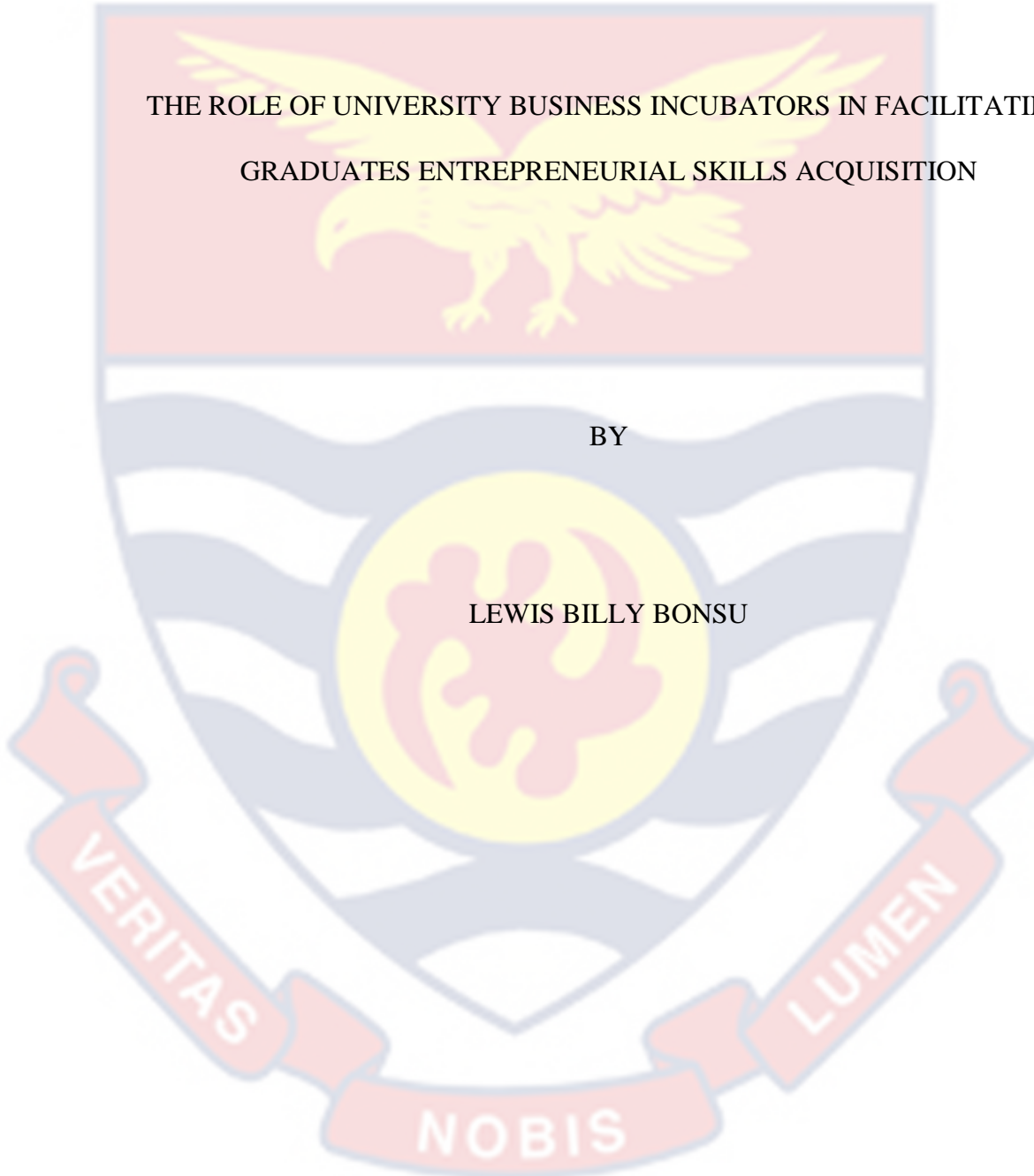


UNIVERSITY OF CAPE COAST

THE ROLE OF UNIVERSITY BUSINESS INCUBATORS IN FACILITATING
GRADUATES ENTREPRENEURIAL SKILLS ACQUISITION

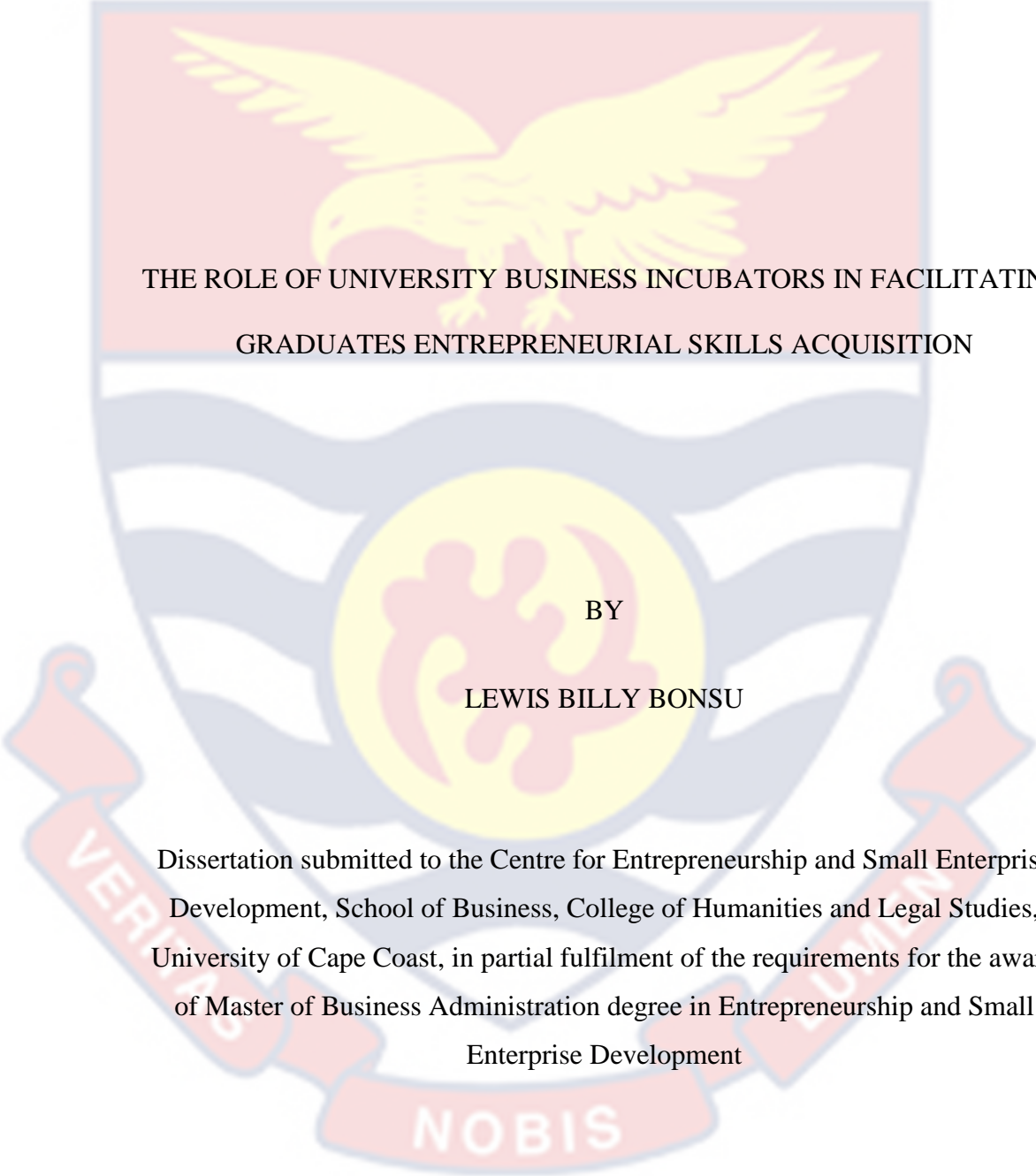
BY

LEWIS BILLY BONSU



2021

UNIVERSITY OF CAPE COAST



THE ROLE OF UNIVERSITY BUSINESS INCUBATORS IN FACILITATING
GRADUATES ENTREPRENEURIAL SKILLS ACQUISITION

BY
LEWIS BILLY BONSU

Dissertation submitted to the Centre for Entrepreneurship and Small Enterprise
Development, School of Business, College of Humanities and Legal Studies,
University of Cape Coast, in partial fulfilment of the requirements for the award
of Master of Business Administration degree in Entrepreneurship and Small
Enterprise Development

AUGUST 2023

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original work and that no part of it has been presented for another degree in this University or elsewhere.

Candidate's Signature..... Date

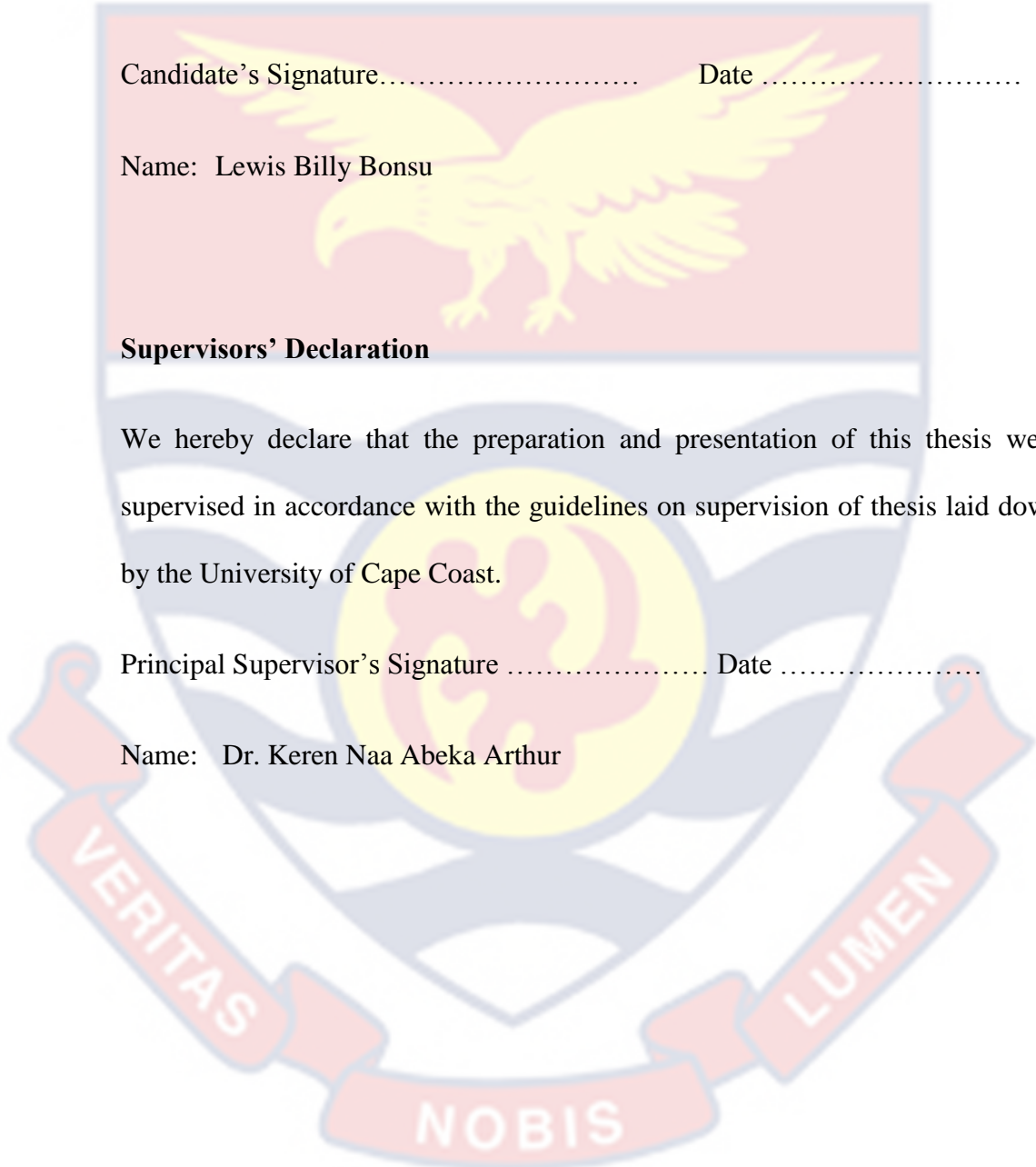
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Supervisors' Declaration

We hereby declare that the preparation and presentation of this thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Principal Supervisor's Signature Date

Name: Dr. Keren Naa Abeka Arthur



ABSTRACT

This study aims to analyse the role of University Business Incubators in facilitating graduates' entrepreneurial skills acquisition. This helps create an environment in which everyone can help the other to put their new ideas, special skills and abilities into new businesses. In other words, the traditional universities' role has been embedded with entrepreneurial responsibility to redirect new knowledge for economic development through BIs. The study adopted an analytical descriptive methodology approach that described the basic features of the data by using the descriptive research design. A qualitative (descriptive) approach used by the research enabled him to obtain the study's data which further assisted him to describe the respondents' perspective and behaviour, giving a more accurate picture of what happened. The possibility of receiving a lot of data from a sizable sample of 20 respondents is one benefit of this strategy. The research reveals that managers of business incubators who have registered with Traction's database have the necessary skills to fully support the expansion of SMEs. These business incubators therefore demonstrated promise for accelerating the development of SMEs and entrepreneurial competencies among incubated business owners, including managerial and entrepreneurial competencies, as the study's findings suggested that business management and entrepreneurial competencies are crucial for business managers in running a business incubator. The study also recommended that incubators managers who lack the necessary entrepreneurship skills should enrol in business courses at neighbouring institutions or universities. Finally, it was advised that government entities open up facilities based on cutting-edge technology to support graduates' entrepreneurial skills acquisition.

