

UNIVERSITY OF KWAZULU-NATAL

**Effectiveness of entrepreneurship education in a turbulent
economy: The perceptions of entrepreneurship graduates in
Zimbabwe**

By

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**A thesis submitted in partial fulfilment of the requirements for the degree
of Doctor of Philosophy**

**School of Management, Information Technology and Governance
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2020

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ACKNOWLEDGEMENTS

Various individuals contributed in various ways towards the accomplishment of this study. The researcher acknowledges and thanks all those who made these significant contributions as follows:

- a. To God Almighty.
- b. My supervisor, Professor Maxwell A. Phiri for his professional guidance, constructive criticisms, and his strict nature, that is needed in academia, without which I would not have completed this write-up. Thank you.
- c. Ms Debbie Cunynghame for her outstanding administrative assistance especially during registration and progress reports updates.
- d. My entire family and siblings; '*I am because we are*'. Your moral, spiritual, financial assistance and the general encouragement received from all of you have seen me this far.
- e. To my late parents John and Everngelista, I am what I am because of your good guidance.

ABSTRACT

The effectiveness of entrepreneurship education may be enhanced if graduates' views on the issue are made known. Ever since Zimbabwean universities started offering entrepreneurship as a discipline, graduates' views on the effectiveness of the programme have not been explored. Empirical evidence shows that there is a positive correlation between entrepreneurship education and economic development. Contrary to the above, however, the Zimbabwean situation has negative pointers. Entrepreneurship education is regarded as a poverty alleviation strategy the world over; yet, regardless of the large numbers of Zimbabwean entrepreneurship graduates qualifying for the industry every year, the economy does not seem to recover. This necessitated a study into the effectiveness of entrepreneurship education in a turbulent economy from the entrepreneurship graduates' perspective. The focus was to assess the extent of entrepreneurship education in Zimbabwean universities, graduates' perceptions on the effectiveness of training methods used in entrepreneurship education, the influence of experiential learning on entrepreneurship education as well as the influence of entrepreneurship education on venture creation and creativity. The positivist philosophy together with the descriptive design and quantitative approach were used in this study. The cluster sampling method was used to select 223 participants out of a target population of 526 Chinhoyi University of Technology (CUT) entrepreneurship graduates of 2012-2016. Questionnaires were used to gather data which was analysed using SPSS version 22. The findings revealed that entrepreneurship education was being offered from primary school to tertiary level in Zimbabwe. Furthermore, the findings revealed that the Zimbabwean entrepreneurship teaching methods were not effectively promoting entrepreneurs. Experiential learning and other more practical approaches were seen as appropriate for entrepreneurship training. Graduates believed that entrepreneurship education has a positive influence on venture creation and creativity. It was recommended that entrepreneurship education should be reinforced across all the learning levels (primary school up to tertiary) and a clear demarcation to be made at each level. A comprehensive overhaul of entrepreneurship teaching methods and approaches used to cater for experiential learning were recommended. Further recommendations were the involvement of stakeholders in the formulation and implementation of policies facilitating venture creation and creativity, commercialisation and industrialisation of products and services.

Key words: Entrepreneurship, education, graduate, turbulent economy, perceptions.

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CHAPTER ONE

INTRODUCTION AND BACKGROUND

1.1 Introduction

This introductory chapter provides the background and context within which the study was carried out. It gives an overview of the nature of Entrepreneurship education in developed economies; the levels of economic turbulence in the Zimbabwean economy, as well as, entrepreneurship intervention programmes in Zimbabwe. Key aspects explained in this chapter include; the research problem, research questions and objectives, the scope of the study, as well as its significance to different stakeholders.

1.2 Context of the study

Entrepreneurship education is a trendy research area across the globe with different authorities viewing it differently. To share the same understanding with the reader, the researcher gave an overview of entrepreneurship education in developed economies; the nature of entrepreneurship education in the Zimbabwean economy; the levels of economic turbulence in the Zimbabwean economy and entrepreneurship intervention programmes in Zimbabwe. The research problem, research objectives, research questions, the significance of the study to different stakeholders as well as the study limitations have been addressed in this chapter.

Across the globe, researchers seem to share the notion that entrepreneurship education is a tool for poverty eradication; and also that it boosts employment and Gross Domestic Product (GDP) among other positive attributes (Kume, Kume and Shahini 2013; Solomon 2008; Sharif, Jamshidian, Rahimi and Naderi 2011; Okon and Firday 2015, Garwe 2014, Frimpong 2014, Rengiah 2013 and Marques 2010). This notion seems to entail that even in countries where there is little economic activity, high unemployment rate, rampant company closure and high labour migration, among other factors, entrepreneurship education will still be a panacea to poverty. Empirical evidence shows that entrepreneurship education researchers were silent about the economic situations in studied countries (Morberg 2014; El-Gohari, Selimand and Eid 2016; Hussain and Norashidah 2015; Frimpong 2014; Dabale and Masese

2014; Rengiah (2013). In Zimbabwe, such researches also focused on other stakeholders other than entrepreneurship graduates themselves (Nani 2014, Garwe 2014, Dabale and Masese 2014 as well as Mauchi, Karambakuwa, Gopo, Njanike, Mangwende, and Gombarume, (2011). Therefore the researcher saw it fit to investigate entrepreneurship graduates' perceptions on the effectiveness of entrepreneurship education in turbulent economies.

1.2.1 The nature of entrepreneurship education in developed economies

Entrepreneurship education in developed economies according to Moberg (2014) is taught at primary, lower secondary schools, as well as tertiary level. It is also taught in different disciplines as a subject or more still as a discipline (Fayole 2013). Moberg (2014) further revealed the desire by policy makers to promote entrepreneurship education at early stages of learning across the globe. The fast and growing changes in the global village have made white collar job related skills obsolete, and they have created demand for entrepreneurial skills. Entrepreneurship education at tertiary level takes different forms as follows: To promote experiential learning, Foss and Lyngsie (2012) advocated for collaborations with techno parks and established organizations. On the other hand, Foss and Klein (2012) and Politis (2005) encouraged learners to take ownership of their entrepreneurial projects and be initiators of their ventures. Hindel (2007) called for a combination of theory and real life projects, an apprenticeship like approach to entrepreneurship education.

Learners who choose to be entrepreneurs in developed economies get full support from the government, industries, universities and other training institutions, families and peers. Such support may be in the form of 'real' infrastructure, equipment, funding, skills development, mentorship, research and development facilities as well as moral support.

1.2.2 The nature of Entrepreneurship education in the Zimbabwean economy

Zimbabwean researchers who wrote about entrepreneurship education view it differently (Nani 2014; Garwe 2014; Dabale and Masese 2014; Mauchi et al. 2011). Nani (2014) views entrepreneurship education as the teaching of practical subjects meant to equip learners with entrepreneurship skills. This means that from as early as primary school, any practical subject taught is meant to teach the learner to become an entrepreneur.

Nani (2014) expects learners to use practical knowledge gained from the classroom for venture start ups which he believes, is the major objective of entrepreneurship education. However, the conversion of practical skills into a business setting is one thing that needs to be clarified. Nani (2014) further claimed that the introduction of practical subjects by the Zimbabwean government into the school's curriculum was meant to produce job creators for economic development. Debatably though, one cannot become an entrepreneur by merely pursuing some practical subjects without looking at other business related subjects regardless of having become technically skilled. Actually, entrepreneurship is not synonymous with technical skills. Dabale and Masese (2014) believed that entrepreneurship could be taught at university level as a module in every university program. Entrepreneurship education is however broader than just a single module. Mauchi, Karambakuwa, Gopo, Njanike, Mangwende, and Gombarume (2011) suggested that entrepreneurship education could be taught at tertiary level as a discipline.

A leading authority in entrepreneurship research, Schumpeter (1989), saw entrepreneurship as a force of "creative destruction". He believed in the creation of new and better ways of doing business that is change. Combining Nani (2014), Mauchi et al. (2011) and Schumpeter (1989)'s perceptions, entrepreneurship education can hence, be defined as using contemporary innovative strategies for skills development through experiential learning for economic development.

Innovation is the application of creativity, it is the means used to exploit change. It takes innovation to be creative. In his analysis for Schumpeter's innovation concept in the context of entrepreneurship Sledzik (2013:89) had this to say: "Schumpeter's words that entrepreneurship is innovation have never seemed as appropriate as the nowadays ..." This implies that entrepreneurship and innovation are unquestionably interrelated. If entrepreneurship is creative destruction (Schumpeter 1989), as such; innovation, creativity, change and entrepreneurship overspill into each other.

1.2.3 Tracing the levels of economic turbulence in the Zimbabwean economy

Although entrepreneurship education is believed to be a solution to economic challenges globally, the accuracy of this view may depend on the economic, political, technological as

well as the social stability of a given economy. Zimbabwe's hyperinflation rate reached a whopping 79 600 000 000% in 2008 (trading economics 2017; Hanke and Kwok 2009). At this rate, the rate of inflation was difficult to manage or control. Basic commodities disappeared from the supermarkets shelves. Citizens relied on imports for survival and prices for basic commodities were beyond the reach of many. The Zimbabwean dollar was practically rendered useless, which led to citizens shunning it for foreign currency. The barter trade came into play and goods were underpriced. Company closures, employee retrenchments, labour migration, corruption, lawlessness and the general unethical business practices such as the importation of goods including even illegal items became the norm.

