.

Figure 12: Elements of Research Design
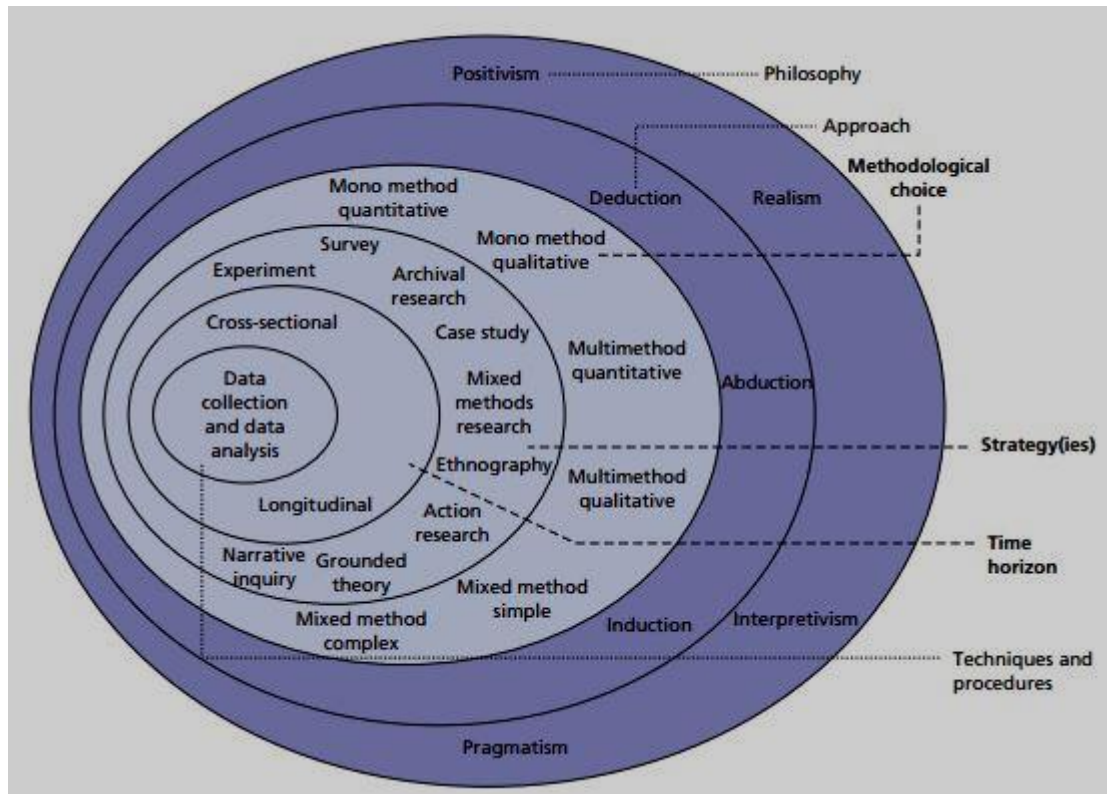
Source: Saunders et al. (2012)

Figure 12 above was put forward by Saunders *et al.* (2012). The research onion, as they called it, is a framework that helps researchers understand the various layers or process they will need to peel off in order to answer their research questions and/or test their hypothesis. According to Saunders *et al.* (2012), the first research layer to be peeled off is the research philosophy, which they divide into four; positivism, realism, interpretivism, and pragmatism. Saunders *et al.* (2009) argue that the process of which knowledge is created is largely influenced by the philosophy we adopt or hold. The second layer is the approach that a researcher can adapt to carry out a research activity; the approach can take the form of deduction or induction. The third layer of the research onion is the methodological choice or choices a

researcher seeks to adopt, i.e. quantitative, qualitative, multi-method qualitative, mixed method simple, mix method complex. The fourth layer comprises of the strategy(is) to be adopted in answering your research questions; narrative inquiry, grounded theory, action research, ethnography mixed methods research, case study, archival research, survey, and experiments. The fifth layer that needs to be considered is the time line that the research will be conducted within which can take the form of either a cross-sectional or longitudinal time horizon. Lastly, every researcher would have to adopt a different data collection and analysis techniques and procedures, i.e. interviews, questionnaires, interpretative thematic analysis, regression etc.

4.2 Philosophical Stance and Justification

Every research is guided by a philosophy, a philosophy being a set of beliefs, assumptions or worldviews that a researcher hold about how the world function (Guba and Lincoln, 1994). These sets of beliefs have huge impacts on how research should be conducted (Saunders *et al*. 2009). Saunders *et al.* (2012) describe a philosophy as the how and what of knowledge, i.e. it tries to answer the questions how knowledge is created and what constituents' knowledge.

It is also important to note that there are notably several philosophies that are currently in use in most social science discourses (Lather, 2006), some of which includes: positivism, interpretivism, realism and pragmatism (Wahyuni, 2012).

Meanwhile, the choice of philosophy in this research is pragmatism.

The philosophy of pragmatism comes between positivism and interpretivism in that it accepts both singular and multiple realities in the world (Fielzer, 2010, Gray, 2009). In brief, Ormerod (2006, p. 892-893) stated that:

"...the word pragmatism has for me positive connotations. I take it to be about being practical, getting things done, doing things a step at a time, not allowing the best to be the enemy of the good, taking account of others' views, not being hung up on unattainable principles and yielding on some issues in order to make progress on others."

Pragmatism does not believe in a one best fit approach in understanding phenomena. Rather, it proposes that the best approach will be dependent on the nature of the research question(s). Generally, pragmatism is concerned with what works well in finding answers to the research problem (Patton, 2002). It requires the researcher to mainly focus on the research problem and then use all the appropriate research philosophies, methods and approaches to fully understand the research problem (Patton, 2002; Creswell, 2014).

The philosophy has been chosen for the following reasons. Firstly, this philosophy has been used because it enables the researcher to produce and reflect on for instance knowledge about youth unemployment, the development of entrepreneurial competences and the effects of entrepreneurship education on youths' entrepreneurial intentions in Sierra Leone using both singular and multiple views (Soini *et al.,* 2011). Secondly, it enables the researcher to interpret data using

different perspectives (Saunders *et al.,* 2012). Thirdly, most studies on entrepreneurial competence and intentions with very few exceptions (Matlay, 2008, Oosterbeek *et al.* 2010; Woodier-Harris, 2010) do not only use positivism as the main research philosophy but were carried out in developed countries thereby limiting the generalisability of their findings for developing countries (Nabi and Liñán, 2011). As a result, scholars have called for future research on entrepreneurial intentions and competencies to use a combination of paradigms to address these challenges (Fayolle and Liñán, 2014). Based on this, both positivism and interpretivism philosophies are used. Positivism and interpretivism are both used to assess the effects of entrepreneurship education on youths' entrepreneurial intentions, whilst interpretivism is used to develop a contextual model of entrepreneurial competencies for entrepreneurship education programmes in Sierra Leone.

4.3 Research Approach

Generally, all research involves the use of one or more theories. A research approach can be described as the process through which these theories are applied, evaluated and justified (Saunders *et al.*, 2009). In simple terms, it deals with the process of how researchers generate, evaluate and justify appropriate theories.

Broadly speaking, there are two major approaches to research: deductive and inductive (Saunders *et al.*; 2009, Bryman and Bell, 2011). Researchers using a deductive approach seek to primarily develop a theory and hypotheses and then find the right strategy to test the hypotheses. On the other hand, researchers using an inductive approach seek to first collect data and then develop a theory out of a

careful analysis of the data collected (Saunders *et al.,* 2009). It is important to note that the two approaches should not be treated as mutually exclusive, both should be seen as complementing each other (Saunders *et al.,* 2009).

Generally, a deductive approach is more congruent with positivism whilst the inductive approach is congruent with interpretivism. However, some scholars believe this classification is misleading and of no value (Lund, 2005; Saunders *et al.,* 2009). Indeed, it is possible to combine both approaches in research. This can be done by employing a deductive approach to unearth some difficult to explain results which could be further explored using an inductive approach (Lund, 2005; Creswell, 2014). It can also be done by confirming research findings from an inductive approach using a deductive approach.

For the purpose of this research both approaches have been used; the deductive approach was used to assess the effects of entrepreneurship education and youths' entrepreneurial intentions whereas the inductive approach was used to collect data that helped to understand the current state of entrepreneurship education programmes in Sierra Leone and to develop the entrepreneurial competencies for entrepreneurship education programmes within the context of Sierra Leone.

4.4 Research Strategy and Methods

The term research strategy was first coined by Yin (1984) to denote the various methods used to collect and analyse data and the different unit of analyses (Kasanen *et al.,* 1991). It looks at the different methods used to collect data for the purpose of answering the research question(s) and/or testing the research

hypothesis. There are different strategies used to collect and analyse data, the main ones being qualitative, quantitative or a mixture of both (Saunders *et al.*, 2012).

Quantitative methods focus on collecting and analysis, empirical data using numbers whilst a qualitative strategy focuses on narrating experiences and accounts of social actors (Saunders *et al.,* 2009). Quantitative methods predominantly rely on a deductive approach, whereas as a qualitative strategy relies on an inductive approach.

Drawing on the philosophy of pragmatism, the researcher adopts a mixed method approach. A mixed strategy, also known as mixed methods, is a combination of quantitative and qualitative methods in trying to answer the research question(s) and/or accept/reject the research hypothesis. It rejects the notion that there is only one best approach to answering the research question(s) set by the researcher (Tashakkori and Teddlie, 2010; Denzin and Lincoln, 2011). Mixed methods, strategies mainly help in triangulating different methods; for example the validation of a model, testing of a theory (Fielding, 2012).

The main advantage of using a mixed strategy is that it enables the researcher to view data from multiple viewpoints (Saunders *et al.*, 2009).

 In particular the quantitative strategy is used to collect and present data on the effects of entrepreneurship education on youths' entrepreneurial intentions. On the other hand, a qualitative strategy is largely used in this study to firstly collect and interpret data on the state of entrepreneurship education programmes in Sierra

Leone and the development of an entrepreneurial competencies framework. In addition, it will be used to interpret quantitative data collected on youths' entrepreneurial intentions.

On the whole, the mixed methods approach is adopted because of the following reasons: firstly it enables the researcher to rigorously integrate statistical (quantitative) and thematic (qualitative) data to expand and enhance findings and to better understand and explain a social phenomenon (Tashakkori and Teddlie, 2009; Jogulu and Pansiri, 2011). The combined results from mixed methods should provide an in-depth understanding of the variables in question.

Secondly, most studies in EE have recommended that future researchers use mixed methods. For example Fayolle and Liñán (2014, p.664) stated that: "…at the methodological level…following suggestions by Shook *et al.* (2003), researchers in EI should attempt to triangulate their findings using multi-method studies." Also Molina-Azorin *et al.* (2014; p.425) clearly state that:

"…only a few studies in entrepreneurship employ mixed methods strategies. Mixed methods may help to improve entrepreneurship research addressing challenges emphasised in earlier studies…to advance our understanding of the entrepreneurial phenomena".

4.5 Samples, Data collection, and Analysis Techniques

The aim of this study is to assess the effects of entrepreneurship education on youths' entrepreneurial intentions and to develop a contextual framework of entrepreneurial competencies for entrepreneurial education programmes within the context of Sierra Leone. As discussed in chapter one, Sierra Leone is currently

experiencing a high level of youth employment, especially among its graduates and there has been a proliferation of EE programmes across the nation. There is therefore, a need to firstly understand and explore the current state of such programmes in terms of their objectives, nature of participants and the context within which the programmes are delivered, explore the effects of entrepreneurship education programmes on the entrepreneurial intentions of the participants and the competencies required to be developed within EE programmes in Sierra Leone.

In order to achieve the aim of the research and objectives of the research, different samples and data collection techniques are used. These are discussed in 4.5.1, 4.5.2 and 4.5.3 below.

4.5.1 Analysis of EE Programmes

This section presents the sample, data collection techniques and analysis of entrepreneurship education programmes in Sierra Leone. This is done in order to cover research objective 1; critically analyse the current state of entrepreneurship education programmes in Sierra Leone

For the purpose of analysing the current state of Entrepreneurship Education Programmes in Sierra Leone, data were collected from multiple institutions offering entrepreneurship education programmes in Sierra Leone. A case study approach to analyse entrepreneurship programmes has been widely used (Caputo *et al.*, 2016). Meanwhile, most of the data on entrepreneurship education in Sierra Leone are either incomplete or fragmented and a heavy reliance on scant secondary data could result in inconsistent findings. Hence it has been preferred by the researcher to do an in-depth analysis of Higher Education Institution case studies for

entrepreneurship education. The richness of the data collected should allow for theoretical saturation to infer general conclusions (Eisenhardt and Graebner, 2007). In conducting a qualitative analysis of the multiple case studies on entrepreneurship education, the researcher went through the following process.

Firstly, a systematic search for electronic databases EBSCO business resource and Web of Science have been performed looking for case studies and reports on Sierra Leone. The search used keywords such as entrepreneurship, education, entrepreneurship education programmes, entrepreneurship education programmes in Sierra Leone, and the impact of entrepreneurship education on youth unemployment etc.

Secondly, online searches were made to identify reports, websites, and articles on the relevant institutions offering entrepreneurship education programmes in Sierra Leone. It was, however, difficult to find a comprehensive list of specific institutions offering entrepreneurship education programmes in Sierra Leone. The lack of data availability in developing countries has been identified as one of the biggest challenges (Ramadani, *et al.*, 2013; Ramadani, 2015). Meanwhile, the researcher was able to find a general list of Higher Education Institutions registered with the Tertiary Education Commission (TEC) (as shown in appendix 2 below) in Sierra Leone. From the broad set of institutions found from this initial step some criteria were applied to assess the validity of the case and thus the inclusion in the sample:

    a. Programmes with explicit learning outcome(s)

    b. Programmes with details of their target group(s)

c. Programmes targeting participants at tertiary institutions.

d. Programmes that are 'entrepreneurship education' focused rather than 'entrepreneurship training' focused.

Thirdly, semi-structured interviews were conducted via telephone to two senior staff at the Tertiary Education Commission to identify and confirm those institutions delivering entrepreneurship education programmes from the general list of Higher Education Institutions found through secondary research. From this, the researcher was able to identify and select some institutions based on the criteria above (see table 9 below).

Fourthly, after selecting the required cases/institutions, semi-structured, in-depth telephone interviews were conducted. In total, seventeen (17) people were interviewed across the institutions identified. Table 9 shows the name of the institutions, number of people interviewed, their position and location. The World Bank conceptual framework (shown in chapter two) was used to help frame questions on issues like the intended outcomes, participants' characteristics, programme characteristics, and context.

Table 9: List of institutions included in the study and interviewees

Name of Institution	Number of People Interviewed	Position	Location
University of Makeni (UNIMAK)	1	Programme Leader	Makeni

Institute of Public Administration and Management (IPAM)	2	Head of Department	Western Urban
The Institute of Advanced Management and Technology (IAMTECH)	1	Module Leader	Western Rural
Milton Margai College of Education and Technology (MMCT)	1	Lecturer	Western Urban
Njala University, Sierra Leone (NUSL)	2	Lecturer	Moyamba, Bo
Northern Polytechnic	1	Lecturer	Makeni
Eastern Polytechnic	1	Module Leader	Kenema
College of Management and Administration (COMA)	1	Lecturer	Western Rural
College of Business Studies	1	Lecturer	Western Urban
Emibex College of Management & Finance	1	Lecturer	Western Urban
Freetown College of Management and Accountancy	1	Lecturer	Western Urban

Institute of Business Studies & Administration (IBSA)	1	Lecturer	Western Urban
Institute of Business Administration & Technology (IBATECH)	1	Lecturer	Western Rural
Institute of Continuing Education and Consultancy Services	1	Lecturer	Western Urban
Institute of Management, Accounting & Tourism (IMAT)	1	Module Leader	Western Urban

In analysing data from the personal interviews, the study used archival analysis. Archival analysis enables researchers to locate, evaluate and carry out a systematic interpretation and analysis of sources found in the archives (Mohr and Ventresca, 2002). This research approach has been used due to its extensive use in other related fields, for example, sociology, economics etc. (Cherlin, 1991). The archival analysis helped in understanding the current state of entrepreneurship education programmes in Sierra Leone.

4.5.2 Entrepreneurial Intentions

The section presents the relevant sample, data collection and analysis techniques for the variable entrepreneurial intentions. This is done in order to critically assess

the extent to which entrepreneurship education programmes impact youths' entrepreneurial intentions (research objective 2).

Prior research in developed countries has shown that entrepreneurship education benefits graduate in particular as they are willing to change their lives through the principles of entrepreneurship. For this reason the participants for data collection in exploring the effect of entrepreneurship education programmes on youths' entrepreneurial intentions are graduates undertaking entrepreneurship as a module across three main courses: BA (Hons) Business Administration degree students, BSc (Hons) Information Technology and Diploma in Banking and Finance at the Institute of Public Administration and Management (IPAM) in 2015/16 academic year. The age bracket of the participants is between 19 and 29 years. This age bracket is chosen because research suggests that people within it have a high propensity to engage in entrepreneurial activities (Henely, 2007; Liñán, 2008).

4.5.2.1 The Institute of Public Administration and Management

The Institute of Public Administration and Management (IPAM) is a constituent college of the University of Sierra Leone established under the authority of the University Senate and the University Court. The institute runs several professional, diploma and undergraduate and postgraduate degree programmes in business, management and information technology.

Entrepreneurship at the institute is offered as a special option for its final year students studying the BSc (Hons) in Business Administration only. Thus, students are given the option to specialise in entrepreneurship or other subject areas in the

final year of the programme. However, to date, there are a handful of students who have opted to choose entrepreneurship as a specialist area of study.

The vast majority of programme participants are young adults (between the ages of 19-29 years) who have come through the formal education process. However, a large proportion of them have no businesses or job experience. The module is designed by the university staff and is largely delivered through the traditional classroom lecture style. Students are assessed through formal exams and the development of a business plan. The module aims to develop and enhance the entrepreneurial intentions and skills of participants. It also aims at helping participants to establish businesses during or after the programme.

In addition, entrepreneurship at the institute is also offered as a compulsory module across all its 2nd-year undergraduate programmes and some of its postgraduate programmes. Of particular interest to this study are the following programmes in which entrepreneurship was offered as a module in the 2015/2016 academic year: Bsc (Hons) in Business Administration, BSc (Hons) in Information Technology and Diploma in Banking and Finance. The Bsc (Hons) in Business Administration and the BSc (Hons) in Information Technology are both four (4) year programmes, whereas the diploma in banking and finance is a two years programme. Entrepreneurship is offered as a module in the second year of all these programmes.

The researcher used the whole cohort (200 undergraduate students) for collecting the data (see table 10 for an overview of the sample). This is made up of 100 students from the BSc (Hons) Business Administration Cohort, 30 from the BSc

(Hons) Information Technology cohort and 70 from the Diploma in Banking and Finance cohort. The decision to use the whole cohort as a sample was to enable the researcher to draw a conclusion that is both valid and reliable. In Sierra Leone, most participants are reserved about participating in a research activity, especially one conducted by someone from the western world. They tend to perceive even their fellow Sierra Leoneans who live abroad as foreigners and may not open up freely for fear of divulging information to someone who might use it for some other reasons. For this reason, the lecturers of the programme assisted in distributing the Entrepreneurial Intentions Questionnaires (EIQ). Their main role was to introduce the researcher to their groups and help in effectively communicating to the participants about the purpose and significance of the study in question. This strategy helped in creating a non-threatening environment where participants felt free to participate in the research. It has been reported that the involvement of the educators in collecting data will help get a higher response rate from the participants (Saunders *et al.,* 2012).

Table 10: Overview of Samples

	Samples		
Group Number	1	2	3
Programme name	Bsc (Hons) Business Administration 2015/2016 academic year	Bsc (Hons) Information Technology 2015/2016 academic year	Diploma in Banking and Finance 2015/2016 academic year
Institution	Institute of Public	Institute of Public	Institute of

	Administration and Management (IPAM)	Administration and Management (IPAM)	Public Administration and Management (IPAM)
Data Acquisition for research question	RQ1	RQ1	RQ1
Ex-Ante, Tstart N	100	30	70
Ex-Post, Tfinal N	100	30	70
Mean Age	24	24	24
Taught Element	Yes	Yes	Yes
Business Planning	Yes	Yes	Yes
Interaction with practice	Yes	Yes	Yes
University support	Yes	Yes	Yes

Note Tstart = first assessment at the beginning of a programme, Tfinal = last assessment at the end of a programme.

Table 10 gives an overview of the samples used to collect data in order to explore the effect of entrepreneurship education on youths' entrepreneurial intentions. As shown above, the researcher used three (3) groups of undergraduate students studying different programmes. The selection of the three (3) groups, firstly enabled

the researcher to have a large sample of programme participants, which adds to the richness of the data collected.

Secondly, it helped the researcher to compare the effect of an entrepreneurship module that meets the "good practice" criterion on entrepreneurial intentions (Souitaris *et al.*, 2007). Souitaris and colleagues (2007) in their research on entrepreneurship programmes offered at major universities suggest that a "good practice" programme can be regarded as any programme that has the following elements: 1) a taught element that has one or more entrepreneurship modules 2) a business planning element that requires participants to either write a business plan or engage in a business competition 3) a practical element which may include interaction with experts and/or practitioners and 4) a university support or wrap-up services element which may include mentoring services, access to funding etc.

The table also shows the institution and the different programmes across which the entrepreneurship module was being taught. The next section gives a description of the institution with specific reference to the selected entrepreneurship module.

Further, the relevant data for exploring the effect of entrepreneurship education on youth entrepreneurial intentions were collected using a modified and validated version Entrepreneurial Intention Questionnaire (EIQ) developed by Liñán and Chen (2009). The relevant items in the questionnaire are shown in Appendix 7. The questionnaires were administered (with the help of the lecturers) to a total of 200 participants across the three programmes at the beginning and the end of the programmes. This enabled the researcher to track changes that occurred to the

intentions of participants towards entrepreneurial activities as a result of their exposure to an entrepreneurship education programme. Figure 13 below shows the data collection process.

Figure 13: Data Collection Process
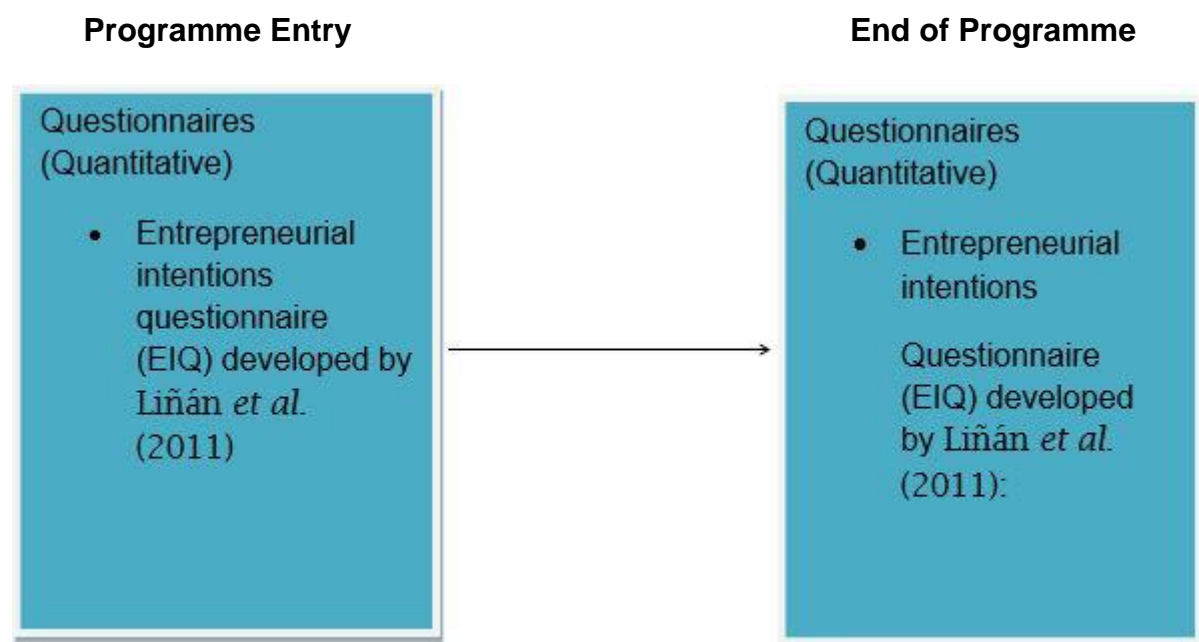
As shown in figure 13 above, data was collected at two different time points; at programme entry and end using the same questionnaire.

The pre-test questionnaires were administered whilst the participants were in class on the first day of the programme in August 2016. This was done after a short introduction of the project by the researcher to highlight the significance of the study.

Similarly, the post-test questionnaire was administered (with the assistance of the lecturer and the class representatives) on the last day of the programme in

November 2016. Almost all the questionnaires were collected on the very day with the exception of the few which were handed over by the lecturer two days after.

Out of the 200 students, one hundred and ninety-two students (192) completed and returned the questionnaire at the beginning of the programme and one hundred eighty-seven (187) completed and returned the questionnaire at the end of the programme

The questionnaires were labeled pre and post respectively. This was done in order to distinguish between the two for the purpose of analysing the data. Additionally, students were encouraged to provide their names and email addresses in order to be contacted again at the end of the programme. They were, however, clearly told that this was not compulsory; that they could choose to not include their personal details in the section provided.

In analysing the data collected to assess the effects of entrepreneurship education on youths' entrepreneurial intentions, the frequency distribution table, graph and interpretative thematic analysis were used. Firstly, the frequency distribution table and graph were used to present and compare data collected before and after the intervention of the entrepreneurship education programme. A frequency distribution also known as a frequency distribution table is an orderly arrangement of data classified according to the number of occurrences (Saunders *et al.*, 2012). A graph on the other hand is a diagram that shows the connection between different variables measured along one of a pair of axes at right angles (Sloane, 2009, Saunders, 2009). The justification for the graphical display of quantitative data is well

documented (Cleveland and McGill, 1984; Lockwood, 1969; Schmid and Schmid, 1979; Tufte, 1983; Wallgren *et al.* 1996, Sloane, 2009). The frequency distribution table and graph have been adopted mainly because it helps the researcher to effectively present and summarise the relevant data in a way that is understandable to the user (Manuel, 2012).

Secondly, the interpretative thematic analysis is used to interpret the 'before' and 'after' quantitative data. The interpretative analysis, which is also referred to as thematic analysis, requires the researcher to delve into the data with the sole purpose of identifying and discussing common *themes* that emerge based on the phenomenon under investigation (Peterson, 2017).

According to Braun and Clarke (2006, p.79), interpretative thematic analysis is a method used for "identifying, analysing, and reporting patterns (themes) within the data" (2006, p.79). The main reason for choosing this method is to have a rigorous analysis that can produce an "insightful analysis that answers particular research questions" (Braun and Clarke, 2006, p.97). The themes were identified from the questionnaire items within the validated Entrepreneurship Intention Questionnaire (EIQ). Braun and Clarke (2006, p.82) observe that "what counts as a theme is that it is something which captures the key idea about the data in relation to the research question and which represents some level of patterned response or meaning within the data set" (Braun and Clarke, 2006, p.82).

4.5.3 Entrepreneurial Competencies

This section covers the relevant sample and data collection and analysis techniques that help in developing a set of entrepreneurial skills and related pedagogies for

entrepreneurship education programmes within the context of Sierra Leone (research objective 3).

The researcher conducted three (3) separate sets of focus group interviews and 10 separate individual interviews. Rezaei-Zadeh *et al*., (2013) state that getting stakeholder views on the definition of core entrepreneurial competencies is vital as it helps to effectively address the relevant expectations, needs and perspectives of those stakeholders, without which entrepreneurship education programmes for developing entrepreneurial competencies are likely to be ineffective (Béchard and Grégoire, 2005).

The first set of focus group interviews was carried out with five (5) entrepreneurship education lecturers whereas the remaining two focus groups were conducted with fourteen (14) students (7 in each group) studying entrepreneurship. Getting the students in particular together was a difficult tasks; some were taking classes at a different campus and had to travel across the breadth of the town for the interviews. Some even complained about transportation cost and questioned what benefit the project will have on their lives. To solve this problem, again the lecturers were engaged to help the researcher to effectively communicate the essence of the research to the participants. It was at this point that they willingly decided to come for the sessions.

The individual interviews, on the other hand, were conducted with five entrepreneurship practitioners and additional five lecturers who were not able to attend the focus group sessions for personal reasons that were communicated to the

researcher. The practitioners for example complained about their busy schedules and the lecturers complained about a clash with their timetables etc. As a result, interview questions were sent via email to all five practitioners and five lecturers.

As a result of the time constraint specifically on the part of the interviewee, the researcher made a maximum 30 minutes separate telephone interviews with all five lecturers and three practitioners. The remaining two practitioners opted to send their answers via email.

Both the focus group and personal interview questions were designed in line with the literature review and the EntreComp framework and were validated by experts in line with the research questions and objectives (see appendix 13, 14 and 15 for the respective interview questions).

The focus groups were conducted using the Nominal Group Technique (NGT). The Nominal Group Technique is a structured brainstorming tool that attempts to seek the independent opinion of all participants on an issue (Delbecq *et al.*, 1975). NGT was primarily used to extensively explore the independent opinions of participants on what constitutes entrepreneurial competence. The technique does not only help in generating a pool of ideas on an issue, but also seeks to engage participants in ranking those ideas and eventually selecting the idea and/or ideas with the majority of votes (Islam, 2010).

According to Islam (2010), the technique is useful for groups that do not normally interact and groups in which tensions are normally high. The technique has been

extensively applied in business, social services, education and health (Davis *et al.,* 1998; Montano *et al.*, 2005; Yiu *et al.,* 2005).

The process started with the researcher explaining the nature of the research and the purpose of the focus group session. The researcher went on to collect the signed consent form from each participant. The process continued with the researcher asking the relevant questions like using the ENTRECOMP framework, what would you consider as the most important competencies that a student needs to have or acquire in entrepreneurship programme and why? How are these competencies defined within the context of Sierra Leone? How can these competencies be developed in students?.

A tentative list of competencies were produced at the end of each focus group interview and participants were asked to vote for the competencies they think are vital within the context of Sierra Leone. A final list was then produced at the end of the interview based on the majority of votes. Participants were also asked to provide any further information at the end of each focus group session.

In relation to the individual interviews, the consent form, EntreComp framework, and interview questions were sent to each participant via email and in some cases the same copy was handed over in person. All ten personal interviews were conducted. The data from the interview sessions were then compared with that of the focus group interviews to identify any recurring theme. A final list of competencies and their interpretations were recorded after a careful analysis.

The sample for both focus groups and personal interviews were selected using a non-probability sampling technique. This technique was used due to its relative ease of use and the possibility to carefully capture the descriptive comments about the sample. It has also been chosen because of its time and cost-effectiveness nature (Saunders *et al.*, 2012). Table 11 below shows the profiles for each interview participant.

This study used the interpretative thematic analysis technique to analyse data derived from the personal and focus group interviews. The interpretative thematic analysis technique helps to support an open analysis (Owen, 1984). As a result, the recurrence of ideas and repetition of terms was used as criteria to identify themes (Duval-Couetil and Long, 2015). It helped to understand the participants' perceptions of what constitutes entrepreneurial competencies within the context of Sierra Leone.

An open coding, which is also referred to as initial coding was used to identify distinct concepts and categories in the data which eventually formed the basic units of my analysis. This approach "deals with the breaking down of qualitative data into discrete parts, closely examining them, and comparing them, for similarities and differences" (Strauss and Corbin, 1998, p. 102). Saldaña (2013) describes it as a "First Cycle", open-ended strategy to effectively coding the data with some suggested general guidelines. According to (Charmaz, 2006, p. 46) the purpose of open coding is "to remain open to all possible theoretical directions indicated by your readings of the data". The process started by identifying, labelling and categorising the key variables involved in the phenomenon. The researcher then went on to relate the variables in an outline form. This process gave the researcher an opportunity to

reflect deeply on the contents of the data collected and to begin taking control of them.

Subsequently, an axial coding, which is also referred to as the second cycle coding method was used to establish connections between the constructs that emerged from the open coding (Saldaña, 2013). The process involved seeking the casual relationships and/or connections, between categories and sub-categories. According to Boeije (2010, p.109) the purpose of axial coding is "to determine which [codes] in the research are the dominant ones and which are the less important ones … [and to] reorganize the data set: synonyms are crossed out, redundant codes are removed and the best representative codes are selected". This technique, particularly helped in verifying whether the concepts and categories accurately represent the responses from the participants and explore how the concepts and categories are related (Saunders *et al.,* 2012).

Next, a selective coding was used to select and identify the main category with the aim of systematically relating it to other categories. Glaser and Holton (2004, p.55) highlighted that "selective coding means to cease open coding and to delimit coding to only those variables that relate to the core variable in sufficiently significant ways as to produce a parsimonious theory. Selective coding begins only after the analyst is sure that he/she has discovered the core variable". The process involved validating those casual relationships between the categories, creating and recreating those categories. The final concepts and categories were then presented in a tabular form. Results from the focus groups and personal interviews helped the researcher

develop a set of entrepreneurial competencies and analysed the provision of entrepreneurship education programmes in Sierra Leone respectively.

Students' Profiles

As stated above, fourteen students took part in the focus group discussions. All students were enrolled in a degree programme at the Public University A which is a constituent college of the University of Sierra Leone. The rationale for focusing on students from this institution is that firstly, it is one of the oldest and very little ones in the country that actively promote entrepreneurship-related activities. University A is widely known in the country for business and entrepreneurship related courses. The students that were interviewed range between the ages of 19-29 years. All students selected were offering entrepreneurship as a compulsory module. The majority of them meanwhile, don't own their own business. They were enrolled in the programme based on the West African Senior Secondary School Certificate Examination results; which is a general GCSE O Level.

Table 11 – Profiles of Interview Participants

Gender	Participant	Institutions/Organisation	Degree enrolled/qualifications	Status
Male	Student A	Public University A	Bsc Information Technology	Student
Female	Student B	Public University A	BscBusiness Administration	Student
Female	Student C	Public University A	BscBusiness Administration	Student
Female	Student D	Public University A	Bsc Information Technology	Student
Male	Student E	Public University A	BscBusiness Administration	Student
Male	Student F	Public University A	BscBusiness Administration	Student
Female	Student G	Public University A	Bsc Information Technology	Student
Male	Student H	Public University A	Bsc Information Technology	Student
Male	Student I	Public University A	BscBusiness Administration	Student
Male	Student J	Public University A	BscBusiness Administration	Student
Female	Student K	Public University A	Bsc Information Technology	Student
Male	Student L	Public University A	Bsc Information Technology	Student
Male	Student M	Public University A	Bsc Information Technology	Student
Male	Student N	Public University A	BScBusiness Administration	Student

Male	Lecturer A	Public University A and B	BSc, MBA	Head of Department
Male	Lecturer B	Public University A and B	Bsc, MBA	Module Leader
Male	Lecturer C	Public University A and B	BA, MBA	Lecturer
Male	Lecturer D	Public University A	Bsc, MBA	Lecturer
Male	Lecturer E	Public University A	Bsc, MBA	Lecturer
Male	Lecturer F	Private University A	MBA	Lecturer
Male	Lecturer G	Private University B	Bsc, MBA	Lecturer
Female	Lecturer H	Private College A	MBA	Lecturer
Male	Lecturer I	Private College A	Bsc	Lecturer
Male	Lecturer J	Private College B	Bsc	Lecturer
Male	Practitioner A	Public Support Institution A	Bsc, MBA	Head
Male	Practitioner B	Public Support Institution B	Bsc, Msc	Head
Male	Practitioner C	Private Support Institution A	Bsc, Msc, PhD	CEO
Male	Practitioner D	Private Support Institution	Bsc, Msc	CEO

		B		
Male	Practitioner E	Private Institution A	Bsc, Msc	CEO

Entrepreneurship Lecturers' Profiles

In total five lecturers took part in the focus group discussions. They collectively have more than 40 years of experience lecturing entrepreneurship at Higher Education level. Three of the lecturers, lecture entrepreneurship at two different public universities; public university A and B. Public University A specialises mainly in delivery business courses. They offer entrepreneurship as a compulsory module for all students studying other courses and as a specialist option for students enrolled in the BSc (Hons) degree in Business Administration. Public university B, on the other hand, focuses primarily on engineering and other social sciences courses. They, however, offer entrepreneurship across some of their programmes. They are regarded as one of the prestigious universities in sub-Sahara Africa. The other two educators primarily offer lecturing services in entrepreneurship and other related modules at public university A.

The interview questions were distributed to five lecturers from a private university and two private colleges who were unable to attend the focus group sessions. Lecturer F is from Private University A; which was formally a constituent of the University of Sierra Leone (USL) but has now been given special powers to offer its own degrees. They primarily offer entrepreneurship as a module across most of their programmes. Lecturer, G, on the other hand, is from Private University B which runs an MBA in Entrepreneurship, a certificate in entrepreneurship and a compulsory module on entrepreneurship across its programmes.

Lecturer H and I are from private college A; which runs both a one year students' entrepreneurship diploma programme and an entrepreneurship module across its

programmes. It is among the few private colleges who has women lecturing entrepreneurship.

Lastly, lecturer J is from private college B which runs an entrepreneurship module aimed at developing the mindsets and capabilities of the participants towards starting and running their own ventures.

Practitioners Profiles

Five practitioners participated in the personal interviews. Practitioner A works at a senior management position at a public support institution A which was set up by the Government of Sierra Leone (GoSL) to regulate, formalise, and support the healthy operations of Small Medium Enterprises in Sierra Leone. The institution aims to stimulate/encourage entrepreneurial spirit among current and potential entrepreneurs. They have been operating for over two years now.

Practitioner B works for public support institution B which has been in existence for the past 13 years now. Their main aim is to encourage investors to invest in small, medium and large businesses in Sierra Leone. They also help in promoting local businesses internationally.

Practitioner C holds a very senior management position at a private support institution at, which is a religious organisation that helps businesses grow through the offering of finance and teachings on Kingdom building and wealth creation. They have been around for the past 17 years now.

Practitioner D holds a significant shareholding in private support institution B which provides consulting services for small, medium and large businesses. They have been operating for the past 10 years on. Finally, practitioner E works for private institutions A, which is a Small Medium Enterprise (SME) that specialises in the provision of public transport. They have been operating for the past three years now.

4.6 Variable Operationalisation

This section is aimed at clearly defining the key constructs of this study; entrepreneurial intentions and entrepreneurial competencies.

4.6.1 Entrepreneurial Intentions

The variable 'Entrepreneurial intention' has been assessed through the theory of planned behaviour. The main constructs of the Theory of Planned Behaviour are attitude toward the behaviour, perceived behavioral control, subjective norm and "entrepreneurial intention" each of which will be examined separately. The scales for these constructs were adopted from the modified version of the Entrepreneurship Intention Questionnaire (EIQ) developed by Liñán *et al.* (2009) and applied to explore the changes in entrepreneurial intentions in the course of delivering the sampled entrepreneurship education programme. The questionnaire items on the modified version were randomly ordered and intermingled in order to minimise the two common drawbacks of instruments used in entrepreneurship research; halo effect and response bias (Liñán *et al.,* 2011).