ACKNOWLEDGEMENT

I wish to express my profound gratitude to the Almighty God for seeing me through this program. To my Rev and Mrs Victor Kusi Boateng, Prof Rosemond Boohene, my sister Vidate Tetteh and my supervisor Dr. Keren Naa Abeka Arthur. I cannot thank you enough. God rich bless you for their immense love, support and encouragement.



DEDICATION

I dedicate this dissertation to the Almighty God



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LIST OF ACRONYMS**ACRONYMS****MEANINGS**

CEO	Chief Executive Officer
ILO	International Labour Organisation
KNUST	Kwame Nkrumah University of Science Technology
NCEE	National Centre for Entrepreneurship in Education
NCTE	National Council for Higher Education
NBIA Accumulation	Neurodegeneration with Brain Iron
OECD Development	Organisation for Economic Co-operation and
SME	Small and Medium Business
UCC	University of Cape Coast
US	United State
UCSC	University City Science Center
UBIs	University-Based Incubators

CHAPTER ONE

BACKGROUND TO THE STUDY

1.0 Introduction

According to the theory of economic growth, universities throughout the world are becoming more involved in fostering academic spin-offs and launching start-ups by students and graduates (Qureshi et al., 2021). The number and diversity of university-based incubators created to aid in the establishment of new technology-based corporations have increased significantly over the past several decades. These organisations work to connect talent, funding, technology, and know-how to the creation of new businesses (Eldering et al., 2021). Some academics have claimed that university-based incubation plays a bigger role in wealth creation, social development, and economic growth (Qureshi et al., 2021).

Business incubation has gained popularity in recent years, with both public and private funding, since it is thought to be an effective strategy for fostering the formation of start-ups and creative small businesses while also lowering the likelihood of new venture failure (Eldering, et al., 2021). This is because university-based incubators share basic running costs, administrative and consulting support, capital availability, and the incubators concept's universality, which encourages the development of new businesses (Vincent et al., 2021). There is widespread recognition of the difficulties caused by the high percentage of young unemployment and underemployment (Ampadu-Ameyaw, et al., 2020).

By promoting business incubators, many governments have made a number of measures to reduce unemployment and company failure, yet the problem of underemployment and unemployment still exists in the nation.

Self-employment and small business growth have risen to the top of the national agenda in Ghana as a result of the country's rising unemployment rate (6 percent), which is notably high among young people. This is done in an effort to reduce the country's alarmingly high unemployment rate (Aryeetey, et al., 2021). The Graduates' Unemployed Association was founded as a result of the high unemployment rates experienced by educated people, which has become a national concern.

"In Ghana, unemployment among university graduates is prevalent, and half of graduates who leave the nation's colleges do not find a job for the two years after their national service and one fifth remain jobless during the third year" (Fichter et al., 2021). About half of 2011 graduates may wait until 2014 before obtaining employment, according to ISSER (2012), which also added this statistic. Graduated unemployment is not just unique to Ghana; internationally, young with higher levels of education have higher rates of unemployment than youth without higher levels of education (Fichter et al., 2021).

Several initiatives, such as Youth in Agriculture, Community Police, National Youth Employment, Youth Business Support, and others have been launched by different governments to address this situation. One strategy to combat graduates' unemployment and the ensuing demand for additional workers as a result of the expansion of university business incubators services

to promote regional economic development and encourage company start-ups (Qureshi et al., 2021).

To encourage the expansion of small businesses, incubators offer a variety of facilities and services, such as company planning and assistance with the law, accounting, and marketing. Promoting incubators is thought to encourage the growth of new firms across the nation, and in the local community, in particular (Lesakova, 2012; Schiopu et al., 2015). Additionally, business incubation increases business survival rates, and there is strong data to support this claim (Nair et al., 2021; Fichter et al., 2021). Despite the fact that business incubation offers a number of advantages, educational institutions in Ghana have not fully embraced this strategy to encourage students to launch their own firms, especially those who desire to do so in order to lower the country's rate of graduate unemployment (Ratinho et al., 2021).

1.1 Problem Statement

In Ghana, unemployment is on the rise and has steadily grown from a relatively low level of 2.8 percent in 1984 to an intolerably high rate of 10.4 percent in 2000, to 8.5 percent in 2010, and was at 9.3 percent in 2019. (Kwofie et al., 2020). Of the fourteen million persons in Ghana who are considered to be in the labour force and are between the ages of 15 and 64, it is estimated that about four million of them or 28 percent of the country's total active population (15–64) are unemployed. Youth between the ages of 18 and 35 appear to be in a more hazardous condition, nevertheless. Despite only comprising roughly 26% of the country's overall population, this age group is responsible for nearly 45% of all unemployment.

According to Teymurova's estimation from 2021, the unemployment rate in Ghana for young people aged 15 to 24 is 25.6%, which is twice as high as the rate for those aged 25 to 44 and three times higher than for people aged 45 to 64. Additionally, due to the lack of business incubation facilities that may support students in turning their innovative ideas into profitable ventures, many students who have fantastic ideas that could serve as an economic development tool to boost graduates' employment creation are unable to do so (Kong et al., 2021).

Those who are able to launch their own firm after school struggle to make ends meet since there aren't enough business support facilities (Fenny et al., 2021). Universities in Ghana are gradually implementing business incubators to prepare students to be positioned in entrepreneurial skills acquisition after school rather than job seekers to help minimize graduates' unemployment. This is done to help address the challenges of graduates' unemployment as well as to promote graduates' entrepreneurial skills acquisition. In an effort to lower unemployment, a number of strategies have been used, but to little avail. Some of the strategies used include preparing young people for the job market (Neeson, 2020; Walsh et al., 2021), illuminating the routes to fulfilling employment (Yunikawati et al., 2018), enhancing financial well-being, both immediate and long-term (Fattah et al., 2021), and encouraging entrepreneurship (Wuepper et al., 2021).

The establishment of university-based incubators was suggested by Nazira et al., (2021) as an efficient and effective strategy to lower unemployment. In addition, business incubators have enabled some graduates start their own business and find employment during the previous few years.

According to Kong and Nelson (2021), universities have a key place in a nation's economic development since they actively participate in R&D, innovation, incubators, Technology Parks, and commercialization.

Due to the nations' growing number of incubators, the popularity of incubators has increased over time in Ghana. In Ghana, there were only three university-based incubators ten years ago; now, there are six, thanks to their important contribution to the growth of the entrepreneurial sector (Bosch, 2021). Even though business incubators are becoming more and more popular in Ghana, some academics have claimed that it is still unclear if they are succeeding in their objectives and exactly what effect they are having on their tenants (Garca et al., 2021). Whether university business incubation improves the performance of new business, associated universities, and promotes new initiatives is a topic of discussion according to Lu et al., (2021). The goal of this study was to evaluate the contribution that university business incubators make to the employment of recent graduates.

1.2 Research Objective

The main objective of the study was to assess the role of university business incubators in facilitating graduates entrepreneurial skills acquisition. To achieve the main objective, the research had the following specific objectives;

1. To determine how graduates see the contribution university business incubators make to employment development.
2. To evaluate graduates' opinions on the performance of university business incubators at a few chosen Ghanaian universities.

3. To examine out how much university business incubators help graduates' entrepreneurial talents.
4. To determine the difficulties faced by university business incubators in assisting graduates with employment development.

1.3 Research Questions

The research questions for the study are as follows:

1. How is the University Business Incubators seen in terms of its contribution to the generation of jobs for graduates?
2. How much do graduate entrepreneurs benefit from business university incubators programs?
3. How beneficial, in the opinion of several Ghanaian colleges, is the incubation of student businesses?
4. What obstacles does the University Business Incubators have to overcome in order to help graduates find employment?

1.4 Significance of the Study

Because it will provide details on the functions of business incubators provided by universities, as well as their obstacles and effects, the study will be helpful to students and recent graduates seeking for a chance to launch their own company. As a result of this information, it was anticipated that graduates would pursue the road of starting their own firms after graduation and that it would inspire students to pursue entrepreneurship. Both private and public colleges who desire to establish business incubators might benefit greatly from this study. It outlines the obligations of both universities and their incubated

students as well as the ways in which institutions may be inventive and creative in the way they operate their business incubators. The study will aid in the creation of a set of relevant solutions for addressing the major difficulties that might emerge in the deployment of business incubators.

Universities will also be exposed to the sort of instruction required to empower students and equip them to launch their own businesses.

The results of the study will also help to lower the rate of startup failure in Ghana, which is required to raise employment levels and spur economic growth in the country. Graduates are crucial to the economic growth of every country, thus this is another benefit of the study's findings. The study will aid in launching new businesses, which will lower unemployment and assist to provide new job prospects. The study seeks to fill the apparent vacuum in the literature and also acts as a resource for scholars looking at the construction of university business incubators in Ghana for institutions. Future academics who are interested in this topic would also be aware of the work that has already been done in Ghana and the areas that still need to be filled, which would help them to comprehend business incubators more precisely. The incubation idea and procedures that are most appropriate for the circumstances in Ghana will be better understood and added to the literature.

Last but not least, the research will aid decision- and policy-makers in deciding to implement the development of business incubators in universities to influence graduates' entrepreneurial talents. It will be beneficial to adopt significant adjustments in academic programs to reflect graduates' entrepreneurial abilities as well as other complimentary skills necessary for launching new businesses.

1.5 Scope of the Study

Incubators located at universities total six. The UGBS Innovation and Incubation Hub of the University of Ghana and the Kumasi Business Incubators of the Kwame Nkrumah University of Science and Technology were the subjects of the study, which was centered on two business incubators centers in Ghana. The scope of the study was restricted to the incubators at the Kwame Nkrumah University of Science and Technology (KNUST) and the University of Cape Coast (UCCBS) in Cape Coast and Kumasi, respectively.

Following a comparison of the total number of graduates hired by all university-based incubators throughout the years, the two incubators were selected from universities. Since a few years ago, these two colleges have run business incubators, and alumni of both institutions are currently residing in those incubators and running their own companies. Graduates who were being incubated were the study's target demographic.

Though the study was limited to graduates incubatees and management of just two universities (University of Cape Coast and Kwame Nkrumah University of Science and Technology), the study's findings are anticipated to reflect some of the common characteristics of business incubators used in universities across the globe. Because of time and resource limitations, the study did not take into account University of Cape Coast (UCC), which also runs a business incubator.

1.6 Limitations of the Study

The study had certain flaws; for example, there wasn't enough information regarding business incubation in Ghana and there wasn't much literature on it in a situation like this study. The issue is that there hasn't been

enough research on business incubation because it's still relatively new in Ghana and universities there are just now beginning to accept it. Additionally, due to funding limitations, the researcher had to restrict the study to only Kwame Nkrumah University of Science and Technology and University of Cape Coast, leaving out all other universities in Ghana that offered business incubation. In order to identify the types of issues faced at the company' genesis and during operation, as well as the success factors and advantages of running their own business, the study only included graduates and incubatees who had created and were operating their own firms after graduating.

Due to time restrictions, it is very difficult to identify all of the graduates incubatees of the different institutions. As a result, the study was restricted to only UG and KNUST, with incubatees as the target group.

1.7 Delimitations of the Study

The study focused exclusively on two specific public universities with active business incubators. Findings and conclusions drawn from these universities could not be generalized to other public or private universities with different incubator setups or programs. Due to resource and time constraints, the study involved a limited number of graduates who had participated in the business incubators of the selected public universities. This smaller sample size might have affected the representativeness and generalizability of the findings.

The research focused on graduates from specific faculties or fields of study within the two public universities. Consequently, insights into the experiences and skills acquisition of graduates from other disciplines were not thoroughly explored.

The study concentrated on specific types or models of business incubators within the selected public universities. Other variations of university business incubators, if present, were not considered in-depth. While the study aimed to explore the role of university business incubators, it did not comprehensively consider external factors (e.g., economic conditions, government policies) that could influence graduates' entrepreneurial skills acquisition independently of the incubator's support. The study primarily focused on the immediate impact of university business incubators on graduates' entrepreneurial skills. The long-term effects of the acquired skills on graduates' entrepreneurial ventures were not extensively investigated.

By acknowledging these delimitations, the study aimed to provide valuable insights into the role of university business incubators in facilitating graduates' entrepreneurial skills acquisition within the context of two specific public universities while recognizing the limitations of the research scope.

1.8 Organisation of the Study

A total of five chapters make up this study. The study's issue statement, research aims, and research questions are all presented in the first chapter's introduction. The study's objectives, importance, and constraints are all covered in this section. The second chapter explores the underemployment of recent graduates and defines business incubators and similar notions. Additionally, it examines various business incubators formats, kinds, and services. It examines the significance of business incubators, university-based business incubators, as well as the governance and management of business incubators. The demographic of the study, the sample and the sampling process, as well as the data sources are all presented in the third chapter's

discussion of the research methodology employed for the study. The fourth chapter also presents analysis and interpretation of the data collected and presented in the form of graphics (bar chart and tables).

The fifth chapter presents the summary of the findings, conclusion of the study and recommendations of the study for the adoption of business incubation by universities. Finally, it makes recommendation for further study in relation to business incubation.

1.9 Chapter Summary

The study's background highlights the growing concern of unemployment among university graduates in Ghana and the significant impact it has on the nation's economic growth and social development. The country's rising unemployment rate, particularly among the youth, has led to the establishment of various initiatives and programs to address the issue. Among these strategies, the promotion of business incubators in universities has gained popularity as an effective means of fostering entrepreneurship and reducing unemployment.

Ghana has experienced a gradual increase in the number of university-based incubators over the years, indicating a growing recognition of their potential to contribute to regional economic development and job creation. However, despite the increasing popularity of business incubators in the country, there is still a need to assess their actual effectiveness in promoting graduates' employment and entrepreneurial skills acquisition. The study's research objectives and questions aim to shed light on the role of university

business incubators in addressing graduates' unemployment and their impact on the success of new businesses.