In March 2009, Zimbabwe adopted a coalition Government of National Unity (GNU) made up of two (2) major political parties. Just after the alliance, the GNU government then officially adopted the multi-currency system with the United States dollar in the dominance. Normal trading was restored with goods resurfacing in supermarkets shelves. However, unethical business practices remained unsolved. The economic crisis re-emerged in 2013 at the dissolution of the GNU. The cash crisis started again in early 2016; and, by November 2016, the Zimbabwean government had introduced bond notes to ease the liquidity crisis Matanda, Dube and Madzokere (2018). To-date, official statistical representation of company closure and company registry in Zimbabwe is very difficult to access.

1.2.4 Inflation rates in the Zimbabwean economy for the past five (5) years

Table 1.1 reveals the year inflation for the years 2012 - 2016 measured by the national consumer price index according to the Reserve Bank of Zimbabwe (RBZ Online 2017)

Table 1.1 Five year comparison of the Zimbabwean inflation rates

Year	Inflation rate
2016	-1.6
2015	-2.4
2014	-0.2
2013	1.6
2012	3.7

Entrepreneurship education according to Lee and Rodriguez-Pose (2020), and Bruton, Ketchen Jr and Duane Ireland (2013) fights against poverty. It is one way of reducing poverty as there is strong empirical evidence suggesting that economic growth over time is necessary for poverty reduction. Entrepreneurship boosts economic growth, enhances educational attainment and increases the rate of economic growth. If entrepreneurship education was, and is indeed a cure for poverty or has the potential to stimulate economic growth, with the large numbers of entrepreneurs graduating from Zimbabwean universities every year and the prevailing economic, socio-cultural as well as the technological environment which promotes Small and Medium entrepreneurial activities, surely something positive could have been evident on the Zimbabwean economy. In such a turbulent economy, investigating entrepreneurship graduates' perceptions on the effectiveness of entrepreneurship education is necessary, and, can reveal very interesting findings.

1.2.5 Entrepreneurship intervention programmes in Zimbabwe

In line with the global trends of entrepreneurship development, the Zimbabwean government together with the private sector have made a significant contribution towards entrepreneurship education promotion as follows:

Table 1.2 Entrepreneurship intervention programmes in Zimbabwe

Programme	Mandate
Research and Intellectual Expo-Science, Engineering and Technology (RIE-SET)	A platform for Zimbabweans home and abroad to display their research and intellectual talent for national growth.
Women's desk	Meant to assist female students to showcase their products, services and companies for possible capitalization and recapitalization.
Empretec Zimbabwe	Set up in 1992 as a joint initiative of United Nations Development Programme (UNDP) and the Zimbabwe Investment Center to

	develop entrepreneurship.
African Regional Intellectual Property Organization (ARIPO)	This grants and publishes patents for, and on behalf of designated member states.
African Women Entrepreneurship Programme (AWEP)	Training and engagement plan targeting African women entrepreneurs with the aim to promote trade and business growth.
Ministry of Small to Medium Enterprise (SME)	To create a conducive and enabling environment that promotes the development and growth of Micro, Small and Medium Enterprises and Cooperatives (SME 2017). To create a conducive environment for small to medium enterprises to flourish and support national growth.
Zimbabwe Institute of Management	Collaboration of private and public sector executives in the promotion of entrepreneurship education through idea and information exchange, discussions and various other activities.

Despite all the Government and private sector attempts to augment entrepreneurship education in the turbulent Zimbabwean economy, there seems to be an insignificant positive relationship between the said attempts and economic growth in the country. ARIPO was set to assist entrepreneurs across the communities to commercialize their prototypes. Major challenges they have and are facing to-date are the government bureaucracy, efficacy in policy implementation and exorbitant costs associated with the commercialization process among others. It is, therefore, imperative to establish the role of entrepreneurship education in such an economy.

Furthermore, the commercialization process of researches in Zimbabwe is so cumbersome such that it leaves idea generators stuck with their prototypes and or ideas. Consequently, most Zimbabwean universities to-date have a lot of research output and innovations awaiting patenting and commercialized.

Based on the arguments indicated in this section, it was hypothesized that if a study is to be carried out to investigate graduates' perceptions on entrepreneurship education effectiveness in a turbulent Zimbabwean economy, interesting results and indeed a new body of knowledge are inevitable.

1.2.6 Entrepreneurial universities; graduates versus economic viability

Chinhoyi University of Technology entrepreneurship graduates over the past five years were as shown in Table 1.3.

Table 1.3 Entrepreneurial universities; graduates versus economic viability

	Graduates		
Year	Male	Female	Total
2016	55	59	114
2015	62	55	117
2014	80	82	162
2013	39	44	83
2012	33	17	50
Total			526

Adopted from Chinhoyi University of Technology (CUT) student records 2017

If on average a single Zimbabwean university can churn out 500 entrepreneurship graduates in four years; with the four Zimbabwean universities offering entrepreneurship as a discipline, it means that on average, 2000 Zimbabwean entrepreneur graduates are produced within the same period. Although they may not necessarily grow meaningfully, a turbulent environment necessitates venture start-ups, creating employment in the process. According to Njanike (2019), 99% of business enterprises in Africa are SMEs. Entrepreneurship contributes towards sustainable development (Dhahri 2018). The environment may not be

that favourable for Foreign Direct Investment but small businesses can at still survive. Burbar and Qaimary (2014) also revealed that a positive relationship exist between entrepreneurship education and economic development. What is worrisome about the Zimbabwean entrepreneurship graduates is that their presence is not making much positive contribution towards employment creation, production, and general community problem solving. This creates the question as to whether or not the Zimbabwean entrepreneurship education is effective.

1.3 Research problem

The effectiveness of entrepreneurship education may be enhanced if graduate views on the issue are made known. Ever since Zimbabwean universities started offering entrepreneurship as a discipline, graduates' views on the effectiveness of the programme have not been explored, hence, remained silent. Empirical evidence shows that there is a positive correlation between entrepreneurship education and economic development (Braunerhjelm 2010; Nauede 2013; Sabella, Farra, Burbar and Qaimary 2014). Contrary to the above indicated evidence, the current Zimbabwean volatile situation has negative pointers. According to the African Development Bank (2015), a negative inflation was anticipated in 2016 to 2018 and, economic growth slowed down to 1.5% in 2015 from 3.8 in 2014. Deloitte and Touch (2016) confirmed a decline in the rate of company creation whilst the Reserve Bank of Zimbabwe (2016) revealed that unemployment rate in Zimbabwe was pegged at over 95%. Njanike (2019) acknowledged that 99% of ventures in Africa are SMEs. This confirms Lee and Rodriguez-Pose's (2020) claim that, entrepreneurship education is a poverty alleviation strategy the world over; yet, regardless of the large numbers of Zimbabwean entrepreneurship graduates qualifying for the industry every year coupled with government owned entrepreneurial bank and related initiatives, favourable entrepreneurship policies for natives, reduced production, increased demand for imports, availability of cheap labour among many other variables, the economy does not seem to recover. Whilst education and training may become watered down or cease to take place in a turbulent economy, the Zimbabwean situation seems to be more complicated since education and training continue to take place but its recipients do not seem to apply its concepts. This necessitates a study into the effectiveness of entrepreneurship education in a turbulent economy.

1.4 Research questions

Addressing unanswered questions is the essence of research. Questions that troubles the researcher and remain unanswered have to be traced using both empirical evidence and primary data. This study, answered the following questions:

- 1.4.1 What is the extent of entrepreneurship education in Zimbabwean universities?
- 1.4.2 How do graduates perceive the effectiveness of training methods used in entrepreneurship education in enabling learners to become entrepreneurs?
- 1.4.3 How does experiential learning influence entrepreneurship education as perceived by graduates?
- 1.4.4 How does entrepreneurship education influence venture creation and creativity as perceived by graduates?

1.5 Research Objectives

The main purpose of this study was to investigate graduates' perceptions on the effectiveness of entrepreneurship education in a turbulent economy. The following objectives guided the research:

- 1.5.1 To assess the extent of entrepreneurship education in Zimbabwean universities
- 1.5.2 To examine graduates' perceptions on the effectiveness of training methods used in entrepreneurship education in enabling learners to become entrepreneurs
- 1.5.3 To establish graduates' perceptions on the influence of experiential learning on entrepreneurship education.
- 1.5.4 To determine graduate's perceptions on the influence of entrepreneurship education on venture creation and creativity.

1.6 The scope of the study

Data were collected from the 2012 to 2016 entrepreneurship graduates from Chinhoyi University of Technology only. Focusing on a single university's graduates was regarded as having capacity to provide room for a rigorous research. The university was chosen because it was the first state university to offer entrepreneurship as a discipline hence it has undergone

more programme reviews than other Zimbabwean universities who started offering the programme after CUT.

1.7 The significance of the study

Entrepreneurship education is said to be a cure for poverty; but despite its introduction as a discipline in Zimbabwean universities in the past one and a half decades, the country still experiences an influx of company closures, retrenchments, increased unemployment, and economic downfall among other challenges. It is argued that to maintain the ‘cure for poverty’ notion, considerations must be made to establish the graduates’ views on the effectiveness of entrepreneurship education.

Whilst this is a case study of entrepreneurship graduates from a single university; results can be generalised to various other graduates in different disciplines. Entrepreneurship education is a research area of interest in developed and developing nations of stable and dynamic to volatile environments. Establishing the effectiveness of entrepreneurship education from the graduate’s perspective in a turbulent environment is an existing research gap that needed to be filled. Practically, the study will benefit several stakeholders, amongst them the following:

1.7.1 Policy makers

It is expected that findings from this study will inform policy makers and help them to make sound decisions regarding the effectiveness of entrepreneurship in a volatile economy, specifically Zimbabwe’s economy. Relevant policies applicable in a turbulent economy will be crafted from findings from this study. Findings will also be used to craft an enabling environment for the creativity of entrepreneurs and resource mobilization.