Thus, items A1–A20 in Appendix 7 explored the four main constructs of the theory of planned behaviour (TPB): Entrepreneurial intention (A4, A6, A9-reversed (rev)-,

A13, A17 and A19-rev-), attitude towards the behaviour (A2-rev-, A10, A12- rev-, A15 and A18), PBC (A1, A5-rev-, A7, A14, A16-rev-, A20) and subjective norms (A3, A8, A11) (Liñán *et al.,* 2011).

Lastly, within the EIQ questionnaire, there are specific items (D1-D6) that seek to assess the entrepreneurial skills of participants. Thus, the constructs in the theory of planned behaviour and entrepreneurial skills will now be clearly defined as follows:

4.6.2 Attitudes Toward Behaviour

"Attitudes Toward a Behaviour" happens to be the first construct in the theory of planned behaviour. It attempts to measure the degree to which an individual positively thinks/perceives about performing the behaviour of becoming an entrepreneur (Lorz, 2011). This construct has been measured in several ways in previous studies. For instance, Autio *et al.* (2000) looked at the desirability of different career options (academic, corporate, civil service, entrepreneurial). Krueger *et al.* (2000) asked participants to rate the attractiveness of becoming an entrepreneur using a single-item scale: "Is starting your own business an attractive idea to you (scale 0 to 100)?" (Krueger *et al.*, 2000, p. 422). However, several researchers (Kolvereid and Isaksen, 2006; Liñán *et al.,* 2009) have used an aggregate measure to effectively capture attitudes as suggested by Ajzen (2002). Thus, this study adopts the 7-point Likert-type scale developed by Liñán *et al.* (2011) as shown in appendix 7.

4.6.3 Subjective Norm

Subjective norm attempts to measure the individual respondent's perception of what his/her peers/network would think if he/she becomes an entrepreneur. It refers to the cultural and social pressure to perform a specific behaviour (Lorz, 2011). Thus, the expectations of peers, mentors and other people within the respondent's network in relation to his/her desire to become an entrepreneur is vital.

Subjective norm has been assessed in a number of studies. Krueger *et al.* (2000) used a single scale (scale: 0 to 100) to ask "would family and friends want you to start your own business?" (Krueger *et al.,* 2000, p.422). However, Autio *et al.* (2001) clearly specified the network of the individual respondent as follows: family, important people, friends, and colleagues. Researchers such as Armitage and Conner (2001) and Liñán and Chen (2009) argued that using a multiple scales to measure subjective norms will deliver the strongest correlation with entrepreneurial intentions. Hence this study has adopted the measures of Liñán *et al.* (2011) as shown in appendix 7 below.

4.6.4 Perceived Behavioural Control

This measures the participant's own belief in his ability to perform the behaviour of becoming an entrepreneur. It is closely linked to the concept of self-efficacy which is defined as people's belief about their abilities and/or capabilities to carry out a certain level of performance that influences events and their lives (Bandura, 1993). Previous research has measured perceived behavioral control using scales ranging from single-item (Krueger *et al.* 2000) to multiple-item scales (Kolvereid *et al.* 2006). This study adopts the item-scales by Liñán *et al.* (2011) shown in Appendix 7 below.

4.6.5 Entrepreneurial Intentions as a component in the TPB Model

There are different ways to measure entrepreneurial intentions, e.g. it can be measured from a self-prediction perspective by asking a question like ("How likely is it that you will perform behaviour y") or from a behavioural intention perspective by asking a question like ("I intend to perform behaviour y"...) (Warshaw and Davis, 1985). Additionally, it can be measured from a desirability perspective by asking a question like (I want to perform behavior y) (Armitage and Conner, 2001). On the whole, research has shown that questions related to behavioral intention and self-prediction have got a high predictive power for behaviour (Shepperd *et al.,* 1988, Armitage and Conner, 2001). Thus, this study has adopted the behavioral intention related questions developed by Liñán *et al.* (2011) as shown in appendix 7 below.

4.6.6 Entrepreneurial Skills

The specific skills within the questionnaire have been taken from the literature (Boyd and Vozikis 1994; Chen *et al.* 1998; Denoble *et al.* 1999). It is assumed that possessing such skills will enable participants to engage in entrepreneurial activities (Denoble *et al.*, 1999, Liñán, 2011). In his study, Liñán (2008) pointed out that these skills can have a very significant effect over the three constructs within the Theory of Planned Behavior (TPB); the strongest being in perceived behavioural control. This is so because, no matter how high an individual's intention is towards a specific entrepreneurial activity, how supportive his or her network or social group is towards an activity, how positive his or her attitude to behaviour is, if the appropriate entrepreneurial skills are absent, he or she will not be able to successfully undertake

any proposed entrepreneurial activity. The study adopts the item scales by Liñán *et al.* (2011) as shown in appendix 7 below.

4.6.7 Entrepreneurial Competencies

The variable 'Entrepreneurial competencies' were analysed through the lens of the EntreComp framework. One of the key parts of the EntreComp framework is the list of competencies that entrepreneurship programmes should seek to develop in participants across countries in Europe. In the context of the EntreComp study, entrepreneurship is seen "as a transversal key competence applicable of individuals and groups, including existing organizations, across all spheres of life" (Bacigalupo *et al.*, 2016, p.10). Entrepreneurial competencies within the EntreComp study are understood to mean the set of knowledge, skills, and attitudes needed by participants (Bacigalupo *et al.*, 2016). Entrepreneurial competencies enable participants to equip themselves with the relevant skills which will help them to enter the job market as employees or self-employed and help contribute to the social development of their nations or start-up their own ventures (Bacigalupo *et al.*, 2016).

Figure 14 provides a snapshot of the EntreComp conceptual model clearly showing a breakdown of the entrepreneurial competencies and their meanings within the framework.

Areas	Competences	Hints	Descriptors
1. Ideas and opportunities	1.1 Spotting opportunities	Use your[5] imagination and abilities to identify opportunities for creating value	• Identify and seize opportunities to create value by exploring the social, cultural and economic landscape • Identify needs and challenges that need to be met • Establish new connections and bring together scattered elements of the landscape to create opportunities to create value
	1.2 Creativity	Develop creative and purposeful ideas	• Develop several ideas and opportunities to create value, including better solutions to existing and new challenges • Explore and experiment with innovative approaches • Combine knowledge and resources to achieve valuable effects
	1.3. Vision	Work towards your vision of the future	• Imagine the future • Develop a vision to turn ideas into action • Visualise future scenarios to help guide effort and action
	1.4 Valuing ideas	Make the most of ideas and opportunities	• Judge what value is in social, cultural and economic terms • Recognise the potential an idea has for creating value and identify suitable ways of making the most out of it
	1.5 Ethical and sustainable thinking	Assess the consequences and impact of ideas, opportunities and actions	• Assess the consequences of ideas that bring value and the effect of entrepreneurial action on the target community, the market, society and the environment • Reflect on how sustainable long-term social, cultural and economic goals are, and the course of action chosen • Act responsibly
2. Resources	2.1 Self-awareness and self-efficacy	Believe in yourself and keep developing	• Reflect on your needs, aspirations and wants in the short, medium and long term • Identify and assess your individual and group strengths and weaknesses • Believe in your ability to influence the course of events, despite uncertainty, setbacks and temporary failures
	2.2 Motivation and perseverance	Stay focused and don't give up	• Be determined to turn ideas into action and satisfy your need to achieve • Be prepared to be patient and keep trying to achieve your long-term individual or group aims • Be resilient under pressure, adversity, and temporary failure
	2.3 Mobilizing resources	Gather and manage the resources you need	• Get and manage the material, non-material and digital resources needed to turn ideas into action • Make the most of limited resources • Get and manage the competences needed at any stage, including technical, legal, tax and digital competences
	2.4 Financial and economic literacy	Develop financial and economic know how	• Estimate the cost of turning an idea into a value-creating activity • Plan, put in place and evaluate financial decisions over time • Manage financing to make sure my value-creating activity can last over the long term
	2.5. Mobilizing others	Inspire, enthuse and get others on board	• Inspire and enthuse relevant stakeholders • Get the support needed to achieve valuable outcomes • Demonstrate effective communication, persuasion, negotiation and leadership
3. Into action	3.1 Taking the initiative	Go for it	• Initiate processes that create value • Take up challenges • Act and work independently to achieve goals, stick to intentions and carry out planned tasks
	3.2 Planning and management	Prioritize, organize and follow-up	• Set long-, medium- and short-term goals • Define priorities and action plans • Adapt to unforeseen changes
	3.3 Coping with uncertainty, ambiguity and risk	Make decisions dealing with uncertainty, ambiguity and risk	• Make decisions when the result of that decision is uncertain, when the information available is partial or ambiguous, or when there is a risk of unintended outcomes • Within the value-creating process, include structured ways of testing ideas and prototypes from the early stages, to reduce risks of failing • Handle fast-moving situations promptly and flexibly
	3.4 Working with others	Team up, collaborate and network	• Work together and co-operate with others to develop ideas and turn them into action • Network • Solve conflicts and face up to competition positively when necessary
	3.5. Learning through experience	Learn by doing	• Use any initiative for value creation as a learning opportunity • Learn with others, including peers and mentors • Reflect and learn from both success and failure (your own and other people's)

Figure 14: The EntreComp Conceptual Model

Source: Bacigalupo *et al.* (2016)

Figure 14 above highlights the fifteen core competencies within the EntreComp framework with a brief description of the meaning of each. The model grouped competencies into three main areas : ideas and opportunities, resources and into action.

4.7 Ethical Issues

Investigating a research study where human contact is involved in the gathering of data, ethical issues have to be effectively determined and addressed. Ethics in research can be defined as the norms or standards of behaviour that guide moral choices about our behaviour and relationships with others (Cooper and Schindler, 2008, p. 34); others were the subject of your work or participants (Saunders *et al.,* 2012). Ethics simply refers to what is moral and/or right in a given situation.

This research was conducted in line with the guidance of the University of West London Human Research Ethics Committee; an ethical clearance application was submitted and approved by the committee before the researcher embarked on the collecting the relevant data. The key ethical procedures which were adopted in this research can now be clearly explained.

Firstly, the working guidelines were clearly set out and communicated to all participants ahead of the actual meeting. The researcher made it clear that all participants should be 18 or over. Secondly, since some of the lecturers of the entrepreneurship programme assisted in the distribution of the questionnaire, the researcher clearly made the participants understand that their participation was completely voluntary and that they could withdraw from the process at any given point in time. This was written within the consent form and pronouncements were

also made at the beginning of each data collection session. This ensured that no one was coerced to participate in the research as a result of their lecturers been involved in the process. The significance of the power relationship in qualitative research has been highlighted by several authors (Ebbs, 1996; Gergen and Gergen, 2000; Mantzoukas, 2004). In a non-positivist research like this, knowledge is normally generated through the interaction between a researcher and its participants. Meanwhile, Gergen and Gergen (2000, p. 1035) note that "the division between researcher and subject is blurred, and control over representation is increasingly shared". Further, Brayton (1997) notes that there is normally a huge imbalance between the researcher and the participants. There is, therefore, a need to redistribute power or replace ownership with participants. To reduce the power distance between the researcher and the participants in this research, the lecturers helped in communicating the essence of the research and emphasised the fact that all participants have an equal voice in shaping its outcomes. The participants were also told that the outcome of the research will be communicated to them. In this way, the researcher was able to develop a good relationship with the participants whilst at the same time maintaining a reasonable distance that allows a professional judgment. This approach helped in creating a non-threatening environment and made the participants feel they made an important contribution to the research throughout. Taylor and Bogdan (1998) describe this non-threatening type of environment as creating "a feeling of empathy for informants" that enables "people [to] open up about their feelings". Such feeling comes as a result of the informal, unstructured, non-hierarchical and anti-authoritative atmosphere created by the lecturers at the start of the process.

Thirdly, it was made clear that the researcher was responsible to keep confidentiality. For instance, the individual names and other personal details have not been included anywhere within this research. The researcher clearly told the participants that should they wish to maintain anonymity, they can happily do so by not including their personal details on the form. In this way, the participants will be sure that their participation and/or no participation will not result in any future consequences. Fourthly, it was made clear that the researcher will report the findings of the research with fairness and accuracy. Lastly, it is expected that the final outcome of the research will be communicated to the participants through a formal letter to their department heads and lecturers since most did not provide personal contact details.

4.8 Researcher's Position Statement

There is a high rate of youth unemployment in Sierra Leone. Born and brought up in Sierra Leone, the researcher has witnessed the alarming rate of youth unemployment in the country and its associated costs. To combat this problem, the researcher shares the same belief with policymakers and scholars that entrepreneurship education plays a significant role in reducing youth unemployment. As an entrepreneur and lecturer, the researcher has evidently seen the impact that a good entrepreneurship education programme has on the skills and intentions of participants in particular. The researcher has personally been able to conduct workshops on entrepreneurship on trips to Sierra Leone and have seen the impact such workshop has had on participants. The goal of an entrepreneurship education programme in a country like Sierra Leone is to mainly equip participants with the relevant skills needed to engage in self-employment opportunities.

Meanwhile, amidst the proliferation of entrepreneurship education and training programmes in the country, youth unemployment amongst graduates in particular seem to be very high. This is in the researcher's view is largely as a result of the general attitude of Sierra Leoneans towards entrepreneurship; most see it as a career for drop-outs. Additionally, the type of skills being taught within the programmes are fragmented and is mostly not comprehensive enough to enable participants to compete in the labor market.

Overall, the researcher strongly believes that the outcomes of this research will help design and deliver entrepreneurship education programmes that produce a host of graduates that will be ready to take advantage of the enormous opportunities in the marketplace. The researcher intends to do this by developing a framework for entrepreneurial competencies and the appropriate pedagogies used to teach these competencies.

4.9 Chapter Summary

In conclusion, this chapter has reviewed some of the research philosophies and methods used to answer the research questions and effectively address the research aims and objectives. The chapter discussed the selection of the appropriate research philosophy and methods used in this research. The chapter further reviewed the research samples for both the interviews (individual and group) and the Entrepreneurial Intention Questionnaire (EIQ). The different methods used to analyse the research data were discussed. The chapter ended with a brief discussion of the ethical consideration and the position statement of the researcher.

Chapter 5

**Findings: Analyses of Entrepreneurship Education Programmes in Sierra
Leone**

5.0 Introduction

This chapter presents and discusses the findings from the individual interviews
conducted in order to critically analyse the current state of entrepreneurship
education programmes in Sierra Leone (RQ1). The chapter starts with a presentation
and an analysis of the individual interviews that were conducted to understand the
current status of entrepreneurship education programmes in Sierra Leone using the
World Bank conceptual framework and ends with a conclusion.

5.1 Analyses of Entrepreneurship Education Programmes in Sierra Leone

One of the primary objectives of the research was to review the current status of
entrepreneurship education provisions in Sierra Leone using the World Bank
Conceptual Framework and provide relevant recommendations. To achieve this, a
sample of fifteen tertiary institutions (N=15) was reviewed. As shown in the
methodology section, a set of criteria was used to generate this sample. Telephone
contacts were made to the heads and in some cases the lecturers of these
programmes asking key questions relating to whom they target, the programme
characteristics, what outcomes do their programmes seek to achieve outcomes and
the context within the programmes are delivered etc.

A detailed analysis of these programmes with specific reference to their context,
outcomes, characteristics, and participants now follows (see appendix 8 for a brief
analysis of each programme).

Programme Outcomes

Each entrepreneurship education programme is designed around key learning outcomes. Balan and Metcalfe (2012) noted that the terms outcomes and objectives are normally used interchangeably in the entrepreneurship education literature. The literature predominantly highlights programme outcomes around key activities and competencies: knowledge, skills and attitudes (Matlay, 2008); intentionality, self-efficacy (Cheng *et al.*, 2009), practical learning (Rae, 2004), competitiveness (Jones, 2010) and graduate careers (Taatila, 2010; Nabi and Liñán; 2011). Meanwhile, the World Bank framework divides programme outcomes into four: entrepreneurial mindsets, entrepreneurial capabilities, entrepreneurial status and entrepreneurial performance.

Generally, it was evident that the vast majority of the programmes covered in this study mainly focus on developing the entrepreneurial mindsets and capabilities and/or competencies of the participants and pays less focus on entrepreneurial status and performance. Entrepreneurial mindsets refer to the socio-emotional skills and general awareness of the concept of entrepreneurship (Valerio, *et al.* 2014). Socio-economical skills comprise of skills like creativity, self-awareness, risk, resilience, self-efficacy, self-confidence, leadership, motivation, teamwork and networking (Luthje and Franke 2003; Cloete and Ballard 2011). Research also shows that the mindset of an entrepreneur is linked to the participants' positive perception towards entrepreneurial activities (Martin *et al*. 2013). Thus, any programme that seeks to influence the mindsets of participants directly or indirectly seeks to influence the views of their desirability and feasibility towards engaging in entrepreneurial activities (Fayolle and Lassas-Clerc 2006; Souitaris *et al.* 2007).

Entrepreneurial capabilities, on the other hand, refer to the required competencies, knowledge and technical skills (Detienne and Chandler 2004; Honig 2004). Such capabilities include general management, marketing, planning, accounting, and human resource management, ability to manage complex processes, resources mobilisation, efficiency, risk assessment etc.

Meanwhile, the competencies that each programme reviewed in this study seeks to develop in their participants are similar and also very different. For instance, some institutions (UNIMAK and IPAM) seek to develop planning, self-confidence, human resource management, risk-taking, managing people and the competence of mobilising resources in their participants. The entrepreneurship programme at Njala University on the other hand is more focused on developing self-awareness, the need for achievement, efficiency, planning, coordination and risk-taking in their participants. A respondent at UNIMAK highlighted that "in my view, I think the module is primarily designed to get students to be generally aware of business rather than actually trying to equip them with the requisite skills that will ignite their intentions to start a business on their own". Similarly, another respondent at Milton Margai College of Education and Technology (MMCT) stated that "we primarily focus on creating the awareness of the concept of entrepreneurship amongst our participants and develop skills like business planning, organising, persuasion and risk-taking in our participants". Another similar but different set of skills is also offered by Eastern Polytechnic, which seeks to develop planning, organising, opportunity, vision, risk-taking, motivation and ethical skills. "Competencies developed within our entrepreneurship module include business planning, coordination, risk-taking, innovation, managing people and spotting opportunities", a

respondent at the Institute of Institute of Advanced Management and Technology (IAMTECH) highlighted.

According to one of the respondents at Emibex College of Management and Finance, part of the reason for the differences in the competencies being taught in an entrepreneurship programme across the country is that "some curriculum designs are carried out by college staff who only takes their own students' needs into consideration".   Another at Eastern Polytechnic stated that "the subject of entrepreneurial competencies is very much subjective. By that I mean there are different meanings be given to the subject itself, hence it is not surprising that we see different programmes seeking to develop different sets of competencies within their participants".

 This is supported by authors like Hayton and McEvoy, (2006); Sánchez, (2013) who aver that the concept of entrepreneurial competencies has many connotations and no generally accepted definition. For example, Man *et al.* (2002, p.124) define entrepreneurial competencies as "higher-level characteristic encompassing personality traits, skills, and knowledge that can be seen as the total ability of the entrepreneur to perform a job role successfully." Bird (1995) defines it as the key underlying characteristics that (i.e. traits, motives, specific and generic knowledge, self-images, skills and social roles) that results in the creation, survival and/or growth of the business.

Also, there are several studies on what actually constitutes entrepreneurial competencies (Katz and Green, 2007; Malebana; 2012). For instance, authors (Man

et al., 2002; Man and Lau, 2005; Ahmad *et al.,* 2010) postulate that entrepreneurial competencies include learning competencies, conceptual competencies, opportunity competencies, personal strength competencies, strategic competencies, organizing competencies, analytical competencies, and related competencies. Izquierdo and Buyens (2008) and Onstenk (2003) identify networking, communication and the ability to identify and evaluate opportunities as the most crucial in the entrepreneurial process.

Mitton (1989) identified nine clusters of competencies required for managers as well entrepreneurs: possessing special knowledge, seeing the bigger picture, spotting unique opportunities, needing tight control, making a total commitment to their venture, utilitarian view of what's right, welcoming uncertainty, embracing competency of others and using contacts and connections. Hood and Young (1993) also stated that the ability to effectively communicate is one of the most essential and frequently mentioned competencies for entrepreneurial success.

In a similar vein, different interviewees had a different view of what constitutes entrepreneurial competencies. For instance, one interviewee at the College of Management and Administration (COMA) stated that "entrepreneurial competencies constitutes of the following: spotting opportunities, taking risks, leadership and management skills, vision, influencing and communication". Another at the Institute of Advanced Management and Technology (IAMTECH) highlight that "the key competencies that need to be taught within an entrepreneurship programme are mobilising resources, opportunity spotting, business planning, team management, creativity, and vision".

Additionally, programmes sought to build the theoretical knowledge of participants and create a general awareness of entrepreneurship as a major force of reducing unemployment through working for others or business start-ups. For instance, the UNIMAK MBA in Entrepreneurship programme aims at "creating a concrete answer to one of Sierra Leone's most pressing needs: employment and job creation" (UNIMAK, 2014). According to an interviewee at UNIMAK "It is also aimed at providing the key tools to participants that will help them to start and grow businesses in the social sector". In a similar vein, one of the interviewees at the Institute of Public Administration and Management stated that "the entrepreneurship education programmes offered at IPAM aims at introducing students to the concept and practice of entrepreneurship and inspires them to start their own businesses before or after graduation". Also, a respondent at Freetown College of Management and Accountancy mentioned that "their entrepreneurship module seeks to develop the core entrepreneurial skills in our students with the sole aim of getting them to start and successfully run a business". Similarly, as shown in the literature, there are different objectives of entrepreneurship education programmes (Mwasalwiba, 2010). For instance several scholars (e.g. Kirby, 2004; Liñán 2004; Henry *et al.,* 2005; Gibb, 2005) stated that the primary objective of an EE programme is to create a general awareness about entrepreneurship. Others (Venkatachalam and Waqif, 2005; Fayolle *et al.,* 2006 etc.) believe that the key objectives of an EE programme is to enable the participants to engage in entrepreneurial activities including but not limited to the starting up of a new venture. Hytti and O'Gorman, (2004) highlighted three key objectives of EE programmes: education for, about and in entrepreneurship. Education for entrepreneurship is primarily aimed at developing

the skills of both present and future entrepreneurs towards the creation of a new venture whereas education about entrepreneurship focuses on giving the necessary knowledge and understanding of entrepreneurship to key stakeholders including students and policy makers. On the other hand education in entrepreneurship aims at making stakeholders more innovative in either their own businesses or that of others (Henry *et al.,* 2005).

Further, other outcomes that the programmes included in this study aims at getting out of their participants include educating participants on how to source and manage finances, survive in a changing environment, develop business plans and market their products or services successfully. For example, an interviewee at Milton Margai College of Education and Technology (MMCET) stated that "our entrepreneurship programmes have as one of its assessment vehicle the development of an individual business plan by participants".

Programme Characteristics

EE programmes comprise of a portfolio of complementary activities that can impact its outcomes **(**Souitaris *et al.*, 2007). Thus, there is a need for programme leaders to effectively design a portfolio that will yield a positive outcome. A programme portfolio could, for instance, include a good curriculum, trainers, duration, and pedagogy. The World Bank framework categorises programme characteristics into the following: programme design, trainers, and delivery, wrap-around services, content and curriculum.

A programme design refers to the combination of the relevant inputs and arrangements that together helps in defining programmes' scope, goals, methods,

and financing model (Valerio *et al,* 2014). Program design can also include key partnerships that are created by the local community within which the programme is being delivered (Fuchs *et al.* 2008). The majority of the programmes/entrepreneurship modules included in this study was developed by the National Council for Technical, Vocational and other Academic Awards (NCTVA) and very few by in-house staff. Among the few include IAMTECH, UNIMAK, IPAM, and NUSL. According to a respondent at IAMTECH for instance, "we designed our entrepreneurship module in-house whilst the student entrepreneurship diploma was developed in collaboration with our partners". Another at UNIMAK stated that "the MBA in Entrepreneurship programme offered at UNIMAK was developed in line with our partner institution, ALTIS, Postgraduate School of Business and Society of the Catholic University of the Sacred Heart of Milan, Italy (Università Cattolica del Sacro Cuore), whilst the certificate in entrepreneurship and supply chain management programme was designed by in-house staff". There were, however, no accurate data on the cost of delivering these programmes. The dearth of lieterature in the area of entrepreneurship in Sierra Leone in particular is a huge challenge for researchers. Additionally, a respondent at College of Business Studies pointed out that "the majority of the programmes across the country were designed without the active involvement of key stakeholders e.g. students, local community, businesses, etc." He continued to say "this is partly because most entrepreneurship curricula were developed by NCTVA who don't actively involve key stakeholders in the design of the curriculum". It was unanimously agreed that the involvement of all stakeholders in the design of the curriculum will immensely contribute to the development of a programme that takes into account the needs of the respective beneficiaries. This is so because the stakeholders are in the position to point out the key success factors

of the programme. The collective voices will help inform a well-articulated and effective curriculum.

In total there are five (5) standalone entrepreneurship courses and 16 entrepreneurship modules being currently delivered among the institutions included in this study. A respondent at IAMTECH stated "we offer a diploma in entrepreneurship and one entrepreneurship module to other students studying different programmes across our institution" whilst the respondent at UNIMAK stated "we offer two entrepreneurship programmes (MBA Global Business and Sustainability Entrepreneurship Track and a Certificate in Entrepreneurship and supply chain management based on a short training) and one compulsory entrepreneurship module to students offering business-related courses". Accordingly, a respondent at IPAM stated "we offer two specialist options for our students studying our MBA and BSc (Hons) Business Administration programmes. We also offer an entrepreneurship module to all other students studying other business and non-business related courses." The remaining colleges only offer entrepreneurship as a module across their courses. The limited number of especially standalone entrepreneurship courses in the country could be as a result of the culture of Sierra Leoneans towards entrepreneurship as noted in chapter two. Culture plays a huge role in determining the choices and actions of a people (Hofstede, 1984; Davidsson, 1995; Furrer, 2000; Hayton *et al.* 2002). The average Sierra Leonean (including academics and graduates) believe in working for others in corporate institutions. To many, entrepreneurship is a discipline for the uneducated or drop outs.

Additionally, a respondent at the Milton Margai College of Education and Technology (MMCET) stated that "there is currently a very little budget for some of our students who will intend to say run their own business around an innovative idea." Similarly, a respondent at Northern Polytechnic highlighted that "adequate funding is not in place to encourage and promote our students who come up with good innovations." The interviewee at University of Makeni, however, mentioned that "we received a reasonable financial support from our partners overseas and our partnerships with the local businesses too." As stated in chapter 2, the effective implementation of EE programmes across a country like Sierra Leone remain a key challenge which is partially due to the lack of funding (Kingombe, 2012; Maina, 2013). Implementing EE programmes in order to achieve their intended objectives calls for an adequate level of funding for things like equipment, state-of-the-art buildings, qualified trainers and monies to help programme participants execute their business plans. Although there is plenty of rhetoric from government about the significance of entrepreneurship education in solving youth unemployment by encouraging people to start a business, little has been done in the area of providing adequate funds (Oketch, 2009). Kingombe (2012) averred that in a developing country like Sierra Leone, the vast majority of its resources are spent on social services rather than programmes that help drive real economic growth. If EE programmes are not adequately funded, the country will not realise its contribution towards allowing its citizens to be entrepreneurial, which in turn helps in reducing the high rate of graduate youth unemployment in particular.

Another dimension of the programme characteristics are the trainers and delivery methods being used. An Entrepreneurship Education Programme needs to have

trainers with the requisite business background which can be a mix of academics and practitioners who are experts in the field (Pittaway and Cope, 2007b). An EE programme should also seek to have a mix of several pedagogical methods including but not limited to lecturers, external speakers, networking sessions, virtual setting etc. According to a respondent at the Institute of Business Studies and Administration (IBSA) "the trainers of these programmes mostly have business degrees, but the vast majority don't have their own businesses thereby lacking some practical experience." One respondent at Njala University, Sierra Leone (NUSL) stated that "I started lecturing an entrepreneurship module with no practical business experience; I only had a degree in business". Another at Milton Margai College of Education and Technology (MMCT) stated: "most tutors of entrepreneurship education programmes in Sierra Leone don't have a practical business background; the vast majority of us are either graduates of a business degree qualification or graduates of an MBA programme". As highlighted in chapter two, the shortage of experienced trainers of EE programmes is one of the key challenges facing the effective implementation of entrepreneurship education initiatives. Trainers play a very important role in ensuring that the objectives of entrepreneurship education are fully achieved. Hence, they have to be given the opportunity to acquire the relevant competencies required to design, deliver and assess entrepreneurship education programmes in an enabling environment (EU, 2014).

Also, opportunities for network and training for these trainers are limited across most institutions. An interviewee at the Institute of Continuing Education and Consultancy Services (ICECS) stated that "most of the entrepreneurship modules or programmes are delivered by the institutions' own staff, whilst few are delivered by a team of local

and international mentors and coaches". In addition, another respondent at Institute of Business Studies & Administration (IBSA) highlighted that "some institutions have a practice of inviting great business leaders in the country to offer public lectures on entrepreneurship to their students". The limitation of training for trainers of EE programmes in particular could be related to the lack of funding opportunities from the government and other key stakeholders. It could also be related to the lack of top level commitments in ensuring that entrepreneurship education programmes are effectively implemented across the country.

Furthermore, another important dimension of a program design is the wraparound services which include arrangements for mentoring and networking as well as opportunities to gain access to financial and non-financial resources (Volkmann *et al.* 2009). The consensus from the majority of respondents shows that the common wrap-around services of these programmes include, but not limited to, business coaching and mentoring from both internal and external speakers, grants from non-governmental organisations and advice on how to access finance. "We have international business coaches for our diploma in entrepreneurship programmes" an interviewee at The Institute of Advanced Management and Technology (IAMTECH) stated. On the other hand, the respondents at the Institute of Public Administration and Management (IPAM) mentioned that "we from time to time invite external speakers to speak on different business-related themes." However, the vast majority of the colleges do not have sufficient wraparound services that will help facilitate the effective implementation of their EE programmes. Again, this could be as a result of the lack of funding or top level commitment. Wraparound services are a very significant input in any successful EE initiative. In other words, the inclusion of key

components like mentoring and network services are pivotal to the achievement of any EE programme. Thus, the lack of it could affect the participants' intentions towards entrepreneurial activities.

Lastly, the content and curriculum of a programme have a strong relationship with programme outcomes. Curriculum and content areas include financial literacy, entrepreneurship awareness, and strategic planning. It also includes the various pedagogies being used, e.g. experiential or lecture based. The EE programmes included in this study had details of the relevant learning outcomes, how students will be taught (e.g. lectures, group presentations, case studies) and assess (e.g. exams, development of a business plan prior to completion etc.). Several authors (Martin *et al.* 2013; Haase and Lautenschläger, 2011; Henry *et al.* 2005) have supported these methods of assessment. A respondent at Institute of Business Administration and Technology (IBATECH) pointed out that "the main aim of the entrepreneurship module being delivered at our school is to increase the awareness of entrepreneurship activities to our students so that they can realise there are other roots to making a living." Another at the Institute of Public Administration and Management (IPAM) averred that "our entrepreneurship module seeks to both expose our students to the concept of entrepreneurship and give them the relevant entrepreneurial skills that will help them start their own ventures."

Further, an interviewee at the Njala University, Sierra Leone (NUSL) highlighted that "the predominant method of delivery our programmes is via a face to face lecture." However, the respondent at the University of Makeni (UNIMAK) clearly mentioned that "our program delivery is made up of both classroom lectures and the use of

external local and international speakers who are experts in business and entrepreneurship."

Programme Context

Context plays a key role in entrepreneurial research (Ratten, 2014, Porfirio *et al,* 2016; Jones *et al.* 2018). It can promote or hinder the objectives of an entrepreneurial education programme. The context within the World Bank framework specifically looks at a series of factors that directly impact on the outcome of an entrepreneurship education programme. Specific contextual factors that can likely influence programme outcomes are political, economic and social factors (Pittaway and Cope, 2007b). Thus, if a specific context (e.g. Sierra Leone) possesses the unique contextual factors that are required to foster entrepreneurship, entrepreneurship programmes delivered within Sierra Leone will be more likely to deliver a positive outcome than a context that lacks the appropriate factors. In addition, entrepreneurship education programmes are more likely to face contextual implementation challenges as a result of the specific operating location in which the programmes are being delivered.

In terms of the operating locations, the majority of the programmes/entrepreneurship modules in Sierra Leone are delivered in the western region of the country, whilst only a few are delivered in other operating regions of the country (see table 2). From the selected sample of institutions, there is a total of 11 institutions offering entrepreneurship programs/modules in the western region of the country, with 2 in the north, 1 in the south and 1 in the east. A respondent at Freetown College of Management and Accountancy stated that "most economic activities are centralised in the capital city of the country. This partially the reason why you will perhaps notice

that there are more institutions in the city that offers entrepreneurship-related programmes than any other part of the country". Another at the Institute of Management, Accounting & Tourism (IMAT) pointed out that "Freetown is both the capital and main economic city of the Republic of Sierra Leone. There are, for instance more financial institutions here than any other part of the country".

In terms of the external factors influencing the programmes, reference can be made to three key factors; political, economic and socio-cultural factors.

The political context refers to the stability of institutions and local society as well as the leadership and the willingness to promote entrepreneurship through local policies and institutions. Politically, moderate efforts have been made to encourage entrepreneurial activities through education by the government. For instance, a respondent at the Institute of Public Administration and Management (IPAM) highlighted that "the government has created a dedicated ministry of Youth Affairs which have in turn created a National Youth Commission". The mission of this commission is to increase the productive capacity of youths by developing policies that will help develop and enhance the potential, skills, and creativity of youths so as to help reduce the unemployment level in the country (NAYCOM, 2009). "There are also supports from non-governmental institutions in terms of the provision of entrepreneurial training to youths across the country" according to another respondent at the Eastern Polytechnic. However, an interviewee at the College of Management and Administration (COMA) noted that specific policy actions of the government in relation to grants and subsidies for the effective running of these programmes are limited. Government support in terms of grants or subsidies is very

important for the success of an entrepreneurship education programme. According to the key political challenge mentioned by a respondent at the Institute of Management, Accounting, and Tourism (IMAT) is that "government ministries put an unnecessary bureaucratic impediment on the process of setting up a venture". For instance, in the World Bank (2018) comparative analysis of the ease of doing business in Sierra Leone shown in figure 3, Sierra Leone is ranked the second lowest country in terms of the ease of doing business. A respondent at the Institute of Business Studies and Administration (IBSA) mentioned that "for our participants to be able to successfully implement the knowledge they acquire through the entrepreneurship programme, the government will need to relax its bureaucratic rules and provide adequate funding for good ideas". Another at Freetown College of Management and Accountancy suggested that "government should encourage more angel investors to finance innovative ideas. The government can do so by establishing a platform for local as well as international local angel investors to meet and interact with prospective entrepreneurs with great ideas". Also, a respondent at the Institute of Business Administration and Technology put forward that "support has to be provided by community-based organisations and the lecturers of the entrepreneurship education programmes." Pittaway and Cope (2007b) clearly highlight the need to create a link between an entrepreneurship education programme and its local institutional context. Kuratko (2005) for instance stated that there is a direct link between programme outcomes and instruction specific champions like administrators, lecturers and principals or heads of programmes. "The government needs to provide support in the form of training for trainers programme for lecturers of EE programmes so that they can be better placed to deliver programme outcomes."

The economic context is also directly linked to the success of entrepreneurs who go through these entrepreneurship education programmes (Mckenzie and Woodruff, 2012). According to the World Bank (2013, p.115) development report "even potentially skilled entrepreneurs would have difficulty succeeding without access to basic infrastructure and financial resources. In their absence, managerial capacity alone may not be enough". The key contextual economic factors within the World Bank framework include the investment climate, local economic conditions, local infrastructures, access finance, regulatory and tax structures and specific market opportunities.

In the context of Sierra Leone, a respondent at the Institute of Public Administration and Management (IPAM) for instance, stated that most programmes are underfunded and there is limited access to finance for participants of these programmes who have gone on to develop viable business plans. This is supported by a respondent at Njala University, Sierra Leone (NUSL) who clearly highlighted that "there is also fewer government grants to subsidise potential businesses. Thus, most participants with brilliant ideas find it difficult to fund their proposed businesses". The tax system according to a respondent at Eastern Polytechnic "doesn't give much of an incentive for start-ups." "There is a need for government to encourage private investors to provide seed capital to the participants of an entrepreneurship education programme that specifically come up with brilliant ideas." Another respondent at the Institute of Advanced Management and Technology (IAMTECH) pointed out that "the government needs to work closely with all financial

institutions and encourage them to provide financial resources to all start-up and small businesses."

The socio-cultural context refers to all factors that are associated with the local perceptions about entrepreneurship as well as the specific cultural attitudes towards, success, failure and the role of certain members in the society. These factors can either promote or hinder the effective implementation of entrepreneurship education programmes (Pinillos and Reyes, 2011). Hofstede (1991) defines cultural values as a tendency to prefer certain behavioural patterns over others. According to Stephan and Uhlaner, (2010), a culture that embraces entrepreneurship will directly lead to an increase in entrepreneurship activities. For example, there are more entrepreneurs within the Asian region than the African region (World Bank, 2013).

In relation to the socio-cultural context of Sierra Leone, it has been noted in earlier chapters that the majority of Sierra Leoneans have a negative perception towards entrepreneurship, especially as a profession. An interviewee at the Emibex College of Management and Finance pointed out that "most people see entrepreneurship as an activity for people who haven't got the required intellects to pursue formal education through the university system". Another stated that "most Sierra Leoneans are risk-averse, a culture that is not supportive of any entrepreneurial activities or if one wants to become a successful entrepreneur" (Institute of Business Administration & Technology (IBATECH)). Entrepreneurial activities are regarded as a third class option by most Sierra Leones hinted a respondent from the Institute of Continuing Education and Consultancy Services.

Several scholars have shown how such cultures can massively impact and shape entrepreneurship programme outcomes (Pinillos and Reyes, 2011; Rauch *et al.,* 2000; Davidson and Wiklund, 1997). Studies also show that entrepreneurship is supported by cultures that portrays both collectivism (support from network) and individualism (having a risk-taking propensity) and that are low in power-distance (where there is less hierarchy), thus, the greater the cultural distance from this ideal situation, the lower the level of entrepreneurial activities in a given society.

Participants Characteristics

Participant characteristics are a key moderating factor of an entrepreneurship education programme. The characteristics of participants refer to what the individual participants bring with them in a programme. Studies show that specific individual traits can have a positive effect on entrepreneurial outcomes (Luthje and Franke, 2003, Rauch and Frese, 2007). The conceptual framework categorises participant characteristics into five which can collectively impact the outcome of a programme: the demographic and personality related profiles of the individual, educational level, experience, interest, and intentions of the participant, participant behaviour.