The significance of this study resides in its ability to provide insight into the purposes, challenges, and outcomes of business incubators in Ghanaian institutions. The research can help students and recent graduates who are looking for opportunities to start their own firms as well as universities that are thinking about setting up incubators. The study's findings can also be used by decision-makers and politicians to inform their implementation of business incubators, which will help to foster graduates' entrepreneurial abilities and reduce the nation's startup failure rate.

Although the study has limits and delimitations, the research nonetheless adds to the body of information on business incubation in Ghana and emphasizes the need for more research in this field. Business incubators have the potential to stimulate economic growth, lower unemployment, and have a beneficial impact on the future of the country by nurturing entrepreneurship and giving necessary assistance and resources to prospective entrepreneurs. The adoption and successful implementation of business incubation strategies in universities could serve as a crucial tool in nurturing the following generation of successful entrepreneurs and promoting the overall development of the nation as Ghana continues to address the issues presented by graduate unemployment.

Definition of Key Words

In this study, several key terms are utilized to provide clarity and precision in discussing the subject matter. The following section presents the

definitions of these key words to ensure a shared understanding of their meanings throughout the research.

1. **Business Incubation:** Business incubation refers to a process or program offered by universities or other organisations that provides aspiring entrepreneurs and start-up companies with a supportive environment, resources, and guidance to accelerate their growth and increase their chances of success. These programs aim to nurture early-stage ventures, foster innovation, and promote entrepreneurial skills among participants.

2. **Entrepreneurial Skills Acquisition:** Entrepreneurial skills acquisition pertains to the process of developing and acquiring the knowledge, competencies, and abilities required to identify business opportunities, initiate ventures, manage risks, and create and sustain successful business. This includes skills in leadership, innovation, financial management, marketing, and problem-solving, among others.

3. **Graduates' Unemployment:** Graduates' unemployment refers to the state of being jobless among individuals who have completed tertiary education (e.g., university graduates). It specifically focuses on the challenges faced by educated individuals in finding suitable employment opportunities after completing their studies.

4. **Start-up Failure:** Start-up failure indicates the inability of a newly established business to survive and sustain its operations over time. It refers to the closure or discontinuation of a start-up venture due to various factors, such as lack of market demand, insufficient funding, or inadequate business planning.

5. Youth Unemployment: Youth unemployment denotes the proportion of individuals within the age group of 15 to 24 years who are jobless and actively seeking employment opportunities. It highlights the challenges faced by young people in entering the workforce and participating in the economy.

6. Economic Growth: Economic growth signifies the increase in a country's production of goods and services over a specific period. It is often measured by the Gross Domestic Product (GDP) and reflects the overall expansion of economic activities within a nation.

7. Social Development: Social development refers to the improvement in the quality of life, well-being, and living conditions of individuals within a society. It encompasses factors such as education, healthcare, income distribution, and social services that contribute to the overall welfare of the population.

8. University-Based Incubators: University-based incubators are specific types of business incubation programs or centers that are established and operated by educational institutions, particularly universities. These incubators aim to support entrepreneurial ventures and commercialize academic research and innovations.

As these key terms form the foundation of the study's research objectives and questions, a clear understanding of their definitions is crucial to facilitate a comprehensive analysis of the role of university business incubators in facilitating graduates' entrepreneurial skills acquisition and addressing unemployment challenges in Ghana.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter examines the different academic works that have been written about the unemployment of recent graduates, the origins of the company concept, and various forms and methods of business incubation. Business incubation services, advantages, and university-based business incubation were all covered in detail. For this chapter, a critical review of business incubators research was done.

2.1 Definition of Business Incubation

There is no universal definition of business incubation due to the lack of consensus among scholars on an accurate and widespread definition of business incubators. There are over thirty definitions in the scientific literature, and nearly that many have been approved by business groups and legislators in different countries, reflecting local cultures and national policies (Kadama, 2014). Incubation, as a concept, is a more organized and attentive process to promote clustering or colocation of businesses; as a consequence, it calls for paying great attention to the issues of potential tenants, which goes far beyond providing infrastructure and office services. Company incubators, angel investors, and venture capital companies all employ the strategy of business incubation to assist budding entrepreneurs (Adelowo et al., 2012).

Some definitions focus on the objective or purpose of business incubators, describing them as "tools to provide some combination of necessary resources in order to nurture a new and/or growing business to some

level of maturity" as well as "locally based institutions created to encourage and support new business development." They also cited other definitions focusing on the entrepreneurial aspects of business incubators, which explain the motivation for establishing incubators as a desire to encourage entrepreneurship and thereby contribute to economic development, and they highlighted the innovation of business incubators in their capacities to support technical entrepreneurs in the development of new firms (Adelowo et al., 2012). Other studies, like Hatten's, concentrate on the advantages of starting a new small firm in an environment like a business incubator.

Small companies may rent equipment including computers, fax machines, and photocopiers as well as get support services from this company. A setting specifically created to help businesses start is a business incubator. In addition to office space and funding, they also provide their tenants with managerial assistance and training. The startup's prospects of success are increased since it can now concentrate on its business plan (Sharma et al., 2014).

The National Business Incubation Association, the European Union, and the United Kingdom Business Incubation Institute, among other well-known definitions from official organisations working in the field and supporting incubation initiatives throughout the world, give inclusive definitions: The National Business Incubation Association defines business incubation as a business assistance procedure that offers entrepreneurs a range of specialized tools and services to aid in the establishment of successful start-up and embryonic firms. Both within the business incubators and through the

network of connections maintained by the incubators, these services are often created or organized by the administration of the incubators.

A business incubators' primary goal is to create profitable business that will be self-sufficient and financially stable when they graduate (Mian, 2014).

These graduates from incubators programs have the ability to boost regional and national economies, create employment, revitalize neighbourhoods, and commercialize innovative technologies. The European Union's Centre for Strategy and Evaluation Services defines an incubator as an organisation that facilitates and systematizes the process of forming successful businesses by providing a wide array of integrated services, such as incubators space, business support services, and clustering and networking opportunities. By offering services as a "one-stop shop," business incubators significantly improve the odds that new start-ups will survive and thrive. They also enable overhead to be reduced by pooling costs (Bruneel et. al., 2012).

Mian (2014) argues that company incubation is a supportive, instructive, and beneficial environment for business owners throughout the crucial phases of starting a new company. Incubators are designed to increase a start-chances ups of success by shortening the time and cost required to establish and expand a business. If successful, business incubators can support the growth of companies that will really be the ones to provide future prosperity and jobs to an area or country (Mian, 2014).

2.2 The theoretical framework that underpins the study

Why people enrol in incubation programs in order to launch their own businesses has been the subject of several hypotheses. People participate in entrepreneurship for two main reasons, according to Choto et al., (2014), first

and foremost, to provide for their family and second, to make money. Lack of entrepreneurial skills could affect these dynamics. Bruner et al., (2009) theoretical framework was used for this study, and its pull opportunity components and push necessity aspects are described below.

2.3 Scaffolding Theory by Jerome Bruner

Improved Review of the Scaffolding Theory in the Context of University Business Incubators. The scaffolding theory, initially proposed by Jerome Bruner, offers valuable insights into understanding how university business incubators can effectively facilitate the acquisition of entrepreneurial skills among graduates. By incorporating relevant literature citations and connecting the scaffolding principles to the role of business incubators in nurturing entrepreneurial talent, we can gain a deeper understanding of the effectiveness of this approach.

Bruner's scaffolding theory, inspired by Lev Vygotsky's Zone of Proximal Development (ZPD) hypothesis, posits that learners benefit from structured guidance and support from more knowledgeable individuals when tackling complex tasks. In the context of university business incubators, this theory aligns with the provision of mentorship, resources, and support to aspiring entrepreneurs as they navigate the challenges of starting their ventures (Wood et al., 1976).

Drawing from the works of Wood et al., (1976), research in educational settings has shown that learners who receive appropriate scaffolding outperform those without such support, resulting in better learning outcomes. Similarly, in the context of university business incubators,

graduates participating in incubation programs often experience accelerated learning and skill development due to the mentorship and tailored support they receive (Smith et al., 2019).

Comparing the scaffolding theory with traditional classroom-based entrepreneurial education, business incubators offer a more hands-on, experiential approach. Unlike passive learning in lectures, incubators create a dynamic environment where graduates can apply theoretical knowledge in real-world situations, akin to Bruner's emphasis on active learning through interactions and experiences (Lalkaka et al., 2016).

However, the effectiveness of university business incubators relies on recognizing and providing support that aligns with each graduate's developmental stage. As per Bruner's theory, learners should be progressively released from scaffolding as they become more competent and independent. Similarly, incubators should tailor their support and mentoring based on the specific needs and readiness levels of the entrepreneurs they assist (Galanakis et al., 2018).

Critically analyzing the application of the scaffolding theory in the context of business incubators, it is essential to consider cultural and contextual factors that may influence the effectiveness of the support provided. Business incubators operating in diverse regions or catering to entrepreneurs from different backgrounds must be culturally sensitive and adapt their mentoring and support strategies accordingly (Al-Aali, 2020).

In conclusion, the scaffolding theory provides a valuable framework for understanding the role of university business incubators in facilitating

graduates' entrepreneurial skills acquisition. By citing relevant literature and linking the scaffolding principles to the incubation process, we have established the importance of tailored support, mentorship, and experiential learning in nurturing entrepreneurial talent. Embracing the principles of scaffolding in designing incubation programs can enhance graduates' entrepreneurial capabilities, contributing to their success as they embark on their entrepreneurial journey (Chang et al., 2018).

2.4 Pull Factors as an Opportunity

According to Co et al., the independence of being your own boss, the financial freedom of entrepreneurship, the sense of achievement, the drive and desire to change the world through entrepreneurship, and the freedom of creativity and innovation are all connected to the pull factor for opportunity-based entrepreneurship (OBE). Additionally, opportunities like independence in doing what they enjoy and the sense of working for themselves, success in managing a sustainable business, recognition in achieving social standards and reducing poverty in the community, personal development through the practice of innovative and creative ideas without limitations, and personal development through the practice of innovative. According to the researcher, invention, freedom, and a sense of achievement define all entrepreneurial activity. As a result, it may be said that certain entrepreneurs who have been incubated may be brought in while others may be driven out.

2.5 Push Factor as Necessity

The term "push forces" refers to business owners who have no choice but to join the incubators and launch their company. An entrepreneur who

entered the market out of necessity (NBE) is someone who was unable to find work and had no choice but to launch their own company. Having a contract job without benefits, having disagreements with directors and management about how the organisation is run, which could limit your career, and not being able to fit into the organisation in a successful way are some additional push factors for starting your own business. These include being unemployed with no job opportunities and outside the working class in the established economy. The push factor, which encourages incubatees to begin participating in the incubation process, frequently includes unemployment, and it is obvious that some incubated are being pushed given what the study discovered.

In conclusion, some businessmen are motivated by both opportunity and necessity (Nieman et al., 2009). Examining graduates' abilities as well as the Ghanaian setting is crucial for the study's goals. The study's ability to ascertain how much university business incubators support students' and graduates' entrepreneurial talents will be aided by the aforementioned hypotheses. For the third research aim, this will be an excellent tool.

2.6 Graduates' Unemployment

In both growing and developing nations, unemployment is the biggest issue. In rising nations, graduate unemployment is a particular worry for the labour market and the nation's economy as a whole. Even though the Ghanaian economy has had more than two decades of strong development, it has not yet undergone the fundamental changes needed to make the nation a modern, industrialized, and prosperous economy (Asante,2011). Self-employment and small company activities are undoubtedly high on the national agenda of Ghana due to the country's high unemployment rate, with the hopes of

presenting alternative job alternatives. Every year, thousands of college grads look for work by entering the labour force. It's challenging to accommodate entrants to the labour market in addition to the already significant number of unemployed graduates.

At the heart of this problem is the reality that university education has fallen short of providing students with the knowledge and abilities necessary to create their own jobs and engage in self-employment (Babatunde et al., 2014). Shildrick (2012) defines unemployment as a state of worklessness that people in the labour force suffer even while they feel and are thought to be capable of working. The International Labour Organisation (ILO) defines unemployment as a person over a particular age who is able to work but is unable to obtain employment for a certain length of time or who fails to work for a predetermined period of time and is still seeking for a paid job. Baah-Boateng (2015), Baah-Boateng (2015), When people are able and eager to work but are unable to obtain employment, unemployment results.

Employees and manufacturing resources are unable to cooperate to produce goods that will benefit society, which is the root cause of this structural imbalance between the supply and demand of labour. Policymakers have recently paid a lot of attention to the connection between self-employment (business ownership) and unemployment. Policymakers are focusing more on self-employment and entrepreneurship as a way to promote economic growth and decrease unemployment as a result of high unemployment rates and slow economic growth. High unemployment rates may, on the one hand, inspire people to create their own companies.

The continuing unemployment of a sizable percentage of the population, for instance, poses the most serious economic danger in Ghana. According to Professor Aryeetey, the large number of youths lining the streets "selling items nobody wants" is a reflection of the high rates of underemployment and unemployment. Approximately half of graduates from Ghanaian colleges and polytechnics would be jobless for two years after finishing their national service, and 20% will be jobless for three years, according to reports (Aryeetey, 2011). In a 1996 poll by the Ministry of Education to gauge the experience Ghanaian graduates had in the job market, it was discovered that 71% of respondents had found employment within five months of completing their national service. However, 50 percent of graduates had to wait three years to obtain employment, according to a 2011 ISSER study.

Compared to South Africa, where a third of the working population is unemployed and the worldwide unemployment rate is 6.1 percent, this number is far higher (Asante, 2011). However, the situation is considerably worse in Nigeria, where up to 80% of graduates report difficulty in obtaining employment annually. Despite this, Ghana's high unemployment rate seems to corroborate recent findings from studies showing that graduates' talents generally do not match the nation's personnel requirements (Owusu-Ansah, 2012).