Zimbabwean universities’ executives can use findings from this study to revisit and realign their programs with the global demands and or trends as seen by graduates who experience their training. Also, findings from this study will be helpful in informing academic curriculum planners on what skills to develop in a turbulent environment.

1.7.2 The academia

The study will benefit other scholars studying the effectiveness of entrepreneurship education in a turbulent economy and related topics by providing empirical evidence or as a reference guide to related studies. The study can be used as a basis for wider research in the same area as it creates gaps for further studies.

1.7.3 Entrepreneurship graduates

Findings can also help entrepreneurship graduates in devising ways and strategies to innovate and fit in a volatile economy. The publication of findings from this study will make a contribution towards challenging graduates to come up with ideas for establishing new opportunities and growing their businesses in a turbulent environment. A dynamic environment comes with dynamic opportunities, which, graduates, believed to have conceptual and diagnostic skills, have to exploit for the growth of their ventures.

1.8 Limitations of the study

The study was limited to Zimbabwean university's graduates and results may not be generalised to other regions where the business environment may be different.

Data was gathered in the current Zimbabwean turbulent environment hence variables, responses and results may be limited to such kind of an environment.

The focus of the study is on the developing nation entrepreneurship graduates' perceptions and results may not apply to developed nations.

1.9 Definition of key terms

1.9.1 Entrepreneurship

This is a controversial term with no agreed definition. Schumpeter (1989) called it a force of creative destruction whilst Nieman and Nieuwenhuizen (2009) view it as a process of bringing about changes in an economy through innovations emanating from the market demands. Nieman and Nieuwenhuizen (2009)'s definition was adopted for this study.

1.9.2 Entrepreneurship education

According to Valerio, Parton and Robb (2014), entrepreneurship education is the building of knowledge and skills about or for the purpose of entrepreneurship. It targets secondary and

higher education students including undergraduate and graduate studying towards formal degree granting programs.

1.9.3 Entrepreneurship training

It is the building of knowledge and skills in preparation for starting or running an enterprise. It targets potential and practicing entrepreneurs who are not part of formal, degree granting programs (Valerio et al. 2014).

1.9.4 An entrepreneur

According to Nieman and Nieuwenhuizen (2009), an entrepreneur is an individual who identifies an opportunity, collects resources, creates and grows a venture that fulfils consumer needs.

1.9.5 Turbulent economy

This refers to a dynamic economy full of negative changes. Brown, Haltiwanger and Lane (n.d:6) view it as a process of bringing about change in an economy through innovations emanating from the market demands. Mufudza (2018) called it an environment full of uncertainty, with managers lacking confidence in the organizational activities including unsustainable advantage as a result of stiff competition.

1.9.6 Effectiveness

As defined by the Australian government Productivity Commission (2013:6) effectiveness is “the extent to which stated objectives are met, it is when the policy achieves what is intended to achieve”.

1.10 Outline of the study

Chapter One serves as an introductory chapter. It provides the background and context in which the study was carried out. This chapter also gives an overview of the nature of Entrepreneurship education in developed economies; the levels of economic turbulence in the Zimbabwean economy, as well as, entrepreneurship intervention programmes in Zimbabwe. Key aspects explained in this chapter include; the research problem, research questions and

objectives, the scope of the study, and the significance of the research to policy makers, academia as well as the entrepreneurship graduates.

Chapter Two gives a brief account of the case at hand; the location of the study area, specifically Chinhoyi University of Technology for the reader to have a clear understanding of this study. Captured in this chapter are the turbulent levels in the Zimbabwean economy and their pointers. The development of Chinhoyi University of Technology including the various schools and programs it offers, its staff establishments, student enrolment, the challenges it faced as well as its successes to date are also explained in this chapter.

Chapter Three is a review of literature addressing the research objectives. Empirical evidence to establish the extent of entrepreneurship education in Zimbabwean universities; graduates' perceptions of the effectiveness of training methods used in entrepreneurship education in enabling learners to become entrepreneurs; graduates' perceptions on the influence of experiential learning on entrepreneurship education as well as graduate's perceptions on the influence of entrepreneurship education on venture creation and creativity are determined in this chapter.

Chapter Four provides discussions on cases and theories pertinent to the effectiveness of entrepreneurship education in a turbulent economy. Examined theories include the resource based theory, dynamic capabilities as well as experiential learning. The theories discussed in chapter four were then used to design a conceptual framework for the study.

Chapter Five addresses the methodology used in this study. The researcher explains the significance of methodology, research philosophy, research paradigm, research strategy, the target population and the sample, sampling strategies, data sources, analysis methods, ethical considerations as well as the study limitations. In Chapter Six, data are presented and findings are explained.

Chapter Seven provides the discussion of findings. Furthermore, findings are linked to empirical evidence to establish situations where they confirm or refute existing evidence by previous researchers.

In Chapter Eight, a summary of findings is given, conclusions are drawn, recommendations are suggested and a gap for further research is also highlighted.

CHAPTER TWO

THE TURBULENT ZIMBABWEAN ECONOMY; ENTREPRENEURIAL ENVIRONMENT AND THE DEVELOPMENT OF CUT

2.1 Introduction

An introduction to the study was done in the previous chapter. This chapter gives insights into an ideal entrepreneurial environment; the political, economic, socio-cultural as well as the technological environment that fosters entrepreneurship generally and as it stands in Zimbabwe. The chapter also outlines the higher education development in a turbulent Zimbabwean environment. For the reader to have a clear understanding of this study, a brief account of the case at hand; the volatility level of Zimbabwe, the pointers to it being turbulent are issues that are all captured in this case based chapter.

2.2 Insights into the entrepreneurial environment

The creation, growth and sustainability of entrepreneurial ventures are highly influenced by macro and micro environmental variable. These encompass the political, economic, socio-cultural and technological variables of a nation as outlined below.

2.2.1 The political environment

The political business environment is linked to government affairs; policy making and implementation. These include government attitudes towards different nations or societies, constitution, government foreign policy, political parties' ideologies and values, pricing policies, taxation laws, investment laws and the general stability of a country among others. According to Mark (2015), these have both immediate and long term effects on businesses. Throughout the world governments control the way businesses are run. To remain good corporate citizens, firms have to always adjust their operations to suit the political factors in their country.

The Zimbabwean government is taking interest in farming and agriculture; as such there are favourable policies and budgets for the agricultural industry.

The Zimbabwean government has also a look east policy dated back to the year 2000. According to Ojakorotu and Kamidza (2018), this foreign policy, must see China politically and economically committed to engage and develop Zimbabwe. They, however, further revealed that Chinese investment in Zimbabwe is against the interests of the general populace. In a way, government policies may benefit or disadvantage its citizens including the business community. They affect businesses in a regulatory capacity which may either promote or discourage entrepreneurial activity in the country.

It is common for governments to control and or put price ceilings on certain products in a country. In Zimbabwe for instance, private entities import and sell fuel but the government determine the maximum price chargeable. There are also controlled prices for such commercial crops as tobacco, wheat, cotton, soya beans, and maize among others. In the mining sector, prices are also controlled. Buying and selling of gold, diamond and platinum is strictly monitored and controlled by the government (Minerals Marketing of Zimbabwe 2019). The government put controls to reduce consumer exploitation by suppliers and to fairly distribute the product or service to the general populace. Laya and Vasquez (2020) believed that price ceilings help to curb food riots in a country where there are food shortages. On the contrary however, these controls frustrate business players for lack of meaningful returns on their investments. Businesses usually see no point in operating ethically when they fail to reach market equilibrium or break even. In Zimbabwe, players in the mining sector particularly small scale miners and or entrepreneurs resort to illegal markets for the trading of their minerals (Chifamba 2020) because of persistent government controls. Price controls or ceilings force many businesses to shut down, hoard their commodities or divert them to informal markets.

High taxation laws reduce economic activity and business growth in a country. If companies are heavily taxed, their disposable income will be reduced which in turn will limit their operations. These taxes impact more on small businesses than large corporates. Zimbabwe is one nation with numerous and very high taxes. Maseko (2014) posits that SMEs face different business conditions from large companies which cause them to bear high tax compliance burdens. He bemoaned the absence of a Small Business tax regime in the country which he alleges to cause SMEs taxpayers to bear disproportionate tax compliance burdens. Such unfavourable taxation policies have forced many entrepreneurs to operate unregistered

businesses, evade taxes or window dress their accounts. Such taxes erode workers salaries resulting in labour migration which reduce the number of technocrats in the country.

The Zimbabwean government put in place a number of policies to support entrepreneurship. Such policies as the investment laws play a critical role in encouraging or discouraging economic activity in a given nation. The Indigenization and Empowerment Act (IEA) of Zimbabwe was signed into law by the then Zimbabwean President Mugabe in March 2008. The policy according to Nyoni (2018) was enacted to promote entrepreneurial culture amongst the country's youths). It called for the relinquishing to indigenous Zimbabweans of 51% shares of companies owned by foreigners (Marazanye 2016). This local equity policy resulted in the closure and relocation to other countries of majority of foreign owned businesses (Murombo 2011). There was a remarkable increase in unemployment, cost of living, brain drain and reduction of the balance of payment, living standards among others. The Indigenization and Empowerment policy was in March 2018, officially amended to apply to only diamond and platinum in the mining sector and twelve other reserved sectors (Zvavahera, Chigora and Tandi 2018; Marazanye 2016). The sectors are transportation (passenger buses, taxis and car hire services; retail and wholesale trade; barber shops, hairdressing and beauty salons; employment agencies; estate agencies; valet services; grain milling; bakeries; tobacco grading and packaging; advertising agencies; provision of local arts and their marketing and distribution; and artisanal mining (Finance Act 2018). The amendment came just after the coming in of the second regime. This brought confusion to the indigenous business people particularly the beneficiaries. It also reduced confidence in all the related policies. This could be the reason why Nyoni (2018) contented that Zimbabwean politicians and policy makers are yet to accord entrepreneurship the attention it deserves.