The profile of a participant refers to the basic demographic identifies and factors of a participant's trait or personality. Such factors include their gender, parental background, and age (Wang and Wong, 2004). According to a respondent at the College of Business Studies, "all most all participants that are engaged in an entrepreneurship education programme across the country in different institutions are above the age of 18." Similarly, an interviewee at the University Of Makeni (UNIMAK) stated that "participants of the MBA in Entrepreneurship programmes offered at UNIMAK are largely adults who are enrolled based on the premise that

they will go out and develop new businesses or enhance existing ones". This is so because one of the recruitments of all Higher Education Institutions across the country is that participants enrolling in their course should be 18 and over.

 In terms of gender, "the vast majority of participants that are enrolled in our entrepreneurship program are men" mentioned a respondent from the Institute of Public Administration and Management (IPAM). A respondent at the University of Makeni stated that "the lower representation of women's enrollment in our entrepreneurship programmes stems from the general discrimination of women in the society at large. A woman's role in a developing society like ours is confined to the home; taking care of the children." Indeed, Sierra Leone is a patriarchal country where men are dominant figures and the role of women is very much limited, especially on strategic issues that affect society and the home. Women are largely seen as cogs in a big machine. Their primary role is to take care of the children; thus more and more women stay at home by default instead of enrolling in programmes that will help them to contribute to society. Further, even when a woman is educated, most are not given the opportunity to showcase their skills. The society views the man as the breadwinner who should go out, work and support the family financially. The society views the woman on the other hand, as someone who should manage the resources that the man brings home.

Additionally, the vast majority of the participants enrolling in these courses and/or modules do not have businesses of their own or work experience neither do they come from a business background. A respondent at the Institute of Business Studies and Administration (IBSA) stated that "most participants are students that have either

come through the West African Senior Secondary Certificate Examination (WASSCE) or via a diploma course from within or outside the institutions they studied". Another at the Northern Polytechnic highlighted that "the vast majority of our students don't have any business experience. They are basically starting from zero as far as their experience in business is concern." An interviewee at the Milton Margai College of Education and Technology (MMCT) stated that "most of the participants (especially those studying entrepreneurship as one of the modules in their respective diplomas/degree courses) are youths from non-business backgrounds. They are mostly between the ages of 20 to 35 years." Studies highlight the significance of a participant's prior business experience and education in shaping programme outcomes (Oosterbeek *et al*, 2010). Unger *et al.* (2011) posit that the business experience of participants and/or a lack of it have a potential of shaping the outcome of an entrepreneurship education programme. In other words, there is a strong possibility of a participant with a high educational level to start and complete the programme to someone who has a low educational level. This is because the rate of skills and knowledge uptake of a participant with a high literacy and numeracy skills will be faster than a participant with a low literacy and numeracy skills (Oosterbek *et al.,* 2010).

In terms of participants' intentions towards entrepreneurial activities like starting and running a new venture, studies show that participants' intentions differ based on their profiles and motivations (Sengupta and Debnath, 1994, Pittaway and Cope, 2007b). Ajzen (1991) theory of planned behavior states that an individual's intentions and relative desire towards an activity (e.g. entrepreneurship) is the most reliable predictors of actions (Renko and Myat, 2013).

According to an interviewee at the Institute of Public Administration and Management (IPAM) "the vast majority of participants are mandated to study the entrepreneurship module amongst other subjects." Another at the Institute of Public Administration and Management (IPAM) stated that "our entrepreneurship modules are compulsory for all our students who are enrolled in our undergraduate programmes." Thus, they may not necessarily have strong interests in entrepreneurship as a profession or a field of study at the start of the programme. However, some authors believe that participating in an entrepreneurship education programme can increase a participant's intentions to become an entrepreneur (Kurakto, 2005; Fayolle, 2008; Lorz *et al.*, 2013). For example, a study conducted by Wilson *et al.* (2007) concluded that there is a positive relationship between entrepreneurship education and entrepreneurial intentions. Also, a study conducted by Dickson and colleagues (2008) shows that there is a very strong and positive correlation with participation in an entrepreneurship education programme and intention to start a career in entrepreneurship.

Lastly, a participant's behaviour and/or decision to participate and continue to participate in an entrepreneurship programme can influence the outcomes of programmes. This will entail how, for instance a specific participant responds to a specific programme offering or how he or she perceives the overall value of the programme. A respondent at the Emibex College of Management and Finance highlighted that "there is a huge variation between the behaviour of our students undertaking the entrepreneurship module; whilst some naturally respond to say a classroom-based lecture, others are much more interested in going out to the field to

learn from experts." Another at the Institute of Business Administration and Technology stated that "from my observations, participants seem to positively respond to the delivery of EE programmes when they are certain that their innovative ideas will be financed." Another respondent at the Eastern Polytechnic observed that "most participants tend to be actively involved in the programme as a result of the perceived benefits of the programme. Some have friends and families who have successfully been through the   course and are now doing pretty well in their start-up." Botha (2006) averred that the perceived value of other participants can positively influence the decision of a participant to actively involve in an entrepreneurship education programme. Findings from a study conducted by Karlan and Valdivia (2011) show that the rates of programme dropouts were higher among people with more experience and education but were less likely to perceive the value of the programme.

5.2 Chapter Summary

This chapter has presented findings of the review of entrepreneurship education programmes in Sierra Leone using the World Bank conceptual Framework for entrepreneurship education and training programmes. Findings from 15 institutions included in this study show that the primary aim of the majority of the programmes is to raise a general awareness of entrepreneurship among participants and equip them with majorly hard skills, i.e. human resources management, planning, management, accounting etc. which are used to start and manage an enterprise. The findings also show that the programmes (with very few exceptions) still use the traditional lecture-based pedagogical approach and assessment (i.e. exams) to deliver the content of the programmes.

The investigation also shows that most of the students are over 18 years and the vast majority of them enter the program with no business background or experience. Also, most of the trainers in the programmes do not have any prior or existing business experience. In terms of programme context, the findings show that the key external factors affecting programmes are political, economic and social-cultural factors. There are robust evidences of program outcomes, with emphasis on entrepreneurial mindsets and entrepreneurial capabilities, but little or no attention given to entrepreneurial status and entrepreneurial performance.

Chapter 6

Quantitative Findings: Entrepreneurial Intentions

This chapter presents the quantitative findings of the assessment of the effects of entrepreneurship education on youths' entrepreneurial intentions. The main aim of distributing the Entrepreneurial Intention Questionnaire (EIQ) was to enable the researcher to answer part of the research question that deals with the effects of entrepreneurship education programmes on youths' entrepreneurial intentions. As mentioned in the methodology section, validated EI questionnaires were distributed before and after the delivery of an entrepreneurship module to three sets of cohorts.

Firstly, section 6.1 presents the demographic details of the students. Secondly, 6.2 present an analysis of the effects of entrepreneurship education on participants' attitude toward behaviour. Thirdly, section 6.3 presents an analysis of the effects of EE on subjective norms. Fourthly, section 6.4 shows an analysis of the effects of EE on perceived behavioural control. Fifthly, section 6.5 present analysis of the effect of EE on participants' entrepreneurial intention. Lastly, section 6.6 and 6.7 respectively present an analysis of EE on entrepreneurial skills and a conclusion to the chapter.

6.1 Demographic Details

To explore the effects of entrepreneurship education on youth's entrepreneurial intentions, two hundred (200) youths between the age of 19 and 29 years were used across three different programmes. From the total number of two hundred participants, 67% were male and 33% were female. This pattern of females being

lower than the males was also reflected in research conducted by Mwiya (2014) which shows that 44.3% of the respondents were female while 55.7% were male.

A brief analysis of the key constructs within the validated Entrepreneurship Intention Questionnaire (EIQ) now follows. It is, however, important to note that the analysis of data collected about the effects of entrepreneurship education for each construct are done in two parts: first, a description of the results for each construct is presented and second, for each construct, an overall observation backed by the relevant literature is presented.

6.2 Analysis of the Effects of Entrepreneurship Education on Participants' attitude toward the behaviour

The attitude of individuals toward a specific behaviour is a key component in the theory of planned behaviour. It has been defined as the extent to which a person holds a positive or negative belief about becoming an entrepreneur and/or engaging in entrepreneurial activities (Ajzen, 2002; Autio *et al.*, 2001). Research has shown that the more positive an individual evaluation of the outcome of engaging in entrepreneurial behaviour is, the more favourable his or her attitude will be toward that specific behavior, and invariably the stronger his or her intention to engage in an entrepreneurial activity would be (Krueger *et al.*, 2000; Autio *et al.*, 2001; Pruett *et al.*, 2009; Segal *et al.*, 2005; Van Gelderen and Jansen, 2008).

Graph 1 and Graph 2 below shows an analysis of the effects of entrepreneurial education on the participants' attitude toward the behaviour of becoming of an entrepreneur before and after the relevant entrepreneurship education programmes.

Five key statements (A02, A10, A12, A15, and A18) were presented and the respondent given the option to indicate their level of agreement for each question ranging from 1 (total disagreement) to 7 (total agreement).

On the first statement "A career as an entrepreneur is totally unattractive to me" (AO2), 27% of the respondents surveyed at the beginning of the programme disagreed with this statement, 17% remained neutral and 56% agreed with the statement. When asked the same question at the end of the programmes, 44% of the respondents disagreed with the statement, 9% remained neutral and 47% agreed with the statement. Thus, although the result at the end shows that after the intervention of the entrepreneurship education programme, the number of people who were attracted to entrepreneurship increased by 20% (showing a positive effect) the outcome still shows that a larger proportion of participants are not attracted to the concept of entrepreneurship. As noted in chapter two, the attitude of the average Sierra Leonean towards entrepreneurship is negative due to the nationally held belief that entrepreneurship is meant for people who either failed to secure the necessary grades to enrol on a university programme, or those who drop out from one. Culture plays a huge role in encouraging entrepreneurial activities in a country (Busenitz *et al.*, 2000; Mueller and Thomas, 2001; Liñán and Chen, 2009). "Culture motivates individuals in a society to engage in behaviors that may not be evident in other societies" (Liñán and Chen, 2009, p. 597). Thus, a culture that doesn't promote entrepreneurship will witness a very low engagement of its citizens in entrepreneurial activities. This explains why Sierra Leone is ranked 132 out of 137 countries in the world in terms of entrepreneurial activities (GEDI, 2018).

With regards to the second statement "If I had the opportunity and resources, I would love to start a business" (A10), 39% of the participants surveyed at the start of the programmes disagreed with the statements, 17% remained neutral and 44% agreed with the statements. However, the results at the end of the programme show that 45% of the participants disagree with the statement, 9% remained neutral and 46% agree with the statement. This depicts a mixed result; there is a 1% difference between those who will embark on their own ventures and those who cannot despite the opportunity and resources presented to them. Resources in the form of opportunities and money are regarded as one of the key challenges of entrepreneurs in a developing country like Sierra Leone. There are limited funding opportunities for even greater ideas, thereby stifling the development of an enterprising culture in the country. According to the World Bank (2013, p.115) development report "even potentially skilled entrepreneurs would have difficulty succeeding without access to basic infrastructure and financial resources. In their absence, managerial capacity alone may not be enough".

Further, results on the statement "Amongst various options, I would rather be anything but an entrepreneur" (A12) show that 28% of the respondents surveyed at the beginning of the entrepreneurship education intervention agreed with the statement, 18% remained neutral and 54% disagreed with the statements. Meanwhile, 44% of the respondents at the end of the programmes disagreed with the statement, 17% remained neutral and 39% agreed with the statement. This result shows a moderate positive effect on the intentions of participants towards entrepreneurship, though the proportion of participants that have little or no intention towards entrepreneurship still remains high. Again, the large proportion of

participants who still don't regard entrepreneurship as a suitable alternative to employment or and/or means to an end may be as result of the lack of the relevant resources and weak entrepreneurial culture within the country. Several scholars have highlighted the significant role that culture plays in explaining entrepreneurial behaviour across countries and regions (Davidsson 1995; Mueller and Thomas 2001; Hayton *et al.* 2002). Spilling (1991) views culture as the shared values, norms and ideas within a group of individuals. As a result, these values, norms and ideas could greatly influence the entrepreneurship level of a country by promoting or inhibiting positive attitudes towards entrepreneurial activities in an individual (Davidsson 1995). According to Lin˜a´n *et al.* (2011, p. 191) "informal institutional factors, therefore, would reflect the social dynamics of entrepreneurship, where the level of entrepreneurial activity within a community is an unintended consequence of many individual choices with respect to entrepreneurship. These choices, however, could be derived from social models that impact on the individual's entrepreneurial intention". It is important to note that the shared values, norms and ideas are primarily passed on through the interaction that takes place between people in both the formal and informal settings.

Additionally, a look at the statement "Being an entrepreneur would give me great satisfaction" (A15) reveals 49% of the participants at the beginning of the programme, disagreed with the statements, 14% remain neutral and 37% agreed with the statements. When compared to the results from participants surveyed at the end of the programmes, 37% disagreed with the statement, 19% remained neutral and 44% agreed with the statement. The result shows that despite a minor increase

in the number of participants that belief being an entrepreneur can give them a great satisfaction, a large number (37%) still think it will not.

Graph 1 and 2: Analysis of Attitude Toward Behaviour (Before and After)

Attitude Toward Behaviour (Before)

Attitude Toward Behaviour (After)
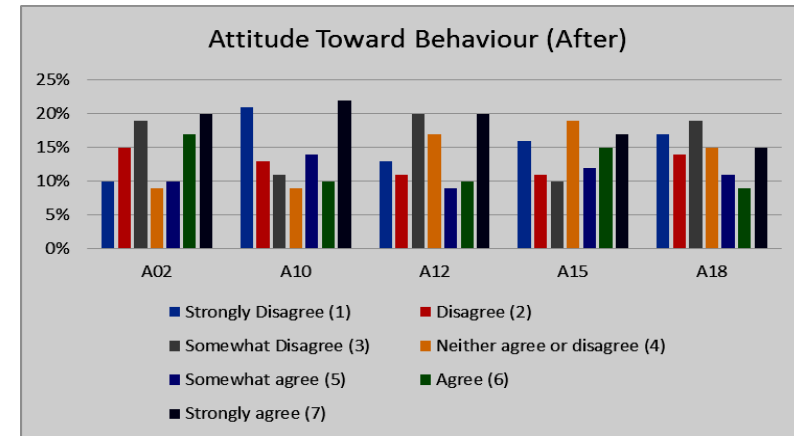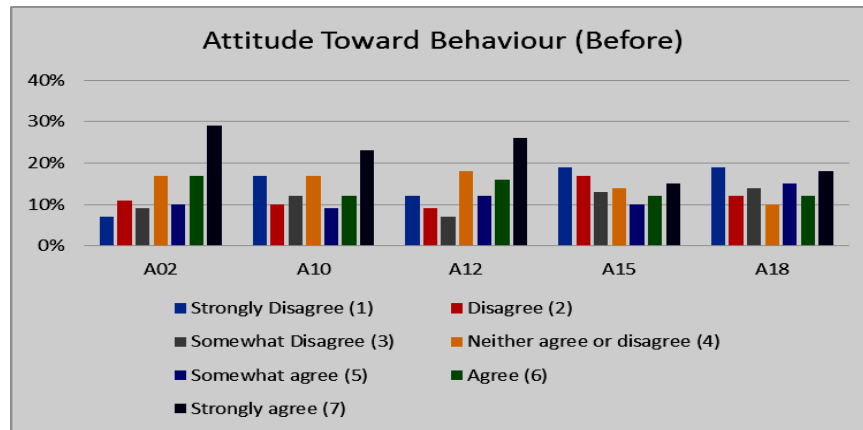
	A02	A10	A12	A15	A18
S D (1)	7%	17%	12%	19%	19%
D (2)	11%	10%	9%	17%	12%
S D (3)	9%	12%	7%	13%	14%
N (4)	17%	17%	18%	14%	10%
S A (5)	10%	9%	12%	10%	15%
A (6)	17%	12%	16%	12%	12%
SA (7)	29%	23%	26%	15%	18%

	A02	A10	A12	A15	A18
SD (1)	10%	21%	13%	16%	17%
D (2)	15%	13%	11%	11%	14%
SD(3)	19%	11%	20%	10%	19%
N (4)	9%	9%	17%	19%	15%
SA (5)	10%	14%	9%	12%	11%
A (6)	17%	10%	10%	15%	9%
SA(7)	20%	22%	20%	17%	15%

Similarly, the large proportion of participants who still believe that being an entrepreneur will not give them great satisfaction could be related to the national culture towards entrepreneurship. Further, key variables like the lack of adequate mentoring and networking service and the lack of entrepreneurship educators with the requisite knowledge could be responsible for the low interest in entrepreneurial activities. Wraparound services such as mentorship and networking plays a huge role in developing successful entrepreneurs (Krueger and Brazeal 1994; Kirby 2006; Volkmann *et al.* 2009). Also the lack of entrepreneurial educators with the requisite knowledge and experience could contribute to the dissatisfaction amongst participants towards entrepreneurial activities (Krueger, 1993; Pittaway and Cope, 2007).

Finally, on the statement "being an entrepreneur implies more advantages than disadvantages to me" (A18), 45% of the participants surveyed at the beginning of the programmes disagreed with it, 10% remained neutral and 45% agreed, whilst 50% of the respondents at the end of the programmes disagreed, 15% remain neutral and 35% agreed with the statement. The result shows a negative impact on the perception of participants toward entrepreneurship; more participants feel being an entrepreneur does not benefit them. This again can be attributed to the culture and other variables discussed above. In research conducted by Oosterbeek *et al.* (2010) it was concluded that the entrepreneurship programme did not have the intended effects on the students' intention to become entrepreneurs. Indeed, the result stands in sharp contrast to earlier positive results. According to Oosterbeek *et al.* (2010, p. 452):

"the results can possibly be related to the fact that students have obtained more realistic perspectives both on themselves as well as on what it takes to be an entrepreneur. A more realistic self-perception may have caused the (insignificant) decreases in the traits measures among students in the treatment group relative to the control group". They further noted that the negative result on the intention of participants to become entrepreneurs

> "can be due to a more realistic view of what is needed to start an own business as was suggested in interviews that were held with lecturers and coaches. More indirectly, participants might have lost their (over) optimism (as reflected in their lower self-perception) and this may have caused a lower interest in entrepreneurship. Alternatively, the program participants may simply have disliked the program. Various factors may have contributed to that: participation is compulsory, the time and effort input demanded from participants is high relative to the credit points they earn, and the number of students per group is large (ten on average) which may hamper active involvement and may have caused some participants to free-ride" (p. 452).

6.2.1 Overall Observation of the effects of Entrepreneurship Education on Attitude Toward Behaviour

In a nutshell, though the overall result suggests that entrepreneurship education does have a positive effect on an individual attitude toward the entrepreneurial behaviour, the result is, however, fragmented as shown in table 12.

Table 12: Results of the analyses of the Effects of Entrepreneurship Education on Participants' attitude toward the behaviour

Questions	Results
A career as an entrepreneur is totally unattractive to me (AO2)	Moderate positive effect
If I had the opportunity and resources, I would love to start a business (A10)	Mixed results
Amongst various options, I would rather be anything but an entrepreneur" (A12) moderate	Moderate positive effect
Being an entrepreneur would give me great satisfaction (A15)	Minor positive effect
"Being an entrepreneur implies more advantages than disadvantages to me (A18)	Negative effect

As shown in table 12 above, whilst there is a moderate effect on the participants' appraisal of entrepreneurship as a career (A02), there is a mixed result of their willingness to actually engage in entrepreneurial activities if given the opportunity and the resources (A10). Similarly, whilst there was a moderate effect on participant's views about choosing entrepreneurship among other options (A12), there is a minor effect on their views on the statement 'being an entrepreneur would give me great satisfaction' (A15). Lastly, more participants think that being an entrepreneur doesn't imply more advantages than disadvantages to them (A18). These results are concurrent with previous research which presents equivocal

outcomes on the impact of EE programmes on attitudes and behaviours (Dickson *et al.*, 2008; Thompson *et al.*, 2010; Fayolle, 2013; Martin, McNally, and Kay, 2013). Specifically, whilst Bakotic and Kruzic (2010), Pittaway *et al.* (2015) and Henry *et al.* (2004) reported a positive relationship, Mentoor and Friedrich (2007) reported a negative relationship whilst Souitaris *et al.* (2007) reported a not significant relationship.

6.3 Analysis of the Effects of Entrepreneurship Education on Subjective Norms

Subjective norm refers to the perceived influence of peers, family members or the community to engage in or not to engage in an entrepreneurial activity (Ajzen, 2002). Studies show that the more favourable an individual's reference group towards his or her intention to engage in an entrepreneurial activity is, the more likely he or she will actually engage in one (Kuehn, 2008; Maresch *et al.*, 2015).

The graphs below (3 and 4) present an analysis of participants' perceptions of how their peers or network will view them if they decide to become entrepreneurs. In order to explore this, three statements were made (A03, A08, and A11) and respondents were given the choice to indicate their level of agreement between total disagreement (1) and total agreement (2). A brief analysis for each of the statements now follows.

On the statement "My friends would approve of my decision to start a business" (AO3), 64% of the respondents surveyed at the beginning of the entrepreneurship education intervention disagreed with the statements, 13% were neutral and 23% were in agreement with the statement. Meanwhile, the results for the same

statement at the end of entrepreneurship education programmes show that 59% were in disagreement, 7% remained neutral and 34% were in agreement with the statements. This shows that the majority (59%) of the participants still strongly believe that their friends would not approve of their decisions to start a business.

Further, when presented with the statement "My immediate family would approve of my decision to start a business" (A08) 63% of the respondents at the beginning of the course disagreed with the statement, whereas 13% remain neutral and 24% were in agreement with the statement. Comparatively, at the end of the programmes, 59% were in disagreement, 12% remained neutral and 29% were in agreement with the statement. Similar to the question A08, the result shows a minor positive effect; most participants still think that their immediate family will not approve of their decision to start a business.

Graph 3 and 4: Analysis of Scale Subjective Norms (Before and After)

Subjective Norms (Before)

Subjective Norms (After)
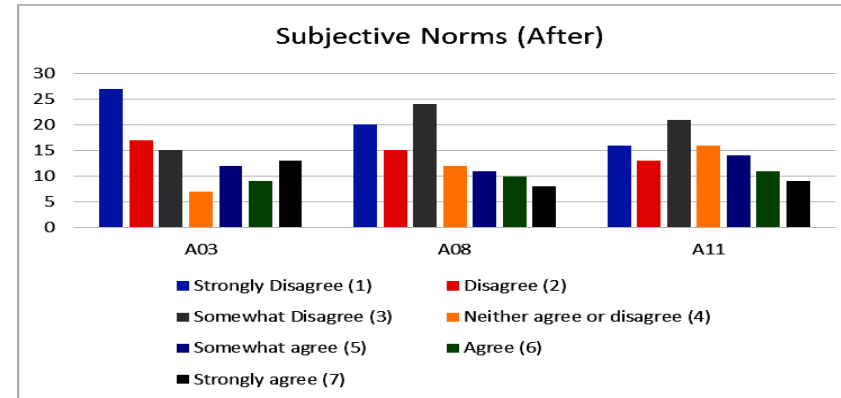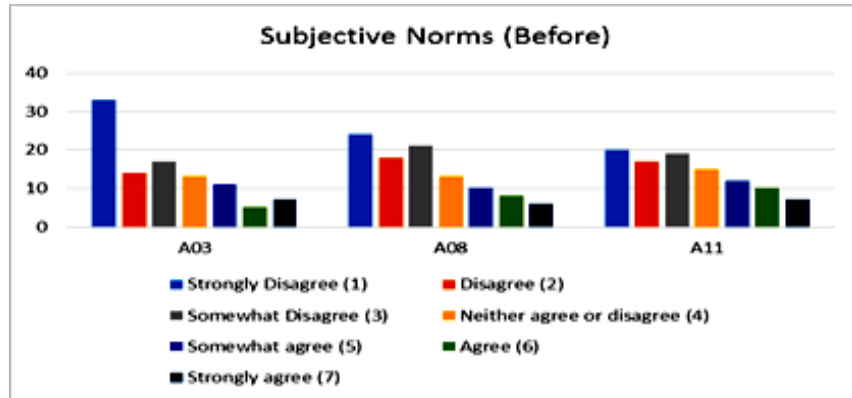
	A03	A08	A11
SD (1)	33	24	20
D (2)	14	18	17
SD (3)	17	21	19
N (4)	13	13	15
SA (5)	11	10	12
A (6)	5	8	10
SA (7)	7	6	7

	A03	A08	A11
SD (1)	27	20	16
D (2)	17	15	13
SD (3)	15	24	21
N (4)	7	12	16
S (5)	12	11	14
A (6)	9	10	11
SA (7)	13	8	9

Finally, on the statement "My colleagues would approve of my decision to start a business" (A11), 56% of the participants at the beginning of the entrepreneurship education programmes were in disagreement, 15% were neutral and 29% were in agreement with the statement. At the end of the programmes, 50% disagreed with the statement, 16% remained neutral and 34% were in agreement. The result shows that most participants (50%) still believe that their colleagues will not approve of their decision to start a business even after the intervention of the entrepreneurship education programme. This is consistent with results from questions relating to A03 and AO8.

Although, authors like Krueger *et al.* (2000) and Autio *et al.* (2001) found a a non signficiant impact of subjective norms on intention, several scholars have reported a positive influence of an individual's friends, colleagues and family members towards entrepreneurial activities (Krueger *et al.* 2000; Liñán and Chen, 2009, Liñán *et al.* 2015). In a study conducted by Kovereid (1996) investigating the choice between becoming an employee versus becoming an entrepreneur shows that the influence of friends, family and colleagues among other factors significantly influence the intention of individuals to engage in entrepreneurial activities. Similarly, studies carried out by Tkachev and Kolvereid (1999) show that subjective norm can better predict the intentions of individuals towards entrepreneurship. Put simply, the opinion of friends, members of the family and colleagues about whether an individual will choose to engage in a career as an entrepreneur, largely affects the formation of entrepreneurial intention (Ajzen, 2001; Solesvik et al.., 2012; Liñán and Chen, 2006).

In addition, as stated earlier culture plays a key role in influencing individual's behaviour towards entrepreneurship (Liñán and Chen, 2009). In chapter two, it was noted that Sierra Leone is a collectivist nation as shown in Hofstede's classifications of national culture. This means that people are likely to believe in the opinions of others whilst making life changing decisions. It has been also noted that the attitude of people in Sierra Leone towards entrepreneurship is negative and as such people are normally not in favour of their friends or family members to engage in any form of entrepreneurial activity especially one that has to do with setting up a business. Thus, this is why even after the intervention of the entrepreneurship education programme, we tend to see a high disapproval rate of the participants' friends towards entrepreneurship.

6.3.1 Overall Observation of the effects of Entrepreneurship Education on Subjective Norms

Ajzen (1991) notion of subjective norms is the perceived social pressures that individuals have to perform a specific behaviour or activity. It is the perception of how their network or peers will view their decision of becoming an entrepreneur. A brief summary of the results of the analysis is shown in table 13 below.

Table 13: Results of the analyses of the Effects of Entrepreneurship Education on Subjective Norms

Questions	Results
My friends would approve of my decision to start a business" (AO3)	Minor positive effect
My immediate family would approve of my decision to start a business (A08)	Minor positive effect
My colleagues would approve of my decision to start a business" (A11)	Minor positive effect

As shown in table 13 above, though the results of the analysis suggest that there is a minor positive effect of entrepreneurship education on subjective norms (Souitaris *et al.*, 2007), the result, however, shows that the majority of the participants' network would not approve their decision to engage in an entrepreneurial activity. For instance, the majority of the participants (64% and 59%, respectively) interviewed at the start and end of the entrepreneurship programs still believe that their friends will not approve of their decision to start a business (AO3). Similarly, 59% of the participants still think their immediate family would not approve of their decision to engage in an entrepreneurial activity. Also, 50% of the participants feel that their colleagues will affect their decision to start a business (A11). In the context of the entrepreneurship education literature, the overall conclusion is that there is a positive relationship between Entrepreneurship Education and subjective norm (Kolvereid, 1996; Krueger *et al.*, 2000; Lüthje and Franke, 2003; Kautonen *et al.*, 2015). Meanwhile, Nabi *et al.* (2017) reported that whilst most articles they reviewed

claimed a positive link between entrepreneurship education and subjective norms, there are, however, some that report a mixed or nonsignificant result. Maresch *et al.* (2015, p.4) reported that "subjective norms are negatively related to EI for science and engineering students, and significant for the whole group" of business students.

6.4 Analysis of the Effects of Entrepreneurship Education on Perceived Behavioural Control

Perceived behavioural control is defined as the extent to which one considers whether he or she will become a successful entrepreneur or not. Liñán and Chen (2009, p. 596) defines it as "the perception of the ease or difficulty of becoming an entrepreneur". This antecedent plays an important role in the theory of planned behaviour. For instance, Krueger and Dickson (1994) show us that entrepreneurial intention increases as a result of an increase in perceived behavioural control. It is important to note that perceived behavioural control is akin to the concept of self-efficacy as proposed by Bandura (1977, 1982). Self-efficacy is simply the ability of an individual to exercise control over what happens within and outside them.

In a quest to understand the participants' own belief in their individual abilities to perform tasks related to entrepreneurship, six (6) statements were put forward (A01, A05, A07, A14, A16, and A20). An analysis of the results as shown in Graph 5 and 6 now follows.

On the first statement "starting a firm and keeping it viable would be easy for me" (A01), 73% of the participants surveyed at the start of the entrepreneurship education programmes were in disagreement with the statement, 11% were neutral

and 16% agreed with the statement. In comparison, 72% of the participants at the end of the programmes disagreed with the statement, 16% remained neutral and 12% agreed with the statement. The result shows a negative effect of the intervention of the entrepreneurship education programme on the participant's ability to start and keep a viable business. This, on one hand, suggests that the appropriate skills sets are not being taught within the entrepreneurship education programmes. On the other hand, it might also mean that the appropriate pedagogical methods are not being used to teach the competencies needed to keep and run a viable business. Additionally, when presented with the statement "I believe I would be completely unable to start a business" (A05) 19% of the respondents at the start of the course were in disagreement with the statement, 12% were neutral and 69% were in agreement. Comparatively, at the end of the programmes, 16% felt they were able to start a business, 17% remain neutral and 67% believe they will be unable to start a business. The result shows a minor positive effect on participants' perception of the ability to start a business. However, 67% of the participants are still unable to start their business. Again, this could be due to the lack of the appropriate skill sets being taught. In a study conducted by Oosterbeek *et al.* (2010, p.452) on the impact of a leading entrepreneurship programme on college students it was noted that "changes in self-perception might have caused the slight decreases in the entrepreneurial skill levels of program participants relative to non-participants as these are of the same order of magnitude as the changes in traits scores". They further noted that "the fact that these changes in self-perception are reflected in lower skill levels and are apparently not (at least) compensated by higher actual levels of these skills is worrisome and indicative of the ineffectiveness of the program at the school of our study (p. 452).

Further, when asked to comment on the statement "I am able to control the creative process of a new business" (A07) 65% think they will be unable to control the creative process of a new business, 15% were neutral about the statement and 20% were in support of the statement. In comparison, the results at the end of the programmes in the same statement shows that 54% of the participants surveyed disagreed with the statement, 26% remained neutral and 20% believe that they will be able to control the creative process of a new business. The result shows that there is no effect of an EE intervention on the participants' ability to control the creation of a new business; the vast majority (54%) still think that they cannot control the creative aspect of a new business, whilst the percentage of those that believe they can remains the same at the beginning and end of the programme (20%). The result suggests that the participants do not possess the requisite skills needed to control the creative process of a new business. Several studies have suggested a participation in an entrepreneurship education programme will lead to an increase in entrepreneurial skills and/or self efficacy (Krueger and Brazeal, 1994; Davidsson, 1995; Henry *et al.,* 2013; Fayolle and Gailly 2015; Nabi *et al.,* 2017). A study conducted by Fayolle and Gailly (2004), however, found that there is not very significant impact of entrepreneurship education on the perceived behavioural control. The result particularly highlighted the fact that though the participants confidence increases at the end of the entrepreneurship programme, they however, ended up realising that starting and managing the creative process was more difficult than they had anticipated.

On the statement "If I tried to start a business, I would have a high chance of being successful" (A14) 64% of the respondents surveyed at the start of the intervention believe that they will have less chance of being successful if they were to start a business, while 13% remained neutral and 23% believe they will have a high chance of being successful if they tried to start a business. On the other hand, 64% of the participants surveyed at the end of the programmes disagreed with the statement, 17% remained neutral and 19% were in agreement with the statement. The result shows a negative effect on the participants' ability to succeed in any business; only 19% believe they can be successful in a business venture whilst 64% still think they cannot. Success in business is hugely hinged on the ability of the individual entrepreneur. Thus, the more competent an individual is, the more he or she is likely to succeed in a business.

Additionally, on the statement of whether "It would be very difficult for me to develop a business idea" (A16), 27% of the participants surveyed at the start of the entrepreneurship education programmes believe that it will not be difficult for them to develop a business idea, 19% remain neutral and 54% believe it will be very difficult for them to develop a business idea. In comparison, 20% disagreed with the statement, 27% were neutral about the statement but 53% think it will be very difficult for them to develop a business idea. Though the result shows a 1% increase in the number of participants that will be able to develop a business idea at the end of the programme, the majority (53%) still think it will be very difficult for them to develop a business idea. The development of business ideas could be directly related to how competent an individual is.

Graph 5 and 6 Analysis of Perceived Behavioural Control (Before and After)

Perceived Behavioural Control (Before)

Perceived Behavioural Control (After)
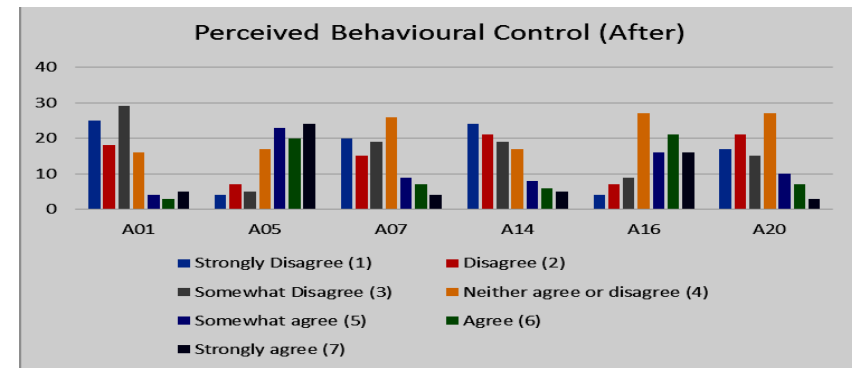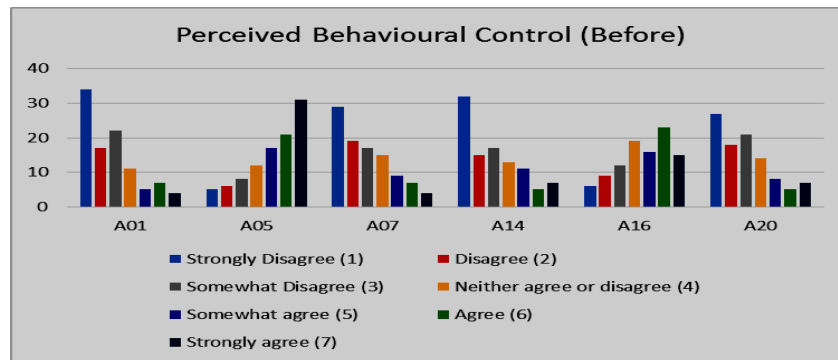
	A01	A05	A07	A14	A16	A20
SD (1)	34	5	29	32	6	27
D (2)	17	6	19	15	9	18
SD (3)	22	8	17	17	12	21
N (4)	11	12	15	13	19	14
Sa (5)	5	17	9	11	16	8
A (6)	7	21	7	5	23	5
SA (7)	4	31	4	7	15	7

	A01	A05	A07	A14	A16	A20
SD (1)	25	4	20	24	4	17
D (2)	18	7	15	21	7	21
SD (3)	29	5	19	19	9	15
N (4)	16	17	26	17	27	27
SA (5)	4	23	9	8	16	10
A (6)	3	20	7	6	21	7
SA (7)	5	24	4	5	16	3

Entrepreneurial competence enables an individual entrepreneur to be able to come up with innovative ideas to existing problems. Thus, the more competent you are as a person the more chances of you coming up with groundbreaking ideas. Authors such as Rauch *et al*. 2005, Unger *et al*. 2011 and Maresch *et al*. (2016) noted that the concept of entrepreneurship education is rooted in the premise that successful entrepreneurship is positively correlated to the possession of certain competencies and skills of the founders of a business. These skills and competencies can be shaped by the effective delivery of an appropriate entrepreneurship education programme (Kuratko, 2005). The effectiveness of EE programmes will depend on key variables such as the methods used to teach those programmes, lecturers, and the curriculum. Thus, a negative effect of any EE programme on the skills and competencies of an individual could be as a result of the lack of these variables.

Finally, on the statement on "I know all about the practical details needed to start a business" (A20), 66% of the participants that were surveyed at the start of the programmes averred that they don't know all about the practical details needed to start a business, whereas 14% remained neutral and only 20% think they know all about the practical details needed to start a business. However, results from the respondents at the end of the programmes shows that 53% agreed with the statement, 27% remained neutral and 20% agreed with the statement. The result shows neither a positive nor a negative effect of the entrepreneurship education programme with the practical knowledge of participants in starting a new business. 53% of participants at the end of the programme still don't know the practical details needed to start a business. Generally, participation in an entrepreneurship education programme enables the individual to understand the key aspects of running a

business and/or engaging in entrepreneurial activities. For example, Bygrave (2004) pointed out that a better understanding of the nature of starting a business will help the unemployed graduate to create businesses on their own thereby reducing the level of unemployment in a country. Wiklund and Shepherd (2003), Charney and Liecap (2000) all assert that there is a positive relationship between entrepreneurship education and business creation. Similarly, researchers (Solomon, *et al.*, 2002; Gibb, 2005; Packham *et al.,* 2010; Rae *et al.,* 2012) argue that entrepreneurship education helps in developing an entrepreneurial mindset, enterprising skills, a wide understanding and application of the concept of entrepreneurship and capabilities to start, sustain and grow. However, Oosterbeek *et al.* (2010) reported a negative relationship between entrepreneurship education and entrepreneurial skills. The negative result in this present study could either be as a result of the way in which the programme is being taught or the way in which it is designed.

6.4.1 Overall Observation of the effects of Entrepreneurship Education on Perceived Behavioural Control

An individual's perceived behavioural control refers to his or her own beliefs about his or her own capabilities to successfully engage in entrepreneurial activities. Cruz *et al.* (2010) defined it as the condition where people perceive that a specific behaviour is easy or difficult to do. Table 14 below presents a summary of the results from the analysis.