From 23,128 in five institutions to 266,000 in 133 institutions, there were 88 percent more students enrolled in higher education in Ghana between 1996 and 2011. Due to this, the National Council for Higher Education (NCTE) recommended graduates to create their own opportunities, citing

recent research that revealed that, of the almost 70,000 graduates who leave tertiary institutions each year, just 40,000 new jobs are created annually. Numerous studies from the United States, Europe, Asia, and West Africa demonstrate that students have a positive attitude toward entrepreneurship and small firms (Karr, 1985; Brockhaus et al., 1986; Scott et al., 1988; Lord, 1999; Ekpohet al., 2011). According to Owusu-Ansah (2012), students and recent graduates from business colleges are growing more and more unsatisfied with their employment prospects. As a result, a rising number of students think that starting and running their own business is a viable alternative to working for a big company.

2.7 Concept of Business Incubation

The word "incubators" was created from its basic definition, which is the artificial fostering of chicken eggs in a protected environment to hasten their hatching. The incubation of businesses uses the same principle as hatching, which accelerates the formation of new initiatives and raises the likelihood of their success. The provision of both material and intangible resources by an incubators allows for the emergence of fresh ideas (Van Weele et. al., 2017). The Batavia Industrial Centre in Batavia, New York, the United States, is generally acknowledged to have been the first incubators when it was founded in 1959. It is possible to trace the incubators's origins to a local real estate investor who acquired an 850,000 square foot structure that was left vacant when a significant company left the area.

After failing to find a tenant who could lease the entire facility, the developer chose to rent different portions of the building to different tenants, some of whom need business advice or assistance in obtaining capital

(Bruneel et.al., 2012). The first business incubators's journey began at this point.

Developed in the 1960s, the University City Science Center (UCSC) inspired interest in incubators by working together to streamline the process of commercializing the findings of basic research (Bruneel et.al.,2012). Interest in the incubators-incubation concept was further ignited by the National Science Foundation's Innovation Centers Program, which ran in the 1970s and sought to institutionalize best practices in the processes of evaluating and commercializing certain technological advances (Vij & Jhanji, 2013). Between 1980 and 1990, the pace of incubators spread significantly increased.

- i. The Bayh-Dole Act, which was approved by the U.S. Congress in 1980 which lessened the uncertainty surrounding the commercialization of the results of federally funded basic research;
- ii. Increased legal recognition of the value of innovation and the protection of intellectual property rights; and
- iii. Increased financial opportunities associated with the commercialization of biomedical research.

This setting led to the creation of various incubators developmental guides as well as non-academic papers and articles with a geographic and normative focus on present or projected business incubation activities. The rise in report-generating activities in the early 1980s and the establishment of the NBIA in 1985 are two events that highlight the expansion of public interest in business incubation at that time. Academic incubation studies started in earnest at the same time as these and other regional initiatives to research and explore the

possibilities of business incubation to support economic growth. The "First generation" or "conventional incubators" (Shepard, 2013) were distinguished by a significant "real estate" component, and its primary goal has been and continues to be to support entrepreneurial start-ups.

A myth about business incubators as innovation hatcheries capable of incubating and taking public "infinitely scalable, dot-com business start-ups" less than a year after entering the incubators was made popular by several for-profit incubators and/or their incubatees in the media in the late 1990s.

After the burst of the US stock market bubble, this illusion and the incubators-incubation idea were generally abandoned and written off by the media (Barba, 2016). The incubators-incubation notion is not dead, although rumours to the contrary are "greatly overblown." Since for-profit incubators make up a very tiny portion of all incubators, the media focused on them in order to draw its unfavourable conclusions about incubators and incubation. Since the first business incubators was established, the majority of incubators have been developed as publicly funded organisations for the incubation of high potential new ventures, as well as privately funded organisations for the commercialization of university innovations and entrepreneurial skills acquisition, urban economic revitalization, and innovation commercialization (Somsuk et. al., 2012). New technology, light manufacturing, and services were the main areas of concentration for the early incubators.

Later, in the 1990s, the "Second Generation" of incubators incorporated management, access to professional assistance, networking services, counselling, skills training, and seed financing. The sorts of business incubated, however, have greatly diversified as the market has grown (Mian,

2021). Beginning in the 1990s, the second generation of incubators for businesses was discovered. The need for services like networking, skill development, and counseling that provided a greater additional value than the original concept grew during this decade. There is a claim that certain types of businesses, namely those that depend heavily on technology, have been driving the need for second generation incubators.

2.8 Empirical Review

Buresh et al., (2019) study sought to understand how business incubators support novel and ground-breaking efforts for commercial businesses and how these initiatives may affect long-term viability. Descriptive-analytical methodology was used in the study. In terms of the quantity of inventions and creations, the study's most notable findings were that business incubators support the growth of creativity and innovation in major company businesses. Business incubators were identified in this study as the most significant means of fostering innovation and creativity for growing small- and medium-sized entrepreneurial initiatives, which aids in their ability to maintain and increase their competitiveness. It was discovered that business incubators support organisations in implementing the economic growth plan that goes hand in hand with an increase in employment possibilities and help to advance the national economy.

As innovation is one of the key pillars of the sustainability of the success and of these institutions in light of a highly competitive pace and an environment of continuous development and renewal, Mansouri et al., (2019) study sought to identify the role of business incubators as a mechanism to

support innovation in small and medium-sized businesses. What role do business incubators play in fostering innovation at SMEs? and other related concerns were among the issues it aimed to answer. Data analysis for both statistical and applied data were provided, and the approach employed was descriptive-analytical. In spite of its interest in the SME industry and its scant understanding of business incubators, it came to the conclusion that Algeria is still lagging behind in this regard.

However, establishing favourable conditions for the establishment of such incubators will significantly aid Algerian SMEs in innovation and growth to compete and continue in the markets, thereby contributing to technological advancement and advancing economic and social development in line with many developed and emerging countries. Amara and Park conducted study that was published in 2019 to identify the need for business incubators to support innovation and creativity in small and medium-sized businesses. They did this using a descriptive analytical method. The study's results demonstrated that business incubators are an integrated system for assisting small businesses, and it is appropriate to support those institutions. Additionally, these business incubators are one of the modern strategies for supporting innovation and creativity in start-ups and small- and medium-sized firms. Business incubators make a big difference in economic growth. By investing in lucrative, cutting-edge concepts that might lead to the creation of businesses with the potential for economic growth, they provide the national organisation a competitive edge.

Identifying the function of technology business incubators in fostering innovation and creativity in small and medium-sized businesses was the goal

of a study by Ammar et al., (2017). A descriptive inductive technique and a deductive analytical approach were both used in this study as part of the scientific process. The most notable findings were that business incubators are becoming increasingly important to the national economy in terms of creating employment possibilities and producing firms that can compete successfully in the market. This is particularly true given the difficulties that globalization presents for new projects, particularly for small and medium-sized businesses, as well as the need to diversify and expand the economy after thousands of dollars have been spent on successful pilot projects that have the potential to become lucrative new business ventures.

Aiming to identify the role of business incubators in economic growth in light of Algerian experience, Kalakhi et al., (2016) set out to do so. The descriptive approach was utilized, and the study's most important findings showed that the conceptualization of the role that business incubators play is related to their actual function. This particular function helps society establish a new perspective of the changes that the global economy, together with new work prospects, brings about in terms of generating wealth. The increased values that it generates will be aided by it. In meanwhile, the nation and the local community have supported small and medium-sized businesses and the burgeoning entrepreneurship sector.

Al-Wadi (2010a) used the descriptive technique to assess the performance of incubators in Jordan in order to comprehend the function of business incubators in economic growth "With Reference to the Jordanian Experience." Incubators for Jordanian businesses that produced 27 initiatives were included in the research. The 18 initiatives that were randomly selected

for the research sample were among them. The study's most notable findings were that, while projects' faith in the function of universities was high, projects' belief in the importance of culture was only moderate. The study's primary research technique was a questionnaire.

2.9 The Perceived Role of University Business Incubators in Facilitating Graduates Entrepreneurial skills acquisition

Lesakova (2012) claims that the major goal of business incubators is to aid in the founding and growth of businesses in the anticipation of increased employment and economic development. Because of this, the process of incubation aims to increase everyone's level of life in the region and its surrounding territories. A business incubator may be envisioned in theory as a mentor for budding businesses whose primary objective is to sprout (Mrkajic et al., 2017). In the twentieth century, Western nations created the first business incubators in an effort to lower unemployment and the failure rate of SMEs. As a result, the same "hatching" idea is used in the incubation of small businesses in order to hasten the creation of new initiatives and increase their chances of success.

Commercialization, innovation, and competitiveness are just a few of the numerous facets of entrepreneurship. In support of these many facets of entrepreneurship, UBIs will be discussed in this section. For an economy to succeed, it must foster innovation, commercialization, and entrepreneurship. According to Al-Mubaraki and Busler, one of the best ways to accomplish this is through incubators, which serve as a tool to encourage economic growth and employment creation (2010). The capacity of incubators to actualize an

entrepreneur's performance and commercialization can be advantageous to both developed and emerging nations.

The National Centre for Entrepreneurship in Education (NCEE, 2013) report states that many researchers agree that entrepreneurship is linked to innovations and the commercialization of university human capital, and as a result, it is connected to innovation in the context of technology transfer offices, incubators, and science parks. Universities are sources of technological innovation and "engines of growth," in accordance with Gibb, who asserts that the public sector and even international (OECD) opinions share this opinion (2013).

Innovation in a university context, according to Gibb (2013), includes more than just technological advancements. Development and acquisition of possibilities for novel approaches to problem-solving that result in better goods, processes, and techniques for managing people and organisations are common definitions of innovation. Thus, innovation in a university environment that promotes entrepreneurship can be viewed in terms of: new firm and leadership initiative promotion; knowledge organisation and program evolution; internal and external parties' engagement; and new research explorations, methods, and applications to practice. Keeping innovation alive inside a firm is the aim of each person's entrepreneurial effort and ability. Only when combined with an organisational culture and a larger framework that supports such actions are both required preconditions adequate for such activities.

University incubators have a long history of supporting innovation and commercialization by offering physical space, human capital, financing sources, and other resources, according to Chandra et al (2012) discussion.

Audretsch (2014) contends that rather than concentrating solely on educating students, advancing research, or even simply disseminating knowledge, universities should concentrate on creating the tools that will enhance innovation, entrepreneurial thinking, the development of organisations and entrepreneurial leaders, and raising the living standards of their constituents. The most successful form of incubators are university-based incubators (UBIs), and by joining a UBI, student entrepreneurs may establish contacts with corporations and start their own firms.

According to Somsuk et al. (2012), university incubators need to help four fundamental groups of entrepreneurs, which are as follows: Similar to this, Robertson et al., (2011) proposed that university incubators seek to increase commercialization by producing spin-offs to strengthen research promotion, new ideas, commercialization activities, and fostering entrepreneurs. According to Hofer and Potter (2010), the OECD urged incubators owners to work with universities to promote commercialization for the good of society as a whole. University incubators are now more supportive of entrepreneurs than other types, according to Al-Mubarak et al. (2013). University incubators play a variety of roles, including supporting leadership and fostering an entrepreneurial culture, in addition to offering services to start-ups.

Since invention and commercialization are two components of entrepreneurship, the author argued that there is a crucial need to combine them. The outcomes of research and technological development should be marketed to help entrepreneurs and to put new techniques and investigations into effect on the one hand, and to assist students and entrepreneurs by providing them with new inventive ways and business ideas on the other. Another aspect of UBIs is competitiveness. According to Mavi et al. (2019), Iran's transition to a knowledge-based economy necessitated UBIs to boost the output of newly established businesses and support their comparative advantages through significant changes to the country's effective financial regulations.

University competition has therefore intensified as a result of the decision to move away from being a non-profit institution and toward becoming a vehicle for making money. The functions of universities as a whole have evolved as a result of the competitive environment, income maximization, quality of education and research, links with industry, and making entrepreneurs the ultimate aim instead of job searchers. The perception of the BIs based-performance universities in its mission of fostering entrepreneurship will be covered in the part that follows.

2.10 The effectiveness of Business Incubation

The efficient use of resources is how business incubators performance is evaluated (Games et al., 2020). This idea is characterized by various factors, such as the selection process for incubatees (Eveleens et al., 2017), the calibre and support of the management team in place, the capacity to gain access to

the networks of the incubators, including actors outside the program, and the degree of knowledge transfer to be implemented, such as patents or spin-off projects (Wann et al., 2017). The main objective of a business incubators is to provide fledgling businesses the tools they need to grow stronger and deal with problems that cause failure (Games et al., 2020). These provide value-added services like training, business counselling, and networking together with certain foundational services like infrastructure, such office renting and coworking spaces (Baraldi et al., 2016). For instance, they are expected to benefit the incubatees in terms of survival, development, and financial success once they graduate from the incubators. Thus, it is feasible to evaluate business incubators by taking into account both their ability to provide services to the firms they are incubating and the ability of those businesses to benefit from those services.

Messeghem et al. (2018) contend that it is feasible to evaluate the effectiveness of business incubators by using four constructs, including local development performance, incubation methods, learning, and incubatee satisfaction. It also highlights the need of considering the goals and satisfaction of incubators' incubatees when evaluating their effectiveness. A further finding from the co-production viewpoint was that, in addition to incubators, entrepreneurs also utilize incubation services as both clients and partners. An incubators' effectiveness is consequently heavily influenced by its tenants' and startups' capacity for and eagerness to work with it to achieve shared objectives, as much as its services itself. In view of their incubatees' perspectives, it illustrates how business incubators run or their ability to provide services (Games et. al., 2020). This shows how the incubatees would

experience high pleasure at a higher level of efficacy relative to the importance of the qualities.