The entrepreneurial bank to fund entrepreneurial programs was also put in place to augment and or facilitate the aforementioned program. There are also local Venture Capital funding that can be mobilised for attractive and investable projects. A significant number of youth amongst them, graduates across disciplines throughout the country have and are still benefiting from these policies. Nasiri and Hamelin (2018:57) revealed that 'higher education increases the opportunity of being pulled by entrepreneurship opportunity rather than being pushed by necessity'. This may mean effective entrepreneurship education influence graduates to create and grow their own ventures.

The government of Zimbabwe is doing a lot to boost entrepreneurship education and support entrepreneurs especially at tertiary level. Ndofirepi (2020) revealed that a total of US\$380 million was allocated to the Ministry of Higher and Tertiary Education (HTE) to support research and innovation in the year 2019. This came after the government had funded the development of, and commissioned innovation hubs at its five (5) state universities including CUT (Chihota 2019, Ndofirepi 2020, Muzira and Bondai 2020). The year 2019 saw Zimbabwean Higher and Tertiary Education bridging the gap between classroom and industry; this gives hope to the conversion of academic knowledge into adoptable products through research and development (Dzenga 2019).

A generally unstable nation with a lot of governance issues may not attract meaningful foreign investment. The turbulent Zimbabwean environment is a result of a myriad of such issues. According to Chin'ono (2020), there is rampant corruption across all sectors, lawlessness, looting by influential people, unfavourable political and economic policies among other issues in Zimbabwe. Favourable conditions including close bilateral ties and alignment of political goals of countries promotes foreign investment (Fang, De Souza, Smith, and Lee 2020). The economic sanctions by the United Kingdom and United States of America to the Zimbabwean leaders have crippling its 'open for business' call.

2.2.2 Legal environment

This comprise of the different parliamentary legislations and laws including licensing policies, foreign trade policies, foreign exchange management Orogbu, Onyeizugbe, Chukwuma and Ewans (2017). Every business has to operate within the legal framework of its nation. Nogal-Meger (2018) posits that rule of law is key to economic development and gives freedom to entrepreneurs. In Zimbabwe, price ceilings, have seen the reduction of players in those areas with some evading licensing their operations. Controlled foreign currency allocation to the business sector has also reduced investment in the country. Cumbersome company registration and licensing processes have reduced Foreign Direct Investment (FDI) and forced some operators and entrepreneurs to operate without registration.

2.2.3 The economic environment

These are financial or fiscal related variables that influence the survival of organizations and their communities. They consist of national income level, rate of profit earnings, employment rate, inflation levels, interest rates, labour costs, income distribution and many others. Environmental scanning to establish the rate of growth of GDP, GNP, Per Capita Income, role of Private and Public sector, trade balance, transport and communication system, money supply in the economy and international debt among others is always necessary for business growth and economic development. The economic environment of a country must attract Foreign Direct Investment (FDI) for the development of the country.

High levels of inflation discourage economic activity in a country. According to Dore` (2018), the economic fate of countries depend on their sound public financial management, economic principles and are also inseparable from a country's politics and governance. Hanke and Kwok (2009); Mhlanga and Sibanda (2013), Zimbabwe recorded a hyperinflation of 79 600 000 000% in November 2008 becoming second after Hungary's 1946 world record. The perplexing financial figures made business transactions very difficult for both locals and foreigners in the country. This hyperinflation resulted in illegal foreign currency dealings, severe food and basic commodity shortages, importation of sub-standard products including Genetically Modified (GMO) foods, brain drain, companies' closure and loss of employment to many through retrenchments. The retrenched workers came together to start their own entities creating the informal sector and the mushrooming of unregistered ventures. Professionals ceased to maintain their integrity and found anywhere doing anything to satisfy their physiological needs. This business environment still stands today. Majority of this new breed of entrepreneurs had no business management skills (Msipah, Chavunduka, Jengeta, Mufudza and Nhemachena 2013). Reinforcing the same sentiments, Chivasa (2014) disclosed that a large number of entrepreneurs do not have the required qualifications to grow their entities. This is the gap which must be filled by the graduate entrepreneur.

Unemployment tends to be rife in a turbulent economy. Njanike (2019) spoke of the global job crisis that has worsened the vulnerability of many in relation to lower job quality, high unemployment, higher job market inequalities, increased time to secure employment and high levels of uncertainty. Reiterating the same sentiments, Nyoni (2018) pointed out that high unemployment rate of graduates is a cause of concern not only in Zimbabwe but across Africa. This is because of the increased number of graduates as a result of increased

enrolment in tertiary institutions. Nyoni (ibid), revealed that approximately 74% of the Zimbabwean graduates are unemployed. Whilst entrepreneurship graduates may face the same operational challenges as other companies in the country, with entrepreneurial skills, the environment can create opportunities for them to start and grow their entities with reduced labour costs. With high unemployment levels and increased time to secure employment, entrepreneurs are able to employ well qualified personnel on full time or on contractual basis. Personnel can be contracted only when their services are needed. That can also be done at below commercial rates and this has become normal in Zimbabwe.

Research and Development is necessary in any type of economy to establish the general macro environmental variables that may positively or negatively impact their activities. It is through research and development that business may get to know of consumer's preferences, competitors' strategies, and communities problems that needs business innovative solutions. According to Chivasa (2014), research and development was not considered by many entrepreneurs as a major factor contributing towards their growth in a dynamic environment. Supporting the same notion, Njanike (2019) pointed out their lack of consumer knowledge, lack of networking structures and ignorance of standards and regulations. These pose challenges for diversification to foreign markets. According to Dore` (2018), a move towards an export oriented strategy with policies directed towards enabling the private sector to compete on global markets is necessary. He further pointed that the policies should include education and skills and removal of bureaucracy.

High interest rates on borrowings discourage investment. No normal business person can borrow at very high interests to invest. High interest rates discourage businesses from producing meaningfully, buy the necessary inputs, pay tax and pay their workers a living wage. According to Njanike (2019), with high interests on borrowings, most Zimbabweans no longer look up to financial institutions for start-up capital. They use their personal savings; use other projects to sponsor new ventures, or pool resources for partnerships. In a way, this limits venture start-ups and their growth. Njanike (2019) further revealed that SMEs were getting inadequate financial support from government and financial institutions. In a turbulent environment where the government fiscal is overdrawn, informed people such as entrepreneurship graduates must deviate from government dependency syndrome to their own means. This is the gap being filled by the new breed of entrepreneurs in the financial

sector. The micro financial institutions are lending entrepreneurs without formal collateral security (Mhlanga and Sibanda 2013; Njanike 2019). They accept such collateral security as livestock, residential houses, vehicles, household furniture, among others. Micro finance instructions have since increased and become popular in the country. This has created opportunities and a favourable environment for Zimbabwean entrepreneurship graduates to venture into business.

Availability of foreign currency in a country is crucial to its economic activity. According to Dore` (2018), the RBZ depletes the country's foreign currency reserves by covering the government's obligations. This has seriously affected local companies since they rely more on imports. Mazikana (2019) revealed that SMEs are playing an important role in foreign currency earnings and GDP of Zimbabwe. They also provide job opportunities in the country, and have a major contribution in the export sub-sector of Zimbabwe. Sharing the same sentiments, Njanike (2019) acknowledged the need to support the SMEs sector that employs a huge population and has potential to employ more. He further revealed that 99% of business enterprises in Africa are SMEs. This implies that even if the economic situation in Zimbabwe is not that favourable for Foreign Direct Investment, small businesses can at least make a break even. On the contrary, Nyoni (2018) cited foreign currency shortages as one of the major factors impeding the Zimbabwean entrepreneur from growing. In support of the same notion, Njanike (2019) claims that the sector is yet to exploit its full potential in terms of growth. Entrepreneurs were found by Njanike (2019) as having challenges in growing the sector due to unsuitable macroeconomic environment. Their major challenges at international level include; inadequate financial support, limited knowledge on international consumers tastes, lack of international networking structures and ignorance of international standards and regulations. In a turbulent economy, however, business people can circumvent government policy for survival. Whilst the Zimbabwean dollar remains the official trading currency, many SMEs and entrepreneurs are turning to mainly the United States Dollar (US dollar) and the South African Rand for their business transactions. The Zimbabwean economy was dollarized in 2009 with such currencies as the South African Rand, Botswana Pula, US dollar and Euro, UK Sterling Pound accepted as legal tender (RBZ 2014) cited by Ngoma (2020). This reduced hyperinflation and increased the demand for imports. Interestingly though, the government keeps a blind eye to such practices. Such ventures are surviving and employing a remarkable number of people. They transact strictly on foreign

currency. A few such businesses also accept local currency in cash at the prevailing parallel market exchange rates. Chivasa (2014); Ndofirepi (2020) believe that entrepreneurs need to be risk takers, adapt to change, dynamic, and compete on the global market for them to grow. Such modules as management of change, entrepreneurship principles, techno-preneurship, new product development, marketing, financial management among others equip the CUT entrepreneurship graduate with such skills.