Table 14: Results of the analyses of the Effects of Entrepreneurship Education on Perceived Behavioural Control

Questions	Results
Starting a firm and keeping it viable would be easy for me (A01)	Negative effect
I believe I would be completely unable to start a business" (A05)	Minor positive effect
"I am able to control the creative process of a new business" (A07)	Neither positive nor negative effect
If I tried to start a business, I would have a high chance of being successful (A14)	Negative effect
It would be very difficult for me to develop a business idea" (A16)	Minor positive effect
I know all about the practical details needed to start a business (A20)	Neither positive nor negative effect

From the table above, it can be seen that there is a mixed result of the effect of an entrepreneurship education programme on perceived behavioural control. For instance, the majority (72%) of the participants surveyed believed starting a business firm and keeping it viable would be difficult for them (AO1). Similarly, though there was a minor positive effect on participants' ability to start a business (A05), a good percentage (67%) of the participants still believe that they will be unable to start a new business. Also, there is neither a positive nor a negative effect on an entrepreneurship education programme on the ability of participants to control the creative process of a new business (A07). In fact a large proportion (54%) of the

population still thinks that they cannot be able to control the area time aspect of starting a new venture.

Similarly, the result shows that there is neither a positive nor a negative effect of an entrepreneurship education programme on the participants' ability to make a business successful; 64% of the respondents still believe that if they tried to start a business they would have a less chance of being successful at it (A14). On the other hand, there is a positive minor effect on participants' ability to develop a business idea. However, a large proportion (53%) of the participants still believes that it will be difficult for them to develop a business idea. Lastly, there is neither a positive nor a negative effect of an entrepreneurship education programme on the practical knowledge that is needed to start a business.

Meanwhile, the literature broadly reports a positive relationship between entrepreneurship education and perceived behavioural control (Nabi *et al.*, 2017). For instance authors (Harris *et al.* 2007; Rauch and Hulsink, 2015) reported a positive link between entrepreneurship education and perceived behavioural control. However, authors like Urbano (2008), Von Graevenitz *et al.* 2010 and Oosterbeek *et al.* (2010) reported a nonsignificant result. The mixed result reported in this study can be as a result of the lack of standardised and appropriate skill sets that are being taught across all entrepreneurship education programmes. Also, the methods used to teach the skills to equip participants to feel confident about starting and successfully running their own businesses may be inappropriate. Hence there is a need to develop standardised skill sets and pedagogical approaches across all entrepreneurship education programmes.

6.5 Analysis of the Effects of Entrepreneurship Education on Entrepreneurial Intentions

Entrepreneurial Intention is regarded as the best predictor of entrepreneurial behaviour (Fishbein and Ajzen, 1975; Ajzen, 2002). It has been defined as the "self-acknowledged conviction by a person that they intend to set up a new business venture and consciously plan to do so at some point in the future" (Thompson, 2009, p. 676). Entrepreneurial intention shows the effort that an individual should make to embark on an entrepreneurial activity or activities (Liñán and Chen, 2009). The key drivers of entrepreneurial intentions are perceived behavioural control, attitude toward the behaviour and subjective norms (Ajzen, 2002). Several scholars have concluded that there is a positive relationship between entrepreneurship education and entrepreneurial intentions (Kuratko, 2005; Gorman et al. 1997; Rauch and Hulsink, 2015).

In order to understand the intention of the participants towards entrepreneurial activities, six (6) key statements were put forward (A04, A06, A09, A13, A17, and A19). An analysis of the results shown in graph 7 and 8 below now follows.

With regards to the statement "I am ready to do anything to be an entrepreneur" (A04), 43% of the participants surveyed at the start of the EE programme indicated that they were not ready to do anything to become entrepreneurs, 26% remained neutral whilst 31% indicated they were ready to do anything to become entrepreneurs. At the end of the programme, however, 35% disagreed with the statement, 29% remained neutral and 36% agreed with the statements. The result thus shows that EE does have a positive effect on participants' willingness to

become entrepreneurs, though there is still a good proportion of participants (35%) that is not willing to engage in entrepreneurial activities. This positive result is in line with studies conducted by several authors such as Henry *et al.,* 2005 and Matley, 2005, who concluded that participation in an entrepreneurship education programme can inspire people to become an entrepreneur. However, the positive effect of EE on the readiness of participants to become an entrepreneur is minor. This may be as a result of the inappropriateness of the delivery methods, educators and/or the Wraparound services (for example mentors, finance) within the programme.

In addition, on the statement on "I will make every effort to start and run my own business" (A06), 41% of the respondents at the start of the programmes indicated they will not will not make every effort to start and run their own businesses whilst 28% remained neutral but 31% agreed with the statement. Comparatively, results from participants surveyed at the end of the programmes show that 31% disagreed with the statement, 40% remained neutral and 29% agreed with the statement. The result shows a negative effect of the entrepreneurship education programme on participants' tireless efforts in starting and running their own businesses. More so, there was a 1% decrease in the percentage of participants willing to make every effort to start their own businesses at the end of the programme. Again, this negative effect could have been as a result of the lack of the relevant skills needed to start their own ventures at the end of the programme. It could also be as a result of the participants' negative attitude toward entrepreneurial activities.

Furthermore, on the statement "I have serious doubts about ever starting my own business" (A09), 18% of the participants at the start of the programmes indicated

they don't have serious doubts about ever starting their own business, 16% were neutral about the statement and a staggering 66% agreed they have serious doubts about ever starting a business. Meanwhile, results from participants surveyed at the end of the programmes show that 26% disagreed with the statement, 24% remained neutral and 50% of the participants still had serious doubts about ever starting their own businesses. Though the result shows a minor positive effect, there are still 50% proportion of the participants who still have serious doubts about starting their own businesses. Again, this might possibly be because of lack of adequate knowledge and skills in the field of entrepreneurship. Researchers (Krueger *et al.*, 2000; Segal *et al.*, 2005; Van Gelderen and Jansen, 2008; Pruett *et al.* 2009) averred that the more positive an individual evaluation of the result of starting a venture is, the more favourable his or her attitude will be towards that behaviour. Thus, an unfavourable behaviour will lead to a little or no effort towards starting and running a business.

Also, the results from participants surveyed at the start of the programme on the statement "I am determined to create a business venture in the future" (A13) shows that 52% indicated they were not determined to create a business venture in the future, whereas 24% remained neutral and only 24% indicated that they were determined to create a business venture in the future. Meanwhile, results from the participants at the end of the EE programmes show that 38% disagreed with the statement, 33% remained neutral and 29% agreed with the statement. The result shows a minor positive effect on the determination of participants in creating a business venture in the future. Scholars, such as Fayolle *et al.,* (2006), Venkatachalam and Waqif, (2005) believe that some of the main objectives of entrepreneurship education programmes are to change the state of individual

intention toward entrepreneurship and to become entrepreneurial in nature, a process that will conversely lead to the creation of new businesses. However, the result shows that there is a large percentage of participants (38%) who are not willing to set up any venture in the future even after the intervention of the entrepreneurship education programme.

Additionally, results from participants at the beginning of the course for the statement "My professional goal is to be an entrepreneur" (A17) show that 63% don't regard entrepreneurship as their professional goal, whilst 17% remained neutral and 20% indicated they will have entrepreneurship as a professional goal. At the end of the course, 52% disagreed with the statement, 26% remained neutral and only 22% of participants indicated that their professional goal is to become entrepreneurs. Thus, there is an increment of 5% in the number of participants who want to make entrepreneurship their professional career, thus showing a minor positive effect. Meanwhile, more than half of the sample studied does not regard entrepreneurship as part of their professional goal. According to Krueger *et al*. (2000), the decision to become an entrepreneur may be considered as conscious and voluntary. This decision may be affected by an individual's intention toward entrepreneurial behaviours (Lee and Wong, 2004). Thus, the intention to consider entrepreneurship as a discipline is largely determined by intention. Intention on the other hand is not just determined by the key antecedents of the theory of planned behaviour, but by some other factors like the wants, habits, values, needs and beliefs of an individual (Bird, 1988; Lee and Wong, 2004).

Graph 7 and 8 Analysis of Entrepreneurial Intention (Before and After)

Entrepreneurial Intentions (Before)

Entrepreneurial Intentions (After)
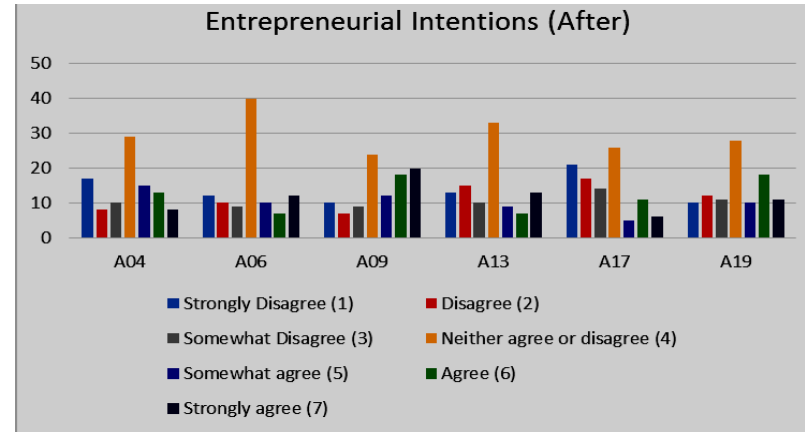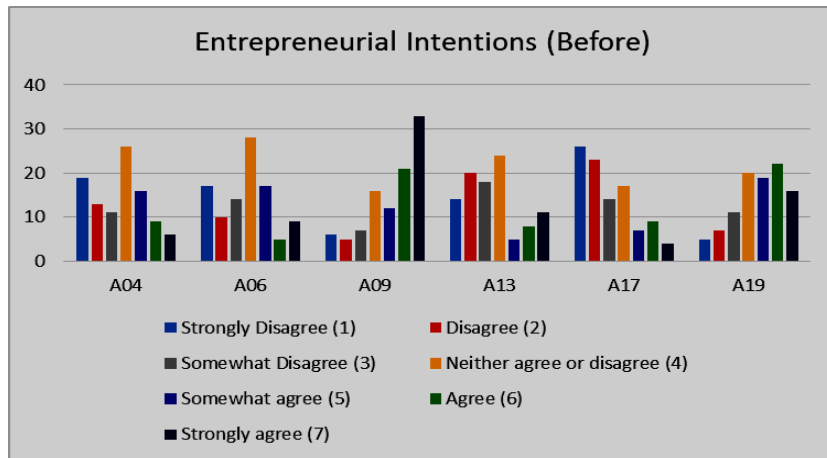
	A04	A06	A09	A13	A17	A19
SD (1)	19	17	6	14	26	5
D (2)	13	10	5	20	23	7
SD (3)	11	14	7	18	14	11
N (4)	26	28	16	24	17	20
Sa (5)	16	17	12	5	7	19
A (6)	9	5	21	8	9	22
SA (7)	6	9	33	11	4	16

	A04	A06	A09	A13	A17	A19.-
SD (1)	17	12	10	13	21	10
D (2)	8	10	7	15	17	12
SD (3)	10	9	9	10	14	11
N (4)	29	40	24	33	26	28
Sa (5)	15	10	12	9	5	10
A (6)	13	7	18	7	11	18
SA (7)	8	12	20	13	6	11

There are also other situational factors like task difficulty and time constraints that can deter people from choosing entrepreneurship as a career. This might explain the reason why more than half of the sample studied do not want to choose entrepreneurship as a career.

Finally, on the statement "I have a very low intention of ever starting a business" (A19) 23% of the respondents surveyed at the beginning of the programmes disagreed with the statement, 20% remained neutral and 57% believed they have very low intention of ever starting a business. In comparison, 33% of the participants at the end of the programmes disagreed with the statement, 28% remained neutral and 39% were in agreement with the statement. On the whole, though the results show a minor positive effect on the intention to engage in entrepreneurial activities, 39% of the participants still lack the intention towards entrepreneurship. As stated earlier, there is a growing body of literature that suggests that intentions play a significant role in the decision to start a business (Krueger *et al.* 2000; Peterman and Kennedy, 2003; Fayolle *et al.,* 2006; Liñán and Chen, 2009, Liñán *et al.* 2015).

However, other studies reported a combination of a mixed, negative and non-significant result. Specifically, Mohamad *et al.* (2014) and Cheng *et al.* (2009) reported that there is a negative relationship between entrepreneurship education and entrepreneurial intentions whereas Fayolle and Gailly (2015) and Packman *et al.* (2010) reported a mixed result. In separate studies conducted by Hytti *et al.* (2010), Beasley (2011) and Bae *et al.* (2014) it was found that there is no significant relationship between entrepreneurship education and entrepreneurial intentions.

6.5.1 Overall Observation of the effects of Entrepreneurship Education on Entrepreneurial Intentions

Entrepreneurial intention can be described as the desire of an individual to engage in entrepreneurial activities such as starting a firm or engaging in a commercially and/or non-commercially viable creative process (Ahmed *et al.*, 2010). It is the conscious and deliberate process that an individual goes through in order to engage in entrepreneurial activities. Broadly speaking, empirical studies have reported a strong relationship between entrepreneurship education and entrepreneurial intentions (Clark *et al.* 1984, Kolvereid and Moen, 1997, Lee *et al.* 2005, Souitaris *et al.* 2007, Bakotic and Kruzic, 2010). Meanwhile, the analysis, as shown above, presents a mixed result (see table 15 for a brief analysis of the results).

Table 15: Results of the Analyses of the Effects of Entrepreneurship Education on Entrepreneurial Intentions

Questions	Results
I am ready to do anything to be an entrepreneur (A04)	Minor positive effect
I will make every effort to start and run my own business" (A06)	Negative effect
I have **serious doubts** about ever starting my own business (AO9)	Minor positive effect
I am determined to create a business venture in the future (A13)	Minor positive effect
My professional goal is to be an entrepreneur (A17)	Minor positive effect

I have a very low intention of ever starting a business (A19)	Minor positive effect

In the table above, though there is a minor positive effect on the readiness of participants to become entrepreneurs, a good percentage (35%) of them still don't have any intention of becoming one (A04). Also, the result shows a negative effect of the entrepreneurship education programme on the efforts of participants in starting and running their own businesses. Approximately 31% of the students indicated they will not make every effort to start and run their own businesses and 40% still remained neutral. Further half of the population surveyed still has serious doubts about ever starting their own businesses, whilst 38% says they are not determined to create any new venture in the future. The result also shows that there is a minor positive effect of EE on the participants' intention to both make entrepreneurship as a career and start their own businesses.

This result is consistent with studies within the entrepreneurship education literature. For instance, prior studies on the effect of entrepreneurship education on entrepreneurial intentions have largely shown a positive link (Nabi *et al.*, 2017). For example, 75% of the articles that Nabi *et al.* (2017) reviewed report a positive link between entrepreneurship education and entrepreneurial intentions. Nonetheless, other studies report a mixed, negative and non-significant result. Specifically, Liñán (2004) and Martin *et al.* (2013) reported a positive relationship, whereas Mohamad *et al.* (2014) and Cheng *et al.* (2009) concluded that there is a negative relationship between entrepreneurship education and entrepreneurial intentions. On the other hand, Fayolle and Gailly (2015) and Packman *et al.* (2010) reported a mixed result

whilst Beasley (2011), Bae *et al*. (2014) and Hytti *et al.* (2010) findings show that there is not a significant relationship between entrepreneurship education and entrepreneurial intentions.

On the whole, this mixed result could be associated with the lack of appropriate skill sets being taught across the program. It can also be as a result of the inappropriate pedagogical methods used in delivering the content of the programme. Earlier findings in chapter 5 on the current state of entrepreneurship education programmes clearly show there are no standardise skill sets being delivered across all programmes and that most of those skills are not in line with what the market demands.

6.6 Analysis of the Effects of Entrepreneurship Education Entrepreneurial Skills

The final part of the relevant item in the questionnaire was targeted at assessing the entrepreneurial abilities/skills of each participant at the beginning and the end of the programmes. Morris *et al.* (2013) averred that entrepreneurial competencies are an important aspect of any venture creation. The skills an individual possess has a direct effect on his or her entrepreneurial intention (Chen *et al.*, 1998, Denoble *et al.* 1999). Liñán (2008) put forward that there is a strong link between personal skills and perceived behavioural control in particular. Thus, those individuals who feel they have a higher level of personal entrepreneurial skills are likely to engage in entrepreneurial activities. Liñán (2008, p.258) also argued that "a high self-perception regarding entrepreneurial skills would also be associated with more favourable attitudes and subjective norms."

Meanwhile, research on competencies are currently at an early stage (Morris *et al.*, 2013; Man *et al.,* 2002; Man and Lau, 2005; Ahmad *et al.,* 2010) and there is thus a need to fill this gap. In order to do so, participants were asked to rate themselves on six (6) different skills (D1-Recognition of opportunity, D2-Creativity, D3-Problem solving skills, D4-Leadership and communication skills, D5-Development of new products and services, D6-Networking skills, and making professional contacts) using a scale of 1 (no aptitude at all) to 7(very high aptitude). TAn analysis of the results presented in graph 9 and 10 now follows.

6.6.1 D1- Recognition of Opportunity

Spotting opportunities is one of the major competencies that have been recognised in the literature (Ahmad *et al.*, 2010, Mitton, 1986, Morris *et al.* 2013). According to Holcombe (2003, p. 25) "entrepreneurship occurs when an individual act to take advantage of a profit opportunity that presents itself in the economy." Put simply recognising an opportunity means taking advantage of a gap in the market. For example, an entrepreneur may notice that a specific product is sold in one market at a lower price and in another for a higher price. In this case, the entrepreneur will recognise the opportunity of the difference in price and act as the middleman. This activity created by the entrepreneur will benefit both the buyer and the seller and the economy as a whole. Entrepreneurial opportunities are normally derived from the knowledge an individual has about the market. According to the neo-classical theorists, everyone in the economy has a perfect knowledge about opportunities in the marketplace (Holcombe, 2003). However, Hayek, (1949) stated that some individuals may have a specific knowledge with regards to a specific opportunity within a specific time and place that is not available to others.

Meanwhile, the results from the participants at the start of the programmes are as follows: 34% very poor, 26% Poor, 17% Fair, 10% Good, 6%Very good, 4% Excellent and 3% Exceptional. Comparatively, results from respondents at the end of the course are highlighted thus: 19% Very Poor, 29% Poor, 20% Fair, 12% Good, 10% Very Good, 6% Excellent and 4% exceptional Good.

The result shows a negative effect of entrepreneurship education programmes on the participants' ability to recognise opportunities. For instance, 48% of the participants still have a poor rating on their ability to spot opportunities. This figure is significantly higher when compared to only 4% of the participants who believe that they are exceptionally good at spotting opportunities. There could be several reasons why the EE programmes covered in this study did not have the widely expected positive impact on the participants' ability to spot opportunities. One possible reason could be as a result of the fact that the pedagogical approach used to teach these programmes is not appropriate. As shown in chapter 5, most programmes are being taught using the traditional lecture approach which only seeks to give knowledge that may not effectively stimulate the mindsets of participants towards identifying and exploiting opportunities. Participants need to be exposed to different teaching methods (for example real life projects, apprenticeship opportunities, expert workshops) to help awaken their minds to the huge opportunities around them. Another reason could be the fact that Sierra Leoneans largely believe in the concept of luck; which is merely waiting for something to miraculously happen such as having manna falling from heaven. This type of mindset is largely derived from the national culture that is hugely based on the fact that wealth is as a result of mere luck rather than work and process. Whilst luck might play a part in the entrepreneurial journey, it is however, important to note that luck (if it exists at all) only favours the prepared mind. In other words, you cannot be lucky if you are not prepared. Opportunities will pass you by if you are not fully prepared for them. The failure to effectively recognise entrepreneurial activities could hamper the success of any entrepreneurial venture.

6.6.2 D2- Creativity

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Creativity has been regarded as an important catalyst of entrepreneurship and economic development (Shalley *et al.* 2004, van den Broeck *et al.* 2008; Oke *et al.*

6.6.2 D2- Creativity

Creativity has been regarded as an important catalyst of entrepreneurship and economic development (Shalley *et al.* 2004, van den Broeck *et al.* 2008; Oke *et al.* 2009). It is the foundation for business growth, innovation and economic growth (Bilton, 2007). Creativity is a process of acting upon a recognised opportunity in ways that can lead to a firm or economy having a competitive advantage over others. It has been defined by Amabile (1988) as the development of new products or ideas which are potentially useful to the users. These new products or ideas can be internally (within the firm) or externally (outside the firm) located (Fillis, 2014). Fillis (2014, p. 3) pointed out that "creativity involves a perceptual response to the environment which may induce a high or low frequency of creative endeavor." Similarly, Hunter *et al.* (2007) view the concept of creativity as something that emerges as a result of an interaction between the entrepreneur and a specific situation. The creative response from an individual could be high as a result of attending an entrepreneurship education programme.

Meanwhile results from participants at the start of the entrepreneurship education programmes with regards to their level of creativity shows the following ratings: 33% Very Poor, 39% Poor, 12% Fair, 7% Good, 4% Very Good, 3% Excellent and 2% exceptional. On the other hand, the results of participants at the end of the programmes show a rating of 28% Very Poor, 33% Poor, 20% Fair, 8% Good, 5% Very Good, 4% Excellent and 2% Exceptional. On the whole, there is some positive effect on the entrepreneurship education intervention on the creative ability of participants. For example, there is an increment in the number of participants who are fairly good at creativity at the end of the programme (from 12% at the beginning

of the programme to 20% at the end of the programme). However, 61% of the population still lacks the ability to think creatively.

One of the reasons behind the huge percentage of participants who still lack the ability to be creative even after the intervention of the EE programme could also be likened to the teaching method that is predominantly used. Lecture based pedagogical approach is not an adequate method of teaching people to become creative. Creativity to a large extent is developed with the total involvement of participants in discussions and projects which traditional lectures do not encourage. Another reason could be as a result of the fact that most programme outcomes are not aimed at letting participants become creative geniuses. As shown in chapter 5, programmes are largely designed to create the awareness of entrepreneurship among participants through the dissemination of knowledge during lectures. Thus, participants are not challenged to engage their minds towards developing novel solutions to community and societal problems at large.

Graph 9 and 10 Analysis of Entrepreneurial Skills (Before and After)

Entrepreneurial Skills (Before)

Entrepreneurial Skills (After)
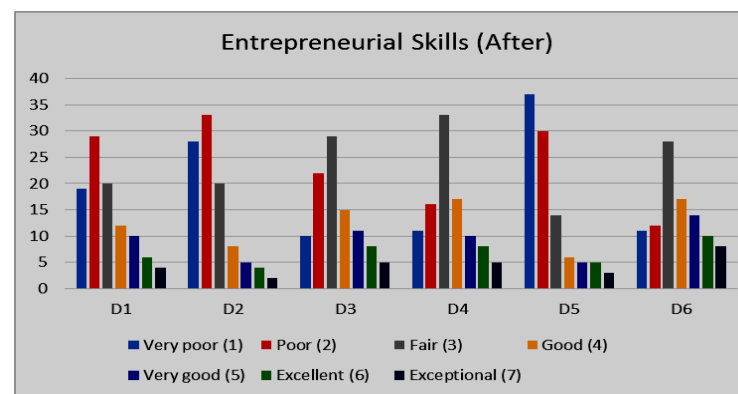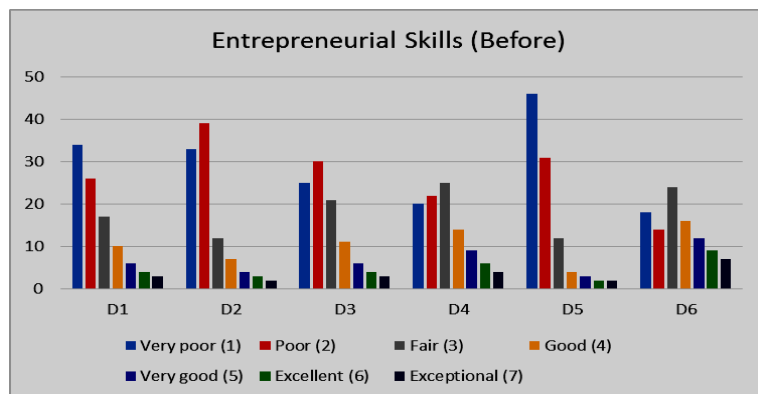
	D1	D2	D3	D4	D5	D6
VP (1)	34	33	25	20	46	18
P (2)	26	39	30	22	31	14
F (3)	17	12	21	25	12	24
G (4)	10	7	11	14	4	16
V (5)	6	4	6	9	3	12
E (6)	4	3	4	6	2	9
Ex (7)	3	2	3	4	2	7

	D1	D2	D3	D4	D5	D6
VP (1)	19	28	10	11	37	11
P (2)	29	33	22	16	30	12
F (3)	20	20	29	33	14	28
G (4)	12	8	15	17	6	17
V (5)	10	5	11	10	5	14
E (6)	6	4	8	8	5	10
Ex (7)	4	2	5	5	3	8

6.6.3 D3-Problem Solving Skills

Problem-solving skills are essential skills for prospective and current entrepreneurs (Dyer *et al.* 2011). They help in preparing participants to effectively work under uncertainty and complex situations (Gibb, 2002). Accordingly, entrepreneurship education is a tool being used to develop these skills for current and future participants (Baggen, 2017). Hsieh *et al.* (2016) argue that in identifying opportunities, individuals stumble across problems to solve. In order to solve these problems, entrepreneurs will need to go in search of relevant information and make the appropriate decisions (Hsieh *et al.* 2016, Baggen *et al.* 2015, and Shepherd *et al.* 2015).

According to Fischer *et al.* (2012), the specific set of skills that help individuals to systematically find information and make the relevant decisions in a complex world around them is referred to as Complex Problem Skills (CPS). Complex problem skills focus on activities that are described as non-routine, interactive and dynamic (Baggen *et al.*, 2017). Such activities require higher-level thinking skills that cover cognitive (e.g. fluid reasoning) and non-cognitive (e.g. self-management) processes (McGrew, 2009) which can be developed through an entrepreneurship education programme.

Meanwhile, the results of the ratings of participants at the start of the programmes for problem-solving skills are as follows: 25% Very Poor, 30% Poor, 21% Fair, 11% Good, 6% Very Good, 4% Excellent and 3% Exceptional. In comparison, ratings from participants at the end of the programmes are as follows: 10% Very Poor, 22% Poor, 29% Fair, 15% Good, 11% Very Good, 8% Excellent and 5% Exceptional.

Though the result shows an increase in the level of participants' fair rating of problem-solving skills, the number of participants who still have poor ratings of this skill remains high even after the intervention of the entrepreneurship education programme. Also, only a few participants rate themselves good, excellent and exceptional.

The lack of problem solving skills among participants of the EE programme in this study could be partly associated with the national culture. In Geert Hofstede's 1984 seminal work, the Sierra Leone score on uncertainty avoidance is 50; meaning it is difficult to classify. Uncertainty avoidance has been defined as "the extent to which the members of a culture feel threatened by ambiguous or unknown situations and have created beliefs and institutions that try to avoid these" (Hofstede, 2018, p.1). Broadly speaking, most Sierra Leoneans feel threatened by change. This culture has been cascaded to the very institutions that are responsible for policy making within the country. The fear of change prevents people from developing skill sets that will help them prevent current and future problems. The typical Sierra Leonean believes things will naturally solve themselves and therefore does not go the extra mile to try to solve them. Successful entrepreneurs on the other hand develop appropriate skill sets to take advantage of the problems they face on a daily basis. Entrepreneurs see problems as opportunities to innovate a new product or service which will invariably lead to the creation of personal wealth. To the entrepreneur, problems are a golden opportunity to exploit the unknown.

6.6.4 D4-Leadership and Communication Skills

Entrepreneurship and leadership are two of the most similar and vital concepts in business (Fernald *et al.* 2005). Scholars have integrated both concepts into a new paradigm called entrepreneurial leadership (Yang, 2008). The concept of entrepreneurial leadership has been described as a dynamic process that enables entrepreneurs to set the direction of the organisation (Harrison *et al.* 2017). Fernald *et al.* (2005) state that entrepreneurs should embrace the concept of leadership in entrepreneurship as it helps them to be competitive within the dynamic business environment. Meanwhile, whilst the entrepreneurial leadership skills largely remain broad and unstructured, Darling and Beebe (2007) put forward that communication is an essential skill for every entrepreneur leader. Harrison *et al.* (2017) also highlighted communication as one of the core skills of an entrepreneur leader. Leadership and communication capability enable entrepreneurs to cope with key challenges that are associated with the growth and success of a venture (Cogliser and Brigham, 2004). Similarly, Agbim *et al.* (2013) averred that verbal and non-verbal communication skills are essential for any entrepreneurial success.

On the ratings of leadership and communication skills, the results from the respondents at the beginning of the entrepreneurship education programmes are as follows: 20% Very Poor, 22% Poor, 25% Fair, 14% Good, 9% Very Good, 6% Excellent and 4% Exceptional. In contrast, the results of participants at the end of the programmes show that 11% were Very Poor, 16% Poor, 33% Fairly good, 17% Good, 10% Very good, 8% Excellent and 5% Exceptional. The results show that the overall effect of an entrepreneurship education programme is minor; there is a minor increase across the various rating scales. However, the overall effect of

entrepreneurship education on the participants' abilities in leadership and communication skills still remains poor.

The poor effect of the intervention of the EE programmes on the leadership and communication skills of the participants could be both a curriculum design and pedagogical issue. It is a curriculum design issue in the sense that programmes are designed to primarily create the general awareness of entrepreneurship rather than genuinely seeking to instil the core skills that participants will need to either start or run their own enterprises and/or successfully engage in entrepreneurial activities. Entrepreneurship is in practice still seen as a secondary option for job creation rather than a strategic means of creating the millions of jobs that the country needs. Also, as stated earlier, the traditional lecture based approach to developing skills in participants is redundant. Leadership and communication skills are developed by not only teaching the theoretical aspect of the programme, but by allowing participants to present for instance real life innovative projects in front of experts and get feedback from them. Leadership and communication plays a huge part in ensuring that people become successful entrepreneurs.

D5- Development of New Products and Services

Entrepreneurship education underlines the significance of capabilities such as the development of innovative products and services (Boyles, 2012). The development of new products and services are part of the innovative process that sets the entrepreneur apart from the rest. Baker *et al.* (2005, p. 497) argued that the decision to be innovative depends on "the portion of the value that the venture creates that the entrepreneur is able to capture for their own purposes." Research conducted by Bae *et al.* (2014) shows that entrepreneurship education plays a key role in the

participant's decision to engage in innovative activities such as the development of new products and services. However, in relation to the skill of developing new products and services, 46% of respondents at the beginning of the programmes rated themselves as Very Poor, 31% Poor, 12% Fair, 4% Good, 3% Very Good, 2% Excellent and only 2% regarded themselves as exceptional at it. Comparatively, 37% of the participants at the end of the EE programmes considered themselves to be Very Poor, 30% Poor, 14% Fair, 6% Good, 5% Very Good, 5% Excellent and 3% regard themselves to be exceptional at developing new products and services. In summary, though there was some increase across the board, the overall result shows there is a negative effect of the entrepreneurship education programmes on the abilities of participants to develop new products and services.

The negative result reported above could be as a result of two main issues; the lack of adequate trainers and funding. Trainers and funding opportunities form a significant part of implementing an EE programme. However, lack of effective trainers and funding opportunities are some of the key challenges facing entrepreneurs in Sierra Leone (Kingombe, 2012, Maina, 2013). As shown in chapter 5, most EE trainers lack the required practical experience that is needed to effectively teach participants on, for instance how to develop a new product or innovative existing ones. The vast majority of the trainers only have generic degrees in business management which do not enable them to effectively teach the core skills that are needed to become an entrepreneur. Further, there are very limited funding opportunities that are at the disposal of even the most innovative entrepreneurs. The number one challenge that stops people from engaging in entrepreneurial activities in Sierra Leone is the lack of cash in particular that allows

them to bring their innovative ideas to light. Though, there are lots of promises from the government about the pivotal role that entrepreneurship education plays in mitigating youth unemployment issues in the country, little has been done in the area of providing adequate funds (Oketch, 2009). Kingombe (2012) observed that in a country like Sierra Leone, 90% of its resources are being spent on social services rather than programmes such as EE programmes that have been proven to drive real economic growth. If EE programmes are not adequately funded, it will not encourage young people in particular to embark on the creation of new products and services as it will be a waste of their time. This could be a partial reason why most graduates will rather seek paid employment than embark on an entrepreneurial journey.

D6- Networking Skills and Making Professional Contacts

Skills relating to networking and making professional contacts have been found to be very essential in engaging in entrepreneurial activities (Witt and Ferris, 2003). Findings from Baron and Taron show that social skills help entrepreneurs to acquire the relevant resources for a new and established venture. Hoehn-Weiss *et al.* (2004, p.7) specifically state that "one arena where social competence is critically important is the early phase of venture creation". Social skills can help an entrepreneur gain social support from the strong ties with his or her professional contacts (Van Gelderen, 2012).

Meanwhile, the ratings for networking skills and making professional contacts from participants at the start of the entrepreneurship education programmes are as follows: 18% Very Poor, 14% Poor, 24% Fairly Good, 16% Good, 12% Very Good,

9% Excellent and 7% Exceptional. On the other hand, the respondents at the end of the EE interventions shows that 11% were Very Poor at networking skills and making professional contacts, 12% Poor, 28% Fairly Good, 17% Good, 14% Very Good, 10% Excellent and 8% Exceptionally good. The overall result shows that there is a minor positive effect of EE on the participants' abilities to network and make professional contacts. Meanwhile, the number of participants who are unable to effectively network and make professional contacts remain poor.

The lack of networking and professional skills found in participants even after the intervention of an EE programme could be as a result of the way in which the programme is designed. The overview of EE programmes presented in this study shows that most programmes are not designed to incorporate activities that will enhance the social and professional skills of the participants. There are, for instance, very limited activities around workshops, seminars and apprenticeships that enable programme participants to meet with industry experts, colleagues and investors which will invariably increase their social and professional skills. In addition, the design of the programmes does not create avenues for mentorship opportunities. Mentors play a significant part in creating successful entrepreneurs; they can for instance help create professional connections for their mentees and provide opportunities to socialise with the appropriate professionals.

6.6.5 Overall Observation of the effects of Entrepreneurship Education on Entrepreneurial Skills

Entrepreneurial skills refer to the capabilities of an individual in successfully engaging in entrepreneurial activities. Entrepreneurial skills, though not directly embedded in the Ajzen's Theory of Planned Behaviour, is closely related to the key

antecedents of Entrepreneurial intention in the framework especially perceived behavioural control. Meanwhile, from the analysis, it can be observed that there is generally a positive effect of entrepreneurship education on entrepreneurial skills. This is in line with research conducted by Galloway *et al*. (2005), Harris *et al.* (2007), Matlay (2008), Chang *et al*. (2014), Morris *et al.* (2013), all of which shows a direct relationship between entrepreneurship education and entrepreneurial skills. However, the effect is very minor and in some cases unclear; there are still a large percentage of students who lack the requisite skills within the Entrepreneurship Intention Questionnaire (EIQ). Specifically, the vast majority of the participants surveyed still lack the skills to develop new products and services, creativity and recognition of opportunity and a fairly good number of them have moderate leadership and communication, problem-solving and networking skills. This is in congruence with studies conducted by Oosterbeek *et al*. (2010), Lans *et al.* (2013) and Gondim and Mutti (2011) all of which reported a not significant result. This minor and/or no significant effect might be hugely linked to the lack of an appropriate standardise entrepreneurial competency being taught within the entrepreneurship education programmes and the relevant pedagogical approaches currently being used in teaching these competencies. A review of entrepreneurship education programmes in chapter 5 clearly shows that traditional methods like lectures and business plans are extensively being used to deliver and assess the outcomes of the entrepreneurship programmes. There are several studies on what actually constitutes entrepreneurial competencies and the relevant pedagogical approaches used to deliver them (Katz and Green, 2007; Malebana; 2012). However, there is no standardised set of entrepreneurial competencies currently in use (Morris *et al*. 2013). Worse still, most of those studies were conducted in the west using western

participants (Naude and Havenga, 2005; Welter, 2011; Gerba, 2012). Thus, there is a need to examine and develop the appropriate skill sets that are needed for particularly a developing country context.

6.7 Chapter Summary

This chapter has discussed the research results based on the questionnaires issued to graduates at the Institute of Public Administration and Management (IPAM) in order to answer part of research question 1 which deals with the effects of entrepreneurship education programmes on youths' entrepreneurial intentions. The entrepreneurship education program has been defined in the literature as "any pedagogical programme or process of education for entrepreneurial attitudes and skills, which involves developing certain personal qualities" (Fayolle *et al.,* 2006, p.702). The main aim of entrepreneurship education is to create or increase the intentions of participants towards entrepreneurial activities (Henry *et al.,* 2013; Fayolle and Gailly 2015). Entrepreneurial intentions, on the other hand, have been defined as the "self-acknowledged convictions by individuals that intend to set up new business ventures and consciously plan to do so at some point in the future" (Thompson, 2009, p.676).

Entrepreneurial intentions have been explored in this study using the Theory of Planned of Behaviour by Ajzen. Ajzen (1991) postulated that the antecedents of an individual intention to perform a specific behaviour are dependent on three key variables; subjective norms perceived behavioural control and attitude toward behaviour.

Meanwhile, the overall result from the analysis shows that there is a positive effect of an entrepreneurship education programme on the relevant variables within the TPB framework i.e. attitude toward behaviour, subjective norms and perceived behavioural control. This is consistent with studies conducted by Kurakto, (2005); Fayolle, (2008); Lorz *et al.*, 2013 and Wilson *et al.* (2007). However, the level of positive impact on all variables studied within the TPB framework appears to be very minor. In other words, the overall result shows that there is a minor effect of entrepreneurship education programmes on entrepreneurial intentions. A review of 39 impact studies conducted by Lorz *et al.* (2013) shows that 8 reported a mixed result, i.e. a combination of positive, negative and not significant results. Specifically, an ex-ante/ex-post study conducted by Souitaris *et al.* (2007) reported a positive and not significant result on the attitudes and perceptions of participants. Similarly, a study conducted by Radu and Loue (2008) shows a contingent result of the impact of EE on EI (see appendix 3 below).

Additionally, the EIQ questionnaire sought to assess the effects of entrepreneurship education on the skills of the participants. Similarly, though the result from the analysis generally shows a positive effect of entrepreneurship education on entrepreneurial skills, the overall effect of the programmes on the participants' entrepreneurial skills appears to be also very minor and/or insignificant. Several studies (Matlay, 2008; Petridou and Glaveli, 2008; Radu and Loue; 2008, Harris *et al.* 2007; Lee *et al.* (2005) etc.) all show a positive impact of entrepreneurship education on entrepreneurial skills. On the other hand, Galloway *et al.* (2005) show an unclear result of the impact of Entrepreneurship Education on entrepreneurship skills.

In his findings, Liñán (2008) stated that a high level of entrepreneurial skills could greatly help an individual's decision to engage in an entrepreneurial activity. Possessing entrepreneurial skills would be very useful in itself, as they could help in the effective establishment and running of a firm. More importantly, Liñán (2008) pointed out that the possession of entrepreneurial skills would lead to an increase in entrepreneurial intention (through its antecedents) which will, therefore, reinforce the possibility that the individual engages in entrepreneurial activities. In this regard, entrepreneurship education initiatives should generally try to develop the key skills needed to engage in entrepreneurial activities.