Networking with other companies and exchanging business insights are among the services, as was already mentioned. The degree to which its incubatees are satisfied is one way to gauge a business incubators' effectiveness. Among the elements are rented space, shared use amenities and services, business assistance, and networking gatherings. The significance of the relationship between efficacy and incubatee satisfaction is determined by rating each on a five-point Likert scale. Business incubators need to regularly evaluate their effectiveness and take into consideration the goals of their incubatees in order to remain sustainable. Hard and soft measures are two distinct types of performance assessments for business incubators, according to Eveleens et al (2017). The hard measure is strongly related to the definite goals, such as the quantity of incubators and the volume of incubators' sales.

In terms of soft metrics, incubatees are judged, for example, on their broadened and fruitful networks, whilst the incubators are expected to have a higher level of competence. Stephens et al., (2012) emphasized the importance of soft measures used both during the incubation process and provided some recommendations, including giving networking among incubatees priority and making sure they are assisted in doing so, making business consultations and funding available for them, designating successful people as mentors to new startups, and providing post-incubation support and evaluation. It is predicted that these would enhance the overall functioning of the incubators. As established by Barbero et al., (2012) the incubators' efficacy is also directly tied to their objective. Incubators programs at universities are thought to be

successful when they actively promote innovation and academic entrepreneurship, for example. Wann et al., (2017) noticed a lack of leadership in incubators as shown by the absence of continuing methods to follow-up with incubatees at various phases, such as having regular meetings or conducting surveys to find out about their perspectives and expectations of their services.

2.11 Challenges Confronting the Role of University Business Incubators in Facilitating Graduates Entrepreneurial skills acquisition

According to Gibb (2013), who also pointed out the absence of standardized metrics to gauge how effectively universities are performing with their incubator's programs, UBIS must overcome a number of challenges. According to the UBI Index (2014), finding leaders at universities is a common issue with establishing an incubator. Because they are skilled recruiters and assist many firms in finding their CEOs, local businesses have the key to fixing this problem. Making entrepreneurial education available to all students, fostering inter-disciplinary trends, encouraging start-up groups, integrating students from the faculties of economics and business studies with students from other faculties and from different backgrounds, and fostering these inter-disciplinary trends are all noted as being major obstacles to advancing entrepreneurial universities in the LEED Report (2018).

The absence of suitable elements of successful entrepreneurs in society, in Gibb's (2013) opinion, is another issue. This study shows that BIs, like all businesses, encounter a variety of challenges. In particular, BIs in universities struggle with access to entrepreneurial management, a dearth of

entrepreneurial skills, sustainability, access to facilities based on cutting-edge technology, and access to finance and sponsors.

The necessity for the educational system to provide an atmosphere that promotes young people to shift from employee to employer mindsets was another problem brought up by Hecklau et al., (2016). It is crucial to prepare these students to create jobs because this is one of the primary goals of new entrepreneurial universities. The establishment and use of BIs within universities advances this goal. There are other problems with UBIs in general that may be identified. First, the funding needed to run the incubators. There are several programs that offer financial resources to businesses, but most of them have unique conditions that some businesses cannot meet.

For a certain venture's size and goals, the available seed money is insufficient. Second, despite the infrastructure being available for the incubators' entrepreneurial needs, it is not currently in use or employed for other administrative activities due to a lack of excitement for the incubation program. Additionally, there is a lack of effective regulation and communication intended to assist entrepreneurship, which limits its continued development and renders the entrepreneurial environment unsuited to operate. The entrepreneurial environment cannot operate as a result. However, there are still a lot of opportunities for entrepreneurs to seize.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

The study's literary canon was covered in the prior chapter. In this chapter, the research methodology which included the research population, data collection strategies, data analysis, and ethical considerations is explained in detail. The primary goal of this chapter is to provide an overview of the research approach that was employed.

3.1 Research Approach

In order to address the research questions, Cooper et al., (2011) describe research design as the plan and structure of the inquiry. The study used an interview-based qualitative approach to data collection and analysis in order to obtain in-depth information and understanding of the role of business incubators in generating graduate employment. In order to comprehend and characterize certain social phenomena, a qualitative research approach relies on the discovery of unexpected results rather than the use of numerical measurements and generates descriptive data via participant observation, interviews, and questionnaires (Cooper et al., 2011).

The use of the design is challenging, it takes a lot of time, and it is tough to analyse and write up because much of the research is qualitative. These are just a few of the design's shortcomings (Shuttleworth, 2008). It provides no means of analysing data patterns or seasonal fluctuations, nor does it provide a means of determining if a link formed between two variables will persist over time or change. It is vital to ascertain the function that university

business incubators perform in aiding graduates in establishing jobs in order to undertake a full review of the existing scenario.

3.2 Research Design

An outline for carrying out a study is known as a study design (Burns et al., 2003). The specific qualitative research design used in this study is a thematic research approach. Thematic analysis is employed to identify and analyze patterns, themes, and meanings in the data collected through interviews and observations. Through formal and informal interviews, observations, and other forms of close interaction, this methodology allows access to important informants, respondents, and environments. As a result, the data will be easier to analyse in terms of meaning patterns. For analysis, the respondents' diverse conclusions will be categorised into themes.

In order to better understand the perspectives, attitudes, and behaviours of the research population, it will be helpful for the researcher to get firsthand information (Gedzi, 2009, Sarpong et al 2001). A qualitative (descriptive) approach uses data obtained at a certain point in time to describe people's perspective and behaviour, giving a more accurate picture of what happened. The possibility of receiving a lot of data from a sizable sample of people is one benefit of this strategy. A qualitative (descriptive) approach, according to Gay (1992), is helpful for looking into a range of issues, including evaluating attitudes, opinions, demographic data, conditions, and procedures. The most common methods for gathering qualitative (descriptive) data include questionnaires, interviews, and observations.

3.3 Population

A big group of items that serve as the principal subject of a systematic investigation is referred to as a research population (Creswell, 2013). A given research population's participants typically share a certain trait. The target population and the accessible population are the two main categories of the research population. The entire collection of variables for which inferences are to be drawn from survey data constitutes the target population for a study. As a result, the target population specifies the characteristics for which the study's findings are intended to be generalized (Cohen et al., 2011). The accessible population is the group to which the researcher may extrapolate the results of the investigation.

The target population's accessible population is one of its subsets (Fink, 2012). From the accessible population, a sample for the study is taken. The populations of this study included all business incubators and graduates who had been incubated and were identified from the database, with the managing directors of the various university business incubators' consent. These individuals include the managers, executives, technical staff, and clients of the business incubators at KNUST and UCC.

3.4 Sample

A sample is a portion of the population that is a reasonably accurate representation of the unit of analysis (Berinstein, 2003;Latham,2007). Sampling is the process of choosing a sufficient "number of components from the population so that by analyzing the sample and comprehending the features of the sample subjects, it would be feasible to generalize the

characteristics to the populations (Radder, 2001). In comparison to gathering data from the entire population, using a sample is more practicable and less expensive.

Key informants including the directors, heads, lecturers, administrators, and other incubation program staff will be sampled using a purposeful sampling technique.

There will only be a small number of participants who can act as primary data sources for the study because of the goals and research methodology. Snowballing approach will be applied to the study population. This sampling technique entails a primary data source proposing other prospective data sources that could be able to take part in the research projects. The only way a researcher may obtain a sample using the snowball sampling approach is through referrals. In light of this, another name for this procedure is chain-referral sampling. When a population is unknown or rare and it is difficult to select participants to assemble as research samples, the popular business study method known as snowball sampling is frequently used.

Twenty (20) participants, ten (10) from each university, including both incubators and incubatees of UCC and KNUST, made up the sample size for the target population. Seven (7) participants from the sampled facilitated graduates or incubatees will be used for each population (UCC & KNUST), while three (3) participants will be drawn from the population sample of incubators. Time and budgetary restrictions are the cause of this. A table showing how the sample sizes were distributed in relation to the various study regions is shown below.

Table 1: Sample Size

Item no.	Study area	Participants	Sample size
1.	UCC	incubators	3
2.		incubatees	7
3.	KNUST	Incubators	3
4.		incubatees	7

Source: Field survey 2021

Probability sampling enables the researcher to compute the predicted error in the study and removes bias in the selection process, in contrast to non-probability sampling, which simplifies participant selection but is more vulnerable to prejudice (Babbie et al., 2014). Fozano et al., (2011). The incubators at the Universities of Cape Coast and Kwame Nkrumah University of Science and Technology will act as the study's sample populations to provide convenience and close proximity.

3.5 Unit of analysis

The choice of the project's analytical unit is a crucial component of research design. According to Cooper and Schindler, the object of the investigation and the method the researcher uses to examine the study's data are both regarded as units of analysis (2011). Research uses people, groups, or individuals as one of its units of analysis. The findings from each individual are the analysis's unit in this study. Based on the specific respondents sampled for the study, the data will be individually examined. These individuals include the administrators, managers, secretaries, academics, and other workers from the Kwame Nkrumah University of Science and Technology and

the University of Cape Coast who will be cited in the study. The research will categorize individual characteristics to provide readers a deeper understanding of the groups of people being studied, including the number of graduates in the incubation program, education level, gender, and age, among other things. As a result, the startup incubators at the Universities of Cape Coast and Kwame Nkrumah will be the subject of this study.

3.6 Data Collection

Face-to-face interviews using a semi-structured interview guide will be conducted by the researcher with respondents chosen from the University of Cape Coast incubators as well as its incubatees and Kwame Nkrumah University of Science and Technology. The primary and secondary data used in this study will both be used. Skaik (2013) explains that whereas secondary sources draw on old theses, online resources, and newspaper articles, primary sources include in-depth interviews and questionnaires.

3.7 Primary and Secondary

Primary data, according to Burns and Burns (2008), encompasses both new data and data that has been collected specifically for analysis. The term "secondary dataset" refers to information that has previously been made available, such as from dictionaries, databases, and other public sources (Remenyi et al., 1998). For the purpose of this study, secondary data were gathered from journals, prior theses, books, and government publications that were both online and printed. Both primary and secondary data were gathered by the researcher using both new and pre-existing sources of information.

3.8 Personal Interviews

Face-to-face interview techniques are particularly useful for gathering data, claim Kayrooz et al., (2005). Through an in-depth discussion of the subject under investigation, interviews help the interviewer and interviewee build a bond. This technique is widely used. As a result, in-person interviews will be held with the managers of the business incubators at the two universities. One of the objectives of this study is to get detailed feedback and understanding about the function of university business incubators in facilitating or fostering graduates/employments.

A personal interview is a sort of face-to-face communication in which an interviewer asks a responder a question and the respondent responds (Zikmund et al., 2010). The practice of conducting in-depth interviews is seen as a superior way to gather data since it gives the researcher access to detailed information that is otherwise impossible to gain through other means. Additionally, this gives alumni and staff members from the University Business Incubation a chance to express their opinions on how business incubators help graduates grow into successful entrepreneurs. University of Cape Coast and Kwame Nkrumah University of Science and Technology in Ghana's business incubators will be interviewed in-depth.

3.9 Data Analyses

Interview transcriptions were the initial step in the qualitative data processing process. English was the language used for all interviews. On the other hand, the interview guide was written in English. Prior to the interviews, the questionnaire was distributed. The interview subjects were made aware of the study's goal at the outset of the session. The interview subjects responded

in English. Each interview lasted around 15 minutes, and questions were emailed to responders beforehand so they could prepare. This process was facilitated by the use of Nvivo 11, a qualitative data analysis application, through the creation of codes to analyse the qualitative data into themes and sub-themes in line with the study goals. The first level of coding involved going over the transcript data line by line and finding the main topics and themes while utilizing the study objectives as a reference.

The resultant themes were then split up into meaning-containing components. After exporting every code into Microsoft Excel, the verbatim replies were put underneath each code. Then, for each of the objectives, the textual descriptions and "verbatim" quotation replies were chosen, assessed separately, and contrasted with the other responses to spot patterns, similarities, and differences. As described by the participants, the method allowed for a structural explanation of the problems. In order to present the findings, descriptive narratives accompanied by examples were used.

3.10 Ethical Considerations

The researcher put a lot of work into making sure that the study would be conducted in an ethically sound manner. According to Brynard et al., (2006), transparency is important for ethical research and private data must be considered. To achieve these aims, the research sought consent from all stakeholders, including the business incubators and the University of Cape Coast and Kwame Nkrumah University of Science and Technology graduates who were incubatees. The respondents' involvement in the study will thus be completely voluntary, and they are free to stop participating at any point while it is being done. The ethical approach of the study will be further supported by

adherence to the institutional laws and regulations governing research. Informed consent was obtained from all participants, and other considerations including participant anonymity and data confidentiality were also taken into account.



CHAPTER FOUR

PRESENTATION AND DISCUSSION OF FINDINGS

4.0 Introduction

In the preceding chapter, we covered the study's methodology and research design. This study's primary goal was to evaluate the contribution of university business incubators to the employment of graduates. The research findings from the study will be presented and discussed in this chapter. The emphasis on using qualitative data from the earlier chapters was continued with the presentation and evaluation of the data under the following headings: demographic information, business profile, entrepreneurial skills needed by incubated SMEs, goals for joining the program, challenges in managing incubated SMEs, effectiveness of incubators program, incubated entrepreneurs with managerial skills, reasons for attending the business incubation program, and factors describing the program.

4.1.0 Demographic Characteristics of respondents (Incubatees)

Table 4.1 below indicates demographic characteristics of respondents in this study.