There is high import demand in Zimbabwe. According to Dore` (2018), low level productivity by local industries has increased demand for imports and foreign currency. Companies apply and take long to get foreign currency for their business transactions through the Reserve Bank of Zimbabwe. Private players with own foreign currency reserves are importing products to satisfy the demand. Dore` (2018) believed that the Zimbabwean inflation has been exacerbated by the purchase of hard currency on the parallel market. He further called the government to find a permanent solution to the recurring foreign currency and cash shortages. Generally, a country needs to have a balance of payment for its success. To save foreign exchange and protect domestic manufacturers, the government created import bans and tariffs. Ngoma (2020) suggested de-dollarization as a strategy to effectively reduce import demand. The country has to still consider cutting down on its import bill to build its foreign currency reserves.

2.2.4 Socio-cultural environment

This is the shared societal traditions, values and customs of a given society. They include educational levels, customer preferences, living standards, customers' attitudes towards innovation consumption habits, cultural and religious values, entrepreneurial spirit and population size and its growth rate among others. These may not have immediate influence but impact the existence and survival of businesses in the long run (Khan and Law 2018). Society through pressure groups may force businesses to observe gender equality in employment, employee wellness in workplaces, reservation of jobs for women or disabled and ethical advertisements. Firms cannot afford to ignore such social environmental demands if they are to survive and remain in business.

The size and growth of population determines a country's labour source. The Zimbabwean population, according to the World Bank (2019), stood at 14.65 million, and estimated to be 15,001,433 by the World population review 2021. Unlike such countries as China, India, Vietnam, Hong Kong with a two child policy (Ngo 2020), most African countries including Zimbabwe do not have any restrictions on the number of children couples can have. Until the nineties, couples used to have as many children as eight. Culturally, these children were taken as a source of labour to work in their family farms, plantations, and mining businesses among others (Canagarajah 2001). Since the beginning of the Twentieth Century, a shared trend that couples have two or three kids has emerged. This implies availability of both skilled and unskilled labour in the long run.

The entrepreneurial spirit of a given community or nationalities influences its economic activity. This spirit is rife in Zimbabwe as triggered by the turbulent political, economic and social environment. Turbulent as the environment is, Zimbabwe has too many registered and unregistered entrepreneurial ventures. Nyoni (2018) advocated for business start-ups and self-employment by universities graduates. Because of high unemployment among other factors, many people run small businesses for self-sustenance. This has triggered competition amongst different players across sectors. Whilst such competition is health to consumers, it negatively affects entrepreneurs particularly those who are ethical in their conduct. According to Berges (2019), culture, behaviours, principles, and the political system of a corroded economy may not be discriminatory as to exclude the business community.

Running unregistered businesses in undesignated places, tax evasion, charging unfair prices, poor and delayed remuneration, unsafe working conditions and many other unethical practices by employers is common in Zimbabwe. Nyoni (2018) called for a conducive environment which he believed to foster an entrepreneurial culture with the potential to significantly address unemployment.

The turbulent Zimbabwean environment has taught its citizens a survival focus culture. They do not waste time on things they cannot change but concentrate on whatever can improve their value. This culture has enhanced business partnerships and consortiums particularly in the mining, agricultural and production sectors. On the negative however, citizens turn a blind eye to unethical behaviour of any sort.

2.2.5 Technological environment

These are innovations and inventions that result in scientific improvements in the offering of products and services (Gurbuz 2018). They include Information Technology (IT), import and export technology, communication processes, improved equipment and improved production processes among others Orogbu, Onyeizugbe, Chukwuma and Ewans (2017). These improve quality of products and services that increases customer satisfaction. According to Mufudza (2018), today's business environment characterised by rapid technological changes has distorted the traditionally known competitive conditions. She called for flexible dynamic capabilities and competencies that quickly respond to the ever-changing business environment. Technology dissemination in Zimbabwe is taking a slow pace especially in the small-scale sector (Msipah et al. 2013). This reduces productivity and impact negatively on the quality of products and services produced especially for the export market. Limited production technology also increases the cost structure of goods and services. This is an area where entrepreneurs can take advantage and heavily invest in. It is imperative to note that most macro environmental factors are country specific, as such, businesses have to stay connected and integrate as and when necessary.

2.3 The turbulent Zimbabwean situation, 2005-2018

Chinhoyi University of Technology (CUT) is a Zimbabwean State owned university located in Mashonaland West Province. Zimbabwe has, since 2005 been politically, economically and socio-culturally turbulent. The country has been under the leadership of the same president, namely, the late Robert Gabriel Mugabe for thirty-seven (37) years since it gained its independence from its British colonial masters in 1980. He remained President up until November 2017 when he resigned amid public demand and subsequent parliament impeachment (The Herald 2018). According to Tafirenyika (2018) and Mukori (2018), Mugabe had become the only centre of power. He had also assumed a number of other strategic positions such as being the Chancellor of all state run Universities, commander-in-chief of the defence forces as well as being the war veterans' patron, among others. This translated into his involvement in major decisions pertaining to the running of such institutions. Some of the country's key government officials, for the past two decades, have been under travel bans and economic sanctions by a number of economically influential

countries. This has seriously affected the economic development of the entire country. The country has been seriously affected economically by these developments.

Since 2005, economic activities in Zimbabwe declined with many established companies closing down, leaving the country with very little real production (Coltart 2008). Company closures translated into increased unemployment, the reduction in disposable income and subsequent brain drain. Brain drain entails the reduction in the Gross Domestic Product (GDP). It also results in the split of families and or marriage breakdowns with couples living in different countries. Child headed families also emerged, creating behaviour deficiencies amongst the youths. A country with a broken moral fibre is associated with moral disintegration and subsequently unethical behaviours in many aspects. Berges (2019) posits that as a society becomes rotten, behaviours and principles become rotten as well, and as the moral compass of an economy continues to decay so does its culture as well as its political system. Behaviours, principles, culture and the political system of a rotten economy may not be that selective as to exclude the business community.

Zimbabwe is very rich in farmland, and at some stage, it used to be the breadbasket of Southern Africa. There are large deposits of mineral ores in this country, including gold, diamond, platinum, chrome, coal, copper, asbestos among others. Despite these positive attributes, economic challenges continue to manifest in the country.

“Since 2006, virtually all sectors recorded declines in output with agriculture, manufacturing and mining estimated to have declined by 7.3%, 73.3% and 53.3% respectively in 2008. It was further noted that average capacity utilization in most industries was between 30% and 45%” (Nyamwanza, Paketh, Mhaka, Makaza and Moyo (2015:38).

Zimbabwe experienced the worst ever hyperinflation during the years 2006 - 2008. Inflation rates as recorded by the Reserve Bank of Zimbabwe by July 2008 reached an alarming month over month rate of 2,600.24% and year over year rate of 231,150,888.87% (Hanke 2008). This situation culminated into poor corporate governance of both private and public owned organizations. Executives in most reputable organizations in the country became very greedy such that they would award themselves with hefty packages whilst workers were getting meagre salaries and sometimes even going for months without payment. Included on the list of the officiated salary scandals were top executives in the following parastatals: Zimbabwe Broadcasting Corporation (ZBC), Premier Service Medical Aid Society (PSMAS) Zimbabwe

Electricity Supply Authority (ZESA), Air Zimbabwe and Harare City Council (HCC) among others (Rusvingo 2014). Interestingly though, most of these executives were never prosecuted, and those who were prosecuted got away with it, being given absurd penalties.

The Zimbabwean situation became so turbulent from 2008; it became a dog-eat-dog situation where only the fittest survived. Economic growth slowed from 3.8 % in 2014 to an estimated 1.5 % in 2015; and, a projected negative inflation in 2016 and 2017 (African Development Bank 2015). According to the Reserve Bank of Zimbabwe (2016), Zimbabwe experienced reverse urbanisation as an economic slowdown hampered opportunities in cities. The institution further revealed that unemployment was pegged at over 95 %; and the rate of new business formation was declining (Deloitte and Touch 2015).

Corruption and nepotism in both the government and the private sector are the worst hit by unethical behaviours prompted by the volatility of the Zimbabwean economy Moyo (2014). Major parastatals either have closed down or are not fully functional. These include the Zimbabwe United Passengers Company (ZUPCO), National Railways of Zimbabwe (NRZ), Cold Storage Commission (CSC), Grain Marketing Board (GMB) and Zimbabwe Revenue Authority (ZIMRA). Chigudu (2014) noted that un-procedural awarding of tender; conflict of interest and palm greasing were key issues surrounding corruption in Zimbabwe. Nepotism is also very rife in both government departments and the private sector. The former president Mugabe appointed his daughter to take positions in state institutions boards (Nyathi 2014); his nephews to ministerial positions; and his son-in-law to be the chief operating officer of the national airliner (The standard 2017).

Also, the former first lady, Grace Mugabe's interest to join politics also exacerbated the Zimbabwean economic and political challenges. Members of the Generation forty (G40) an informal group of Zimbabwe African National Union – Patriotic Front (ZANU–PF) politicians which she led until November 2017 under the guidance of the controversial Professor Jonathan Moyo, were interested in furthering their personal interests at the expense of the general public and the tax payers (Newsday 2018).

The situation could have further worsened by the forty-one (41) years age difference between the former President Robert Gabriel Mugabe and his wife Grace Mugabe. There were serious

differences in economic and political ideologies between the two. The general understanding of the people in Zimbabwe was that Grace was manipulating and controlling Robert Mugabe's thinking. By virtue of her being the President's wife, Grace Mugabe had actually become abnormally powerful; humiliating senior government officials in public meetings without any remorse (Zimbabwe Mail 2018).