Additionally, studies have shown that the type of skills being taught and the pedagogies used are very vital in entrepreneurship education programmes (Matlay, 2008; Petridou and Glaveli, 2008). Results from the qualitative analysis of the status of entrepreneurship education programmes in Sierra Leone suggest that there are no standardised skills sets and pedagogies that are being used within the entrepreneurship education programmes across the various institutions. Also results from the Entrepreneurial Intention Questionnaire (EIQ) clearly show that the effects of entrepreneurship education on the skill sets within the EI questionnaire are minor. Particularly, the results show that there is an even minor effect of entrepreneurship education programmes on certain entrepreneurial skills e.g. the development of new products and services, problem-solving and creativity skills. As already noted, the minor or insignificant effects of entrepreneurship education programme on skills could be as a result of the lack of standardises and appropriate skill sets being used across programmes.

Though the western world has to come to terms with the need to have a standardised entrepreneurial competence framework that could be used by developers and tutors of entrepreneurship education programmes, developing nations are yet to develop one within their context. For this reason, it was appropriate to further examine the type of competencies needed within the context of Sierra Leone with the sole aim of developing a standardised entrepreneurial competence framework for entrepreneurship education programmes.

Chapter 7

Qualitative Findings: Entrepreneurial Competencies

7.0 Introduction

Based on the analysis of the Entrepreneurial Intention Questionnaire (EIQ), it was evident that the participants, on the whole, lacked the requisite skills needed to increase their intentions towards entrepreneurial activities. Also, a review of the entrepreneurship education programmes shows that there are currently no standardised entrepreneurial skill sets that are being taught within the respective programmes; each programme seeks to develop similar and in most cases different skills in their participants. In addition, the pedagogies being used to develop most of the skills in participants are largely theory-driven and may not be solely appropriate. This could, therefore, be responsible for the lack of requisite entrepreneurial skills and intentions amongst graduates; hence there is a need to develop a contextual framework of entrepreneurial competencies and the appropriate pedagogies needed to develop these competencies within participants of an entrepreneurship education programme.

This section will therefore present results of the focus group and individual interview data collected on entrepreneurial competencies with the sole purpose of developing contextualised sets of entrepreneurial competencies and related pedagogies.

The aim of the interviews was to find out which competencies are required for entrepreneurship education programmes within the context of Sierra Leone and the appropriate pedagogies that could be used to develop each competency.

As stated in the methodology, three (3) focus groups were conducted; made up of two (2) different sets of students and one (1) set of lecturers. In addition, questionnaires were electronically sent out to the practitioners of entrepreneurship and the additional five lecturers. The result of those interviews is discussed under the key themes and questions below.

7.1 Entrepreneurial Motivation

At the start of the interview process, participants were asked to indicate their respective intentions for engaging in entrepreneurial activities or choosing entrepreneurship as a subject in the case of the students interviewed. The vast majority of the students interviewed indicated that entrepreneurship is a compulsory programme for all undergraduate students doing business related courses at public university A. Thus, students may not willingly engage in entrepreneurial activities which may have a significant impact on the desired outcome. Bird (1988) averred that entrepreneurial intentions are the foundations for understanding the process of creating a new venture and/or engaging in entrepreneurial activities. Entrepreneurial intentions are the major predictor of a planned behaviour (Kolvereid, 1996; Liñán, 2004). It is the force that drives individuals to choose self-employment over traditional salary based employment (Gerba, 2012). Thus, the absence of it will contribute to a low level of entrepreneurial activities among citizens.

Meanwhile, the students also mentioned other vital reasons for engaging in an entrepreneurship education programme. Student A, for instance, stated that:

"*I applaud the initiative of embedding entrepreneurship as a component of our studies. This will enable me to be self-employed instead of depending on the government".* Student B similarly pointed out that "*the entrepreneurship*

module will help me to achieve my dream of owning and running a fashion business". Student H clearly highlighted that "*I choose to come to the 'public university A' mainly because of its root in business-related courses. I want to be able to run my own business and become a boss sometime in the future*".

This notion is shared with Student K who stated that "*Public University A will help fuel my ambition of becoming the richest woman in Sierra Leone by starting and growing a host of successful businesses*". The primary objective of EE is to create or increase the intentions of participants towards entrepreneurial activities, e.g. setting up an enterprise or becoming innovative in an existing organisation (Henry *et al.,* 2013; Fayolle and Gailly 2015; Nabi *et al.,* 2017). In a similar vein, scholars such as Fayolle *et al.,* (2006); Venkatachalam and Waqif, (2005) strongly assert that some of the key objectives of entrepreneurship education programmes are to change the state of individual behaviour and intention towards entrepreneurship and to become entrepreneurial in nature, a process that will invariably lead to the establishment of new enterprises as well as new job opportunities.

However, some other students shared the popularly held national belief in Sierra Leone that entrepreneurship is primarily for people who drop out of school. This is consistent with the literature presented in chapter two which pointed to the negative attitudes or national culture of Sierra Leoneans towards entrepreneurship. Student D specifically stated that:

"*Entrepreneurship is mostly for people who either have little/no educational background or who have simply dropped out of school*". Similarly, student L opined that that "*the profession of entrepreneurship perfectly suits those who*

do not have the academic credentials to enroll on a university course". Student M specifically made reference to the reality in the country by stating "*look at the majority of businesses in this country, both small and large and you will notice that the vast majority of its owners do not have any formal educational background*".

Culture plays a significant role in promoting or inhibiting entrepreneurial activities in a country. According to Stephan and Uhlaner, (2010), a culture that embraces entrepreneurship will help in increasing entrepreneurial activities, whereas a culture that does not will stifle any innovative drive or intention towards entrepreneurship. For instance, there are more entrepreneurs within the Asian region than the African region (World Bank, 2013).

On the other hand, when the question about "*what inspired you to become a lecturer of entrepreneurship*" was directed to the lecturers being interviewed the majority of them highlighted that they have noticed that those who engage in entrepreneurial activities tend to be much happier and richer in resources than those who are not. Lecturer A, for instance, averred that "*research has clearly shown that entrepreneurship is a key driver to any country's economic growth*". Similarly for Lecturer B:

   "*the reason for lecturing entrepreneurship is as a result of the fact that it will help to drastically reduce the high level of youth unemployment in the country*". Lecturer F pointed out that "*our youths need a different kind of knowledge that will empower them to be independent rather be dependent on state resources and jobs which are very limited. I have therefore chosen to*

teach entrepreneurship to youths so that I can play my part in empowering our youths most of which are currently unemployed". For lecturer C "*I was inspired to teach entrepreneurship by my late lecturer and mentor who was both an entrepreneur and academic. He did not only teach us the theoretical aspect of entrepreneurship, but actually related it to his real-life business experience.*"

Additionally, lecturer E mentioned that:

"*I teach entrepreneurship mainly because I have seen its resultant positive effects on my life in the small businesses I run. I, therefore, decided it would be wise to share my skills with our young people as they are the hardest hit in terms of future job opportunities*". Lecturer J mentioned that "*my decision to choose entrepreneurship as a profession was largely influenced by my family background. My dad had a business and he was taking me along to help with a certain aspect of its operations*".

Entrepreneurship education is indeed a passport to job creation and a life full of opportunities. Entrepreneurs tend to live a happier life as they are positioned to exploit resources in providing solutions to both their personal problems and the problems that society faces in general. Successful entrepreneurs tend to live more prosperous and happier lives than their counterparts. They are seen as solution providers rather than liabilities.

Similarly, when the same question was put forward to the practitioners of entrepreneurship, there was an overwhelming response that the reason why they are

engaged in entrepreneurship is that they believe it is the solution to the high rate of youth unemployment in Sierra Leone. Practitioner A stated:

> "*I choose this field because of my strong conviction that it will help empower youths to be self-employed rather than depending on the very limited jobs that are currently provided by the government and the private sector*". Similarly, practitioner B highlighted that "*I was driven by the government's effort of promoting entrepreneurial initiatives across the country for our young people*". For practitioner C "*entrepreneurship allows you to be self-reliant and it gives you the freedom to do what you what to do*". Practitioner C hinted "*I chose to become an entrepreneur because of the complete freedom one enjoys and the potential of making a fortune rather than just a mere living*". "*The profession of entrepreneurship makes you be self-sufficient among other numerous benefits*" mentioned practitioner D.

Lastly, practitioner E stated that "I primarily engage in entrepreneurial activities because I have *a Short Attention Span Disorder (SASD). I get bored quickly, and being an entrepreneur is one of the few occupations with promises a dynamic-enough work environment to keep me interested*".

Arguably, most people venture into entrepreneurship as a result of the freedom they get in terms of their time and resources. Entrepreneurs tend to determine how their monies and 24 hours are used. They hate being tied down in one place and told what to do. Becoming an entrepreneur allows people to work on what they love doing rather than being forced into doing something that you do not like. Entrepreneurship as a profession enables individuals to play critical roles in creating jobs in a society.

7.2 Definition of Entrepreneurial Competencies

The second question was about the participants' personal understanding of what the term entrepreneurial competencies is. Studies show that there is no standardised definition of entrepreneurial competencies; different authors and bodies have presented similar but different definitions (Hayton and McEvoy, 2006; Mitchelmore and Rowley, 2009; Sánchez, 2013). For instance, the European Commission (2016, p.9) defines entrepreneurial competencies within the EntreComp framework "as a set of knowledge, skills and attitudes" required to nurture the individuals' personal development which will in turn enable them to actively participate in society, to (re)enter the job market as an employee or as a self-employed person, and to start-up appropriate ventures. Similarly, Bird (1995) defines it as a tool that helps in turning existing ventures around and for helping to create new ventures. Man *et al.* (2002) describe it as a characteristic that includes the personal traits, skills, and knowledge of an individual that allows him/her to successfully perform a job role. Lans *et al.* (2010) also view entrepreneurial competencies as the ability of an individual to identify opportunities and pursue them and achieving innovation-related business targets.

Evidence from the various interviews conducted also showed that there is no uniform definition of entrepreneurial competencies. Below are some of the definitions derived from the interviews:

> "*Personally, I think entrepreneur competencies are the skills required to launch, grow and sustain an entrepreneurial initiative, mostly business venture.*" Practitioner A. "*Entrepreneurial competencies are about acquiring the skills necessary to be able to start and effectively run an enterprise. In some cases, those skills can be necessary to secure a job and be effective at*

it" Practitioner C. "*It can be referred to as the relevant attitudes, knowledge and skills that an individual is expected to have in order to be able to start, grow and run a venture*" Lecturer D. "*To me, entrepreneurial competence is simply the knowledge and skills one has to have in order to be effective either on your job or business*" Student H.

Practitioner F stated:

"*Entrepreneurial competencies simply have to do with some of the core qualities that an entrepreneur should possess. There are two essential qualities that ALL entrepreneurs must have: Risk-taking ability (or risk-tolerance) and Initiative. There are many other desirable qualities (e.g., innovation, communication skills, management skills, creativity, positive attitude, IQ, EQ), but a deficit in any of these desirable qualities can be successfully overcome. A deficit in the first two qualities cannot be overcome for a person to become a successful entrepreneur*".

Firstly, the different opinions of the participants on what entrepreneurial competencies are in this study are consistent with findings in the literature. Secondly, though there are slight differences in the definitions, the common theme that keeps occurring is that entrepreneurial competencies are about the acquisition of skills, knowledge, and behaviour which an individual can use to establish a venture and grow it or find a job. This is in line with the UK and US notion of competence; in the former competence is seen as the necessary skills that a specific individual needs to acquire or show in a given job, whereas in the latter competence is seen as the underlying characteristic or behaviour of an individual that leads to a superior

performance in a given job or venture (Cheng and Dainty, 2003; Mitchelmore and Rowley, 2009). It is also very much in line with the definition of entrepreneurial competencies adopted in this study, which is the appropriate knowledge, skills and attitude needed to either start a business or be enterprising; enterprising meaning the formation and application of ideas in business as well as professional settings.

7.3 Key Entrepreneurial Competencies

Participants were asked to make reference to the skill sets in the EntreComp framework, highlight and justify the ones they think should be developed or are looking for in prospective entrepreneurs within the context of Sierra Leone. Several studies have been conducted on what actually constitutes entrepreneurial competencies (Katz and Green, 2007; Malebana; 2012). Scholars such as Izquierdo and Buyens (2008) and Onstenk (2003) identified communication, networking, and the ability to effectively identify and evaluate opportunities as the most crucial competence of an entrepreneur. Other authors (Man *et al.*, 2002; Man and Lau, 2005; Ahmad *et al.*, 2010) identified several competencies including opportunity competencies, strategic competencies, organising competencies, analytical competencies, and related competencies. Mitton (1986) identified nine different competencies that both managers and entrepreneurs alike need to possess; the ability to see the bigger picture (vision), spotting opportunities, needing tight control, total commitment to their venture(s), possessing special knowledge, a good view of what is right, embracing uncertainty, embracing the competency of others around them and utilising their networks. In addition, the ability to effectively communicate is one of the most vital competencies that have been cited across different kinds of literature (Young, 1993).

The European Commission (2016) highlighted fifteen (15) core competencies that the citizens of the European Union are expected to learn in any entrepreneurship initiative/programmes: spotting opportunities, creativity, vision, valuing ideas, ethical and sustaining thinking, self-awareness and self-efficacy, motivation and perseverance, mobilising resources, financial and economic literacy, mobilising others, taking initiative, planning and management, coping with uncertainty, ambiguity and risk and learning through experience.

The evidence of the various interviews which were conducted around the competencies highlighted by the European Union within the EntreComp framework is consistent with some of the competencies in the framework itself and general findings within the literature. For instance student, A pointed out that:

"*to me setting a vision, spotting opportunities, teamwork, creativity, mobilising resources, self-awareness, and management skills are very essential for would-be entrepreneurs. This is because creativity helps you to spot opportunities, mobilise resources and effectively manage your business. Being self-aware on the other hand helps you to leverage your strengths and work on your weaknesses*". For student C "*to become an entrepreneur, one has to be able to set him or herself a vision, be creative, spot opportunities, mobile resources, develop the confidence to take action, make mistakes and learn from your experience*". Student H is of the opinion that "*self-awareness, setting a clear vision, learning from experience, working with others, gaining financial freedom and literacy and having a never giving up mentality is very essential for any effective entrepreneur*".

Practitioner D stated that:

"*They all are extremely important. However, I will prioritize five critical competencies needed to successfully engage in an entrepreneurship as follows: "1. Vision – We always start with our Why in life. The risk of doing things is a most powerful force on it in any human endeavour. 2. Spotting opportunity – Entering the space of Entrepreneurship in a sustainable way requires us to be able to spot opportunities that make social and economic sense. I can start nothing in a sustainable version for which there exists no opportunity. 3. Taking the initiative – Nothing can happen without acting. Taking action is the beginning of all great ventures. 4. Mobilizing resources – We can only be successful in Entrepreneurship if we are able to mobilize both human, financial and other resources required or necessary for the venture. 5. Dealing with ambiguity, uncertainty, and risk – The appetite and ability to deal with ambiguity, uncertainty and risk is the most significant reason why many aspiring entrepreneurs never launched. Thus, it is key for an entrepreneur to be able to take the risk. Risk averseness leads to inaction".* Similarly, lecturer A pointed out that *"to succeed as an entrepreneur within the context of Sierra Leone one has to develop skills on risk-taking, vision setting, financial literacy, management, and self-efficacy and of course mobilizing both financial and human resources".* For lecturer D "*having a range of skills in motivation and perseverance, risk-taking, management, mobilising and working with others, and spotting opportunities will give you an edge over other competitors*".

Additionally, practitioner B observed that:

"*although all of the skills are very vital for current and would be entrepreneurs, I strongly think that given our cultural dynamics as a country, the key skill sets that every entrepreneur should possess are risk-taking, planning and management, working with others, learning through experience, self-awareness and self-efficacy, teamwork, motivation and perseverance, mobilizing resources, financial and economic literary, spotting opportunities and creativity*".

Futhermore, practitioner E highlighted clearly stated that:

"*in my own view, having a clear vision about what you want to be backed with the ability to be creative, spot opportunities, take appropriate risks and mobilising the necessary financial and human resources are essential skills that our local entrepreneurs should possess*". This is similar to the view of lecturer I who categorically stated that "*the ability to spot opportunities, setting a clear vision, become aware of your strengths and weaknesses, mobilising resources and ensuring that you never quite is vital for any entrepreneurial success*". Student M also mentioned that "*for young entrepreneurs it will be good to develop skills like management, financial and economic literacy, spotting and acting on opportunities, creativity and self-efficacy*".

Similarly, Lecturer, G commented that:

"*I am of the strong opinion that our programmes should particular seek to first ensure that our youths are aware of their strengths and weaknesses and be confident in themselves. This should be followed by the development of key*

skills like vision, teamwork, opportunity spotting, perseverance, risking taking, financial management and the ability to create things".

In the words of student N "*one of the reasons why most students don't engage in entrepreneurial activities is simply because of the lack requisite skills like self-awareness, self-efficacy, working with others, management and how to effectively mobilise resources. Also, most people are afraid of taking risks for fear of failure*". Whilst Lecturer C put forward that: "*in a context like Sierra Leone I think the very first entrepreneurial skills that should be taught within our curriculum should be how to mobilise financial resources in particular and for this much time should be spent to teach financial and economic literacy skills, This is so because when you ask most of our young youths today to start a business around what they are passionate about the very first complain you will hear is that the money needed to start and run a venture is scarcely available.*" He continued to say "*as soon they get a grasp of the techniques of raising and managing start-up funds we can then go on to develop skills like vision, risk taking, spotting opportunities, motivation and perseverance and encourage them to learn from experience*".

Again the above findings clearly shows that there are fragmented as well as similar entreprenruial competencies that are needed to be taught in an entrepreneurship education programme.

Furthermore, over 90% of the participants interviewed are of the opinion that some of the skills within the EntreComp framework need to be either combined or relabel as they are actually very much related e.g. mobilising resources should be in the same

category with mobilising others, working with others should be relabelled as teamwork. Practitioner A is of the opinion that:

"*the word resources actually cover both human and non-human resources*". Similarly, Lecturer C noted that "*the word resource is actually a generic term for both financial and human resources, all of which are needed to effectively start and run a business*". Also, the respondents overwhelmingly agreed that skills like "taking the initiative" and risk-taking should be combined. "*This is because, looking at the descriptors undertaking the initiatives actually points towards the skill of risk-taking*" Practitioner B. Similarly, Educator A pointed out that "*taking the initiative is a part and parcel of the risk-taking process and thus should be embedded*".

Further, over 95% of the participants do not think uncertainty and ambiguity is a skill that is relevant within the context of Sierra Leone. This is simply because Sierra Leoneans do not seem to feel threatened by uncertainty or unknown situations. In his 1984 seminal work, Geert Hofstede classified countries into six cultural dimensions one of which is uncertainty avoidance. He defined uncertainty avoidance as "the extent to which the members of a culture feel threatened by ambiguous or unknown situations and have created beliefs and institutions that try to avoid these" (Hofstede, 2018, p.1). Hofstede rated countries on uncertainty avoidance using a scale between 1 (lowest) to 100 (highest). On the recent rating on uncertainty avoidance, Sierra Leone scores about 50. Hofstede noted the implication for any country that scores 50 on any of the dimensions, is that such a country is difficult to classify with respect to that dimension (Siu and Lo, 2013).

Additionally, the majority of the participants were of the opinion that the competency of planning and management should be recorded as management as planning is a subset of management. Specifically, Practitioner A noted that:

"In managing people and resources we are actually planning for those resources". In a similar vein, Lecturer B stated that

> "*Management in the words of Henri Fayol is the art of planning, organising, co-ordinating, commanding and controlling the resources of an entity. So planning is a core component of management and should therefore not be seen as two separate concepts*".

Also, a competence such as ethical and sustainable thinking was unanimously disregarded as participants think it is not a key competence for becoming a successful entrepreneur within the context of Sierra Leone. Lecturer G for instance hinted that: "although globally ethics play a vital role in building and sustaining a business, the culture of Sierra Leoneans is to make profit at all costs". Practitioner E commented that "ethical principles in business within the context of Sierra Leone is not that important within our context given the fact that a significant proportion of Sierra Leoneans go into a business with the aim of doubling their bottom-line through inflated prices". Practitioner B specifically highlighted that:

> "*the culture of Sierra Leoneans of making profits at all costs is a major reason why we have witnessed a rise in fake and/or less durable Chinese products flooding the market. We simply do not take ethics in business seriously and hence it will be difficult to successfully teach that in any entrepreneurship education programme*".

7.4 Overall Observation of Entrepreneurial Competencies needed in Sierra Leone

Out of the fifteen (15) core competencies within the EntreComp framework (see figure 9 above) evidence from the analysis above shows that the following eleven (11) competencies are relevant for entrepreneurs in Sierra Leone: a) vision; b) spotting opportunities; c) creativity; d) risk-taking; e) mobilising resources f) learning from experience; g) self-awareness and self-efficacy; h) motivation and perseverance, i) management; j) financial and economic literacy and k) teamwork/working with others. Thus, competencies such as ethical and sustainable thinking, planning and management, mobilising others, valuing ideas, coping with ambiguity and risk have either be excluded or merged. For instance there was a general conscious amongst participants that the ethical and sustainable thinking competencies embedded within the EntreComp framework is not relevant within the context of Sierra Leone as most entrepreneurs in Sierra Leone do not regard ethics as a fundamental aspect of becoming a successful entrepreneur. In this vein, a revised competency framework based on the EntreComp framework is shown in table 16.

These unique competencies can help to design the learning outcomes of an entrepreneurship education programmes in Sierra Leone and also help inform policymakers on the appropriateness of developing the required entrepreneurial competencies. It should be noted there are no precise skill sets in the literature that exactly match this skill set. This shows the complex nature of an entrepreneurial action and as a result, many scholars have been calling for the need to have a

standardise set of entrepreneurial competencies of entrepreneurship programs (Cope 2003; Higgins and Elliot, 2011; Morris *et al.;* 2013).

Meanwhile, scholars have put forward certain skill sets that are similar to the above skill sets. For example, Mitton (1986) highlighted some clusters of competencies which are relevant for entrepreneurs, i.e. seeing the bigger picture, networking, risk-taking and seeing the bigger picture. Izquierdo and Buyens (2008) and Onstenk (2003) identified networking, ability to identify and evaluate opportunities as vital competencies for entrepreneurs. Others (Man *et al.,* 2002; Man and Lau, 2005; Ahmad *et al.,* 2010) mentioned opportunity spotting, learning competencies, personal strength competencies, organising competencies and relationship competencies as part of the key entrepreneurial competencies to develop within individuals.

Among the three sets of competencies that Wright (2011) puts forward resource mobilisation and spotting opportunities were among the vital ones an entrepreneur needs to possess. Similarly, among the 13 set of competencies that Morris *et al.* (2013) highlighted, opportunity recognition and assessment, resource leveraging, resilience, self-efficacy, risk, creativity, self-efficacy and building and using networks. Entrepreneurship education "is concerned with the inculcation of a range of skills and attributes, including the ability to think creatively, to work in teams, to manage risk and handle uncertainty" (OECD, 2009, p. 5).

Table 16: Entrepreneurial Competencies needed in Sierra Leone

Areas	Competences	Definition	Key Descriptors
1. Ideas and opportunities	**1.1 Spotting opportunities**	Ability to identify and evaluate gaps in the market that no one has been able to see (Mitton, 1989; Casson and Wadeson, 2007)	• Identify and evaluate key challenges facing the market • Identify and take advantage of opportunities to create value by exploring the external environment using the PESTLE framework (Political, Economic, Social, Technological, Legal and Environment) e.g. political, social, • Identify scattered elements in the external environment and evaluate opportunities to create value in the marketplace
	1.2 Creativity	The ability to construct ideas or products which are new and potentially useful (Amabile 1988; Shalley *et al.* 2004; Bilton, 2007; Harryson, 2008; Morris *et al.* 2013)	• Develop and evaluate several ideas to take advantage of the opportunities spotted in the external environment • Constantly create value, including robust solutions to existing and new problems in the marketplace • Research and experiment with innovative approaches • Effectively combine resources (knowledge, financial and human resources) to achieve take advantage of the opportunities
	1.3. Vision	A vision describes a person's future state. It is a long-term plan that is deliberately and consciously set by an individual. It is that force that helps you to become fixated on your plans	• Visualise the future • Dream big dreams and write it down on a paper • Establish the purpose of achieving your dreams

		even when the going gets tough (Mitton, 1989; Timmons; 1979; Locke and Kirkpatrick 1995; Frisch 1998; Boojihawon *et al.* 2007; Becherer *et al.* 2008; Sadeghi and Esteki, 2010)	• Develop medium-term goals (2-3 years) • Develop short-term goals (0-2 years) in line with your medium-term goal, purpose, and visions • Design workable strategies to turn your vision into a reality
2. Resources	**2.1 Self-awareness and self-efficacy**	Self-awareness relates to the ability to identify one's strengths and weaknesses whilst a person's self-efficacy is about having a sense of confidence in what he or she does (Crandall and McGhee, 1968, Martin and Staines, 1994; Shumpeter, 1994, Keogh, 2006, Sadeghi and Esteki, 2010)	• Identify and assess your core competencies using the SWOT framework (Strength, Weaknesses, Opportunities, and Threats) (Mappigau and Maupa, 2015) • Carefully reflect on your personal needs, aspirations and wants in the short, medium and long-term • Identify and evaluate your individual and group strengths and weaknesses • Constantly review your abilities to carry out tasks from own reflection and that of your peers • Develop a strong belief in your own ability to manage the course of events, despite the uncertainty, setbacks and temporary inconveniences
	2.2 Motivation and perseverance	The ability to keep going irrespective of the challenges and setbacks (Schmitt-Rodermund, 2004, Zali *et al.* 2007); Izquierdo and Deschoolmeester, 2010).	• Develop a strong sense of determination from within to pursue your stated vision • Develop a spirit of resilience to go through any setbacks and come to terms with the understanding that they are only temporary inconveniences

			• Be prepared to be patient and keep pushing to achieve your long-term individual or group goals • Be vigilant under pressure, challenges, and any temporary failure (s)
	2.3 Mobilising resources	Ability to bring together resources (both financial and human resources) in order to effectively engage in an entrepreneurial activity(is) (Mitton, 1989; Keogh, 2006; Murray, 1996; Izquierdo and Deschoolmeester, 2010)	• Develop the ability to obtain and effectively manage the material, non-material and digital resources needed to turn to take full advantage of opportunities • Effectively maximise limited resources available at your disposal • Deliberately engage in a continuous professional development programme to develop and sharpen competencies related to mobilising resources e.g. communication, negotiation, influencing, tax, digital and technical competences • Develop the ability to Inspire and motivate key stakeholders • Mobilise the relevant support required to achieve your goals and vision • Demonstrate effective negotiation, communication, persuasion and leadership skills
	2.4 Financial and economic literacy	Ability to understand the basic financial aspect of a business, including profit and loss statement, cash flow statement etc. (Izquierdo and Deschoolmeester, 2010)	• Developing analytical skills to be able to break down the cost of turning an idea into action • Get abreast with the key terminologies in finance and their implication, e.g. profit and loss, current and fixed assets, fixed and variable costs, overheads etc.

			• Develop a plan and effectively evaluate financial decisions over time
			• Identify the key cost elements to be considered in bringing your ideas into action
			• Develop systems to effectively manage your finance in order to grow and sustain your venture over the long run
	3.1 Management	The art of planning, coordinating, organising, commanding and controlling the different aspect of an entrepreneurial venture (Fayol; 1984; Collins and Moore; 1964; Lans and Gulikers, 2010)	• Develop long-, medium- and short-range goals • Identify strategic areas and develop action plans around each • Establish control measures in place to ensure that the stated goals are met • Develop an effective performance management system • Design systems to swiftly adapt to unforeseen changes • Develop the ability to effectively organise resources • Establish coordination between different section of a venture
3. Into Action	**3.2 Risk-taking**	The ability of an individual to tolerate ambiguity and uncertain situations and make sound decisions in this situation, while being able to control own emotions. (Mill, 1848; Robles and Zárraga-Rodrígueza, 2015)	• Identify opportunities and be willing to make decisions when the information available is partial or ambiguous, when the result of that decision is not certain , or when the outcome(s) is not clear • Develop the ability to evaluate risky ventures using appropriate criteria and swiftly make a decision

			• Experiment ideas and prototypes from the early stages, to reduce risks of failing
			• Swiftly and effectively handle rapidly changing
			• Develop processes that help to create real value
			• Regularly take up new challenges
			• Be independent and work towards achieving stated goals
			• Track and monitor risky events
	3.3 Teamwork	Teamwork deals with the ability to work with a group of people with complementary skills to achieve a common objective (Timmons, 1979; Izquierdo and Deschoolmeester, 2010, Morris *et al.* 2013)	• Learn to effectively work together as a team and co-operate with members to spot and maximise opportunities
			• Develop trust and confidence in the team
			• Be open and learn to effectively communicate
			• Embrace conflicting situations and find ways to solve it together
			• Clearly define roles and stay positive
	3.4. Learning through experience	This relates to either participating in a real-life entrepreneurial experience or learning from those in the field (Timmons; 1979, Cope and Watts, 2000; Dhliwayo, 2008; Mendes and Kehoe; 2009)	• Engage in a real-life entrepreneurial venture or experiment with new ideas
			• Learn from peers, mentors and industry experts
			• Secure apprenticeship spots
			• Read wide include success stories
			• Learn from your own failures and that of others

			• Read theoretical books to get ideas and be ready to apply them

Studies conducted by the World Bank (2017) on what skills and competencies needed for graduates in all sectors highlighted team work, computer skills, ability to solve problems, sense of values, writing and speaking skills among the top competencies needed in all sectors. As earlier stated, there is no standardised entrepreneurial competence framework that is currently in use within the context of Sierra Leone. Hence, there is a need to develop one that will help educators, policymakers and other key stakeholders to develop the relevant skills within graduates/participants.

7.5 Pedagogical Methods for Entrepreneurial Competencies

A question about how entrepreneurial competencies can be developed within participants undertaking an entrepreneurship education was put forward to the participants. This question arose out of the findings from the overview of entrepreneurship education programmes in Sierra Leone where it was noted that different programmes employ some traditional methods that may not be appropriate to develop some of the key skills within participants. There has been an increase in interest in how entrepreneurship education is delivered or taught to ensure that the core skills are effectively passed on to the participants (Kirby, 2004, Mwasalwiba, 2010). Morris *et al.* (2013) stated that given the complex nature of entrepreneurship it will be appropriate to develop pedagogical methods that move beyond the traditional methods of discussion, lecture, and exams. Sarasvathy (2001, p. 2-3) in her paper highlighted the problems of teaching entrepreneurship as opposed to say a general MBA programme:

"*In general, in MBA programs across the world, students are taught causal or predictive reasoning – in every functional area of business. […] we teach potential entrepreneurs […] the sequential progression from idea to market research, to financial projections, to the team, to the business plan, to financing, to prototype, to market, to exit, with the caveat, of course, that surprises will happen along the way. Seasoned entrepreneurs, however, know that surprises are not deviations from the path. Instead, they are the norm, the flora and fauna of the landscape, from which one learns to forge a path through the jungle*".

Pedagogy has been defined by Hägg and Peltonen, (2014) as a collection of different teaching strategies that are focused on ensuring the intended learning outcomes of an entrepreneurship education programme is met. Around the world, different institutions use different pedagogical approaches to teach entrepreneurship education programmes (Fayolle and Gailly, 2008). The evidence of participants generally shows that a mix of pedagogical methods is needed to teach entrepreneurship programmes. From the analysis of the relevant pedagogies needed to develop the relevant entrepreneurial competencies from the students', lecturers' and practitioners' perspectives a mixed of pedagogical approaches on how to teach each of the competencies in this study were identified as shown in table 17.

Table 17: Pedagogical Approaches based on Interview Result

Competencies	Pedagogical Approaches	Examples of Statement
1.1 Spotting opportunities	Case studies, workshops led by expert speakers, simulations, seminars	"*in order for us to learn the skill of spotting opportunities, the the university should introduce a system whereby successfully entrepreneurs are invited to tell us how they were able to spot their opportunities*" (Student, C). "*We should invest in workshops and seminars that will bring current entrepreneurs, academics and students together to discuss themes related to spotting opportunities...this sort of the format will help our students effectively develop key entrepreneurial skills*" (Lecturer, A). "*In order to develop skills like spotting opportunities etc. custom made case studies and simulations should be prepared and used in all lectures and workshops*" (Lecturer, E).

		"*I am of the strong opinion that the best way to teach students how to spot opportunities is to get them to learn from those who have already succeeded in the entrepreneurial field*" (Practitioner, E).
1.2 Creativity	Business project, case studies, workshop led by expert speakers, seminars, experimentation	"*Creativity can be best developed by getting students to engage in an actual project. We have to understand that entrepreneurship is about doing. Theoretical knowledge is important but theory without practice in entrepreneurship may not help students to develop a skill like creativity*" (Practitioner, B). "*I think the best way for all students studying entrepreneurship to learn about how to be creative is to get them to involve in real life business projects*" (Student, F).

		"*A monthly expert-led workshop on entrepreneurial skills will greatly help in developing the creativity in our students*" (Lecturer, D).
1.3. Vision	Case studies, experimentation, Lectures	"*The best way to develop a skill like vision will be to design case studies around existing local entrepreneurs. This can be used together with published international case studies*" (Lecturer, C).
		"*I think the best way to teach people how to set visions for themselves is to give them a theoretical framework and then ask them to formulate it*" (Practitioner A).
		"*I personally think that case studies on successful entrepreneurs will greatly help in developing the art of vision setting within students*"(Student, Student, M).
2.1 Self-awareness and self-efficacy	Lectures, skills audit exercise, seminars	"*A carefully prepared lecture, which will include a skills audit exercise will assist in helping students to be aware of their strengths and*

		weaknesses and abilities to effectively embark on an entrepreneurial venture" (Lecturer, F). *"The concept of self-awareness can be best assessed through lectures and organised seminars"* (Practitioner, C). "*The best way to get students to be aware of their strengths and weaknesses and nurture their abilities, lecturers would have to carry out a skills audit at the beginning and end of the programme and organise seminars on a regular basis*" (Student, K).
2.2 Motivation and perseverance	Case studies, expert speaker	"*Inviting external speakers to share their experience on how they were able to motivate themselves and persevere through those challenges*" (Student, H). "*Students can be exposed to relevant case studies on entrepreneurs*

		who have shared their secrets about how they were able to keep on keeping on through their unique challenges" (Practitioner, D). "*I have always been a strong supporter of hiring external speakers to share their experience with our students. This will help our students to for instance understand their key drive and what made them to never give up amidst challenges*" (Lecturer, B*).*
2.3 Mobilising resources	Case studies, expert speakers, business proposal, seminars	"*Resource mobilisation is one of the most difficult aspects of businesses in Sierra Leone. Ask any prospective or even a current entrepreneur and you will be told that the reason why they haven't started and/or grow their existing businesses if because of the lack of key resources. To, therefore, ensure both current and future entrepreneurs develop the art of mobilising the relevant resources we will need relevant case studies and seminars prepared on this theme*" (Student, E).

		"To develop the competence of mobilising resources, trainers should consider using case studies and business proposal within their lectures" (Practitioner, C). "*The competence of resource mobilisation can be best nurtured by getting participants to work on proposals and reflect on case studies*" (Lecturer, J).
2.4 Financial and economic literacy	Lectures, exams, and workshop led by external speakers	"*Financial and economic literacy can be developed in participants Through carefully planned lectures and exams*" (Practitioner, E). "*External speakers who are grounded in financial and economic literacy can be invited to teach our students using a workshop like a format*" (Lecturer, G). "*I think students can learn about financial and economic literacy skills*

		through lectures and exams" (Student, I).
3.1 Management	Lectures, workshop led by expert speakers, apprenticeship	"*Management skills including planning, coordinating, controlling and organising our best developed used lectures and workshop formats*" (Lecturer, E). "*in order to develop management skills, participants should be given the opportunity to join apprenticeship schemes that will enable them to understudy what managers of organisations normally do on a day to day basis*" (Practitioner, D). "*I think students can learn skills to manage people and resources by modeling role models; hence the institution should encourage more regular workshops where external speakers can share their experiences*" (Student, L).
3.2 Risk-taking	Case study, expert-led seminars, experimentation	"*The best way to learn how to take a risk is to take one. Students should be given the opportunity to embark on their own projects and learn from the experience*" (Lecturer, B)

		"Risking taking appetite can be developed within participants by firstly getting them to read case studies about real-life entrepreneurs and the associated risks they took and conduct seminars inviting some of the best entrepreneurs especially those who have taken huge risks" (Practitioner, A). "*In my opinion, risking skills can be learned through experimentation and seminars where entrepreneurial experts who have taken risks in their businesses can come and share their unique experiences*" (Student, N).
3.3 Teamwork	Business project, case study, seminars, group activities	"*A carefully planned group activities is a vital tool for developing teamwork among participants*" (Lecturer, I). "*In order to develop the competence of teamwork in participants, it will be vital for the college to organise seminars, get participants to work on projects in groups*" (Student, J).

		"*I think teamwork can be best nurtured by allowing participants to work on real-life projects in groups*" (Practitioner, C).
3.4. Learning through experience	Mentorship, expert speakers, case studies, experimentation	"*The best way to learn by experience is to get involved real life projects and read stories of people who have gone ahead of you. The university should encourage the practical application of the theory its lecturers teach by allowing students to work on real-life projects and invite external speakers*" (Lecturer, G). "*Experiential learning is the bedrock of all entrepreneurial ventures. Entrepreneurship is simply learned by doing. Participants can best learn via experience through mentorship programmes and engagement in a mini like projects whilst in the process of completing their programme*" (Practitioner, A). "*To learn by experience we will need the university to regularly invite external speakers to share their entrepreneurial journey with us and get us*"

		involved in doing some sort of business as part of the course. We can, in addition, provide reflection on our learning experiences the project" (Student B).