Table 4.1: Demographic Characteristics of Respondents

Age	Number	Percentage
Less than 22	1	5
23-30	7	35
31-39	8	40
40 +	4	20
GENDER	NUMBER	PERCENTAGE
Male	13	65
Female	7	35
PERIOD OF OPERATION (MONTHS)	NUMBER	PERCENTAGE
12	1	5
24	9	45
36-48	8	40
60 +	2	10

Source: fieldwork2022

In terms of age, respondents between the ages of 31 and 39 made up the majority (40%) while respondents between the ages of 23 and 30 came in second (35%) and respondents over the age of 40 came in third 20%. Younger than 22-year-old respondents made up just 5% of the total. The outcomes show that young entrepreneurs take part in the incubation program. It is obvious that individuals of all ages are looking for support from business-support structures. These findings may be connected to Masutha et al., (2014)

conclusion that entrepreneurs are generally 35 years of age or older. The study's main area of interest, however, was the management of firm incubation. Last but not least, incubation program entrepreneurs who participated in the study were divided into four age groups: 22 or younger, 22 to 30, 30 to 39, and 39 and older.

4.1.1 Gender of respondents

With only 35% of the total replies coming from women, the table above reveals that men made up the large majority of responses (65%). According to Botha et al. (2006), it is likely to have a negative effect on female engagement in entrepreneurial activities for defined groups who have historically faced disadvantage, such as women. In addition, the fact that most women today have well-paying corporate jobs may deter them from pursuing executive roles in small businesses. From this, Gwija et al (2014) asserted that steps should be taken to close the gender participation gap and encourage women to start small companies is derived.

4.1.2 Period of the Business operation

The firms of the respondents have participated in the incubation program for a variety of times, according to the aforementioned statistics. SMEs between the ages of 12 and 24 made up the bulk of those taking part in the incubation program (45 percent), followed by SMEs between the ages of 36 and 48, which made up 40% of the total. In addition, only a tiny percentage of respondents (10%) represented SMEs that had been in development for longer than five years. Those who had been enrolled in the program for a year were only included in 5% of cases.

Scaramuzzi (2002) asserts that the duration, kind, and worth of the services offered to applicants during the incubation process should all be carefully outlined by business incubators. There is still a substantial failure rate during the first three years of a SME's operation in a university (Choto, et al., 2014). SMEs can thus benefit from the nurturing atmosphere provided by business incubators in order to help them survive their first three years of operation (Imbadu, 2013; SEDA, 2014). Because of this, the incubation periods for both public and private firms, in both industrialized and developing countries, often last three years (Masutha et al., 2014).

In order to answer the three research objectives for the study, interview questions were developed. Subtopics were created from the aforementioned questions to facilitate discussion during the interview. The major research questions and their sub-questions were utilized to generate themes and sub-themes that were then applied to the data analysis. The segmentation of the interview data into themes and sub-themes is examined in this article's technique of analysis (Bradley et al., 2007). By combining ideas into general conclusions based on data analysis, the idea is to bring concepts together. The themes were founded on individual interviews. The primary topics and how they relate to the sub-themes of the research question are shown in the table below.

Table 5: Major themes for this study's investigation.

Table 4.2: Objectives with the Corresponding Sub-themes

Main theme	Sub themes
1.Perceived Role of University Business Incubators in facilitating graduates' entrepreneurial skills acquisition	Involvement in a business incubator at early stages Entrepreneurial education and training in the SMEs success SMEs' registration process in the incubation programme Awareness about incubators to support SMEs
Main theme	Sub themes
2.Effectiveness of University Business Incubators	Criteria to monitor the performance Types of support incubated business need Reasons to attend the incubation programme
Main theme	Sub themes
3. Extent to which Incubators have facilitated the entrepreneurial skills	Objectives of enrolling in business incubation programmes Entrepreneurial background and business success Entrepreneurial skills requirement of incubatees The services obtained from business incubators
Main theme	Sub themes
4. Challenges faced in running the incubators	Support structures Advanced Technological facility Self-sustainability 4 Relevance of entrepreneurial skills

Source: Fieldwork2022

4.2.0 Perceived Role of University Business Incubators in facilitating graduate's entrepreneurial skills acquisition

4.2.1 Involvement in a business incubator at early stages

In line of the findings, this study examined the effects and outcomes of enrolling in an incubators program throughout the initial phases of a company' development. In order to give them a strong entrepreneurial foundation on which to build their businesses, respondents to this poll were asked how much they participated in business incubation programs when they were just starting out. These comments are presented in the following sections.

4.2.2 Contributing to the Success of Business

Other factors that affected the business incubators' effectiveness were discovered to be strongly related. While analysing the results, information regarding the relationship between public and private support as a key factor in an incubators' success was uncovered. The socioeconomic environment in which businesses operate, as well as the incubators staff's enthusiasm for assisting incubates, were further points of agreement among the six respondents. In support of the aforementioned, other factors to take into account include entrepreneurial and technical skills, as well as sector characteristics relevant to a given industry.

Utilizing expertise in industry analysis, high-calibre entrepreneurs are nurtured to produce a viable and in-demand good. For suggestions, read "Four Legs of the Table" by Raymond Ackerman. The four Ps of marketing having a product people want, reaching that market, spreading awareness of it, and maintaining quality are what it all comes down to. Therefore, this theme's

primary objective was to evaluate the contribution of university business incubators to graduates' ability to create jobs.

Intriguingly, only a small number of survey participants disagreed with the majority's conclusion that the management function in their firms is influenced by the entrepreneurial basis and training facilitation. The majority of respondents, it appears from the results, think that training facilitation and an entrepreneurial foundation may be helpful in managing and growing businesses. The research reviewed for this study, which demonstrates the importance of mentorship facilitation and entrepreneurial foundation, is supported by these findings. According to Gwija et al. (2014), entrepreneurial education and foundations should not be disregarded in the growth of SMEs and the creation of jobs. The results might be connected to Choto et al. (2014)'s theory that entrepreneurial foundation and training are necessary for SMEs to practice entrepreneurial culture.

4.2.3 Entrepreneurial education and training in the SMEs success

The validity of communications on topics relating to entrepreneurial success was furthered by this study. The next sentence demonstrates how the participants' entrepreneurial education and training had a substantial impact on the success of their businesses. Only a few respondents disagreed with the majority of those who took part in this poll who stated that entrepreneurship education and training are essential to the development of their SMEs. Findings show that more people agree that entrepreneurship education and training are essential for the growth of SMEs that have been incubated. These findings back up Bergek et al., (2008) assertion that incubators support services should include mentorship and educational programs for

entrepreneurs. Masutha et al., (2014) contend that the main method for aiding SMEs in expanding and so reducing their failure rate should be entrepreneurship education and training.

4.2.4 Incubated SMEs access to business funding

A question was designed to determine whether or not businesses that were incubated were successful in securing the finance they need. In the paragraph that follows, the findings about how straightforward it is for respondents to obtain finance from financial institutions to support their businesses are described. A sizable percentage of respondents believe it is straightforward for firms like theirs to obtain money from financial institutions to support their operations, compared to a considerably smaller percentage who believe it has never been easy. The majority of respondents believed that SMEs could easily obtain financing from financial institutions, according to the data. However, the findings contradict the claim made in the literature (Masuka et al., 2014; Gwija et al., 2014; and Mmasi et al., 2012) that acquiring start-up capital is a substantial barrier for recently founded firms.

4.2.5 SMEs' registration process in the incubation programme

The following findings probed the respondents' registration process for the program. The following paragraph interprets how much faster the incubation program makes the procedure of registering a business for respondents.

Surprisingly, the majority of those who responded to this survey agreed that the procedure for registering a firm under the business incubation program is swift, with just a small number of people disagreeing. According to

the findings, it is uncertain if applying for a company license through an incubation program is speedier. This may be connected to Gwija's (2014) findings that the time required for company registration at universities is excessive, however other respondents did not agree with this claim. The speed technique is not persuasive enough, according to some poll participants.

4.2.6 Entrepreneurial skills as a success influence on SMEs

Respondents were questioned about how much the entrepreneurial abilities they developed during incubation helped their businesses, which helped to support the findings mentioned previously in this paragraph. The paragraph that follows indicates the percentage of participants who agreed or disagreed that having entrepreneurial abilities had a substantial influence on the success of their incubated SMEs. Only a small number of respondents to this poll disagreed with the majority's conclusion that having entrepreneurial skills would help their businesses grow more successfully. The results show that a sizable portion of respondents thought that entrepreneurial abilities (such as procedures, interpersonal and personal interactions, etc.) would aid in the success of their SMEs.

These results are consistent with past research that asserts the importance of entrepreneurial skills to the long-term survival and growth of SMEs. This may be connected to Chang et al., (2013) claim that entrepreneurs with entrepreneurial skills have successful management strategies, a happy outlook, and decent behaviour when running a business. Neneh (2013) claims that a large part of the high failure rate of small firms can be attributed to the lack of entrepreneurial skills and an entrepreneurial attitude. Additionally, he concludes that a firm's development and longevity are influenced by its

entrepreneurial experience, which is a critical element in entrepreneurial success.

4.2.7 Awareness about incubators to support SMEs

The data on respondents' agreement or disagreement that entrepreneurship development is significantly influenced by support systems for entrepreneurs, such as business incubators, is analysed in the paragraph that follows. The goal of this study was to ascertain how business incubators contribute to the growth of SMEs. Only a few respondents disagreed with the general consensus that business incubators and other frameworks for SMEs have a substantial impact on the growth of incubated businesses. Operation incubators are a useful instrument, according to the literature assessment, for enhancing SMEs' development potential and lowering the high failure rate in their first three years of operation (Grimaldi et al., 2005). Incubators play a substantial economic role in helping new businesses survive, according to Al-Mubaraki et al., (2010) analysis of the literature. The results of this study therefore agree with those of a huge number of past studies in this field.

4.2.8 SMEs for economic participation

The data in the paragraphs that follow indicates the percentage of respondents who agreed or disagreed that establishing a business is better to seeking for work. The most intriguing finding was that the vast majority of respondents thought starting a business was preferable to looking for employment, with only a small percentage disagreeing. According to these findings, a sizable portion of respondents think that starting a small business is a better route to financial independence than looking for employment.

This study backs up findings from Masutha et al., (2014), which suggest that more people are seeking entrepreneurship chances and that SMEs in universities are likely to generate new jobs. The literature has a strong understanding of the connection between push and pull elements. Nieman et al., (2014) provide evidence from the literature that shows how entrepreneurship and SMEs hasten economic engagement. The relevance of entrepreneurship in the creation of jobs has been a hot topic in recent years, according to Schwartz et al., (2008), who also found similar results.

4.3.0 The incubators programme effectiveness

The efficiency of incubators programs for SMEs was studied in this study along with the necessity of such programs. The next paragraph is a translation of the interview guide, and it indicates whether the participants agreed or disagreed that, as compared to establishing a firm on one's own, the incubators program is the greatest tactical instrument for the growth of SMEs.

4.3.1 Criteria to monitor the performance

The management criteria for assessing the effectiveness of university-based business incubators are the focus of the current sub-theme of this study. Four out of six participants said they used the same criteria to evaluate the success of the incubators, which is a resounding majority in terms of this sub-theme. Since this is essentially what the government demands, they are concentrating on the quantity of employees, growth in turnover, creation of jobs, and SMEs involved in the program. Incubators two asserts that there is a fundamental difference between the measurement matrix and itself.

By building a small number of businesses, you must adopt a strategy that aspires for broad success and long-term viability. As an alternative, train a small number of businesses, which would result in the creation of more jobs but not ones that would be long-lasting or contribute to business expansion. You must be conversant with the particular technical and operational abilities required by each industry. According to Macheke et al., (2013), recruiting trained labour and competitive management is one of the most important prerequisites for sustaining the high performance of the business incubators in order to stay productive and get a competitive edge.

Additionally, incubators number four offered the following response to the prior result that enumerated the criteria used to assess the efficiency of the business incubators: Based on research, successful companies, and the normal length of time it takes for a small firm to become self-sustaining which, according to the study, is on average three years we utilize universal criteria as a foundation for our decision-making. We have a three-year program as well because of this. The creation of new jobs and internal development are the two most crucial aspects in our eyes. The requirements are outlined as follows: In three years, is it possible for the firm to produce jobs? Which, in plain English, means that if the owner is the first employee, the owner must create three further jobs, and if the firm has two owners, the owners must create two additional jobs as they are employees who must pay themselves?

Even if they don't initially pay themselves a wage, they will be able to do so at the end of the year. Revenue is the second criteria. Can the company make enough money in the next three years to support itself and its employees, as well as make enough money to pay the owner's salary after just three years?

Sales and the company's capacity to show a good percentage of growth are additional requirements. The company must further demonstrate its ability to preserve asset value after three years. The facts presented above demonstrate how important it is to monitor the operation of the business incubators in order to determine its development and advancement.

A substantial percentage of participants think the incubators program is the greatest alternative for small business development and growth, while a lesser percentage thinks the program of incubation is ineffective and unproductive. According to the results of the survey, the great majority of respondents agree that the incubation program has to be treated seriously. The business incubators program, according to Salem (2014), is one of the most important resources for assisting start-up businesses in surviving during their formative years of operation. These findings are consistent with Scaramuzzi's 2002 study on the efficiency of incubation, which found that between 80% and 85% of incubated businesses succeed. Furthermore, incubators are a crucial and successful strategy for providing start-up businesses with the tools and resources they need, according to Rogerson et al., (1999). They suggest incubators be seriously thought upon in this regard.

4.3.2 Types of support incubated business need

Based on a survey of the literature, the next paragraph covers the types of assistance SMEs need in order to enrol in incubation programs. Financial support, entrepreneurship and development skills, assistance with the creation of new products and services, additional assistance, and more than one of the aforementioned assistances were the five sorts of assistance that respondents required.

Surprisingly, the study's findings reveal that the majority of respondents need both financial aid and more than one of the aforementioned services, with only a small number needing help launching new goods or services. Additionally, the data showed that some of the respondents needed help developing their entrepreneurial and development skills. The other participants said they required spaces for sharing office services and handling clientele. This might be predicated on the notion that incubators assist business growth by providing workspace (Ndabeni, 2014). Office supplies, aid with starting a business, and support for R&D are just a few of the services that business incubators provide (Buys et al., 2007).