2.4 The 2018 new Zimbabwean dispensation

The current Zimbabwean President Emerson Dambudzo Mnangagwa occupied the presidential position with the assistance of the army. As Hutchings (2017) points out, Mnangagwa was sworn in as President on November 24 2017 after a military takeover, marking the final chapter to the Zimbabwean political drama. In his own words, at the world economic forum in Davos Switzerland in 2018, President Mnangagwa said that on various occasions he served in various ministries under the Mugabe regime, including serving as the Vice President, Speaker of parliament, Head of the country's intelligence agency, and as the Minister of defence (Turak 2018). The sitting Zimbabwean Vice President Dominic Gueveya Chiwenga was the Zimbabwe Defence Forces Commander when the military embarked on operation restore legacy in November 2017. As much as the Mugabe regime has lapsed, and the new dispensation is reigning, the military is exercising 'veto power' in some instances, while also influencing the operations of government and other security organs Gagare (2018). Gagare (2008) further revealed that tensions and mistrust are building up in the government with the military making too many demands to the government and the party as well as pushing the army to receive preferential treatment and dominance. Ironically, some ministers who were accused of corruption during the Mugabe regime are still serving in the new dispensation. Furthermore, although some of the officials who were accused of corruption during the Mugabe regime have appeared before the anti-corruption committee, they are still to be charged. They are allowed to do their business as usual. Zimbabweans have since termed this 'catch and release' strategy. This means that the Zimbabwean situation is still volatile. Based on the facts indicated in this paragraph, participants at the Victoria Falls investors' conference, held in Victoria Falls Zimbabwe in November 2018, emphasised the need for the government to walk the talk when it comes to dealing with corruption (Safuli 2018).

In a bid to curb the various challenges associated with a volatile economy prevailing in the country, the Zimbabwean government put in place a number of organizations to nurture entrepreneurial attempts. According to Nyamwanza et al. (2015), these attempts include; the implementation of the 2002 - 2007 Small to Medium Enterprise (SME) policy and strategy framework ; the 2011 Indigenization and Economic Empowerment (IEE) Policy ; the 2012-2016 Industrial Development Policy (IDP), as well as, offering entrepreneurship as a discipline at university level.

Although the move to introduce entrepreneurship as a discipline in universities has seen a large number of entrepreneurship graduates being churned out of the universities; still, entrepreneurship education does not seem to have a positive contribution towards economic development in Zimbabwe as posited by Burbar and Qaimary (2014); Mazikana (2019) that entrepreneurship education positively influence a country's economic development. Mashayahanya (2014) posits that despite being supported as the engines for employment creation and economic growth, SMEs are not growing or surviving. The economy is extraordinarily volatile causing various and rapid changes in the management of businesses. The needs to increase development and stabilize the country politically, economically and socio-culturally remain major push factors for entrepreneurship education in Zimbabwe.

To-date, Zimbabwe has nineteen (19) universities twelve (12) of which are state run. The oldest being the University of Zimbabwe (UZ). The latter, initially known as the Rhodesia University Association, was founded in 1945. It was later adopted by the British government and named the University college of Rhodesia and Nyasaland in 1955. Upon independence in 1980, it then became known as the University of Zimbabwe (UZ 2018). It is from this university that all the other Zimbabwean universities derived most of their ideologies and human resources.

2.5 Higher education development in a turbulent Zimbabwean environment

The economic situation of a country affects the entire education system from primary to secondary schools up to tertiary level (Hove and Ndawana 2019). This is what necessitates the reviewing of the Zimbabwe's education curriculum to focus mainly on science and technical/vocational content from primary schools up to tertiary level. The review was seen as having the potential to assist in equipping individuals with the necessary technical and

entrepreneurial skills that may allow them to become employers and not only jobseekers. In Muzira and Bondai (2020), Zvobgo (1986) supported the same sentiment when he posits that the National Manpower Survey (NMS) done in 1981 revealed that the majority of the Africans were occupying the lower skill jobs hence, the introduction of technical colleges to bridge this gap. He further pointed out that universities must strongly participate in community and national programmes of development to create new possibilities for national development in various industries through research.

The world has moved towards innovation and cutting-edge industrial advancement. In line with this, the Zimbabwean government set the Zimbabwe Council for Higher Education (ZIMCHE) and been mandated by the Ministry of Higher and Tertiary Education to implement the Zimbabwe National Qualifications Framework through Statutory Instruments SI 132, SI 133, SI 137 and SI 140 of 2018 to increase transparency in the country's education. The move was done to prepare for a shift to a new Higher and Tertiary Education model 5.0 (HTE 5.0) up from the traditional Higher and Tertiary Education 3.0 (HTE 3.0). The old model focused on teaching, research and community service while the new model (HTE 5.0) includes innovation and industrialisation (Chihota 2019). Education 3.0 did not yield the expected results of developing industries as there was a disconnect between knowledge gained in Higher and Tertiary Education system and the local environment as the Higher and Tertiary Education system seemed to be concentrating on exotic application domains (Murwira, 2019). This seems to be common in Africa. Mukurunge and Tlali (2017) revealed that the tertiary level curriculum in Lesotho does not adequately prepare graduates for the employment or venture start ups since emphasis is on theoretical and academic excellence as opposed to empowerment with entrepreneurial skills. They further called for curriculum review to align it towards producing entrepreneurs and technocrats for the economic development of their country.

Education 5.0 as seen by Muzira and Bondai (2020) was introduced as an attempt to match the Zimbabwean curriculum to Zimbabwean culture as well as the country's developmental needs. Zimbabwe's target is to re-engineer and revive industry through the most modern technology. In line with the national vision 2030 (transforming the country's economy into an upper middle class by 2030), the Zimbabwean Minister of Higher and Tertiary Education intends to achieve this through his ministry's HTE 5.0 model which promotes

entrepreneurship education. To promote vision 2030, the government funded the development of, and have since commissioned innovation hubs at its five (5) state universities including CUT (Chihota 2019, Muzira and Bondai 2020). The year 2019 saw Zimbabwean Higher and Tertiary Education bridging the gap between classroom and industry, moving from theory to practice. The country launched innovation hubs in five of the state universities with the remainder still under construction. This gives hope to the conversion of academic knowledge into adoptable products through research and development (Dzenga 2019). Higher education institutions would, therefore, produce graduates who have entrepreneurial skills and are equipped to set up industries and rather than job seekers. This has been evidenced by Chinhoyi University of Technology's artificial insemination project launched as a way of implementing Education 5.0 (Ministry of Higher and Tertiary Education, Science and Technology Development, 2018b cited by Muzira and Bondai 2020). Harare Institute of Technology, according to Chihota (2019), has also started manufacturing of electricity transformers to be one of the key suppliers of the same to the Zimbabwe Electricity Supply Authority (ZESA). A lot more is taking place at the University of Zimbabwe (UZ), Midlands State University (MSU) and Great Zimbabwe University (GZU) innovation hubs.

Harmonisation of course content in similar modules of different universities is since July 2019 under way (Dzenga 2019). Apart from boosting flexibility for students' movement from one university to another where necessary, module synchronization also helps in resource (mainly personnel) sharing. This has necessitated the removal of irrelevant programs whilst improving those that are relevant to the country's developmental needs (Muzira and Bondai 2020). Education 5.0 requires the blending of theory with practice, with the Minimum Bodies of Knowledge and Skills (MBK/S) being introduced to the university curriculum influencing teaching; promotes the Heritage based philosophy which supports the application of gained knowledge on the local environment in order to produce relevant goods and services (Muzira and Bondai 2020; Murwira 2019). Muzira and Bondai (2020), Tirivangana (2019) view heritage based education as meant to use Zimbabwe's readily available agricultural, climatological and mineral heritage for national development. According to Dzenga (2019), plans are underway aimed at unifying curriculum from primary, secondary and tertiary institutions. These curricula have to feed into, and speak to each other. The Ministry of Primary and Secondary Education's focus is on competence-based curriculum while Higher

and Tertiary education is on Teaching, Research, Community service, innovation and industrialisation (education 5.0).

2.6 Chinhoyi University of Technology Schools and their contribution towards entrepreneurship

Chinhoyi University of Technology is one of the state run universities offering entrepreneurship as a discipline. It started as a

“Degree programme that was established under the auspices of the University of Zimbabwe in 1999. Its vision is to be the world-class centre of excellence for technological innovation and entrepreneurship. The university’s mission is to produce innovative graduates, create knowledge, enhance entrepreneurship and provide community service through quality teaching, training and technologically oriented research. Its core values are Integrity, Excellence, Dynamism, Entrepreneurship, Democracy and Culture” (www.cut.ac.zw).

Outlined below are the CUT schools and their contribution towards entrepreneurship.

2.6.1 School of Agricultural Sciences and Technology

As indicated by Makuza (2018) on www.cut.ac.zw,

“The school has a fully functional Biotechnology, Food Science and Technology and MSc Postharvest Science and Technology laboratories. They are also proud owners of a fully functioning farm as their Strategic Business Unit. They have, at the farm, the Livestock section with cattle, sheep, goats, indigenous chickens, broilers & layers, guinea fowls, rabbits and pigs. They grow maize, soya beans, sorghum, sunflower, bird eye chillies, pastures trees, and legumes among many in their crop section”.

This boosts experiential learning in the school and the school feeds the university as well as the local communities.