7.6 Overall Observation of the Pedagogical Methods for Entrepreneurial Competencies

Table 17 above indicates that there are various pedagogical methods that can be used to develop the key entrepreneurial competencies within participants of entrepreneurship education programmes in Sierra Leone. The findings specifically suggest that each competence requires a combination of different sets of pedagogical methods. The most common pedagogical methods across the board are expert speakers, workshops, case studies and real-life projects. Several institutions across the world have implemented a range of pedagogical methods in their programmes to teach entrepreneurial competencies to their participants (Fayolle and Gailly, 2015). Over the years, there has been a huge debate amongst scholars and practitioners alike about the best method to educate entrepreneurs (Gorman *et al*, 1997). Bechard and Gregoire (2007) for instance put forward a classification of pedagogical models that can be used in an entrepreneurship education programme: demand model (which is driven by participants' learning style e.g. experimentation and participants' led seminars), supply model (which is based on the traditional strategy of teaching e.g. lectures and exams), and competence model (which is based on real-life projects or simulation). Another relevant aspect in the entrepreneurship education literature is the need for programme designers and implementers to specifically map the relevant entrepreneurial competencies with the relevant pedagogical approaches (Hood and Young, 1993, Morris *et al*. 2013, Fayolle, 2013). Scholars tend to map soft competencies (competencies that trigger changes in the mindsets of participants towards entrepreneurship e.g. vision, creativity, spotting opportunities, self-motivation and resilience) to   pedagogical approaches like simulations, experiential learning, mentorships, external speakers

(Spenser and Spenser, 1993, Liñán, 2004, Fretschner and Weber, 2013). In particular, scholars have observed that experiential learning and allowing participants to have a direct link with successful entrepreneurs will help participants to discover themselves (self-awareness) and facilitate personal change in their mindsets towards entrepreneurship (Harmelling *et al.,* 2009; Gondim and Mutti, 2011; Burrows and Wragge, 2013). Further, pedagogical approaches for meta-competencies such as creativity, spotting and evaluating opportunities, self-efficacy, risk, teamwork etc. could take the form of experimentation (Smith *et al.,* 2012; Gielnik *et al.,* 2015), presentation of students work in front of an expert panel of judges (Chang *et al.*, 2014) as well as simulations related to business (Watts and Wray, 2012; Vorley and Williams, 2016). Scholars such as Hytti and O'Gorman, (2004), and Fayolle and Gaillly, (2015) argue that traditional pedagogical approaches are not suitable for the development of soft competencies with specific reference to meta-competencies.

In a similar vein, scholars have sought to match hard competencies (which are competencies that equip participants with a set of practical skills to engage in an entrepreneurial activity, e.g. planning, financial and economic literacy, communication, etc.) with pedagogical approaches like expert speakers, internships, (Omazić and Vlahov, 2011; Vesper *et al.*, 1989, Morris *et al.*, 2013, Dobratz *et al.* 2015). Pedagogical approaches for general management competencies like organising and strategising should take the form of real-life entrepreneurial projects during the execution of the entrepreneurship programme (Hytti and O'Gorman, 2004; Galloway *et al.*, 2005) and participation in entrepreneurial events like competitions, workshops and fairs (Smith *et al.* 2012; Chang *et al.,* 2014).

7.7 An integrated Framework of Entrepreneurial Competencies and Pedagogical Approaches

Accordingly, results from the analysis of interviews conducted in relation to the identification of entrepreneurial competencies and entrepreneurial pedagogies within the context of Sierra Leone appear to match specific competencies with specific pedagogical approaches. An integrated framework of the relevant competencies is presented in table 18. The table shows a set of unique competencies and pedagogical approaches that combine both experiential and action learning elements to develop both the soft and hard competencies within participants of an entrepreneurship education programme. The call for a contextual framework for specific components of entrepreneurship education programmes (i.e. competencies and pedagogies) has abounded (Fayolle and Gailly, 2008; Matlay, 2008; Nekka and Fayolle; 2010; Fayolle; 2010; Stewart; 2012). As stated by Gartner (1995), the context has the tendency to influence the outcome of a research; researchers should not particularly underestimate the influence of external factors and overestimate the influence of internal or personal factors when making judgments.

Table 18: An Integrated Framework for Entrepreneurial Competencies and Pedagogical Approaches

Areas	Competences	Definition	Descriptors	Pedagogies
1. Ideas and opportunities	**1.1 Spotting opportunities**	Ability to identify and evaluate gaps in the market that no one has been able to see (Mitton, 1989; Casson and Wadeson, 2007)	- Identify and evaluate key challenges facing the market - Identify and take advantage of opportunities to create value by exploring the external environment using the PESTLE framework (Political, Economic, Social, Technological, Legal and Environment) e.g. political, social, - Identify scattered elements in the external environment and evaluate opportunities to create value in the marketplace	- Case studies (Solomon *et al.* 2002; Hytti and O'Gorman; 2004; Bennett, 2006; Abaho *et al.*, 2015) - Workshops led by expert speakers (Hegarty, 2006; Collins *et al.*, 2006; Mwasalwiba, 2010) - Simulations (Hytti and O'Gorman; 2004; Ahmad *et al.*, 2004; Garalis and Strazdienė, 2007; Honig, 2004) - Seminars (Bennett, 2006; Mwasalwiba, 2010
	1.2 Creativity	The ability to construct ideas or products which are new and potentially useful (Amabile 1988;	- Develop and evaluate several ideas to take advantage of the opportunities spotted in the external environment - Constantly create value, including robust solutions to	Business project (Brink and Madsen, 2015; Hytti and O'Gorman, 2004)

		Shalley *et al.* 2004; Bilton, 2007; Harryson, 2008; Morris *et al.* 2013)	existing and new problems in the marketplace • Research and experiment with innovative approaches • Effectively combine resources (knowledge, financial and human resources) to achieve take advantage of the opportunities	• case studies (Solomon *et al.* 2002; Hytti and O'Gorman; 2004; Bennett, 2006 • Workshop led by expert speakers • Seminars ((Hegarty, 2006; Bennett, 2006; Mwasalwiba, 2010 • Experimentation (Gondim and Mutti, 2011)
	1.3. Visio n	A vision describes a person's future state. It is a long-term plan that is deliberately and consciously set by an individual. It is that force that helps you to become fixated on your plans even when the going gets tough (Mitton, 1989; Timmons; 1979; Locke and Kirkpatrick 1995; Frisch 1998; Boojihawon *et al.* 2007; Becherer *et al.*	• Visualise the future • Dream big dreams and write it down on a paper • Establish the purpose for achieving your dreams • Develop medium-term goals (2-3 years) • Develop short-term goals (0-2 years) in line with your medium-term goal, purpose, and visions • Design workable strategies to turn your vision into a reality	• Case studies (Solomon *et al.* 2002; Hytti and O'Gorman; 2004; Bennett, 2006; • Experimentation (Gondim and Mutti, 2011) • Lectures (Feet, 2000; Solomon *et al.* 2002; Hytti and O'Gorman; 2004; Bennett, 2006;

		2008; Sadeghi and Esteki, 2010)		
2. Resources	**2.1 Self-awareness and self-efficacy**	Self-awareness relates to the ability to identify one's strengths and weaknesses whilst a person's self-efficacy is about having a sense of confidence in what he or she does (Crandall and McGhee, 1968, Martin and Staines, 1994; Shumpeter, 1994, Keogh, 2006, Sadeghi and Esteki, 2010)	• Identify and assess your core competencies using the SWOT framework (Strength, Weaknesses, Opportunities, and Threats) • Carefully reflect on your personal needs, aspirations and wants in the short, medium and long-term • Identify and evaluate your individual and group strengths and weaknesses • Constantly review your abilities to carry out tasks from own reflection and that of your peers • Develop a strong belief in your own ability to manage the course of events, despite uncertainty, setbacks and temporary inconveniences	• Lectures (Fiet, 2000; Solomon *et al.* 2002; Hytti and O'Gorman; 2004; Bennett, 2006; • Skills audit Exercise (Ramsey, 2005; Higgins, 2008Gondim and Mutti, 2011; Kirkwood *et al.,* 2014) • Seminars (Bennett, 2006; Mwasalwiba, 2010
	2.2 Motivation and perseveran	The ability to keep going irrespective of the challenges and setbacks (Schmitt-Rodermund, 2004, Zali *et al.* 2007);	• Develop a strong sense of determination from within to pursue your stated vision • Develop a spirit of resilience to go through any setbacks and come to terms with the understanding	• Case studies (Solomon *et al.* 2002; Hytti and O'Gorman; 2004; Hägg and Peltonen, 2014).

	ce	Izquierdo and Deschoolmeester, 2010).	that they are only temporary inconveniences • Be prepared to be patient and keep pushing to achieve your long-term individual or group goals • Be vigilant under pressure, challenges, and any temporary failure (s)	• Expert speaker (Mwasalwiba, 2010
	2.3 Mobilising resou rces	Ability to bring together resources (both financial and human resources) in order to effectively engage in an entrepreneurial activity(is) (Mitton, 1989; Keogh, 2006; Murray, 1996; Izquierdo and Deschoolmeester, 2010)	• Develop the ability to obtain and effectively manage the material, non-material and digital resources needed to turn to take full advantage of opportunities • Effectively maximise limited resources available at your disposal • Deliberately engage in a continuous professional development programme to develop and sharpen competencies related to mobilising resources e.g. communication, negotiation, influencing, tax, digital and technical competences • Develop the ability to Inspire and motivate key stakeholders • Mobilise the relevant support required to achieve your goals and vision • Demonstrate effective negotiation, communication, persuasion and leadership skills	• Case studies (Solomon *et al.* 2002; Hytti and O'Gorman; 2004; Bennett, 2006; Brink and Madsen, 2015) • Expert speakers (Hegarty, 2006; Mwasalwiba, 2010; Fayolle and Gally, 2015 • Business proposal (Solomon *et al.* 2002; Honig, 2004; Gondim and Mutti, 2011; Kirkwood *et al.*, 2014) • Seminars (Bennett, 2006; Mwasalwiba, 2010
	2.4 Finan cial	Ability to understand the basic financial aspect of a business,	• Developing analytical skills to be able to break down the cost of turning an idea into action	• Lectures (Fiet, 2000; Solomon *et al.* 2002; Hytti and O'Gorman;

	and economic literacy	including profit and loss statement, cash flow statement etc. (Izquierdo and Deschoolmeester, 2010)	• Get abreast with the key terminologies in finance and their implication, e.g. profit and loss, current and fixed assets, fixed and variable costs, overheads etc. • Develop a plan and effectively evaluate financial decisions over time • Identify the key cost elements to be considered in bringing your ideas into action • Develop systems to effectively manage your finance in order to grow and sustain your venture over the long run	2004, Bennett, 2006) • Exams (Honig, 2004) • Workshop led by External speakers (Hegarty, 2006; Mwasalwiba, 2010
3. Into Action	**3.1 Management**	The art of planning, coordinating, organising, commanding and controlling the different aspect of an entrepreneurial venture (Fayol; 1984; Collins and Moore; 1964; Lans and Gulikers, 2010)	• Develop long-, medium- and short-range goals • Identify strategic areas and develop action plans around each • Establish control measures in place to ensure that the stated goals are met • Develop an effective performance management system • Design systems to swiftly adapt to unforeseen changes • Develop the ability to effectively organise resources • Establish coordination between different section of a venture	• Lectures Fiet, 2000; (Solomon *et al.* 2002; Honig, 2004; Bennett, 2006) • Workshop led by Expert speakers (Honig, 2004; (Hegarty, 2006; Mwasalwiba, 2010) • Apprenticeship (Hytti and O'Gorman; 2004; Thursby *et al.*, 2009; Gilbert, 2012)

| | | 3.2 Risk-taking | The ability of an individual to tolerate ambiguity and uncertain situations and make sound decisions in this situation, while being able to control own emotions. (Mill, 1848; Robles and Zárraga-Rodrígueza, 2015) | • Identify opportunities and be willing to make decisions when the information available is partial or ambiguous, when the result of that decision is not certain , or when the outcome(s) is not clear

• Develop the ability to evaluate risky ventures using appropriate criteria and swiftly make a decision

• Experiment ideas and prototypes from the early stages, to reduce risks of failing

• Swiftly and effectively handle rapidly changing

• Develop processes that help to create real value

• Regularly take up new challenges

• Be independent and work towards achieving stated goals

• Track and monitor risky events | • Case study (Solomon *et al.* 2002; Erikson, 2003; Rae, 2005; Bennett, 2006; Morris *et al.*, 2012)

• Expert-led seminars (Haiti and O'Gorman; 2004; Hegarty, 2006; Bennett, 2006; Gondim and Mutti, 2011; Watts and Wray, 2012)

• Experimentation (Spencer and Spencer, 1993; Hytti and O'Gorman; 2004; Harmeling *et al.*, 2009; Gondim and Mutti, 2011) |
| | | 3.3 Team work | Teamwork deals with the ability to work with a group of people with complementary skills to achieve a common objective (Timmons, 1979; Izquierdo and Deschoolmeester, | • Learn to effectively work together as a team and co-operate with members to spot and maximise opportunities

• Develop trust and confidence in the team

• Be open and learn to effectively communicate

• Embrace conflicting situations and find ways to solve | • Business project (Hytti and O'Gorman; 2004; Florin *et al.*, 2007; Smith *et al.*, 2012; Change *et al.* 2014; Kirkwood *et al.*, 2014)

• Case studies |

		2010, Morris *et al.* 2013)	it together • Clearly define roles and stay positive	(Solomon *et al.* 2002; Erikson, 2003; Hytti and O'Gorman; 2004; Rae, 2005; Bennett, 2006; Morris *et al.*, 2012) • Seminars (Mwasalwiba, 2010). • Group activities (Hytti and O'Gorman, 2004; Bennett, 2006; Florin *et al.* 2007; Ancona and Bresman, 2007; Mwasalwiba, 2010; Hynes *et al.*, 2011)
	3.4. Learn ing throu gh exper ience	This relates to either participating in a real-life entrepreneurial experience or learning from those in the field (Timmons; 1979, Cope and Watts, 2000; Dhliwayo, 2008; Mendes and Kehoe; 2009)	• Engage in a real-life entrepreneurial venture or experiment with new ideas • Learn from peers, mentors and industry experts • Secure apprenticeship spots • Read wide includes success stories • Learn from your own failures and that of others • Read theoretical books to get ideas and be ready to apply them	• Mentorship (Spencer and Spencer, 1993; Harmeling *et al.*, 2009; Gondim and Mutti, 2011; Watts and Wray, 2012). (Burrows & Wragge, 2013) • Expert speakers (Hegarty, 2006; Mwasalwiba, 2010). • Case studies

				(Solomon *et al.* 2002; Erikson, 2003; Hytti and O'Gorman; 2004; Rae, 2005; Bennett, 2006; Morris *et al.*, 2012) • Experimentation (Kelly, 1997; Spencer and Spencer, 1993; Hytti and O'Gorman; 2004; Harmeling *et al.*, 2009; Gondim and Mutti, 2011; Watts and Wray, 2012).

Similarly, Baumol (1990) noted that the rules of entrepreneurship research have dramatically changed from one time and place to the other; hence there is a need to largely take context into consideration.

7.8 Chapter Summary

The chapter has presented findings on the key components of entrepreneurial competencies and pedagogical approaches needed to develop those competencies within the context of Sierra Leone. The concept of entrepreneurial competencies has many connotations in literature. Similarly, findings from the interviews presented different definitions. Meanwhile, the common attributes of all those definitions are that competencies have to do with the acquisition of skills and knowledge that helps to empower the beneficiary.

The findings further show that there are 11 core competencies that are vital in the context of Sierra Leone; spotting opportunities, creativity, setting a clear vision, self-awareness and self-efficacy, motivation and perseverance, mobilising resources, financial and economic literacy, management, risk-taking, teamwork and learning through experience, The chapter further presented findings of the relevant pedagogical strategies can be used to develop these strategies i.e. seminars, expert-led workshops, experimentation, case studies etc. The chapter ended with an entrepreneurship education competencies framework to be used within the context of Sierra Leone and similar contexts.

Chapter 8

Summary, Conclusion, and Recommendations

8.0 Introduction

This chapter presents the summary, conclusion and the relevant recommendations of the study. Specifically, 8.1 will provide an answer to the research questions, present an analysis of how the research aims and objectives were and a summary of the research methods. Section 8.2 presents a discussion of the contributions and findings of the study. Section 8.3 presents the implication of the findings. Section 8.4 presents the key limitations of the study and the impact of these limitations on the interpretation of the findings. Section 8.5 presents relevant suggestions for future researchers and section 8.6 presents a conclusion to the chapter.

8.1 Overview of the Study

The study sought to assess the effects of entrepreneurship education on youths' entrepreneurial intentions and to develop a contextual competency framework for entrepreneurial education programmes within the context of Sierra Leone. To achieve this, two key research questions were set: RQ1: what is the current state of entrepreneurship education in Sierra Leone and its effects on youths' entrepreneurial intentions? and RQ2: what are the key sets of entrepreneurial competencies and related pedagogies appropriate within the context of Sierra Leone?

In addition, four specific research objectives were developed: to critically analyse the current state of entrepreneurship education programmes in Sierra Leone; critically assess the extent to which entrepreneurship education programmes impact youths' entrepreneurial intention; develop a set of entrepreneurial competencies and related

pedagogies for entrepreneurship education programmes within the context of Sierra Leone and provide recommendations to stakeholders on the appropriateness of entrepreneurship education initiatives in solving youth unemployment across Sierra Leone. To answer research RQ1, Ajzen Theory of Planned Behaviour (TPB) was used. The key constructs of this theory (subjective norm, perceived behavioural control and attitude toward the behavior) were used to predict the entrepreneurial intentions of the participants. Also, to answer RQ2, the European Commission EntreComp Framework was used to understand the key competencies needed within the context of Sierra Leone. The study also used the World Bank framework to analyse the different entrepreneurship education programmes in Sierra Leone.

Further, the study used a mixed method approach to collect data from participants, e.g. interviews (focus group and one to one interviews) were respectively conducted with heads of programmes, graduates, lecturers and practitioners to collect data to firstly assess the current state of entrepreneurship education programmes in Sierra Leone and develop an entrepreneurial competency framework. Also, a validated questionnaire for entrepreneurial intentions was distributed to graduates at the Institute of Public Administration and Management (IPAM) at the beginning and the end of an entrepreneurship education programme. The next section presents the findings and contribution to the thesis.

8.2 Contributions and Findings

The section presents both the contributions and findings of this study. It starts with the presentation of the relevant contributions that the study makes followed by the key findings.

8.2.1 Contributions

This thesis has several contributions. Firstly, the study contributes to the body of knowledge on entrepreneurship education and youth entrepreneurship within the context of Sierra Leone, where the study of entrepreneurship is significantly under-researched. According to a report from the UNDP (2014), the vast majority of the youth population in Sierra Leone is either unemployed and/or underemployed. This has caused serious constraints on the economic development of the country as a whole (World Bank, 2013) and may be directly related to the country's relatively low Human Development Index (HDI) rating (UNDP, 2018). Entrepreneurship education is seen as a tool in preparing youths to establish their own ventures thereby creating jobs and reducing the unemployment level in the country.

Secondly, this study also contributes to the application of the World Bank conceptual framework for entrepreneurship education and training programmes, Ajzen (1994) theory of planned behavior and the European Commission EntreComp framework for entrepreneurial competencies. The World Bank Framework was used to analyse the current state of entrepreneurship education programmes in Sierra Leone in terms of their outcomes, participants, and characteristics. Theory of Planned Behaviour (TPB) was primarily applied with the aim of predicting the behaviour of participants towards entrepreneurial action after the intervention of an entrepreneurship education programme and the European Commission EntreComp framework for entrepreneurial competencies was used to develop appropriate entrepreneurial competencies within the context of Sierra Leone. The EntreComp framework has 15 competencies that the European Commission has put forward as competencies that need to be taught to all participants undertaking an entrepreneurship education

programme within Europe. As shown in the findings below, the researcher through data collected from the lecturers, students, practitioners and the literature, developed an entrepreneurial competency framework that entails 11 entrepreneurial competencies and their related pedagogies that programme designers and other relevant stakeholders can use to develop and deliver entrepreneurship education programmes within the context of a developing nation.

Thirdly, from a practical point of view, the study provides necessary recommendations to key policymakers on the appropriateness of entrepreneurship education initiatives in addressing the constant rise in youth unemployment across Sierra Leone and produces a set of entrepreneurial competencies for entrepreneurship education programmes to inform policy makers on the required entrepreneurial skill sets needed for especially their graduate population. This will help direct and/or intensify government efforts towards entrepreneurship and also guide practitioners in designing programmes that are fit for purpose.

Lastly, the findings of the study serve as a reference point for future researchers who will be engaged in research on entrepreneurship education and its effects on key variables like intentions and competencies of participants within the context of Sierra Leone.

8.2.2 Findings

As earlier noted, the research investigated the current state of entrepreneurship education in Sierra Leone and its effects on youths' entrepreneurial intentions. It also looked at key sets of entrepreneurial competencies and related pedagogies that are appropriate within the context of Sierra Leone. It has been noted that most studies

on entrepreneurship education have been carried out in the West using western participants and institutions (Naude and Havenga, 2005). There is, therefore, a need to carry out more research on the effects of entrepreneurship education in developing countries (2012). Scholars (Baumol, 1990, Welter, 2011), believe that the contextualisation of studies on the entrepreneurship education and its impacts is relevant due to various political, cultural and socio-economic differences that exist from one country to the other. In addition, Fayolle and Gailly (2008) emphasise the need to carefully reconsider the context in which entrepreneurial research are conducted. Quite recently, Jones *et al.* (2018) in their special issue titled: 'Emerging themes in entrepreneurial behaviors, identities and contexts' calls for future entrepreneurship researchers to take into consideration the context in which entrepreneurial research are carried out. The literature abounds with contextualisation of key components of entrepreneurship (Maritz and Brown, 2012), including but not limited to, programme outcomes (Matlay, 2008); audience (Fayolle and Gailly, 2008); pedagogies (Fayolle, 2010) and competencies (skills, knowledge and attitude) (Matlay, 2008).

Accordingly, the conceptual explication of the research covers relevant issues of entrepreneurship education and its effects on youths' unemployment in Sierra Leone. The youth population is the fastest growing population in Africa and the most affected in terms of employment; morethan 60% of over 200 million youth population is unemployed (Agbor *et al.*, 2012). In Sierra Leone, according to the UNDP (2014) report, approximately 70% of the youth population in Sierra Leone are unemployed. The problem is severe among the graduates that in theory should possess the appropriate skills needed by employers to enable them to gain a competitive

advantage (Collins *et al.* 2004; Galloway *et al.* 2005; Mitra 2011; Wilson *et al.* 2009; ILO 2015; Mbeteh and Pellegrini, 2018). A study specifically conducted by the Career and Advisory Placement Services, Graduate Youths pointed out that only about 16% of the overall graduate population in Sierra Leone gain employment after graduation (World Bank, 2013). This has caused serious constraints on the economic development of the country as a whole (World Bank, 2013; ILO, 2015). Entrepreneurship education is seen as a major tool in preparing youths to establish their own ventures thereby creating jobs and reducing the unemployment level in the country (Isaac *et al.* 2007; Hisrich *et al.* 2007; Nagesh *et al.* 2008; Abimbola and Agbola 2011; de Wit and de Kok, 2014). In their study of the impact of EE programmes on youth unemployment in Tunisia, Premand *et al.* (2012) concluded that EE indeed helps to increase the level of employment amongst youths. Other studies (e.g. Charney and Liecap 2000; Luthje and Frank 2002; Wiklund and Shepherd 2003; Isaacs *et al.* 2007; Mwasalwiba, 2010) have confirmed that participation in an entrepreneurship education programme does lead to an increase in business creation which invariably leads to the reduction in youth unemployment. The same is true for graduate youths; Gibcus *et al.* (2012) found out that those who participated in entrepreneurship education programmes went on to start their own businesses within 0.7 years after graduation, whilst those who did not start their own businesses after 2.8 years after graduating. Research conducted in the USA and UK has also pointed to the conclusion that people who acquire education in entrepreneurship are more likely to be successful in entrepreneurial activities than those who are not (Robinson and Sexton, 1994; Pickernell *et al.*, 2011). Within the context of developing countries, similar results show that EE has a direct impact on youth unemployment; for example, Ogundele *et al.* (2012) averred that

entrepreneurship education programmes in Nigeria stimulate youths into creating jobs for themselves and others through the establishment of enterprises. Olorunmolu (2010) entrepreneurship education helps to produce entrepreneurs who in turn help in reducing youth unemployment its associated problems. However, studies on entrepreneurship education in Sierra Leone are very limited despite the rise in the implementation of such initiatives through government policies. Also, the youth unemployment level in the country still remain on the rise amidst the widely held belief that entrepreneurship education will lead to a reduction in graduate youth unemployment in particular,

To this end, the researcher sought to critically analyse the current state of entrepreneurship education programmes in Sierra Leone (research objective 1) using the World Bank framework. The framework helped in analysing the different entrepreneurship education programmes in Sierra Leone specifically in terms of their outcomes, participants, context, and characteristics. The results show that in terms of programme outcomes, the vast majority of entrepreneurship education programmes reviewed mainly focused on developing the mindsets and capability of participants. Developing entrepreneurial mindsets generally focus on raising awareness of the concept of entrepreneurship and social skills (e.g. networking, self-efficacy etc.) among participants (Valerio, *et al.* 2014). Entrepreneurial capability, on the other hand, focused on developing the requisite competencies, technical skills and knowledge within an individual (Detienne and Chandler, 2004). The research shows that that majority of the EE programmes seek to develop hard skills like human resource management, resource mobilisation, financial management, risk assessment, accounting, planning etc.

On programme characteristics, the research shows that most programmes reviewed are designed by a government body called the National Council for Technical, Vocational and other Academic Awards (NCTVA) with a very few developed by in-house staff. The participants in these programmes are mostly above 18 years old and the majority do not have a business background. Oosterbeek *et al.* (2010) note that having a prior business experience significantly helps to shape a participant's intention towards entrepreneurial activities. Also, the vast majority of the trainers of these programmes do not have a business background or an entrepreneurship qualification. Pittaway and Cope (2007b) suggested that trainers of EE programmes need to have both the academic and business background in order for them to effectively deliver the content of the programme. In terms of pedagogical approach, the majority of the programmes still use traditional ways (e.g. lectures, business plans) of delivering the content of the programmes. Meanwhile, academics and practitioners have argued about what it is the most appropriate pedagogy for teaching the content of entrepreneurship education programmes (Neck and Green, 2011). The former is in support of a theory-driven pedagogical approach (Yamakawa, 2016) whilst the latter focus on a practiced-based approach to developing the core competencies required to effectively engage in an entrepreneurial venture. However, Neck *et al.* (2014) stated that a good theory without an action is busy work and an action without a theory is not worth learning.

The study also reveals that most programmes largely use exams as a method of assessment and that there are little or/no wrap services within the programme (e.g. mentorship and coach opportunities, grants, business loans etc.).

Further, in terms of the context within which these programmes are delivered, it has been noted that most programmes are delivered in the western region of the country. The key external factors influencing these programmes are socio-cultural, political and economic factors. The socio-cultural dynamics in Sierra Leone do not encourage entrepreneurial activities. For most people, they see entrepreneurship as a profession for dropouts or those who are less fortunate to enroll in a university programme. Politically, though there have been efforts by the government in terms of policies directed at encouraging entrepreneurial activities, less has been done in terms of the implementation of these policies. Economically, there is not much infrastructural and financial support to boost entrepreneurship in the country. As Mckenzie and Woodruff (2012) note, the economic context is directly linked to the success of prospective entrepreneurs who go through the entrepreneurship education programmes.

With this background, the researcher further sought to critically assess the extent to which entrepreneurship education programmes affect youths' entrepreneurial intentions (objective 2). To do this, the theory of Planned Behaviour (TPB) was primarily applied with the aim to predict the behaviour of participants towards entrepreneurial action. Scholars (Henry *et al.,* 2013; Fayolle and Gailly 2015) averred that participation in an entrepreneurship education programmes increases participants' intentions towards entrepreneurial activities. Thompson (2009, p.676) has defined entrepreneurial intentions as "self-acknowledged convictions by individuals that intend to set up new business ventures and consciously plan to do so at some point in the future". The theory of planned behaviour is based on the assumption that the intention of an individual towards an activity (e.g. entrepreneurial

activity) is dependent on subjective norms (what others think about the activity), attitude toward the behaviour (the person's positive or negative, perception of the activity) and perceived behavioural control (the person's ability to carry out the said activity) (Ajzen, 1991).The results from the research show that there is a minor positive effect of entrepreneurship education programmes on the antecedents of entrepreneurial intention (i.e. perceived behavioural control, subjective norms and attitude toward behaviour). The overall positive results are very much consistent with studies conducted by various scholars (Kurakto, 2005; Wilson *et al.* 2007; Fayolle, 2008; Lorz *et al.* 2013). More specifically, research conducted by Souitaris *et al.* (2007) on the impact of entrepreneurship education reported a positive, but a not significant result on the perceptions and attitudes of participants towards an entrepreneurial behaviour. Also, impact reviews conducted by Lorz *et al.* (2013) highlighted 8 mixed results; which is a combination of positive, negative and not significant results. Authors (Radu and Loue, 2008) also show a mixed result of the impact of entrepreneurship education on entrepreneurial intentions. A breakdown of results from some of the impact studies is shown in appendix 3.

Similarly, results on the effects of entrepreneurship education programmes on the entrepreneurial skills of participants also show a much lower positive effect. Scholars (Harris *et al.,* 2007; Lee *et al.* 2005) have also reported positive results whilst Galloway *et al.* (2005) reported an unclear result. It has been stated that participants who are in the possession of good entrepreneurial skill sets are more likely to engage in entrepreneurial activities than those who are not (Liñán, 2008). Thus, possessing skills in entrepreneurship will invariably positively impact the antecedents

of the Theory of Planned Behaviour specifically perceived behavioural control (Liñán, 2008).

Also, as earlier stated, the results from the overview of entrepreneurship education programmes in the Sierra Leone show that the type of skills being taught and the specific pedagogies that are used to develop these skills do not effectively empower the youths to be able to engage in entrepreneurial activities. The result shows that most programme outcomes seek to develop hard entrepreneurial skills like human resources management, project management, planning, budgeting, and finance. The major pedagogical approaches being used to develop these hard skills are traditional classroom lectures, development of business plans and exams. Researchers (Petridou and Glaveli, 2008; Matlay, 2008) highlighted the significance of specific skills being taught and the pedagogical approach being used to develop them. It was on this note that the specific entrepreneurial competencies that needed to be developed within the context of Sierra Leone were investigated. It should be noted that though attempts have been made to come up with a standardised framework for entrepreneurial competencies needed to be developed within entrepreneurial programmes, there has been none agreed upon. Also, most of these attempts have been made by western scholars (Man *et al.,* 2002; Man and Lau, 2005; Izquierdo and Buyens, 2008; Wright, 2011; Malebana; 2012; Morris *et al.,* 2013) using western participants and institutions.

In this regard, the study sought to investigate what sort of skill sets and associated pedagogical methods that are relevant within the context of Sierra Leone. This was done with the aim of developing a set of entrepreneurial competencies and related

pedagogies for entrepreneurship education programmes within the context of Sierra Leone (objective 3). To do this, the European Commission EntreComp framework was used. The framework has 15 competencies that the European Commission has put forward as competencies that need to be taught to all participants undertaking an entrepreneurship education programme within Europe. Interviews were conducted to ascertain what specific competencies within the framework are relevant within the context of Sierra Leone. Results from interviews conducted with various students, lecturers, and practitioners show that there were only 11 competencies that are relevant for prospective entrepreneurs within the context of Sierra Leone [(a) vision; b) spotting opportunities; c) creativity; d) risk-taking; e) mobilising resources f) learning from experience; g) self-awareness and self-efficacy; h) motivation and perseverance, i) management; j) financial and economic literacy and k) teamwork/working with others]. The competencies identified are very much congruent with the classification of the soft and hard entrepreneurial competencies put forward by several authors Liñán, 2004; Smith *et al.*, 2012; Gielnik *et al.*, 2015). Soft competencies primarily help to increase a participant's subjective norms and attitude towards entrepreneurial behaviour (Fayolle and Gally, 2015).

The framework also includes the relevant pedagogical approaches to teach each of the competencies highlighted. Findings from the interviews show that there is a need to use a mixture of pedagogies to develop the relevant entrepreneurial competencies within participants. The most common pedagogical approaches adopted are case studies, workshops led by expert speakers, simulations, seminars, business project, and experimentation. The framework can be used by educators, practitioners, and all

major stakeholders to design and implement entrepreneurship education programmes within developing nations with specific reference to Sierra Leone.

8.3 Implications of the Study

The key findings presented in this study have broader implications. Firstly, the study does confirm the applicability of the theory of planned behaviour in predicting entrepreneurial intentions within the context of a developing country. The qualitative analysis of the Entrepreneurial Intention Questionnaire (EIQ) results shows that there is a minor positive effect of entrepreneurship education programmes on the antecedents of the theory of planned behaviour. Also, results from the overview of entrepreneurship programmes in Sierra Leone show that the required competencies are currently not being developed within the programmes. In addition, traditional pedagogical methods are still largely used to develop entrepreneurial competencies across the majority of the programmes. This has resulted in the minor effect of entrepreneurship programmes on the intentions of participants towards entrepreneurial activities. The literature supports the notion that possessing the relevant entrepreneurial competencies does lead to an increase in entrepreneurial intentions through its antecedents (Liñán, 2008, Morris *et al.*, 2013).

Secondly, the findings do benefit educators and policymakers in that it will help them to effectively design and implement entrepreneurship education programmes for graduate youths by using the competency framework developed in this study. The study presented possible reasons why entrepreneurship education programmes are producing minor effects on participants, thereby not solving the current youth unemployment problems across the country. Meanwhile, having completed this

study, the researcher strongly believes that there is a very strong positive effect of entrepreneurship education programmes on specifically graduate youth unemployment through their engagement in self-employment activities. What is primarily required is the development of a standardised set of competencies and appropriate pedagogical approaches (which this study provides) to teach them. With this in mind, educators and other key stakeholders should be very cautious about not simply disqualifying an entrepreneurship education programme because it did not increase the intentions and competencies of the participants. They will need to embark on investigating other possible causes such as the lack of appropriate pedagogies and competencies being taught. In this light, educators and policymakers need to rewrite programme learning outcomes in line with the required skills and pedagogies such as those presented in this study.

Additionally, considering the findings of this research and the literature review, educators and policymakers should make entrepreneurship education compulsory across all programmes as suggested by Von Graevenitz *et al*. (2010). Graduate youths, in particular, need to be involved in entrepreneurial competencies education and training programmes across the country. A vibrant graduate youth entrepreneurship policy will ensure that our graduates are prepared to revitalise private sector jobs through the establishment of small and medium enterprises and other innovative practices. Policymakers should in addition set up entrepreneurship incubation centers where prospective entrepreneurs would meet and get mentorship and support from practitioners and experts.

Furthermore, policy makers should create a conducive environment and involve other key stakeholders (educators, students, practitioners, community etc.) in both the design and implementation of entrepreneurship education programme. Although, government on its own cannot produce entrepreneurs or solve the unemployment problems in a country, it can however create a favourable ecosystem for its citizens to establish successful businesses (Paltasingh, 2012). A favourable ecosystem requires the development of appropriate policies in relation to appropriate taxes, regulations, provision of finance and the conduct of entrepreneurial research (Fenton and Barry, 2011).

8.4 Research Scope and Limitations

Though a research scope can limit the amount of information one can generate, it serves as a useful guide for the researcher. The scope and limitations of this research, therefore, are as follows:

Firstly, the geographical location is limited to Sierra Leone, West Africa. As earlier noted, most youths in Sierra Leone have the perception that entrepreneurship activities are meant for college drop-outs. This may perhaps be responsible for the overall negative attitude and behaviour that participants bring to an entrepreneurship education programme. The focus on only Sierra Leone might limit the generalisability of the study with specific reference to the entrepreneurship education competency framework developed. Also, the interview sample size, in particular, that was used to develop an entrepreneurship education competency framework within the context of Sierra Leone is small. This was primarily because of the time required to specifically bring together the lecturers for the focus group sessions and interview the

practitioners. It was very difficult to get the practitioners in particular to do a minimum of 30 minutes minimum interviews.

Secondly, the study focuses only on entrepreneurship education programmes targeted at students at tertiary education institutions in Sierra Leone. The study did not, therefore, include entrepreneurship education programmes targeted at primary and secondary school students. It does not also cover entrepreneurship training programmes offered by organisations like the ILO, UNDP and other non-governmental institutions and targeted at youths in general.

Thirdly, the main dependent variable is the entrepreneurial intention. The entrepreneurial intention is considered to be one of the most appropriate and immediate indicators of an entrepreneurship education programme. The study only assessed the effect of entrepreneurship education on youths' entrepreneurial intentions before and after the completion of the respective entrepreneurship programmes but not during the delivering of the programmes.

Fifthly, due to the timeframe of the research, the study does not explicitly cover some key entrepreneurship research areas such as content, design and the impact of role models and the educators/trainers of those programmes on participants.

Lastly, also due to the timeframe of the research, other key factors (e.g. family background, peer group influence, etc.) that impact entrepreneurial intentions are not separately taken into account in this study. These factors are, however indirectly captured through attitudinal variables which are antecedents of intention (Lorz,

2011). The research could have also looked at the impact of corruption (as an external factor) on youths' entrepreneurial intentions and the effective implementation of entrepreneurship education programmes within the context of developing nations.

8.5 Suggestions for Future Research

There are several suggestions for future researchers based on the findings and limitations of this Ph.D. study. First, future researchers could conduct a similar research within the same developing country context by using participants from different countries. Future researchers can do a comparative study of entrepreneurship education impact studies on key variables in two or more countries within developing nations. This will enable a larger sample size and a clearer picture of the actual effects of EE on its antecedents.

Secondly, future researchers should focus on studying the impact of both entrepreneurship education and training programmes. According to Jones and English (2004, p. 416) the former is concerned with the "process of providing individuals with the ability to recognize commercial opportunities and the insight, self-esteem, knowledge, and skills to act on them" It primarily targets graduates that are enrolled in a formal degree-granting programmes (Valerio *et al.,* 2014). The latter on the other hand, focuses on developing the appropriate skills and knowledge specifically for the purpose of starting or operating an enterprise (Volkmann *et al.*, 2009).

Thirdly, future researchers should cover other key entrepreneurship themes, i.e. the impact of programme design on programme outcomes, the role of role models and

mentors during and after an entrepreneurship education programme and the impact of entrepreneurship education on entrepreneurial performance. Additionally, future researchers could focus on the impact of corruption on entrepreneurial intentions and the effective implementation of entrepreneurship education programmes within the context of developing nations. In a similar vein, future researchers could conduct research on the impact of the business environment on the successful implementation of entrepreneurial ideas. They could also consider the effects of the business environment and economic transparency on entrepreneurship.

Fourthly, future researchers should consider carrying out research on EE impact studies using ex-ant, during and ex-post strategy. This will enable them to effectively measure and/or assess the actual impact of the EE programmes. There is also a need to assess impact 2 or 3 years after the participants' engagement in an entrepreneurship education programme.

Finally, there is a need for future researchers to build upon the entrepreneurship education, competence framework developed in this study by using a wide range of participants to include, lecturers, students, practitioners and policymakers across different contexts within the developing nations. This will help to develop a comprehensive framework that can be used across all programmes.

8.6 Chapter Summary

This chapter presented an overview of the study, the key findings and contributions, the implication of the findings and the limitations of the study, and key suggestions for future research opportunities.

The research specifically contributes to the application of the World Bank conceptual framework for entrepreneurship education and training, the theory of planned behaviour and the EntreComp framework in predicting entrepreneurial intentions. The implication of the study for educators and practitioners is highlighted. In particular, the study will benefit educators in designing the content of an entrepreneurship education programme. Though the overall positive effect of entrepreneurship education on entrepreneurial intentions and skills are minor, there is still huge evidence that supports the significance of EE programmes in especially reducing graduate youths unemployment. Hence policymakers should continue to support the growth of entrepreneurship education programmes whilst at the same time monitoring its design and implementation. The chapter also highlighted key limitations, i.e. sample size, time, etc. Suggestions for future researchers in terms of advancing this nature of study within countries in developing nations were particularly highlighted.