4.3.3 Reasons to attend the incubation programme

A question was posed to attempt to understand why incubatees choose to participate in the programs. The next section goes through the factors that applicants consider while deciding whether to participate in the program for company incubation. Five categories were used to categorize the research: growth potential, a lack of entrepreneurial skills, other variables (both known and unknown), and other. The majority of SME respondents in this survey who were questioned about their reasons for taking part in the study stated when asked about growth potential that it was the most important factor to take into account, followed by those who started because they lacked entrepreneurial skills.

While some of the respondents joined the incubation program in search of networking opportunities, office space rentals, professional management mentorship, and administrative support, others did so in search of both growth and entrepreneurial abilities. Some business owners may require expert

guidance and business plan services in the incubators program, according to Adegbite (2001).

4.4.0 The extent to which University Business Incubators have facilitated the entrepreneurial skills of students and graduates

4.4.1 Objectives of enrolling in business incubation programmes

The goal of the study is to ascertain how much university business incubators have promoted the development of entrepreneurial abilities among students and recent graduates. The perspectives of respondents about the reasons they take part in business incubators programs were divided into the following categories: This indicates that respondents' objectives may have varied, as was already indicated, and may have included growth, skills, finance, networking, other, or more than one of the aforementioned. The majority of the entrepreneurs in this study's incubation program registered with the goal of growing their firms, followed by those who attended with the goal of developing a range of skills. Unexpectedly, 3.6 percent of the total were individuals who joined the incubation program for financial or other reasons.

In addition to financial assistance and a meeting place, other responders joined so they could use the facilities to accommodate their clients. Clients of incubators reportedly want support with a variety of business-related tasks, according to Al-Mubaraki et al., (2010). So, in order for SMEs to overcome their difficulties, the concept of firm incubation is crucial. The high failure rate of SMEs in both developed and developing countries, according to

Masutha et al., (2014), can be reduced by supporting entrepreneurial-based business via business incubation.

4.4.2 Qualities of a successful incubatees

Botha et al. (2006) claim that successful business owners demonstrate knowledge and practical skills that are frequently assessed by their aptitude for entrepreneurship, profit, sales turnover, and staff development. The responses claimed that there is a clear connection between the earlier discoveries and the present study. A company's growth and turnover, staff count, and product or service quality are all signs of a successful entrepreneur. The results were consistent with the results of a significant amount of past study on this subject. Incubators two made the following conclusions based on respondents' descriptions of what makes a successful entrepreneur: Tenacity may be defined as having the ability to listen to, comprehend, and accept good advice as well as the willingness to adapt and the humility and self-assurance to be self-assured, yet tenacity can occasionally be shown in individuals who have the incorrect aims in mind.

"Someone who believes in their idea and has a learning attitude is very vital; if you are a person without a learning attitude, you will not achieve," said another respondent (incubators four). Success is more likely for those who seek out teamwork. A fantastic incubate also comprehends the company's marketing strategy and what needs to be done to meet client expectations. Last but not least, a quick rate of growth, tenacity, a long-term plan, and effects.

Having a presenting talent, as well as the capacity to successfully conclude negotiations and conduct properly, according to incubators

management. Moreover, displaying pleasantness and a cheerful demeanour in all interactions with people and businesses. For SMEs, it's essential that employees have both personal and entrepreneurial skills. They also need to be mature in their own businesses and have strong communication skills (Chang et al., 2013).

One of the administrators of the business incubators gave the example of the other talents' applicability, saying: "Business plan; where the business is going, its laws; and formalize the business, putting in the operations process, and marketing their business ideas, but they can't persuade themselves." If they do not already possess fundamental skills, we teach them. Additionally, they require soft skills like the capacity to analyse a situation and choose the appropriate course of action in light of it. They require common sense, which comes from having a particular knowledge of the environment and gradually developing interpersonal skills. For example, while under pressure, your company will be put to the test to see how you assess a situation and apply strategy skills to numerous scenarios.

4.4.3 The achievement of incubation goals

The findings on how much respondents agreed or disagreed that they had achieved their aims by taking part in the incubation program are explained in the paragraph below.

The findings show that the majority of study participants achieved their objectives for signing up for the incubation program, which would reduce the failure rate of SMEs for those who participated. Only a few individuals claimed that the incubation program did not help them achieve the goals they

had when they signed up. According to the findings of this section, entrepreneurs participating in the incubation program are satisfied and agree that being incubated reduces their chance of failure, particularly during the early and unstable stages of their firms. These findings may be related to the assertion made in the literature that the concept of a business incubators is necessary for SMEs to survive during their early phases of operation and that business incubators have been accepted in universities as a way to accelerate the SME sector (Masutha et al., 2014). Business incubators are essential to assisting small and medium-sized companies with their demands for entrepreneurial skills. Therefore, it is important to not minimize their importance.

4.4.4 Entrepreneurial background and business success

An analysis of the literature on entrepreneurship reveals a connection between an entrepreneur's past and the chance that their company would succeed. Given the foregoing, the research looked at the backgrounds of the respondents. The statement that follows shows how many respondents agreed or disagreed that they have entrepreneurial backgrounds. According to poll data, the majority of participants agreed that having an entrepreneurial history can be very important for starting and growing a firm, while just a small percentage of respondents claimed that they did not. The findings indicate that the majority of participants believed that an entrepreneurial background in the incubation program can significantly contribute to the development of any organisation.

Notably et al., (2014) believe that the success of entrepreneurs is significantly influenced by the educational system. Comparing these findings

to that of Stephen et al., (2014), who maintain that tertiary education and exposure often equip entrepreneurship activities and directly affect graduates' development of the requisite entrepreneurial skills, they show that their findings are more favourable.

4.4.5 Entrepreneurial skills requirement of incubatees

A review of the literature on BIs found that in order to promote the growth of their clients' businesses, incubators must meet their clients' desires for entrepreneurial abilities. In light of the aforementioned, this study looked at the skills needed by SMEs. The paragraph that follows will analyse the skills that the program's SMEs deemed to be most important.

The aforementioned entrepreneurial skills were broken down into marketing, human resources, financial, entrepreneurial, and networking, as well as more than one of the aforementioned and extra abilities. According to the literature, technical and process abilities were also stated by respondents. In terms of the capabilities of the entrepreneur respondents in this research, the findings show that the majority of incubated entrepreneurs need the various talents listed above. It's interesting to note that respondents who felt they lacked entrepreneurial, marketing, and financial skills as well as human resources skills. According to the study's material, the incubation program's entrepreneurs do not possess the necessary entrepreneurial abilities to grow their business.

Few entrepreneurs have degrees in business from respected colleges, according to Gwija et al. (2014). Instead, they are from all different backgrounds. Business incubators in developing countries have a variety of

challenges, including a lack of money, the desire to grow into new regions, and a shortage of facilities with cutting-edge technology, according to Stefanovic et al. (2008). (prototype).

4.4.6 The services obtained from business incubators

Incubators for businesses are emphasized in the literature as organisations that support entrepreneurship and assist start-up businesses survive. The literature review that came before this one looked at the services that entrepreneurs in incubators use. The findings of the services accessed by respondents during the incubation process are explained in the paragraph that follows.

The supply of workspaces, the facilitation of coaching and mentoring, all of the aforementioned, as well as more than one of the aforementioned, have all been connected in this study to a significant linkage between networking services and entrepreneurial abilities. More than one of the aforementioned services was used by most research participants. Surprisingly, only a tiny percentage of the representatives were able to facilitate networking, coaching, mentorship, office space, and business opportunities.

The results of this research show that business incubators provide SMEs with a range of services, such as business assistance and technical support services, to foster and build start-up businesses (Ndabeni, 2008). The literature claims that during the past several years, colleges have become more committed to business incubation models as a practical strategy for guaranteeing the survival of SMEs (Masutha et al., 2014). So, the growing and

long-term viability of the entrepreneurial sector is positively impacted by small business incubators, a new trend in colleges.

4.4.7 Number of subordinates at start of the business

According to a review of the literature on SMEs, they are believed to create jobs. The paragraph below is meant to demonstrate the number of employees each responder had at the start of the incubation program.

All of the respondents in this survey began their businesses with just one to ten employees, according to the study's findings. The results of this study suggest that every business that took part in the incubation program had between one and ten workers, which may indicate that SMEs initially produce fewer job opportunities. Hutabarat et al., (2010) assert that promoting SMEs through business incubators is one strategy to grow the economy and raise living conditions in the nation. The majority of SMEs, according to Buys et al., (2007), have a minor impact on entrepreneurial skills acquisition at the start-up period; this can mean that entrepreneurs cannot afford to engage workers during their first few years of operation.

4.4.8 Current number of employees

Given the past research on employment creation by SMEs that have undergone incubation, this study questioned the effect of the respondents. In the paragraph that follows, it is indicated how many managers the respondents' businesses have.

The research reveals that most respondents had between one and ten employees working for them, while those with between eleven and fifty employees made up a small portion of respondents. The findings also show

that most of the research participants had between one and ten people in their ranks as subordinates. The research went on to say that the majority of study participants, who were entrepreneurs, needed the numerous talents described above. Contrary to Buys et al., (2007), who assert that the performance of the incubated SMEs determines the success of the incubators, the quality of the incubated entrepreneurs may be evaluated in the selection criteria. The outcomes can also be attributed to a lack of resources and business expertise that the SMEs that were incubated need to become independent and manage their operations without help from incubators (Grimaldi et al., 2005).

4.5.0 The Challenges Faced by University Business Incubators Prior To Incubation Programmes

This research identified many significant difficulties faced by incubated SMEs in operating their firms after reviewing the literature on the difficulties that incubatees encounter before beginning the incubation process. The section that follows examines research on the several problems that respondents face, which are grouped into the following categories: government restrictions, office space, money, and entrepreneurial skills. The results of this study support those of a substantial body of prior research on the topic.

In an effort to draw attention to the challenges incubators encounter, incubators one remarked, "Our main challenge is expansion into multiple sites; costs will be considerable in setting up a new site, and people may not join." According to a second responder, in addition to helping entrepreneurs clear their thoughts, the biggest issue is helping them interact with corporations in order to open doors and obtain their first customer. Gaining a client's trust and

demonstrating that a good or service is being supplied might be difficult; the issue is breaking through the door block of exposure. Finally, the former manager's lack of experience operating a firm suggested that he was an entrepreneur. Inadequate operational systems can also refer to methods, protocols, and procedures for arranging the house and for quality control. The outcomes of this study will now be contrasted with those of past research. Because of this, the purpose of this sub-theme was to identify the difficulties startup incubators encounter.

4.5.1 Support structures

For-profit incubators will likely make up around 50% of all business incubators in the future, according to Nowak et al., (2000). Incubators may get money from both private and public businesses, according to the goal of this sub-major topic. The literature claims that funding and support mechanisms were one of the issues business incubators were confronting. According to the survey's findings, all of the participants receive support from public agencies, in contrast to two of the participants who stated they had never gotten help from private agencies. The findings of this study are in line with those of Akcomak (2009), who discovered that business incubators in developing nations receive substantial support from government agencies and that there is little transparency regarding the amount of financing provided to them.

4.5.2 Advanced Technological facility

The study's findings show that serving SMEs that have been incubated is not a problem for the majority of respondents (four out of six interviewees), and that just two said that access to technology-based facilities is a significant

hindrance. On the other hand, technology-based business incubators are powerful drivers of innovation, R&D, economic growth, and entrepreneurship in industrialized countries (Ozdemir et al., 2013). The findings of this study will be compared to those of Buys et al., (2007), who discovered that having access to technical resources and technical expertise leads to better business incubators settings. Based on the interviews, Incubators 1 stated: "High-tech facilities are not necessary, but yes." The study's findings showed that the majority of participants (four out of six interviewers) indicated that serving SMEs that are being incubated is a difficulty, while just two felt that access to technology-based facilities is a big hindrance. On the other hand, technology-based business incubators in industrialized countries are important forces behind entrepreneurship, economic growth, and innovation (Ozdemir et al., 2013). We'll now compare the findings of this study to those of Buys et al., (2007), who discovered that having access to technology resources and technical expertise leads to better business incubators settings. Based on the interviews, incubators one stated: "High-tech facilities are not necessary, but they are welcome."

4.5.3 Self-sustainability

The study's findings indicate that two out of the six business incubators that participated indicated their incubators is self-sustaining and not dependent on government support, while three out of six said their incubators is not. This study supports Tamasy (2007) and Akcomak (2009)'s assertions that business incubators are best handled privately and shouldn't be reliant on governmental funding. Instead, they should create a strategy to help people become self-sufficient. Incubators Six emphasized that "we are a recognized training

facility" while talking about sustainability. Yes, a number of publicly traded companies provide funding to the incubators, and they also endorse the initiative. According to another respondent (incubator 3),

"I feel it is a yes and no response; our approach allows us to be sustainable; it meets our core needs, yet at the end of the day, we must pay our facilitators and employees." The assistance we receive, however, makes life easier for us. Determine if the managers of the participating business incubators had a model that would enable self-sustainability was the goal of this subjective subject.

4.5.4 Relevance of entrepreneurial skills

We will now compare these findings to those from past studies. Business incubators in developing nations, according to Akcomak (2009) and Lalkaka (2002), still lack the administrative and entrepreneurial skills required to effectively support the expansion of small businesses. Four out of six respondents to this study agreed that the incubated SMEs are negatively impacted by the incubation managers' lack of entrepreneurial abilities. However, according to two of the business incubators managers, running an incubator does not require formal training or entrepreneurial skills; rather, incubators managers must be enthusiastic and persistent in helping SMEs that are being fostered grow.

These results support the findings of numerous past studies conducted in this field. Considering how important entrepreneurial abilities are, incubators two made the following connection: In the same way that entrepreneurs need to have entrepreneurial knowledge and experience in order to launch their businesses, incubation management must at the very least be aware of what these entrepreneurs are going through.