Apart from having the potential to be employed in the Agro and Food-Industry, graduates from the school of Agricultural Sciences and Technology can also set up and grow their own ventures and be self employed as entrepreneurs. They can also acquire free farms through the government’s indigenization initiative (Marazanye 2016). If properly nurtured, such ventures can as well grow to multi-national companies. The school of Agricultural Sciences and

Technology fully supports the government 'command' agriculture and fisheries policy. Command agriculture is a Zimbabwean government initiative to provide all the necessary inputs and farming implements to farmers interested in strategic farming activities at zero deposit, and pay back after selling their produce. The policy, according to Chisoko and Zharare (2018), "is an import substitution-led industrialisation concept focusing on boosting maize production and empowering local producers of cereal crops. It also helps to create employment". With the best soils and rainfall patterns in the province, the school of Agricultural Sciences and Technology has the potential to grow very large agro and food processing industries in the province, country, region and beyond. Currently, the farm supplies the university hotels, canteen, staff and local community with fresh farm products. The school also promotes the government's Food Security and Nutrition cluster of the 'ZimAsset policy'. They rear animals then slaughter them and sell meat to the university and surrounding communities. Zvavahera and Chigora (2015:61), indicated that

"the Food and Nutrition Cluster is responsible for making sure that the country has sufficient food and food reserves for its population. Zimbabwe through ZimAsset seeks to reclaim its position as the best farming country in Southern Africa as adequate food and nutrition are key to peace and security".

The school is also very popular for its artificial insemination project. According to Jena (2017), the Department of Animal Production and Technology in the school is instrumental in growing the province and national cattle herd through artificial insemination. The program is promoting the university brand, carrying its flag high.

2.6.2 School of Entrepreneurship and Business Sciences

The school seeks to develop the best possible quality in academic and entrepreneurial skills in all the students at the university. It is entrepreneurial-centric and thus, closely connected with other Schools to enable the experience of its graduates to be distinct (Muranda 2016).

In line with the university's entrepreneurship mandate, the school seeks to nurture its students with regard to entrepreneurship, innovation and creativity. According to Anseeuw and Alden (2010), early independent Zimbabwean policies did not encourage the equitable distribution of wealth and means of production amongst all citizens; it gave preference to rich foreigners and the local elites. The school of Entrepreneurship and Business Sciences together with the government's Short Term Emergency Recovery Programme (STERP) will go a long way in

addressing this anomaly. The programmes in the school form the basis for the management of businesses. The school is responsible for the university-wide teaching of such modules as Management Principles, Marketing Principles, Communication Skills, Financial Accounting, Entrepreneurship Principles, Corporate Governance and Ethics, and Strategic management among others. These modules are instrumental in running businesses. The school of Entrepreneurship and Business Sciences serves all the other schools in the university. It is responsible for training and grooming entrepreneurs; people who can identify opportunities, create ventures and grow them (Msipah et al 2013).

For their venture creation related modules, students in the department of Entrepreneurship and Business Management normally work hand in hand with students from other departments and schools. The engineering students, Information and Technology (IT), and the school of art students are usually consulted by the Entrepreneurship and Business Management students for the creation of their prototypes. The department of Entrepreneurship and Business Management is responsible for the exploitation and nurturing of students' entrepreneurial skills in the entire university. The school support entrepreneurial growth and development in Zimbabwe (Moyo 2014). Students and/ or graduates from the entire university have to lace-up their technical skills with entrepreneurial skills to build fully functional businesses.

In line with the ZIMASSET government policy, the school of Entrepreneurship and Business Sciences is instrumental in reducing the challenges faced by the Small to Medium Enterprises (SMEs). It enhances the SMEs' marketing, procurement, record management, financial management as well as entrepreneurship skills (Nyamwanza et al 2015). As also Msipah et al. (2013) puts forth, the university train local SMEs in various business related areas of their needs.

2.6.3 The School of Engineering Sciences and Technology

The school strives to provide high quality education and innovative research at all levels with the aim of producing innovative graduates through the enhancement of entrepreneurship and the provision of engineering solutions to community problems (Manyumbu 2017).

Furthermore, the school addresses the Value Addition and Beneficiation cluster to ZimAsset government initiative (Zvavahera and Chigora 2015). It also addresses the Science, Technology, Engineering and Mathematics (STEM) government policy by promoting home grown scientific solutions to community and industrial challenges. STEM aims at promoting the integrated, interdisciplinary and applied teaching of Science, Technology, Engineering and Mathematics subjects. Successful projects under the banner of the school of Engineering Sciences and Technology include the solar robots in the small towns of Chinhoyi, Kadoma and Rusape. There are a lot more other projects in the process of commercialisation. According to Nyamwanza et al. (2015), commercialization also addresses the government's Short Term Emergency Recovery Programme (STERP) to resuscitate the manufacturing activity and increase capacity utilization levels. Students from this school are also instrumental in assisting students from other departments to produce prototypes and software.

2.6.4 School of Natural Sciences and Mathematics

According to Jonathan (2017) on www.cut.ac.zw, the school

“partnered with Seeding Labs Inc. USA in setting up science teaching and research (STAR) laboratories. They also intend to continue making contacts with potential local partners to fund promising research and development initiatives and promote practical entrepreneurship education”.

Local, regional and international Venture Capital Funding (VCF) need to be mobilised for attractive and investable projects to help students to meet pre-incorporation expenses and company registration. Such partnerships go a long way in exposing students to explore and solve problems; and help them to be logical thinkers (buse.2018). Kolb (2014) called this experiential learning.

As Chara (2016: e05) indicated,

“STEM is meant to promote the learning of Science Technology, Engineering, and Mathematics. It offers free education to students in public schools enrolled for science subjects at ‘Advanced’ level with government paying for their full school and boarding fees. The government is doing this to stimulate interest for science subjects and increase the number of students enrolling for STEM degree programmes. STEM subjects boost innovation and will subsequently result in the industrialization of the economy and create employment”.

The Zimbabwean STEM initiative has started showing results with a remarkable increase in university enrolment of STEM related degree programs (Gadzirayi, Bongo, Ruyimbe, Bhukuvhani, and Mucheri 2016). The school fully caters for the Science Technology, Engineering and Mathematics (STEM) government initiative. The initiative according to Buse 2018) is significant in poverty reduction, economic recovery and sustainable development; and, this will assist young entrepreneurs to set up high-tech enterprises. Although the school of Natural Sciences and Mathematics is still to leave a mark on the society and economy under the CUT banner, it is quite promising given the state of the art equipment in their teaching and learning laboratories. It also has the lowest student/lecturer ratio in the whole university. There is no doubt that effective teaching and learning is taking place in this school.

2.6.5 School of Wildlife, Ecology and Conservation

The school is in partnership and collaboration with strategic partners such as the World Universities Biodiversity Forum, International University Network on Cultural and Biological Diversity (IUNCBD), Zimbabwe National Parks and Wildlife Authority, Birdlife Zimbabwe, Wildlife and Environment Zimbabwe, Umfurudzi Park, Pioneer Africa, Hurungwe Safaris, Ubuntu Unleashed and the East African Lakes Observatory Network (Gandiwa 2018).

The school is unique in the sense that it takes a practical approach to learning by integrating field visits, bush school, attachments and exhibits in the curriculum. Students go for field trips right in the bush to observe and learn about wild animals in their natural state. Students are also attached for work related learning by national parks and or conservancies for experiential learning. This approach instils an entrepreneurial mindset in the learner and promotes the CUT entrepreneurial mandate. As the only university in the province, CUT is strategically positioned to exploit the natural resources in the province. As recommended by Kolb (2014), students in this school learn by doing.

The school of Wildlife, Ecology and Conservation also addresses the government command fisheries policy. The policy according to Kompas and Gooday (2007), focuses on input restrictions and total catch limits. It is intended for boosting efficiency in those involved in

fishing in order to prolong the industry's life span. The school is instrumental in research and growth of the wildlife and fisheries sector.

2.6.6 School of Hospitality and Tourism

The school of Hospitality and Tourism has an entrepreneurial approach; teaching for industrialization and wealth creation. It is the only one in the country with two (2) well equipped hotels operating as teaching laboratories. This gives students a practical business and technological orientation (Chikuta 2018).

This school fully addresses the university mandate of technology and innovation. Students in this school are practically exposed to every aspect of hotel management. Hospitality and Tourism also embraces the Zimbabwe Agenda for Sustainable Socio-economic Transformation Programme (ZimAsset). Amongst its prospects, agriculture and nutrition has been reckoned as a sustainable cluster for economic development (Zvavahera and Chigora 2015).

Mashonaland West Province where Chinhoyi University of Technology is located is home to such tourist destinations as the Chinhoyi Caves, located just eight (8) kilometres from Chinhoyi Town. In addition, Kariba Dam and game reserves, located two hundred and forty-four (244) kilometres from Chinhoyi town as well as Mazvikadei Dam and crocodile farms, located thirty-seven (37) kilometres from Chinhoyi Town. These places directly boost the practical teaching and learning of hospitality and tourism students.

2.6.7 School of Art and Design

Due to its social orientation, the school of Art and Design addresses the Social Services and Poverty Reduction cluster of the ZimAsset (Zvavahera and Chigora 2015). It also helps to reduce poverty through employment creation, innovation, and economic growth. Students from this school help and work with students from other programs, particularly entrepreneurship students, in new product development. The Herald entertainment and art (2017) reported that the school is also famous for its nationwide final year students' exhibitions, which have also helped to boost the university's image. Clothing and Fashion designers from this school were instrumental in assisting the 2016 top scorers' new product

developers. The school has several patented clothing patterns, music albums and other designs to their name.