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Appendices

Appendix 1: Pillars of an Entrepreneurship Ecosystem

Component of the entrepreneurship ecosystem	What does it measure?
Pillar 1:Opportunity Perception	Can the population identify opportunities to start a business and does the institutional environment make it possible to act on those Opportunities?
Pillar 2: Start-up Skills	Does the population have the skills necessary to start a business based on their own perceptions and the availability of tertiary education?
Pillar 3: Risk Acceptance	Are individuals willing to take the risk of starting a business? Is the environment relatively low risk or do unstable institutions add additional risk to starting a business?
Pillar 4: Networking	Do entrepreneurs know each other and how geographically concentrated are their networks?
Pillar 5: Cultural Support	How does the country view entrepreneurship? Is it easy to choose entrepreneurship or does corruption make entrepreneurship difficult relative to other career paths?

Pillar 6: Opportunity Perception	Are entrepreneurs motivated by opportunity rather than necessity and does governance make the choice to be an entrepreneur easy?
Pillar 7: Technology Absorption	Is the technology sector large and can businesses rapidly absorb new technology?
Pillar 8: Human Capital	Are entrepreneurs highly educated, well trained in business and able to move freely in the labor market?
Pillar 9:Competition	Are entrepreneurs, creating unique products and services and able to enter the market with them?
Pillar 10: Product Innovation	Is the country able to develop new products and integrate new technology?
Pillar 11: Process Innovation	Do businesses use new technology and are they able access high quality human capital in STEM fields?
Pillar 12: High Growth	Do businesses intend to grow and have the strategic capacity to achieve this growth?
Pillar 13: Internationalization	Do entrepreneurs want to enter global markets and is the economy complex enough to produce ideas that are valuable globally?
Pillar 14: Risk Capital	Is capital available from both individual and institutional investors?

Source: GEDI (2018)

Appendix 2: List of Higher Education Institutions in Sierra Leone

	Institution	Location
	PUBLIC INSTITUTIONS	
1	University of Sierra Leone	Western Urban
2	Njala University	Moyamba, Bo
3	Milton Margai College of Education and Technology	Western Urban
4	Freetown Teachers College	Western Urban
5	Port Loko Teachers College	Port Loko
6	Northern Polytechnic	Makeni
7	Eastern Polytechnic	Kenema
8	Bonthe Technical College	Bonthe
	PRIVATE INSTITUTIONS	
1	University of Makeni	Makeni
2	Institute of Electoral Administration and Civic Education	Western Urban
3	College of Management and Administration (COMA)	Western Rural
4	College of Business Studies	Western Urban
5	College of Travel and Tourism Studies	Western

		Urban
6	Banktec College of Information Technology	Western Urban
7	MASTEE College of Technology	
8	Emibex College of Management & Finance	Western Urban
9	Crown Technical College	
100	Evangelical College of Theology	Western Rural
11	Silicon Pro	Western Urban
12	Every Nation College of Administration	
13	Freetown College of Management and Accountancy	Western Urban
14	Christian Leadership College	
15	Institute of Advanced Management and Technology	Western Urban
16	Institute of Business Studies & Administration (IBSA)	
17	Institute of Business Administration & Technology (IBATECH)	Western Rural
18	Institute of Continuing Education and Consultancy Services	Western Urban
19	Institute of Management, Accounting & Tourism (IMAT)	Western Urban

20	Orthodox College of Education of West Africa	Western Urban
21	Pentecostal International Christian College of Management and Administration	
22	Kelhas College for International Studies	
23	LICCSAL Business College	Western Urban
24	Sierra Leone Theological College & Church Training Centre	Western Urban

Source: World Bank (2013)

Appendix 3: Overview of Analysed Impact Studies and Results by Dependent Variables

Table 1. Overview of Analyzed Impact Studies and Results by Dependent Variables.

Results: Impact of Entrepreneurship Education Program on the Respective Dependent Variables Positive[1] (+); Negative[1] (—); Not Significant[1] (ns); Contingent[2]; Unclear[3]

	Study	Measurement Occasion	Sample Size	Skills and Knowledge	Attitudes and Perceptions	Intentions	Nascency and Performance	Other Outcome Variables	Overall 30 Positive 8 Mixed 1 Not Significant
1	Bakotic and Kruzic (2010)	ex post	176			+			positive
2	Oosterbeek et al. (2010)	ex ante/ex post	104	ns ns —	ns ns ns ns ns +	—		ns	mixed
3	Kruzic and Pavic (2010)	ex post	265					+	positive
4	Singh and Verma (2010)	ex post	52				+++ ns		mixed
5	Von Graevenitz et al. (2010)	ex ante/ex post	196	+	ns ns ns ns ++	—			mixed
6	Athayde (2009)	ex post	109					+	positive
7	Cruz et al. (2009)	ex post	345				++		positive
8	Olomi and Sinyamule- (2009)	ex post	330*				ns		not significant
9	Cheung (2008)	ex ante/ex post	50	+	+				positive
10	Jones et al. (2008)	ex ante/ex post	50			+			positive
11	Liao and Gartner (2008)	ex post	312					+	positive

Table 1. (*Continued*)

	Study	Measurement Occasion	Sample Size	Skills and Knowledge	Attitudes and Perceptions	Intentions	Nascency and Performance	Other Outcome Variables	Overall 30 Positive 8 Mixed 1 Not Significant
				Results: Impact of Entrepreneurship Education Program on the Respective Dependent Variables Positive[1] (+); Negative[1] (—); Not Significant[1] (ns); Contingent[2]; Unclear[3]					
12	Matlay (2008)	ex post	64	+			+		positive
13	Petridou and Glaveli (2008)	ex post	104	+	+		+	+	positive
14	Radu and Loué (2008)	ex post	44	+	contingent	contingent			mixed
15	Alarape (2007)	ex post	62				++		positive
16	Garalis and Straz-diene (2007)	ex post	103	+	+ + + +				positive
17	Harris, Gibson and Taylor (2007)	ex ante/ex post	142	+	+ + +				positive
18	Souitaris et al. (2007)	ex ante/ex post	124		ns ns +	+	ns		mixed
19	Wilson et al. (2007)	ex post	933		+				positive
20	Fayolle et al. (2006)	ex ante/ex post	20		+	+			positive
21	Friedrich et al. (2006)	ex ante/ex post	27				+		positive
22	Chrisman et al. (2005)	ex post	159				++		positive

Table 1. (*Continued*)

	Study	Measurement Occasion	Sample Size	Skills and Knowledge	Attitudes and Perceptions	Intentions	Nascency and Performance	Other Outcome Variables	Overall 30 Positive 8 Mixed 1 Not Significant
23	Galloway et al. (2005)	ex post	519	unclear				unclear	mixed
24	Lee et al. (2005)	ex post	162	+		+		contingent ns	mixed
25	DeTienne and Chandler (2004)	ex ante/ex post	71	+					positive
26	Ohland et al. (2004)	ex post	91					++	positive
27	Wee (2004)	ex post	52	+					positive
28	Peterman and Kennedy (2003)	ex ante/ex post	109		++				positive
29	Galloway and Brown (2002)	ex post	2,143				ns ns	+	mixed
30	Menzies and Paradi (2002)	ex post	177				++		positive
31	Thornberry (2002)	ex post	1,000				+		positive
32	Fayolle (2000)	ex post	25				+		positive
33	Hansemark (1998)	ex ante/ex post	19		++				positive
34	Chrisman (1997)	ex post	181				+		positive
35	Kolvereid and Moen (1997)	ex post	303			+	+		positive
36		ex post	51	+					positive

Results: Impact of Entrepreneurship Education Program on the Respective Dependent Variables Positive[1] (+); Negative[1] (—); Not Significant[1] (ns); Contingent[2]; Unclear[3]

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Table 1. (*Continued*)

| Study | Measurement Occasion | Sample Size | Results: Impact of Entrepreneurship Education Program on the Respective Dependent Variables Positive[1] (+); Negative[1] (—); Not Significant[1] (ns); Contingent[2]; Unclear[3] | | | | | Overall 30 Positive 8 Mixed 1 Not Significant |
			Skills and Knowledge	Attitudes and Perceptions	Intentions	Nascency and Performance	Other Outcome Variables	
Kourilsky and Esfandiari- (1997)								
37 Clouse (1990)	ex ante/ex post	47	+					positive
38 Garnier and Gasse (1990)	ex post	228				+		positive
39 Clark *et al.* (1984)	ex post	1,265			+	+		positive

Notes: [1]Authors find positive, negative or not significant effect of entrepreneurship education on outcome variable.
[2]Authors find different outcomes depending on the characteristics of the independent variable (Radu and Loué, 2008) or due to contingency factors (Lee et al., 2005).
[3]Research question/ hypothesis could neither be supported nor denied.
*The total sample size is $n = 508$, however, we only considered the participants in small business and entrepreneurship courses and interpreted the remaining trainees as a control group.

Source: Lorz *et al.* (2013)

Appendix 4: List of Managerial Competencies

	Entrepreneurial competency	Author	Entrepreneurial competency	Author
1	Accepting of responsibility	Kordnaeij *et al.*, 2007	Long-term vision	Timmons, 1979
2	Ability to motivate others	Izquierdo and Deschoolmeester, 2010	Making a Total Commitment to Their Cause	Mitton, 1989
3	Adaptability and flexibility	Tajeddini and Mueller, 2009	Marketing and sales skills	Izquierdo and Deschoolmeester, 2010
4	Analytical ability	Kumara and Sahasranam, 2009	Multi-experience identity	Mendes and Kehoe, 2009
5	Applied in orientation	Mendes and Kehoe, 2009	Need for achievement	McClelland, 1961; 1965
6	Approachability	Martin and Staines, 1994	Need for autonomy	Schjoedt, 2009
7	Assertiveness	Keogh, 2006	Need for feedback	Schjoedt, 2009
8	Belief in effect of personal effort on outcomes	McGhee and Crandall, 1968	Need for power	Barkham, 1994

9	Challenge ability	Sadeghi and Steki, 2010	Need for Total Control	Mitton, 1989
10	Commercial experience	Murray, 1996	Need for Variety	Hackman & Oldham, 1976
11	Commercial understanding	Izquierdo and Deschoolmeester, 2010	Negotiation	Keogh, 2006
12	Communication skills	Izquierdo and Deschoolmeester, 2010	Networking & Team-building	Kumara and Sahasranam, 2009
13	Competitiveness	Man *et al.*, 2002	Non-traditional	Mendes and Kehoe, 2009
14	Conceptual skills	Hynes *et al.*, 2009	Opportunity identification, grasping, evaluation	Mitton, 1989
15	Concern for high quality of work	Izquierdo and Deschoolmeester, 2010	Optimistic	Mendes and Kehoe, 2009
16	Creativity	Martin, 1982	Persistence	Schmitt-Rodermund, 2004
17	Critical Thinking	San Tan and Ng, 2006	Physical health	Hornaday and Aboud, 1971
18	Decision making	Cantillion, 1700	Practical work	Hynes *et al.*, 2009

	ability	(Cited in Kilby, 1971)	experience	
19				
20	Desire to have high earning	Pistrui *et al.*, 2001	Previous contact with venture capitalists	Murray, 1996
21	Determination	Zali, *et al.,* 2007	Pro-activity	Leko-Šimić et al, 2007
22	Embracing	Mitton, 1989	problem solving ability	Boojihawon et al, 2007
23	Engineering skills	Izquierdo and Deschoolmeester, 2010	Production and marketing experience	Murray, 1996
24	Estimation skills	Nekka and Fayolle, 2010	Responsiveness to local environmental conditions	Leko-Šimić et al, 2007
25	Experiential learning	Mars and Hoskinson, 2009	Risk bearing	Mill, 1848
26	Finance management	Izquierdo and Deschoolmeester, 2010	Risk taking	Brockhaus, 1980
27	Global vision	Boojihawon *et al.*, 2007	Seeing a Big Picture	Mitton, 1989

			Perspective	
28	Goal-driven	Timmons, 1979	Seeing the market from a different angle	Izquierdo and Deschoolmeeer,2010
29	Goal-setting skills	Boojihawon *et al.*, 2007	Self-confidence	Martin and Staines, 1994
30	Having a Utilitarian View of What's Right	Mitton, 1989	Self-evaluation	Wong et al, 2005
31	High extraversion	Schmitt-Rodermund, 2004	Self-understanding	Hynes et al., 2009
32	High level of drive and energy	Thomas and Mueller, 2000	Social abilities	Gasse and d'Amboise, 1997
33	ICT proficient	Hynes et al., 2009	Strategic thinking	Lans and Gulikers, 2010
34	Idea generation	Mitchelmore and Rowley, 2010	Stress and failure coping	Haglind, 2004
35	Implementation abilities	Green, 2009	Task motivation	Izquierdo and Deschoolmeester, 2010
36	Independence	Badri *et al.*, 2006	Time-management skills	Boojihawon et al, 2007

37	Information seeking ability	Gholipor, 2009	Tolerance for ambiguity	Mitton, 1989
38	Innovation	Schumpeter, 1934	Using Contacts and Connections	Mitton, 1989
39	Integrity	Izquierdo and Deschoolmeester, 2010	Venture and career evaluation	Izquierdo and Deschoolmeester, 2010
40	Internal locus of control	Sapuan *et al.*, 2009	Visionary	Sadeghi and Steki, 2010
41	Intuitive ability (sixth sense)	Sadler-Smith, 2010	Willing to have productive collaboration with others	Timmons, 1979
42	Leadership / Management	Collins and Moore, 1964	Willing to learn from failures	Timmons, 1979

Appendix 5: List of Managerial Competencies

Success Competencies With Empirical Support
Motive and Trait Level:
tolerance of ambiguity
need for control of material (financial) outcomes
achievement/task motivation
drive

Social Role and Self-Concept Level:

recognising importance of business relationships

concern for high quality of work

recognising and acting on opportunity

assertiveness

Skill Level:

designing specific products or services

designing the specific business organisation

manoeuvring in the industry

motivating organisation members

creating and utilising networks

comprehensive, detailed planning

monitoring the work of others

knowledge of finance/cash management

knowledge of engineering

knowledge of accounting

knowledge of marketing, and sales

knowledge about leadership

knowledge about oral communication

knowledge about human relations skills

Threshold Competencies with Empirical

self-confidence

persistence

integrity

recognising one's own limitations

expertise

information seeking

Theoretical and Speculative Competencies

Motive and Trait Level:

total commitment to their venture

need for control

utilitarian control

tolerance for ambiguity

present-future time orientation

temporal/cognitive complexity

vigilance

intuition

flexibility

field independence

Social Role and Self-Concept Level:

role negotiation

role transition flexibility

seeing the big picture/strategic zoom lens

embracing competency of others

aware of business timing

recognising patterns in complex and shifting arrays of data

clear business goals

internal alignment of values, needs and beliefs

managing conflict

form emotionally positive instrumental relationships

managing the overlapping family and business systems

managing transitions in relationships

Skill Level:

team building and collaboration

experiential learning

Source: Boyatzis (1982)

Appendix 6: The Full EntreComp Framework

Area	Compe-tence	Hint	Descriptor	Thread[10]	**Foundation**		**Intermediate**		**Advanced**		**Expert**	
				Level of proficiency	**Relying on support from others**		**Building independence**		**Taking responsibility**		**Driving transformation, innovation and growth**	
				Progression	Under direct supervision.	With reduced support from others, some autonomy and together with my peers.	On my own and together with my peers.	Taking and sharing some responsibili-ties.	With some guidance and together with others.	Taking responsi-bility for making decisions and working with others.	Taking responsibility for contrib-uting to complex developments in a specific field.	Contributing substantially to the devel-opment of a specific field.
					Discover	Explore	Experiment	Dare	Improve	Reinforce	Expand	Transform
					Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**	**Level 6**	**Level 7**	**Level 8**
Ideas and opportunities	Spot-ting oppor-tunities	Use your imagina-tion and abilities to identify oppor-tunities for creating value.	Identify and seize opportu-nities to create value by exploring the social, cultural and economic landscape. Identify needs and challenges that need to be met. Establish new connections and bring together scattered elements of the landscape to create opportunities to create value.	Identify, create and seize opportuni-ties.	I can find opportunities to help others.	I can recognise opportunities to create value in my community and surroundings.	I can explain what makes an opportunity to create value.	I can proac-tively look for opportunities to create value, includ-ing out of necessity.	I can describe different analytical approaches to identify entre-preneurial opportunities.	I can use my knowledge and understanding of the context to make opportuni-ties to create value.	I can judge opportunities for creating value and decide whether to follow these up at different levels of the system I am working in (for example, micro, meso or macro).	I can spot and quickly take advantage of an opportuni-ty.
				Focus on challeng-es.	I can find different examples of challenges that need solutions.	I can recognise challenges in my community and surroundings that I can contribute to solving.	I can identify opportunities to solve problems in alternative ways.	I can redefine the description of a challenge, so that alternative opportunities address it may become apparent.	I can take apart established practices and challenge mainstream thought to create opportu-nities and look at challenges in different ways.	I can judge the right time to take an oppor-tunity to create value.	I can cluster different opportunities or identify synergies among different opportunities to make the most out of them	I can define opportunities where I can maintain a competitive advantage.
				Uncover needs.	I can find examples of groups who have benefited from a solution to a given problem.	I can identify needs in my community and surroundings that have not been met.	I can explain that different groups may have different needs.	I can establish which user group, and which needs, I want to tackle through creating value.	I can carry out a needs analysis involving relevant stake-holders.	I can identify challenges related to the contrasting needs and interests of different stakeholders.	I can produce a 'roadmap' which matches the needs with the actions needed to deal with them and helps me create value.	I can design projects which aim to anticipate future needs.

				Analyse the context.	I can tell the difference between different areas where value can be created (for example, at home, in the community, in the environ-ment, or in the economy or society).	I can recognise the different roles the public, private and third sectors play in my region or country.	I can tell the difference between contexts for creating value (for example, communities and informal networks, existing organisations, the market).	I can identify my personal, social and professional opportunities for creating value, both in existing organisations or by setting up new ventures.	I can identify the boundaries of the system that are relevant to my (or my team's) value-creating activity.	I can analyse an existing value-creation activity by looking at it as a whole and identifying opportunities to develop it further.	I can monitor relevant trends and see how they create threats and new opportunities to create value.	I can promote a culture within my organisation that is open to spotting the weak signals of change, leading to new opportunities for creating value.
Creativ-ity	Develop creative and purpose-ful ideas.	Develop several ideas and opportuni-ties to create value, includ-ing better solutions to existing and new challeng-es. Explore and experiment with innova-tive approach-es. Combine knowledge and resources to achieve valuable effects.		Be curious and open.	I can show that I am curious about new things.	I can explore new ways to make use of existing resources.	I can experi-ment with my skills and competences in situations that are new to me.	I can actively search for new solutions that meet my needs.	I can actively search for new solutions that improve the value-creating process.	I can combine my understand-ing of different contexts to transfer knowledge, ideas and solutions across different areas.		
				Develop ideas.	I can develop ideas that solve problems that are relevant to me and my surroundings.	Alone and as part of a team, I can develop ideas that create value for others.	I can experi-ment with different techniques to generate alternative solutions to problems, using available resources in an effective way.	I can test the value of my solutions with end users.	I can describe different techniques to test innovative ideas with end users.	I can set up processes to involve stake-holders in finding, develop-ing and testing ideas.	I can tailor a variety of ways of involving stakeholders to suit the needs of my value-creating activity.	I can design new processes to involve stakeholders in generating, developing and testing ideas that create value.
				Define problems.	I can approach open-ended problems (problems that can have many solutions) with curiosity.	I can explore open-ended problems in many ways so as to generate multiple solutions.	I can take part in group dynamics aimed at defining open-ended prob-lems.	I can reshape open-ended problems to fit my skills.	I can describe and explain different approaches to shaping open-ended problems and different problem-solving strategies.	I can help others create value by encouraging experimentation and using creative tech-niques to approach problems and generate solutions.	I can initiate, develop, manage and complete a creative project.	I can use a mix of creative techniques to keep generat-ing value over time.
				Design value.	I can assemble objects that create value for me and others.	I can improve existing products, services and processes so that they better meet my needs or those of my peers and the community.	I can identify the basic functions that a prototype should have to illustrate the value of my idea.	I can assem-ble, test and progressively refine proto-types that simulate the value I want to create.	I can create (alone or with others) products or services that solve my problems and my needs.	I can develop and deliver value in stages, launching with the core fea-tures of my (or my team's) idea and progressive-ly adding more.	I can apply different design approaches to create value through new products, processes or services.	I can design and put in place innova-tive processes to create value.

			Be innova-tive.	I can find examples of innovative products, services and solutions.	I can describe how some innovations have transformed society.	I can tell the difference between types of innovations (for example, process versus product innovation and social innovation, incremental versus disruptive innovation).	I can judge if an idea, product or process is innovative or just new to me.	I can describe how innovations diffuse in society, culture and the market.	I can describe different levels of innovation (for example, incremental, breakthrough or transformational) and their role in value-creating activities.	I can identify the steps needed to research the potential for an innovative idea in light of its development into an existing enterprise, a new venture or an opportunity for social change.	I can manage innovation processes that respond to emerging needs and make the most of opportunities as they become available.
Vision	Work towards your vision of the future.	Imagine the future. Develop a vision to turn ideas into action. Visualise future scenarios to help guide effort and action.	Imagine.	I can imagine a desirable future.	I can develop simple future scenarios where value is created for my community and surroundings.	I can develop (alone or with others) an inspiring vision for the future that involves others.	I can build future scenarios around my value-creating activity.	I can use my understanding of the context to identify different strategic visions for creating value.	I can discuss my (or my team's) strategic vision for creating value.	I can develop (alone or with others) and compare different future scenarios.	I can show different audiences the benefits of my vision during turbulent times
			Think strategi-cally.			I can explain what a vision is and what purpose it serves	I am aware of what is needed to build a vision.	I can explain the role of a vision statement for strategic planning.	I can prepare a vision statement for my (or my team's) value-creating activity that guides internal decision-making throughout the whole process of creating value.	I can plan backwards from my vision to design the necessary strategy to achieve it.	I can encourage enthusiasm and a sense of belonging around a convincing vision.
			Guide action.			My vision for creating value drives me to make the effort to turn ideas into action.	I can decide what type of vision for creating value I would like to contribute to.	I can identify the changes needed to achieve my vision.	I can promote initiatives for change and transformation that contribute to my vision.	I can identify challenges related to my (or my team's) vision, while respecting the different levels of the system and the variety of stakeholders affected.	I can create (alone or with others) a 'roadmap' based on my vision for creating value.
Valuing ideas	Make the most of ideas and opportunities.	Judge what value is in social, cultural and economic terms. Recognise the potential an idea has for creating value and identify	Recognise the value of ideas.	I can find examples of ideas that have value for myself and others.	I can show how different groups, such as firms and institutions, create value in my community and surroundings.	I can tell the difference between social, cultural and economic value.	I can decide which type of value I want to act on and then choose the most appropriate pathway to do so.	I recognise the many forms of value that could be created through entre-preneurship, such as social, cultural or economic value.	I can break down a value chain into its different parts and identify how value is added in each part.	I can develop strategies to effectively make the most of opportunities to create value in my organi-sation or venture.	I can state the value of a new idea from different stakeholders' perspectives.

			suitable ways of making the most out of it.	Share and protect ideas.	I can clarify that other people's ideas can be used and acted on, while respecting their rights.	I can explain that ideas can be shared and circulated for the benefit of everyone or can be protected by certain rights, for example, copyrights or patents.	I can tell the difference between types of licences that can be used to share ideas and protect rights.	I can choose the most appropriate licence for the purpose of sharing and protecting the value created by my ideas.	I can tell the difference between trademarks, registered design rights, patents, geographical indications, trade secrets, confidentiality agreements and copyright licences, including open, public-domain licences such as creative commons.	When creating ideas with others, I can outline a dissemination and exploitation agreement that benefits all partners involved.	I can develop a tailored strategy on intellectual property rights that deals with geographic requirements.	I can develop a strategy on intellectual property rights that is tailored to the age of my portfolio.
	Ethical and sustainable thinking	Assess the consequences and impact of ideas, opportunities and actions.	Assess the consequences of ideas that bring value and the effect of entrepreneurial action on the target community, the market, society and the environment.	Behave ethically.	I can recognise behaviours that show integrity, honesty, responsibility, courage and commitment.	I can describe in my own words the importance of integrity and ethical values.	I can apply ethical thinking to consumption and production processes.	I am driven by honesty and integrity when taking decisions.	I can argue that ideas for creating value should be supported by ethics and values relating to gender, equality, fairness, social justice and environmental sustainability.	I can take responsibility for promoting ethical behaviour in my area of influence, (for example, by promoting gender balance highlighting inequalities and any lack of integrity).	I make it my priority to make sure that ethical behaviour is respected and promoted in my area of influence.	I take action against unethical behaviour.
			Reflect on how sustainable long-term social, cultural and economic goals are, and the course of action chosen. Act responsibly.	Think sustainably.	I can list examples of environmentally friendly behaviour that benefits a community.	I can recognise examples of environmentally friendly behaviour by companies that creates value for society as a whole.	I can identify practices that are not sustainable and their implications for the environment.	I can produce a clear problem statement when faced with practices that are not sustainable.	I can discuss the impact an organisation has on the environment (and vice versa).	I can discuss the relationship between society and technical developments, relating to their implications for the environment.	I can choose adequate methods for analysing environmental impact based on their advantages and disadvantages.	I can contribute to self-regulation discussions within my sector of operations.
				Assess impact.	I can find and list examples of changes caused by human action in social, cultural, environmental or economic contexts.	I can tell the difference between the impact of a value-creating activity on the target community and the broader impact on society.	I can identify the implications that taking up opportunities will have on me and my team, on the target group and on the surrounding community.	I can identify stakeholders who are affected by the change brought about by my (or my team's) value-creating activity, including stakeholders who cannot speak up (for example, future generations, climate or nature).	I can analyse the implications of my value-creating activity within the boundaries of the system I am working in.	I can define the purpose of the impact assessment, impact monitoring, and evaluation of impact.	I can choose 'measure indicators' to monitor and assess the impact of my value-creating activity.	I can carry out impact assessment, impact monitoring, and impact evaluation on my value-creating activity.

Resources												
				Be accountable.				I can tell the difference between accounting for use of resources and accounting for the impact of my value-creating activity on stakeholders and the environment.	I can tell the difference between input, output, outcomes and impact.	I can discuss a range of accountability methods for both functional and strategic accountability.	I can use the accountability methods that hold me responsible to our internal and external stakeholders.	I can design ways to be accountable to all of our stakeholders.
	Self-awareness and self-efficacy	Believe in yourself and keep developing.	Reflect on your needs, aspirations and wants in the short, medium and long term Identify and assess your individual and group strengths and weaknesses. Believe in your ability to influence the course of events, despite uncertainty, setbacks and temporary failures.	Follow your aspirations.	I can identify my needs, wants, interests and goals.	I can describe my needs, wants, interests and goals.	I can commit to fulfilling my needs, wants, interests and goals.	I can reflect on my individual and group needs, wants, interests and aspirations in relation to opportunities and future prospects.	I can translate my needs, wants, interests and aspirations into goals that help me reach them.	I can help others to reflect on their needs, wants, interests and aspirations and how they can turn these into goals.		
				Identify your strengths and weaknesses.	I can identify things I am good at and things I am not good at.		I can judge my strengths and weaknesses and those of others in relation to opportunities for creating value.	I am driven by the desire to use my strengths and abilities to make the most of opportunities to create value.	I can team up with others to compensate for our weaknesses and add to our strengths.	I can help others identify their strengths and weaknesses.		
				Believe in your ability.	I believe in my ability to do what I am asked successfully.	I believe in my ability to achieve what I intend to.	I can judge the control I have over my achievements (compared with any control from outside influences).	I believe I can influence people and situations for the better	I believe in my ability to carry out what I have imagined and planned, despite obstacles, limited resources and resistance from others.	I believe in my ability to understand and take the good out of experiences that others may label as failures.		
				Shape your future.	I can list different types of jobs and their key functions.	I can describe which qualities and abilities are needed for different jobs, and which of these qualities and abilities I have.	I can describe my skills and competences relating to career options, including self-employment.	I can use my skills and competences to change my career path, as a result of new opportunities or from necessity.	I can discuss how a realistic understanding and evaluation of my personal attitudes, skills and knowledge can influence my decision-making, relationships with other people and quality of life.	I can choose professional development opportunities with my team and organisation based on a clear understanding of our strengths and weaknesses.	I can design professional development strategies for my team and organisation based on a clear understanding our strengths and weaknesses, in relation to both current and future opportunities to create value.	I can design strategies to overcome my (or my team's or organisation's) weaknesses and to develop our strengths in anticipating future needs.

	Motivation and perseverance	Stay focused and don't give up.	Be determined to turn ideas into action and satisfy your need to achieve. Be prepared to be patient and keep trying to achieve your long-term individual or group aims. Be resilient under pressure, adversity, and temporary failure.	Stay driven.	I am driven by the possibility to do or contribute to something that is good for me or for others.	I am motivated by the idea of creating value for myself and others.	I can anticipate the feeling of achieving my goals and this motivates me.	I can regulate my own behaviour to stay driven and achieve the benefits of turning ideas into action.				
				Be determined.	I see tasks as challenges to do my best.	I am motivated by challenges.	I can set challenges to motivate myself.	I am willing to put effort in and use resources to overcome challenges and achieve my (or my team's) goals.	I drive my effort by using my desire for achievement and belief in my ability to achieve.	I can coach others to stay motivated, encouraging them to commit to what they want to achieve.	I can create the right climate to motivate my team (for example, by celebrating successes, by learning from failures and by encouraging innovative ways to tackle problems).	I consider all outcomes as temporary solutions appropriate to their time and context, and so am motivated to make sure they develop in a continuous cycle of improvement and innovation.
				Focus on what keeps you motivated.		I can recognise different ways of motivating myself and others to create value.	I can reflect on the social incentives associated with having a sense of initiative and creating value for myself and others.	I can tell the difference between personal and external factors that motivate me or others when creating value.	I can use strategies to stay motivated (for example, set goals, monitor performance and evaluate my progress).	I can use strategies to keep my team motivated and focused on creating value.	I can design effective ways to attract talented people and keep them motivated.	I can reward initiative, effort, and achievement appropriately within my team and organisation.
				Be resilient.	I show passion and willingness to achieve my goals.	I am determined and persevere when trying to achieve my (or my team's) goals.	I can overcome simple adverse circumstances.	I can judge when it is not worth continuing with an idea.	I can persevere in the face of adversities when trying to achieve my goals.	I can devise strategies to overcome standard adverse circumstances.	I can cope with unexpected change, setbacks and failures (for example, job loss).	I can make sure that my team or organisation stay positive when making difficult decisions and dealing with failure.
				Don't give up.	I do not give up and I can keep going even when facing difficulties.	I am not afraid of working hard to achieve my goals.	I can delay achieving my goals in order to gain greater value, thanks to prolonged effort.	I can maintain effort and interest, despite setbacks.	I can celebrate short-term achievements, in order to stay motivated.	I can inspire others to work hard on their goals by showing passion and a strong sense of ownership.	I can stay focused on my vision and goals, despite challenges.	
	Mobilising resources	Get and manage the resources you need.	Get and manage the material, non-material and digital resources needed to turn ideas into action. Make the most	Manage resources (material and non-material).	I recognise that resources are not unlimited.	I can appreciate the importance of sharing resources with others.	I can experiment with different combinations of resources to turn my ideas into action.	I can get and manage the necessary resources to turn my idea into action.	I can develop a plan for dealing with limited resources when setting up my value-creating activity.	I can get together the necessary resources to develop my value-creating activity.	I can allocate enough resources to each step of my (or my team's) action plan and for the value-creating activity (for	I can judge the key resources needed to support an innovative idea or opportunity to develop an existing

		of limited resources. Get and manage the competences needed at any stage, including technical, legal, tax and digital competences (for example through suitable partnerships, networking, outsourcing and crowd-sourcing).								example, time, finances, and my team's skills, knowledge and experience).	business, launch a new venture, or initiate a social enterprise.
			Use resources responsibly.	I value my possessions and use them responsibly.	I can describe how resources last longer through reuse, repair and recycling.	I can discuss the principles of circular economy and resource efficiency.	I use resources responsibly and efficiently (for example, energy, materials in the supply chain or manufacturing process, public spaces).	I take into account the non-material cost of using resources when taking decisions about my value-creating activities.	I can choose and put in place effective resource-management procedures (for example, life-cycle analysis, solid waste).	I can identify the opportunities that use resources efficiently and the circular economy brings to my organisation.	I can design and put in place innovative ways to lower the overall impact of my value-creating activity on the environment, the community and society, and measure the improvement.
			Make the most of your time.	I can recognise different uses for my time (for example, studying, playing, resting).	I value my time as a scarce resource.	I can discuss the need for investing time in different value-creating activities.	I can use my time effectively to achieve my goals.	I can manage my time effectively, using techniques and tools that help make me (or my team) productive.	I can help others manage their time effectively.	I can put in place effective time-management procedures.	I can develop effective time-management procedures that meet the specific needs of my value-creating activity.
			Get support.	I can look for help when I am having difficulty achieving what I have decided to do.	I can identify sources of help for my value-creating activity (for example, teachers, peers, mentors).	I can describe the concepts of division of labour and job specialisation.	I can find and list public and private services to support my value-creating activity (for example, incubator, social enterprise advisors, start-up angels, chamber of commerce).	I can find digital solutions (for example, free, paid for, or open-source) that can help me manage my value-creating activities efficiently.	I can find support to help me take advantage of an opportunity to create value (for example, advisor or consultancy services, peer or mentor support).	I can effectively delegate tasks within and outside my organisation to make the most value (for example, outsourcing, partnering, acquisitions, crowd-sourcing).	I can develop a network of flexible and responsive providers from outside the organisation who support my value-creating activity.
Financial and economic literacy	Develop financial and economic know-how.	Estimate the cost of turning an idea into a value-creating activity. Plan, put in place and evaluate financial decisions over time. Manage financing to	Understand economic and financial concepts.	I can recall basic terminology and symbols related to money.	I can explain simple economic concepts (for example, supply and demand, market price, trade).	I can use the concept of opportunity costs and comparative advantage to explain why exchanges happen between individuals, regions and nations.	I can read income statements and balance sheets.	I can explain the difference between a balance sheet and a profit-and-loss account.	I can build financial indicators (for example, return on investment).	I can use financial indicators to assess the financial health of a value-creating activity.	I can use financial indicators to compare the financial health of my value-creating activity with that of competitors

			make sure my value-creating activity can last over the long term.	Budget.	I can judge what to use my money for.	I can draw up a simple household budget in a responsible manner.	I can draw up a budget for a value-creating activity.	I can judge the cash-flow needs of a value-creating activity.	I can apply the financial planning and forecasting concepts that I need to turn ideas into action (for example, profit or not for profit).	I can judge the cash-flow needs of a complex project.	I can judge the cash-flow needs of an organisation that handles many value-creating activities that depend on each other.	I can create a plan for the financial and economic long-term sustainability of my (or my team's) value-creating activity.
				Find funding.	I can identify the main types of income for families, businesses, non-profit organisations and the state.	I can describe the main role of banks in the economy and society.	I can explain that value-creating activities can take different forms (a business, a social enterprise, a non-profit organisation and so on) and can have different structures of ownership (individual company, limited company, co-operative and so on).	I can identify public and private sources of funding for my value-creating activity (for example, prizes, crowd-funding, and shares).	I can choose the most appropriate sources of funding to start up or expand a value-creating activity.	I can apply for public or private business support programmes, financing schemes, public subsidies or calls for tender.	I can raise funds and secure revenue from different sources, and manage the diversity of those sources.	I can judge an opportunity as a possible investor.
				Understand taxation.	I can outline the purpose of taxation.	I can explain how taxation finances the activities of a country and its part in providing public goods and services.	I can estimate the main accountancy and tax obligations I need to fulfil to meet the tax requirements for my activities.		I can estimate how my financial decisions (investments, buying assets, goods and so on) affect my tax.	I can make financial decisions based on current taxation schemes.	I can make financial decisions based on taxation schemes of different countries and territories.	
	Mobilising others	Inspire, engage and get others on board.	Inspire and enthuse relevant stakeholders. Get the support needed to achieve valuable outcomes. Demonstrate effective communication, persuasion, negotiation and leadership.	Inspire and get inspired.	I show enthusiasm for challenges.	I am actively involved in creating value for others.	I do not get discouraged by difficulties.	I can lead by example.	I can get endorsement from others to support my value-creating activity.	I can inspire others, despite challenging circumstances.	I can maintain momentum with my team, partners and stakeholders when involved in a challenging situation.	I can form coalitions to turn ideas into action.
				Persuade.		I can persuade others by providing a number of arguments.	I can persuade others by providing evidence for my arguments.	I can persuade others by appealing to their emotions	I can pitch effectively in front of potential investors or donors.	I can overcome resistance from those who will be affected by my (team's) vision, innovative approach, and value-creating activity.	I can create a call to action that gets internal stakeholders on board, such as co-workers, partners, employees or senior managers.	I can negotiate support for ideas for creating value.