The study's primary research issue was that administrators of business incubators in less developed nations lacked the abilities essential to help entrepreneurs in their incubator's programs effectively. The majority of respondents had formal education, and some had previous work experience, therefore incubated SMEs and the organisations that assist these entrepreneurs ought to both have an entrepreneurial mindset. To ensure the success of SMEs, it is therefore essential to promote a growth mentality among entrepreneurs in the SME sector at universities (Neneh, 2012). Another interviewee said, *"I am now re-imagining the idea of a range of skills to be mentored in the management department, such as HR, finance, marketing, strategy, technology, operation, employing facilitators and mentors"*.

According to the study's findings, the majority of respondents cited a lack of funding as a significant barrier. This is in line with the findings of Gwija et al. (2014), which show that acquiring funding and possessing the necessary business skills are the two main barriers to operating SMEs. Despite the fact that business incubators frequently assist SMEs with office space, the survey's findings revealed that participants had problems finding an office. It's noteworthy to see that respondents are concerned about a lack of business skills based on the findings for both entrepreneurial skills and governmental limits. This is also supported by the findings of other studies, such as Masutha et al., (2014) study, which found that entrepreneurs who work in incubators lack the necessary business skills to fully contribute to the growth of SMEs.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Overview

An overview and discussion of the results were provided in chapters four and five. Conclusions will be reached in this chapter, along with suggestions. A brief recap of the material in the previous chapters is given at the beginning of this one. The chapter concludes with suggestions for further investigation after the conclusion of the complete study and a summary of its findings. This study's highlights are a concise summary of everything it has covered.

5.1 Summary of Results

The purpose of this study was to determine how much SMEs in universities benefit from business incubators in terms of developing their entrepreneurial abilities. To assist in achieving the primary objectives of the research, sub-objectives were developed.

Sub-objective one: To assess the perceived effectiveness of University Business Incubators in some selected universities in Ghana:

As can be seen from the following comments, all incubation managers completed tertiary education, with the majority concentrating on business or entrepreneurship. According to most interviewees, business incubators have been around for more than five years and are not a recent development. The success of the company incubators, according to four interviewees, was negatively impacted by a lack of entrepreneurial abilities. The proper operation of a business incubators, according to four participants, requires a

formal qualification. The majority of respondents (almost all) agreed that having a business management degree combined with a technological expertise helps the organisation grow and be long-term viable. All respondents agreed that the following talents are crucial: technical aptitude, business management aptitude, interpersonal and people aptitude, human resources aptitude, leadership aptitude, marketing aptitude, and process aptitude.

According to all respondents, cultivating an entrepreneurial culture and developing a reputation for social innovation and teamwork abilities are more important. Financial knowledge, which is a financial talent, was one of the most crucial abilities mentioned by respondents. The incubators' effectiveness is measured by the number of employees, the rate of turnover, and the creation of new jobs. The dedication of the incubation team to the growth of the SMEs it has supported is crucial.

Determine the extent to which university business incubators have benefited students and graduates in fostering their entrepreneurial skills (sub-objective 2). In respect to this objective, it is possible to draw the following conclusions: All of the responding SMEs identified a variety of entrepreneurial skills as being necessary, including financial, marketing, HRM, interpersonal, networking, administrative, and technology capabilities. According to all responders, some fostered entrepreneurs have a history in entrepreneurship and hold various kinds of formal degrees. According to respondents, incubated SMEs face a variety of issues, including inadequate competencies for process management and firm management.

Most participants agreed that a successful incubator should have a high pace of development, tenacity, sustainability, and an influence on society. The need of effective communication as well as personal, entrepreneurial, and entrepreneurial maturity skills were also addressed. Sub-objective three is to identify the difficulties BIs have while imparting entrepreneurial skills to university graduates. The graduation phase saw an average of 15 entrepreneurs participating and graduating. Respondents cited a number of significant obstacles for business incubators, including production space, funding, equipment upkeep, and technical expertise. Governmental organisations provided aid to each responder. The majority of respondents do not view access to technologically advanced facilities as a big problem. Since the incubators was dependent on government funding, the majority of respondents thought that self-sustainability was a serious challenge. Managers of incubation programs concur that incubated SMEs suffer as a result of incubation managers' lack of entrepreneurial skills.

5.2 Conclusion

The research reveals that managers of business incubators who have registered with Traction's database have the necessary skills to fully support the expansion of SMEs. These business incubators therefore demonstrated promise for accelerating the development of SMEs and entrepreneurial competencies among incubated business owners, including managerial and entrepreneurial competencies (Akcomak, 2009), as the study's findings suggested that business management and entrepreneurial competencies are crucial for business managers in running a business incubator. According to Akacomak et al., (2009), the development of skills during the incubation

period motivates entrepreneurs to increase their market share and business opportunities in a commercial setting, which promotes the growth of entrepreneurship.

The study, which aims to support small and medium businesses, gives insight into how business incubators might help small and medium size organisations with their need for entrepreneurial skills. The results make it clear that incubated SMEs are important for promoting economic participation and job growth. Generally speaking, it is crucial to acknowledge the role that business incubators play in aiding SMEs in developing the entrepreneurial skills they require, since this will positively affect the expansion of the university economy.

5.3 Recommendations

In order to boost economic growth, social welfare in the country, industrial development of nations, economic competitiveness, income generation, the promotion of entrepreneurship activities, and improving international trade, it is advised that SMEs at universities enrol in business incubation programs. The government and its agencies should also pay high attention to supporting programs for company incubation, particularly in the designated districts. The new business ministry should acknowledge small and medium-sized firms (SMEs) as growth engines since they contribute significantly to employment creation and economic growth. Due of its critical role in addressing the nation's problems with poverty, slow economic growth, and unemployment, entrepreneurship may benefit from this support.

Entrepreneurs who receive incubators support produce jobs; according to the report, each incubators employed one to 10 residents.

In order to encourage graduates to begin entrepreneurial endeavours, the report suggests that new business incubators be established within Ghanaian colleges. Management should take recruiting top-notch entrepreneurs into the incubation process seriously and conduct an accurate review of the business incubators' staff. Additionally, training was advised for people who are struggling to manage the firm. However, a substantial percentage of respondents said that the market's need for their products and services will probably continue in the future. The success of the SMEs that have been fostered should be maintained and grown, according to incubators managers. Entrepreneurship education has been a popular subject in academic and literary circles as a way to promote an entrepreneurial culture in high schools.

In addition, incubation managers should be tertiary college educated, have a background in entrepreneurship or company management, and have experience in both. The recommendation is also made for incubators managers who lack the necessary entrepreneurship skills to enrol in business courses at neighbouring institutions or universities. Finally, it was advised that government entities open up facilities based on cutting-edge technology.

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APPENDICES

APPENDIX A

BUSINESS INCUBATORS INTERVIEW GUIDE

The purpose of this survey is to solicit for your views on the topic '*The role of University Business Incubators in facilitating graduates' entrepreneurial skills acquisition – Ghana*'. Please be assured that your opinions/responses will be treated with dignity, honesty, and confidentiality as well as the names of your organisation. However, you have the option to leave the interview at any time if you so desire. I would want to emphasize that your opinions are valuable and would make a significant contribution to this research.

Section A. Demographics Information

1. Age
2. Gender
3. Educational level
4. When was the business established?

Section B: The Perceived Role of University Business Incubators in Facilitating Graduates Entrepreneurial skills acquisition

5. What are the things that you do that help develop entrepreneurship?
6. What services do you provide to start up a business?
7. What kind of assistance do you provide to run and make a business competitive while in business incubation?
8. Please tell us about your support services for graduates.

9. In what ways, other than education and training, can University Business Incubators help develop entrepreneurship?
10. What role may university business incubators play in fostering entrepreneurship through education and/or training?

Section C: The Extent to Which University Business Incubators Facilitate the Entrepreneurial Skills of Graduates

11. Since you started the operation how many graduates have enrolled in your programme?
12. Do you think it is necessary to have a formal qualification to manage an incubators successful? If yes, why?
13. What sort of criteria does management use to monitor the performance of your incubators?
14. Are you happy with the performance of your business incubators and which skills are mostly contributing to the performance? If not, why?
15. What are the contributing factors to the success of Business Incubators in the University.

Section D: The Perceived Effectiveness of University Business Incubation

16. What abilities are required for incubatees to be successful?
17. Do you think entrepreneurial skills are important for incubatees? If yes why?
18. What are the most common skills revealed by your clients, and do they participate in the incubation programme? If not, why not?
19. What do graduates in your programme need the most?

Section E: The challenges faced by business incubators in facilitating the entrepreneurial skills requirements of graduates

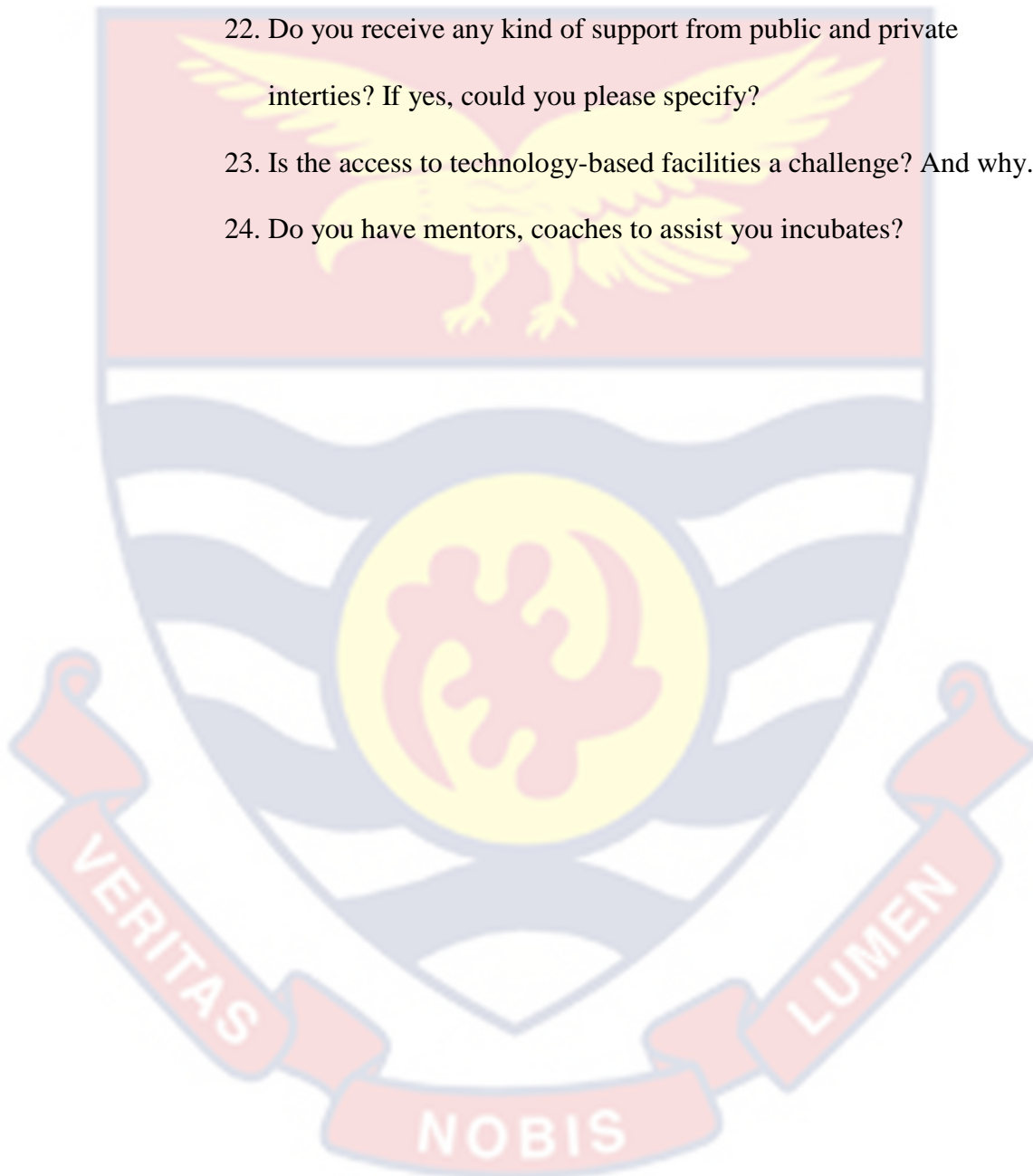
20. What are the most critical challenges for your business incubators?

21. What challenges do you face in facilitating services for graduates?

22. Do you receive any kind of support from public and private interties? If yes, could you please specify?

23. Is the access to technology-based facilities a challenge? And why.

24. Do you have mentors, coaches to assist you incubates?



APPENDIX B**INTERVIEW GUIDE FOR INCUBATEES**

The purpose of this survey is to solicit for your views on the topic ‘*The role of University Business Incubators in facilitating graduates’ entrepreneurial skills acquisition – Ghana*’. Please be assured that your opinions/responses will be treated with dignity, honesty, and confidentiality as well as the names of your organisation. However, you have the option to leave the interview at any time if you so desire. I would want to emphasize that your opinions are valuable and would make a significant contribution to this research.

1. What is your highest educational level?.....
2. Is your business registered?
3. If so, what is the structure?
4. What is the specialization of your firm?
5. Where did you get the money to start the business?
6. How many people are currently working in your company?
7. What is the role of university business incubation in facilitating graduates’ entrepreneurial skills acquisition?
8. Which kind of business support services available for university business incubation?
9. How do you evaluate the overall quality of the physical resources currently available to your business?
10. What are the benefits of attending business incubation programme?

11. What are the impacts of university business incubation in facilitating graduates' entrepreneurial skills acquisition?
12. What are the challenges faced by university business incubation?
13. What are the measures to sustain university business incubation in tertiary institutions?