Into action	Taking the initiative	Go for it.	Initiate processes that create value. Take up challenges. Act and work independently to achieve goals, stick to intentions and carry out planned tasks.	Communicate effectively.	I can communicate my ideas clearly to others.	I can communicate my team's ideas to others persuasively by using different methods (for example posters, videos, role-play).	I can communicate imaginative design solutions.	I can communicate the value of my (or my team's) idea to stakeholders from different backgrounds effectively.	I can communicate the vision for my (or my team's) venture in a way that inspires and persuades external groups, such as funders, partner organisations, volunteers, new members and affiliate supporters.	I can produce narratives and scenarios that motivate, inspire and direct people.	I can take part in constructive discussions with the community that my idea is targeted at.	I can get all relevant stakeholders to take responsibility to act on an opportunity for value creation.
				Use media effectively.	I can provide examples of inspiring communication campaigns.	I can discuss how different media can be used to reach audiences in different ways.	I can use various methods, including social media, to communicate value-creating ideas effectively.	I can use media appropriately, showing that I am aware of my audience and purpose.	I can influence opinions in relation to my value-creating activity, through a planned approach to social media.	I can design effective social-media campaigns to mobilize people in relation to my (or my team's) value-creating activity.	I can define a communication strategy to mobilize people in relation to my (or my team's) value-creating activity.	I can sustain and increase the support for my vision.
	Taking the initiative	Go for it.	Initiate processes that create value. Take up challenges. Act and work independently to achieve goals, stick to intentions and carry out planned tasks.	Take responsibility.	I can carry out the tasks I am given responsibly.	I am comfortable in taking responsibility in shared activities.	I can take individual and group responsibility to carry out simple tasks in value-creating activities.	I can take individual and group responsibility in value-creating activities.	I can delegate responsibility appropriately.	I can encourage others to take responsibility in value-creating activities.	I take responsibility in complex value-creating activities.	I can take responsibility in seizing new opportunities and when facing unprecedented challenges in value-creating activities.
				Work independently.	I show some independence in carrying out tasks I am given.	I can work independently in simple value-creating activities.	I can initiate simple value-creating activities.	I am driven by the possibility of being able to initiate value-creating activities independently.	I can initiate value-creating activities alone and with others.	I can help others work independently.	I praise initiative taken by others and reward it appropriately within my team and organisation.	
				Take action.	I can have a go at solving problems that affect my surroundings.	I show initiative in dealing with problems that affect my community.	I actively face challenges, solve problems and seize opportunities to create value.		I take action on new ideas and opportunities, which will add value to a new or existing value-creating venture.	I value others taking the initiative in solving problems and creating value.	I can encourage others to take the initiative in solving problems and creating value within my team and organisation.	
	Planning and management	Prioritise, organise and follow up.	Set long-, medium- and short-term goals. Define priorities and action plans. Adapt to unforeseen	Define goals.	I can clarify what my goals are in a simple value-creating activity.	I can identify alternative goals to create value in a simple context.	I can describe my goals for the future in line with my strengths, ambitions, interests and achievements.	I can set short-term goals that I can act on.	I can define long-term goals arising from the vision for my (or my team's) value-creating activity.	I can match short-term, mid-term and long-term goals to the vision for my (or my team's) value-creating activity.	I can design a strategy to achieve goals in line with my (or my team's) vision.	I can manage the balance between the need for creativity and for control so that my organisation's capacity to

	I can…	I can…	I can…	I can…	I can…	I can…	I can…	I can…
								achieve its goals is protected and nurtured.
Plan and organise.	I can carry out a simple plan for value-creating activities.	I can deal with a range of simple tasks at the same time without feeling uncomfortable.	I can create an action plan which identifies the necessary steps to achieve my goals.	I can allow for the possibility of changes to my plans.	I can summarise the basics of project management.	I can apply the basics of project management in managing a value-creating activity.	I can develop and stick to a detailed project management plan, adjusting to changing circumstances to make sure goals are reached.	I can design managerial procedures to effectively deliver value in challenging circumstances.
Develop sustainable business plans.			I can develop a business model for my idea.	I can define the key elements that make up the business model necessary to deliver the value I have identified.	I can develop a business plan based on the model, describing how to achieve the value identified.	I can organise my value-creating activities using planning methods such as business and marketing plans.	I can keep my planning methods updated and adapt them to changing circumstances.	I can adapt my value-creating activity's business model to face new challenges.
Define priorities.	I can recall the order of steps that was needed in a simple value-creating activity I took part in.	I can identify the basic steps that are needed in a value-creating activity.	I can prioritise the basic steps in a value-creating activity.	I can set my own priorities and act on them.	I can define the priorities to meet my (or my team's) vision.	I can stay focused on the priorities set, despite changing circumstances.	I can define priorities in uncertain circumstances, with partial or ambiguous information.	
Monitor your progress.	I can recognise how much progress I have made on a task.	I can monitor whether a task is going to plan.	I can identify different types of data that are necessary for monitoring the progress of a simple value-creating activity.	I can set basic milestones and observation indicators to monitor the progress of my value-creating activity.	I can describe different methods for performance and impact monitoring.	I can define what data is needed to monitor how effective my value-creating activities are and an appropriate way to collect them.	I can develop the performance indicators I (or my team) need to monitor progress towards a successful outcome in changing circumstances.	I can design and put in place a data-collection plan to monitor whether my venture is achieving its aims.
Be flexible and adapt to changes.	I am open to changes.	I can confront and deal with changes in a constructive way.	I can change my plans based on the needs of my team.	I can adapt my plans to achieve my goals in light of changes that are outside my control.	I can embrace change that brings new opportunities for value creation	I can anticipate and include change along the value-creating process.	I can use the results of monitoring to adjust vision, aims, priorities, resource planning, action steps or any other aspect of the value-creating process.	I can communicate effectively to the organisation the reason for changes and adjustments.

				Foundation		Intermediate		Advanced		Expert	
Coping with uncertainty, ambiguity and risk	Make decisions dealing with uncertainty, ambiguity and risk.	Make decisions when the result of that decision is uncertain, when the information available is partial or ambiguous, or when there is a risk of unintended outcomes. Within the value-creating process, include structured ways of testing ideas and prototypes from the early stages, to reduce risks of failing. Handle fast-moving situations promptly and flexibly.	Cope with uncertainty and ambiguity.	I am not afraid of making mistakes while trying new things.	I explore my own ways to achieve things.	I can discuss the role that information plays in reducing uncertainty, ambiguity and risk.	I can actively look for, compare and contrast different sources of information that help me reduce ambiguity, uncertainty, and risks in making decisions.	I can find ways of making decisions when the information is incomplete.	I can pull together different viewpoints to take informed decisions when the degree of uncertainty is high	I can make decisions evaluating the different elements in a situation that is uncertain and ambiguous.	I can set up appropriate strategies for collecting and monitoring data, which help me take decisions based on sound evidence.
			Calculate risk.	I can identify examples of risks in my surroundings.	I can describe risks related to a simple value-creating activity in which I take part.	I can tell the difference between acceptable and unacceptable risks.	I can weigh up the risks and benefits of self-employment with alternative career options, and make choices that reflect my preferences.	I can apply the concept of affordable losses to make decisions when creating value.	I can compare value-creating activities based on a risk assessment.	I can assess the risks my venture is exposed to as conditions change.	I can evaluate high-risk long-term investments using a structured approach.
			Manage risk.			I can critically evaluate the risks associated with an idea that creates value, taking into account a variety of factors.	I can critically evaluate the risks related to the formal set-up of a value-creating venture in the area in which I work.	I can demonstrate that I can make decisions by weighing up both the risks and the expected benefits of a value-creating activity.	I can outline a risk management plan for guiding my (or my team's) choices while developing my value-creating activity.	I can use strategies to reduce the risks that may arise during the value-creating process.	I can come up with strategies to reduce the risk of my value-creating initiative becoming obsolete.
Working with others	Team up, work together, and network.	Work together and co-operate with others to develop ideas and turn them into action. Network. Solve conflicts and face up to competition positively when necessary.	Accept diversity (people's differences).	I can show respect for others, their background and situations.	I am open to the worth that others can bring to value-creating activities.	I can combine different contributions to create value.	I can value diversity as a possible source of ideas and opportunities.		I can support diversity within my team or organisation.	Outside of my organisation, I can find ideas that create value and make the most of them.	
			Develop emotional intelligence.	I can show empathy towards others.	I can recognise the role of my emotions, attitudes and behaviours in shaping others people's attitudes and behaviours and vice versa.	I can express my (or my team's) value-creating ideas assertively.	I can face and solve conflicts.	I can compromise where necessary.	I can deal with non-assertive behaviour that hinders my (or my team's) value-creating activities (for example, destructive attitudes, aggressive behaviour and so on).	I can manage conflicts effectively.	

				Listen actively.	I can show empathy towards others.	I can discuss the benefits of listening to other people's ideas for achieving my (or my team's) goals.	I can listen to other people's ideas for creating value without showing prejudice.	I can listen to my end users.	I can describe different techniques for managing relationships with end users.	I can put in place strategies to actively listen to my end users and act on their needs.	I can pull together information from a wide range of sources to understand my end users' needs.	
				Team up.	I am open to working alone as well as with others, playing different roles and taking some responsibility.	I am willing to change my way of working in a group.	I can work with a range of individuals and teams.	I share the ownership of value-creating activities with the members of my team	I can build a team based on the individual knowledge, skills and attitudes of each member.	I can contribute to creating value by teaming up with distributed communities through digital technologies.	I can design physical and virtual spaces that encourage team members to work together.	I can build an organisation's capacity to create value by encouraging people to work together.
				Work together.	I am open to involving others in my value-creating activities.	I can contribute to simple value-creating activities.	I can contribute to group decision-making constructively.	I can create a team of people who can work together in a value-creating activity.	I can use techniques and tools that help people to work together.	I can give people the help and support they need to perform at their best within a team.	I can work with a remote team of people who can independently contribute to a value-creating activity.	I can design working methods and incentives that enable team members to work well together.
				Expand your network.	I can explain the meaning and forms of association, co-operation and peer-to-peer support (for example, family and other communities).	I am open to establishing new contacts and cooperation with others (individuals and groups).	I can use the relationships I have to get the support I need to turn ideas into action, including emotional support.	I can establish new relationships to get the support I need to turn ideas into action, including emotional support (for example, joining a mentor network).	I can use my network to find the right people to work on my (or my team's) value-creating activity.	I proactively make contact with the right people inside and outside my organisation to support my (or my team's) value-creating activity (for example, at conferences or on social media).	I can use my network to bring together different perspectives to inform my (or my team's) value-creating process.	I can design effective processes to build networks of different or new stakeholders and keep them engaged.
	Learning through experience	Learn by doing.	Use any initiative for value creation as a learning opportunity. Learn with others, including peers and mentors. Reflect and learn from both success and failure (your own and other people's).	Reflect.	I can find examples of great failures that have created value.	I can provide examples of temporary failures that have led to valuable achievements.	I can reflect on failures (mine and other people's), identify their causes and learn from them.	I can judge if and how I have achieved my goals, so that I can evaluate my performance and learn from it.	I can reflect on my (or my team's) achievements and temporary failures as things develop so as to learn and improve my ability to create value.	I can help others reflect on their achievements and temporary failures by providing honest and constructive feedback.	I can take my team or the organisation to a higher level of performance, based on the feedback collected and by learning lessons from achievements and failures.	
				Learn to learn.	I can provide examples that show that my abilities and competence have increased with experience.	I can anticipate that my abilities and competence will grow with experience, through both successes and failures.	I can reflect on the relevance of my learning pathways for my future opportunities and choices.	I am always looking for opportunities to improve my strengths and reduce or compensate for my weaknesses.	I can find and choose opportunities to overcome my (or my team's) weaknesses and to develop my (or my team's) strengths.	I can help others develop their strengths and reduce or compensate for their weaknesses.	I can identify opportunities for self-improvement in my organisation and beyond.	I can design and put in place a strategy for my venture to continue to generate value.

				Learn from experi-ence.	I can recognise what I have learnt from taking part in value- creating activities.	I can reflect on my experience in taking part in value-creating activities and learn from it.	I can reflect on my interac-tion with others (including peers and mentors) and learn from it.	I can filter the feedback provided by others and keep the good from it.	I can integrate lifelong learning into my personal development strategy and career progress.	I can help others reflect on their interaction with other people and help them learn from this interaction.	I can learn from the impact-monitoring and evaluation activities that I have designed to track the progress of my value-creating activity.	I can learn lessons from monitoring and evaluation processes and establish them into my organisation's learning processes.

Appendix 7: Entrepreneurial Intention Questionnaire (EIQ) items

A. Indicate your level of agreement with the following statements about the entrepreneurial activity from 1 (total disagreement) to 7 (total agreement).

	1	2	3	4	5	6	7
A01. Starting a firm and keeping it viable would be easy for me	□	□	□	□	□	□	□
A02. A career as an entrepreneur is totally unattractive to me	□	□	□	□	□	□	□
A03. My friends would approve of my decision to start a business	□	□	□	□	□	□	□
A04. I am ready to do anything to be an entrepreneur	□	□	□	□	□	□	□
A05. I believe I would be completely unable to start a business	□	□	□	□	□	□	□
A06. I will make every effort to start and run my own business	□	□	□	□	□	□	□
A07. I am able to control the creation process of a new business	□	□	□	□	□	□	□
A08. My immediate family would approve of my decision to start a business	□	□	□	□	□	□	□
A09. I have serious doubts about ever starting my own business	□	□	□	□	□	□	□
A10. If I had the opportunity and resources, I would love to start a business	□	□	□	□	□	□	□
A11. My colleagues would approve of my decision to start a business	□	□	□	□	□	□	□
A12. Amongst various options, I would rather be anything but an entrepreneur	□	□	□	□	□	□	□
A13. I am determined to create a business venture in the future	□	□	□	□	□	□	□
A14. If I tried to start a business, I would have a high chance of being successful	□	□	□	□	□	□	□
A15. Being an entrepreneur would give me great satisfaction	□	□	□	□	□	□	□
A16. It would be very difficult for me to develop a business idea	□	□	□	□	□	□	□
A17. My professional goal is to be an entrepreneur	□	□	□	□	□	□	□
A18. Being an entrepreneur implies more advantages than disadvantages to me	□	□	□	□	□	□	□
A19. I have a very low intention of ever starting a business	□	□	□	□	□	□	□
A20. I know all about the practical details needed to start a business	□	□	□	□	□	□	□

B. Considering all advantages and disadvantages (economic, personal, social recognition, job stability, etc.), indicate your level of **attraction towards** each of **the following work options** from 1 (minimum attraction) to 7 (maximum attraction).

	1	2	3	4	5	6	7
B1 - Employee							
B2.- Entrepreneur							

C. Indicate your level of agreement with the following sentences about the values society put on entrepreneurship from 1 (total disagreement) to 7 (total agreement).

	1	2	3	4	5	6	7
C1. My immediate family values entrepreneurial activity above other activities and careers	☐	☐	☐	☐	☐	☐	☐
C2. The culture in my country is highly favorable towards the entrepreneurial activity	☐	☐	☐	☐	☐	☐	☐
C3. The entrepreneur's role in the economy is generally undervalued in my country	☐	☐	☐	☐	☐	☐	☐
C4. My friends value entrepreneurial activity above other activities and careers	☐	☐	☐	☐	☐	☐	☐
C5. Most people in my country consider it unacceptable to be an entrepreneur	☐	☐	☐	☐	☐	☐	☐
C6. In my country, entrepreneurial activity is considered to be worthwhile, despite the risks	☐	☐	☐	☐	☐	☐	☐
C7. My colleagues value entrepreneurial activity above other activities and careers	☐	☐	☐	☐	☐	☐	☐
C8. It is commonly thought in my country that entrepreneurs take advantage of others	☐	☐	☐	☐	☐	☐	☐

D. How do you rate yourself on the following entrepreneurial abilities/skill sets? Indicate from 1 (no aptitude at all) to 7 (very high aptitude).

	1	2	3	4	5	6	7
D1. Recognition of opportunity	□	□	□	□	□	□	□
D2. Creativity	□	□	□	□	□	□	□
D3. Problem solving skills	□	□	□	□	□	□	□
D4. Leadership and communication skills	□	□	□	□	□	□	□
D5. Development of new products and services	□	□	□	□	□	□	□
D6. Networking skills, and making professional contacts	□	□	□	□	□	□	□

Appendix 8: Entrepreneurship Education for Tertiary School Students (EEPTSS)-Summary of Findings

	University of Makeni (UNIMAK)
Programme Outcomes	The university runs two standalone entrepreneurship programmes (MBA in Entrepreneurship and Certificate in Entrepreneurship and Supply Chain Management) and a compulsory entrepreneurship module. The MBA in Entrepreneurship programme aims to develop entrepreneurship skills and attributes for its participants and linking them up with Local and international network of facilitators, partners and investors. It also aims at enabling participants to start and grow their own businesses during and after the course. Similarly, the certificate and module in entrepreneurship aim at impacting knowledge in entrepreneurship that will help participants to start and successfully run their own ventures. Overall the core-competencies that their entrepreneurship programmes seek to develop are: managing people, risk-taking, mobilising resources, business planning, self-confidence, assertiveness, spotting opportunities and building networks.

Programme Characteristics	The MBA programme in entrepreneurship is run in partnership with the Catholic University of Milano (Italy) and Tangaza University College (Kenya). It is delivered using a blended learning formula; some parts in the classroom (3 intensive weeks at the beginning, middle and final part of the year, plus 6 long weekends from Friday to Sunday), the rest is done online and on the the field (UNIMAK, 2016). On the other hand, the certificate in entrepreneurship and supply chain management and the module in entrepreneurship were designed and are being delivered by the university's staff
Programme Context	The MBA in Entrepreneurship Programme and the individual undergraduate entrepreneurship module are offered at the main University campus in the city of Makeni, Sierra Leone. The socioeconomic dynamics of the rural setting in which the university operates encourages entrepreneurial activities. However, participants who wish to start their own businesses during and after the course face serious capital constraints
Programme Participants	The MBA in entrepreneurship programme is meant for active and inspiring leaders who want to grow or start their own businesses. Participants are largely adults (UNIMAK, 2016). The entrepreneurship module targets undergraduate students participating in human resource

	management, banking and finance, accounting and banking and business administration diploma and degree courses, whilst the certificate in entrepreneurship and supply chain management target anyone interested in gaining employment.
Key findings	The MBA programme mainly caters for the needs of working professionals and is delivered using a blended learning approach (lectures, expert workshops, development of business plans etc.). The course is delivered on a part time basis, allowing participants to pursue their degree without leaving their respective jobs or businesses. Distance learning materials are available to all participants.
	The entrepreneurship module on the other hand is offered as a compulsory module for all undergraduate students taking business related courses. The module is largely theoretical though there are some practical elements to it e.g. the formulations of a business plan. The certificate in entrepreneurship and supply chain management is a standalone programme that is open to all participants who are interested in acquiring knowledge in entrepreneurship and supply chain. It is offered as a short time course.
	Institute of Public Administration and Management (IPAM)

Programme Outcomes	The programmes collectively aim to develop and enhance entrepreneurial skills of participants. The key skills covered in both their standalone entrepreneurship programme and modules include risk-taking, business planning, organising people, mobilising resources, self-confidence, monitoring others, knowledge on finance, leadership and marketing. It also aims at helping participants to establish businesses during or after the programme
Programme Characteristics	The programmes are designed by the university staff and delivered through the traditional classroom lecture. Students are assessed through exams and the development of a business plan
Programme Context	The institution offers entrepreneurship as a compulsory module for all its students doing different programmes at undergraduate level. It also offers entrepreneurship as an optional specialist area for both undergraduate and post-graduate students. The programmes are offered at different campuses across the capital city. Participants are faced with huge financial constraints in implementing their business ideas. Banks are not willing to lend to people without collaterals. There is also very little financial support from government to fund these ideas. Also, most people in the urban area are not necessarily keen to engage in entrepreneurial activities. They rather prefer traditional office based/white collar jobs. Thus interest in entrepreneurship education for students in this context

	relatively low
Programme Participants	The vast majority of programme participants are young adults who have come through the formal education process. However, a large proportion of them have no businesses or jobs.
Key findings	Very few students have the intention to engage in entrepreneurial activities and/or choose entrepreneurship as a profession. This may be due to the negative perception that people have about entrepreneurship as a profession
	The Institute of Advanced Management and Technology (IAMTECH)
Programme Outcomes	The one year student entrepreneurship programme aims to help participants to identify relevant opportunities, market niche, formulate specific, measurable and realistic plans and develop a small medium size businesses that will create sufficient income for themselves and "help boost the country's post Ebola economic development" (COCORIOKO, 2015). On the other hand, the entrepreneurship module offered across their diploma courses intend to equip students with required entrepreneurial skills that will enable them to successfully start and effectively run their own business. The skill sets embedded in their programmes includes: innovation, spotting opportunities, business planning and co-ordination, managing people, effective communication, assertiveness and control of

	resources
Programme Characteristics	The student entrepreneurship programme was developed by the college in partnership with The Network University (TNU), Migration and Development Consultancy (MD Consultancy) based in the Netherlands. It is delivered by two local staff and several coaches in the Netherlands through distance learning using the internet. The programme is financed by the Dutch Ministry of Foreign Affairs. It is monitored and evaluated by the International Organisation for Migration (IOM). The entry requirements of the programme are that students should hold the West African Basic Education Certificate Examination (BECE) and have an intention to start and run a successful business. The entrepreneurship module specification on the other hand was designed the college's staff with guidance from external experts. The programme is being delivered by the college's staff through a mix of traditional lectures and expert workshops.
Programme Context	On January 19th, 2016, IAMTECH in collaboration with the Network University of Netherlands launched a programme called 'Student Entrepreneurship Programme' (The Patriotic Vanguard, 2016). The programme is offered at the main campus in Freetown. The institute also offer entrepreneurship as a module across it courses at it main campus.
Programme Participants	The student entrepreneurship programme initially aims to target 50 students and alumni of the

	college and other prospective and current entrepreneurs within the Sierra Leone. The entrepreneurship module however only target participants studying other diploma courses at the institute
Key findings	The student entrepreneurship programme ended in August 2016 and the next intake is scheduled for January 2017. The online programme targets Sierra Leone nationals based in Sierra Leone. IAMTECH happened to be one of the very few colleges that offers entrepreneurship as a standalone discipline
	Milton Margai College of Education and Technology (MMCET)
Programme Outcomes	The aim of the module is to create a general awareness of the concept of entrepreneurship and help build the entrepreneurial capability of participants. A core entrepreneurial capability that the entrepreneurship programs seek to develop is: persuasion, planning, risk taking, organising, and flexibility, managing others, self-confidence, using initiatives and spotting opportunities.
Programme Characteristics	Milton Margai only runs entrepreneurship as a module across the different courses they offer. The module is designed and delivered by the college's own staff
Programme Context	The entrepreneurship module is delivered across the different campuses of the college.

Programme Participants	The module largely targets youths studying other courses within the college
Key findings	Entrepreneurship is offered as a compulsory course across all courses
	Njala University, Sierra Leone (NUSL)
Programme Outcomes	The intended outcomes of the module is to create a general awareness of entrepreneurship and impact the relevant, knowledge, competencies and technical skills needed to start and run a business. Key competencies covered within the entrepreneurship programmes are: efficiency, business planning, self-awareness, and need for achievement, co-ordination and control of resources, integrity and managing conflict.
Programme Characteristics	The module was developed and is being delivered and assessed by the college's staff
Programme Context	Njala offers their entrepreneurship course at their main campus in a town called Njala, Moyamba district and in the second capital, Bo.
Programme Participants	The programme targets students studying courses in the social sciences. The age range is largely between 20 to 35 years
Key findings	The entrepreneurship module is offered as both an elective and a compulsory module across some courses
	Northern Polytechnic

Programme Outcomes	The module is intended to equip learners with the necessary capabilities and mindset to enable them start, sustain and grow a venture. Key capabilities, it seeks to develop in participants are: organizing, persuasion, risk taking, business planning, and leadership and management skills.
Programme Characteristics	The module is designed by an external body (NCTVA), but it is delivered and administered by the polytechnic's staff. The running of the programme is financed by fees paid by participants. The module is largely delivered using the classroom lecture format
Programme Context	The programme is delivered at the polytechnic's main campus in Makeni. It is administered within a relatively stable political environment. Economically, the programme is facing some challenges in that there is limited funding from government to keep it running. The perception of entrepreneurship as a means to survival is strong among the people in Makeni as they are known for embarking on entrepreneurial activities
Programme Participants	The vast majority of participants are between the ages of 15-35 years
Key findings	- The polytechnic does not particularly have a diploma or certificate programme that specialise in Entrepreneurship but it does run an entrepreneurship module across it courses. The module is designed by the National Council for Technical, Vocational and Other Academic Awards (NCTVA) a body that is responsible to certify graduates at certificate and diploma levels. The perception of entrepreneurship within the participants in the region (rural) in

	which the programme is delivered is relatively high as compared to other regions(western rural and urban regions) in the country
	Eastern Polytechnic
Programme Outcomes	The module is primarily aimed at developing the entrepreneurial mindsets and capabilities of participants so as to enable them start and successfully run an enterprise
Programme Characteristics	The entrepreneurship module is being delivered to, all participants studying other diploma and certificate courses. The module is designed by the polytechnics in-house staff and accredited by Njala university, University of Sierra Leone. The traditional classroom lecture is the main method of delivery the module. The key competencies are covered in their module are: leadership, persuasion, and business planning, risk-taking, persuasion and management skills.
Programme Context	The entrepreneurship module is being delivered on campus in the eastern region of the country. Though there are specific initiatives from the government to promote entrepreneurship programmes across all institutions, grants and funding to support these initiates are limited.
Programme Participants	The age bracket of the majority of participants is between 20-35 years. Most of them have no business background. They are normally students who missed out on the minimum requirement needed to be accepted in a university programme

Key findings	Entrepreneurship is offered as a module only and not as a course on its own. However, the module is compulsory for all participants studying other disciplines
	College of Management and Administration (COMA)
Programme Outcomes	The prevailing focus of the entrepreneurship module is on developing entrepreneurial mindsets and capabilities to start a business. Entrepreneurial capabilities include acquiring financial literacy skills and a range of social skills such as locus of control, self-confidence, creativity, resilience, risk taking, management, business planning and leadership skills.
Programme Characteristics	The syllabus of the module is designed by NCTVA and is embedded within the school curricula. Thus the design is hugely influenced by an external body. The module is administered on a semester basis across different disciplines and it is delivered within the normal school hours by the college's staff.
Programme Context	The module is being delivered in the Western Rural area where participants tend to be more involved in entrepreneurial activities than their urban counterparts. The political and economic climate in which the programme is being delivered presents both an opportunity and constraint, specifically with regards to government policies, access to finance and the financial infrastructure
Programme Participants	The programme largely target youths between the ages of 20-35 years who have either missed out

	on university requirements or just want to study at the college to gain employment
Key findings	All participants are taking the entrepreneurship module as a compulsory subject and not necessarily because they like doing it. Thus the intention of individuals towards entrepreneurship may largely vary
	College of Business Studies (CBS)
Programme Outcomes	The entrepreneurship module at CBS is targeted at developing the mindset of participants towards entrepreneurship. Specifically, the module sought to enhance the socio-emotional skills (e.g. risk-taking, creativity, persistence, need for achievement etc.) of participants. The module also seeks to cover skills like leadership, business planning and persuasion skills.
Programme Characteristics	The content and curriculum of the programme are designed by an external body (NCTVA) and its primarily focused on promoting entrepreneurial mindsets and skills. It is delivered by the college's own staff. In addition, the programme is delivered through lectures and assessed externally
Programme Context	The programme is delivered in the western urban area of the country where the interest of participants towards entrepreneurship is low. The delivery of the module is flagged by constraints from specific government policies and economic factors such as access to funds and inflation

Programme Participants	The programme mostly targets young unemployed individuals who lack the requisite skills to be gainfully employed
Key findings	There is a huge eternal involvement in programme design and assessment. However delivery is done in house. Entrepreneurship is offered as a module rather than a course on its own.
	Emibex College of Management & Finance
Programme Outcomes	The module is aimed at developing participants entrepreneurial skill sets towards opening their own ventures. It is also aimed at creating a general awareness about entrepreneurship as an alternative form of employment. Some core competencies it seeks to develop in participants are: persuasion, leadership, planning and risk taking skills.
Programme Characteristics	The entrepreneurship module at Emibex is offered as a compulsory subject to all students studying their diploma and certificate courses. The module is offered on a semester basis. The syllabus is designed by NCTVA but the content is delivered by local staff. The college from time to time make use of external speakers and/or experts.

Programme Context	The political, social and socio-cultural environment in which the module is being delivered poses both a challenge and opportunity. For instance the government has designed policies through the ministry of youths and ministry of education to encourage the design of entrepreneurially oriented courses that will help reduce youth unemployment in the country. However, funding from government towards these programmes is limited.
Programme Participants	The programmes largely target individuals between the ages of 20-35 years
Key findings	The module targets young individuals who are looking for an alternative form of employment to survive. Most participants have little business background. The module is designed eternally, but delivered internally
	Freetown College of Management and Accountancy
Programme Outcomes	The module focuses on developing entrepreneurial capabilities and mindsets of all participants towards entrepreneurship. The competencies that are embedded in the module include risk taking, business planning, organising, managing others, integrity and knowledge about finance.
Programme Characteristics	The module is designed and moderated by an external body, but delivered by the college's own staff using traditional lecture methods. The college from time to time invite external speakers with business backgrounds to share their experiences with participants

Programme Context	The programme is delivered within the context of the capital city (western urban area). The culture of people in the western urban area is primarily towards traditional/white collar jobs and less towards entrepreneurship.
Programme Participants	Participants of this programme have little business background/or experience. The majority of them are youths between the ages of 18 to 35 years old
Key findings	Entrepreneurship is delivered as a module across all courses
	Institute of Business Studies & Administration (IBSA)
Programme Outcomes	The programme seeks to instill an entrepreneurial mindset into participants. It does this by stressing the importance of entrepreneurship as a major alternative to traditional employment. The programme further seeks to equip participants with the required skills to be self-employed, such as business planning, mobilising resources and people, leadership, finance, risk taking and controlling of resources
Programme Characteristics	The programme is run as module across all courses in the college. It is designed and assessed by NCTVA but delivered by the college's own staff.
Programme Context	The programme is being delivered in the western urban area of the capital city of Freetown, where most people have low entrepreneurial intentions toward self employment and/or starting a business.

	The majority prefers the traditional employment opportunities, i.e. legal practice, banking, doctors etc.
Programme Participants	Programme participants are primarily youths seeking an alternative form of education
Key findings	The curriculum and content of the module does not cover contemporary issues in entrepreneurship. This is partly because programmes are designed by external bodies who seldom revised the content to align with current changes
	Institute of Business Administration & Technology (IBATECH)
Programme Outcomes	The module in entrepreneurship is designed to equip participants with the relevant skills and attributes needed to start a venture. Key skills included in the module are time management, persuasion, business planning, organisation, control, finance and team building skills.
Programme Characteristics	The entrepreneurship module specification is designed by NCTVA and delivered by the college's local staff. The method of delivering the content and curriculum is largely based on the traditional classroom lecture
Programme Context	The entrepreneurship module at Institute of Business Administration and Technology (IBATECH) is being delivered at the college's main campus in Freetown. The perception of people in the local

	communities towards entrepreneurial activities is relatively low compared to other regions in the country. However, like other institutions, support subsidies and/or grants for government is limited
Programme Participants	The participants include people with formal and no formal education background and the majority are between the ages of 20-35 years
Key findings	Entrepreneurship at the college is delivered as a module across all disciplines. The main aim of the module is to equip the technical abilities of participants to start and run their own business
	Institute of Management, Accounting & Tourism (IMAT)
Programme Context	The entrepreneurship module at IMAT is delivered at its main campus in Freetown, western urban region. Funding to run the module comes from fees paid by participants. Even though government policy seeks to promote entrepreneurial activities in the country, here is little/no government support in the form of grants or subsidies for modules run by the institute in general
Programme Characteristics	The syllabus on the entrepreneurship module is designed by NCTVA, but delivered mostly by staff at IMAT. The college sometimes invites experts to teach the module at specific times in the academic year. Classroom lectures are used to deliver the content of the module

Programme Outcomes	The module primarily seeks to enhance the entrepreneurial skills and attributes of participants, e.g. project management skills, persuasion, how to raise finance, leadership, team building, risk taking and spotting opportunities. It is also aimed at creating a general awareness of entrepreneurship and get participants to start their own businesses
Programme Participants	Participants are largely young people between the ages of 15-35 years. Most participants have some form of formal education background, but have a little background understanding on how to start sustain and effectively grow a business
Key findings	Entrepreneurship at IMAT is delivered as a module and not a certificate or diploma course on its own. The programme aims to enhance participants abilities and intention towards starting their own businesses
	Institute of Continuing Education and Consultancy Services
Programme Outcomes	The module primarily aims at starting a business by developing the entrepreneurial competencies and knowledge of participants. Some core competencies it seeks to develop in participants includes persuasion, time management, business planning, mobilising resources, managing cash flow, management and leadership skills.

Programme Characteristics	The content and curriculum of the module are designed by NCTVA and whereas the delivery, administrative services, grants and mentoring facilities are organised by the college's own staff.
Programme Context	The Institute of Continuing Education and Consultancy Services run their entrepreneurship module in their campus in the western urban area of the country. The availability of funds is very limited in the context within which the programme is delivered thus affecting programme outcomes especially that of starting a business
Programme Participants	Participants of the module come from varied educational background and are largely between the ages of 20-30 years. Their interest and intention in entrepreneurial activities is not particularly high as the majority still seek to get jobs in the formal sector
Key findings	Entrepreneurship at the Institute of Continuing Education and Consultancy Services is offered as a module across all their courses. Thus, there is no specific certificate and/or diploma course in entrepreneurship offered at the college. The content and curriculum of the module are designed by NCTVA

Appendix 9: Overview of EE Programmes in Sierra Leone Questionnaire

Briefly answer the questions below. Please provide as much information as possible.

Name:

Occupation:

Institution:

Do you hold an entrepreneurship qualification?

Do you have any business experience? If yes, please briefly describe your experience

Who is responsible for the design of the programme?

What are the main learning outcomes of the entrepreneurship programme/module?

Please describe the key characteristics of the participants, e.g. age, level of education, business experience etc.

How is the programme/module delivered?

How is the programme/module assessed?

What core competencies does the programme/module seek to develop in participants?

What are the key challenges that you face in delivering the programme/module?

Do you have any other relevant information to share with regards to the programme/module?

Appendix 10: Consent Form: Overview of EE Programmes

Dear Sir/Madam,

I kindly invite you to participate in an interview in relation to my research titled:

*"*Youth unemployment and entrepreneurship education in Sierra Leone: the development of a contextual competencies framework for entrepreneurship education programmes"

I am currently enrolled in a PhD Business research programme at the University of West London, United Kingdom. The main aim of the research is to assess the effect of entrepreneurship education on youths' entrepreneurial intentions and to develop a set of entrepreneurial competencies for entrepreneurship education within the context of Sierra Leone. To do this I have set as an objective to firstly look at the current State of entrepreneurship education programmes in the country. You will be therefore asked key questions in relation to this.

Please note that your participation in this research project is entirely voluntary. Your responses will be analysed and interpreted in the most appropriate way and included in future publications by the Investigator.

Data Protection and Confidentiality: None of your personal data or information (including your personal image(s), other images provided by

you about your business, brand, trademark, patent or logo) will be

disclosed or used in any publication without your consent

If you have any questions about this project, please feel free to call **Mr**

Alfred Mbeteh *to discuss,* on +44 (0)74 7951 0978, including by Text or

Whatsapp,

Thank you for your assistance in this very important endeavour.

Sincerely yours,

Alfred Mbeteh

Principal Investigator

Appendix 11: Consent form: Entrepreneurial Intentions

Name of Researcher: Alfred Mbeteh. Email: 21294641@uwl.ac.uk	
School: Claude Littner Business School	
Title of study: Youth Unemployment and Entrepreneurship Education in Sierra Leone: the development of a contextual competency framework for entrepreneurship education programmes	
Aim of Research: the aim of this research is to assess effect of entrepreneurship education on youths' entrepreneurial intentions.	

Please read and complete this form carefully. If you are willing to participate in this study, ring the appropriate responses and sign and date the declaration at the end. If you do not understand anything and would like more information, please ask. Please note that this research has received a research ethics clearance by the university

I have had the research satisfactorily explained to me in verbal and / or written form by the researcher.	YES / NO
I understand that the research will involve conducting a survey which the completion of a questionnaire, and the estimated time commitment of 15 minutes	YES / NO
I understand that my participation is voluntary and that I am free to withdraw at any time, without giving reason.	YES / NO

I understand that all information about me will be treated in strict confidence and that I will not be named in any written work arising from this study.	YES / NO
I understand that any audiotape material of me will be used solely for research purposes and will be destroyed on completion of your research.	YES / NO
I understand that you will be discussing the progress of your research with others at University of West London and the research outcome will be given to me	YES / NO
I understand that data collected from me will be stored for the duration of the research only and this has been explained to me	YES / NO

I freely give my consent to participate in this research study and have been given a copy of this form for my own information.

Signature: ………………………………………………………………….………….

Date: …………………………………………………………………………………

Appendix 12: Consent form: Entrepreneurial Competencies

Dear Sir/Madam,

I kindly invite you to participate in an interview in relation to my research titled:

*"*Youth Unemployment and Entrepreneurship Education in Sierra Leone: the development of a contextual competency framework for Entrepreneurship Education Programmess *"*

I am currently enrolled in a PhD Business research program at the University of West London, United Kingdom. The main aim of the research is to assess the effect of entrepreneurship education on youths' entrepreneurial intentions and to develop a set of entrepreneurial competencies for entrepreneurship education within the context of Sierra Leone.

Part 1 of my data collection covered entrepreneurial intentions, whilst this part (Part 2) is primarily focused on asking your views about what key entrepreneurial competencies are needed to be learnt in an entrepreneurship programme.

The questions have been designed to gather information on your perception about the key entrepreneurial competencies needed for entrepreneurship programmes. To do so, I have attached the European Entrepreneurship Competence Framework [ENTRECOMP], a framework that highlights the core entrepreneurship

competencies that need to be taught across entrepreneurship programmes delivered within Europe.

Please note that your participation in this research project is entirely voluntary. Your responses will be analysed and interpreted in the most appropriate way and included in future publications by the Investigator.

Data Protection and Confidentiality: None of your personal data or information (including your personal image(s), other images provided by you about your business, brand, trademark, patent or logo) will be disclosed or used in any publication without your consent

Next Step: If you agree to participate in this project, please fill the questionnaire attached and email back to 21294641@student.uwl.ac.uk.

If you have any questions about this project, please feel free to call **Mr Alfred Mbeteh** *to discuss,* on **+44 (0)74 7951 0978**, including by **Text or Whatsapp**,

Thank you for your assistance in this very important endeavour.

Sincerely yours,

Alfred Mbeteh

Principal Investigator

Appendix 13: Entrepreneurial Competencies Questionnaire for Practitioners

Briefly answer the questions in the table below. Please provide as much information as possible.

Name:

Occupation:

Company:

Questions	Explanation / Comment
1. What inspired you to become a practitioner of entrepreneurship?	

2. Please try to define or summarise your personal understanding of what entrepreneurial competencies are?	
3. Using the ENTRECOMP framework (see attached), what entrepreneurial competencies do you look for in a prospective entrepreneur within the context of Sierra Leone?	
4. How can these competencies be developed in prospective entrepreneurs/employees in your view?	
5. Is there anything else you would like to share with me?	

Appendix 14: Entrepreneurial Competencies Questionnaire for Students

Briefly answer the questions in the table below. Please provide as much information as possible.

Name:

Occupation:

Institution:

Questions	Explanation / Comment
1. What inspired you to choose this module?	

2. Please try to define or summarise your personal understanding of what entrepreneurial competencies are?	
3. Using the ENTRECOMP framework (see attached), what entrepreneurial competencies do you think is vital to acquire within the context of Sierra Leone?	
4. How can these competencies be developed in prospective entrepreneurs/employees in your view?	
5. Is there anything else you would like to share with me?	

Appendix 15: Entrepreneurial Competencies Questionnaire for Lecturers

Briefly answer the questions in the table below. Please provide as much information as possible.

Name:

Occupation:

Company:

Questions	Explanation / Comment
6. What inspired you to become a lecturer of entrepreneurship?	
7. Please try to define or summarise your personal understanding of	

what entrepreneurial competencies are?	
8. Using the ENTRECOMP framework (see attached), what entrepreneurial competencies do you think is appropriate for students to learn within the context of Sierra Leone?	
9. How can these competencies be developed in prospective entrepreneurs/employees in your view?	
10. Is there anything else you would like to share with me?	