2.6.8 Institute of Lifelong Learning and Development Studies

Lifelong learning represents the continuous building of skills and knowledge throughout the life of individuals from experiences encountered in the course of a lifetime. In this context, learning is formal, informal and non-formal for all age groups in varied contexts beyond formalized situations such as universities (Matowanyika 2018). The school is quite relevant in the university; promoting entrepreneurship through continuous building of skills and knowledge at all levels and ages. In terms of research and teaching activities, the institute is guided by the country's policies mainly the Zimbabwe Agenda for Sustainable Socio-economic Transformation (ZIMASSET) and other national development blueprints.

2.7 Chapter summary

This chapter gave insights into the political, economic, socio-cultural as well as the technological environment that promotes entrepreneurship. The chapter also outlines the higher education development in a turbulent Zimbabwean environment. It also outlined the turbulent Zimbabwean situation, the development of CUT and the contribution of its schools towards entrepreneurship development in the country.

CHAPTER THREE

ENTREPRENEURSHIP EDUCATION IN ZIMBABWE: EMPIRICAL EVIDENCE

3.1 Introduction

In this chapter, various authorities were consulted to help address the research objectives and answer the research questions. Various authorities that contributed to related topics are consulted and scrutinised to establish the contributions and for having a clear understanding of the topic under study. This will go a long way in assisting the researcher to gain insight of the findings from previous research, and it forms the basis for further research. Thematic areas addressed in this study include establishing the scope of entrepreneurship education in universities; effective training methods used in entrepreneurship; the influence of experiential learning on entrepreneurship education as well as the influence of entrepreneurship education on venture creation and creativity. This is done with the intention to establish the effectiveness of entrepreneurship education in a turbulent economy.

Literature review can be explained as an essential evaluation of a range of past and present narratives related to a given study. It is a survey of intellectual articles pertinent to a specific research area. As also mentioned by Rengiah (2013), the major purpose of reviewing literature is to provide a hypothetical overview of existing theories, models and research findings pertinent to current studies. It assists researchers to have a clear understanding of past and current developments in a given research area. It also assists researchers to establish if research was already carried out, and to identify the existing gaps in research areas. Literature review also assists researchers to learn from their fellow researchers' mistakes and provides a platform through which researchers' work can be evaluated.

Tanczer (2015) believed that the purpose of literature review is to give a summary of existing research on a given topic. It is also used to establish differences and similarities in views by different authorities in relation to a specific topic. These views are essential in identifying the gaps in previous studies.

Entrepreneurship education has proved to be an interesting research area across the globe (Ndofirepi 2019; Muzira and Bondai 2020; Garwe 2014; Frimpong 2014; Okon and Firday 2015; Kuratko 2003; Rengiah 2013; Prodromou 2009; Marques 2010; and Arensburg 2015). As evidenced by a large body of knowledge that seeks to measure the impact of entrepreneurship education on unemployment entrepreneurship education is widely thought to be the answer to unemployment (Osene 2015, El-Gohari, Selimand Eid 2016; Garwe 2014). The relationship between entrepreneurship education and the graduates' intent is also another area reasonably studied (Ndofirepi 2020; Hussain and Norashidah 2015; Frimpong 2014). Various studies showing the positive impact of entrepreneurship education on economic growth have been done in Europe (Dhahri and Omri 2018; Denga 2019, Kume, Kume and Shahini 2013; Prodromou 2009; Martin, Carree and Thurik 2010; Arensburg 2015; Rengiah 2013) Africa {Efe 2014, Frimpong 2015; Ongwae (u.d)}, including Zimbabwe (Dabale and Masese 2014; Mauchi et al. 2011). Whilst researchers see a positive contribution by entrepreneurship education to economic growth, very little, if any, is known about the graduates' perceptions on the entrepreneurship education effectiveness in a turbulent economy.

3.2 The scope of entrepreneurship education in universities

Entrepreneurship education is very broad, different stakeholders or players view it differently. It can be formally or informally trained. Formal entrepreneurship education can be taught at different levels ranging from primary schools, secondary schools, colleges and universities. The teaching approaches also differ depending with the level. These different levels range from being a part to certain modules, single modules, a set of modules and a discipline. There are various different types of entrepreneurial ventures in Zimbabwe although their value and contribution towards economic development is still low.

In order to unpack the nature of entrepreneurship education in the school system, Arensburg (2015) conducted a study to establish the differences and similarities in views by entrepreneurship education professionals and school officials mainly principals. He also aimed at uncovering the role of high school executives and or principals in the implementation of entrepreneurship education.

Arensburg (2015) argues that school executives take entrepreneurship education as business related curriculum; relating it to venture start-ups. He further argued that to school executives, entrepreneurship education is as if it is business education, and also that they perceive it in a narrower manner. Closely related to Arensburg's (2015) views, the Middle East and North African (MENA) universities "consider entrepreneurship education as informal training interventions for different early stage entrepreneurs" (Belwal, Al Balushi and Belwal 2015). Kirby (2004) in Belwal et al. (2015) further revealed that the same is taught as extra-curricular in MENA universities. However, Fayolle (2013); Blenker, Korsgaard, Neergaard and Thrane (2011) hold to the view that entrepreneurship education is to date being taught as both a discipline and a teaching approach.

Although there are laid down policies regarding entrepreneurship education across Europe, Arensburg (2015) acknowledges that entrepreneurship education is still to be fully adopted across Europe. In Finland, however, entrepreneurship education has been adopted throughout the school system from primary schools to universities (Arensburg 2015). Chell (2016) asserts that entrepreneurship education in schools should focus on shaping young people's mindsets and also that it should provide them with skills, attitudes and knowledge ideal for the development of an entrepreneurial culture. The report further revealed that the entrepreneurship education in school is that students were not mature enough to come up with basic problem solving skills

According to Moberg 2014, entrepreneurship education is taught to various people in different disciplines and levels. Moberg (2014:4) also argued that "policy makers around the world view entrepreneurship as a key competence to be fostered at an early stage of education". Furthermore, Moberg (2014), Rosendahl-Huber, Sloof and Van Praag (2012), pointed out that whilst most researchers focus on entrepreneurship at tertiary level, it is also being taught at primary and lower secondary schools. However, Heinonen and Hytti (2010); Laukkanen (2003); Foss and Lyngsie (2012), Ndofirepi and Rambe (2018) believe that entrepreneurship education is best offered at tertiary level.

Citing Msarak (2014) and Masri et al. (2010), Belwal et al. (2015), and Chihota (2019) posit that competence based knowledge is imparted to students at vocational educational institutions, technical and vocational education and training centres; while on-the-job training

and enhancement practical training are offered in the academic departments of the colleges of technology. Although acknowledged that entrepreneurship education should be considered as a daily practice for all university students; he argued that it is considered a practice for talented minority of business students.

In a study carried out by Kee, Rodrigues, Kundu, and Racine (u.d.) it was discovered that entrepreneurship education in India and Europe exists through business management courses. Although in many developing countries, Zimbabwe included, entrepreneurship education curricula encourage students to take initiative and responsibility with regard to entrepreneurship, there are less such initiatives by government or universities themselves (Kee, Rodrigues, Kundu, and Racine u.d.). Instead, the private sector and non- profit making organizations take the central role in entrepreneurial initiatives. In Zimbabwe, the private sector is instrumental in accepting students for work related learning (attachment) since most universities are still building innovation hubs and incubation centres (Garwe 2014) to place their students. Garwe's observation could have triggered the Zimbabwean government through the Higher and Tertiary Education ministry to sponsor the construction of innovation hubs in their state owned universities, the first five of which were commissioned in 2019 (Muzira & Bondai 2020, Murwira 2019).

Logical initiatives on entrepreneurship education by state authorities are still limited in most countries. In relation to this argument, Kee, Rodrigues, Kundu, and Racine (n.d.) indicated that entrepreneurship basics are offered in Poland as a compulsory module in secondary vocational schools. The module covers such aspects as entrepreneurial attitudes development and venture start up. In Austria, entrepreneurship is taught at secondary level of technical vocational education, here students run artificial firms. The Netherlands government develops teaching material and training to teachers for pilot projects on entrepreneurship education in secondary schools. The transition year and leaving certificate vocational program in Ireland accord students the opportunity to experience entrepreneurship. In Germany, real life learning takes place in vocational training institutions where they place students both in the schools and firms, and give them the opportunity to set up their own firms. In Norway, the government partners with Young Enterprise Norway to implement the entrepreneurship education strategy. Entrepreneurship education is offered through technical and vocational training in Uganda, Kenya, Botswana and other African nations. In those African countries

teaching methods remain traditional classroom approaches even though the objective is to instil venture start ups and growing skills.

Some African economies have since improved with entrepreneurship education being offered at different levels from primary school to university (Dumbu 2014; Nani and Mpofu 2015; Fatoki 2014; Efe 2014; Frimpong 2014; Undiyandeye 2015). In Zimbabwe, a year-long industrial attachment is offered in most universities and polytechnics as well as teachers' colleges (Garwe 2014), Ndofirepi and Rambe (2019). Students get attached to an established firm in departments related to their programs. Students pursuing entrepreneurship as a discipline rotate in all the firm departments for them to have a feel of the real business activities and put theory taught at university or college in practice. Progress assessment is done from both the training institution and the firms to which students are attached.

Regarding the role, positive and negative impact of entrepreneurship education in the economy, Arensburg (2015) argued that entrepreneurship education does not always results in positive economic and individual outcomes. He further claimed that there is no guarantee of efficacy in the various entrepreneurship programs in the market place due to the variations in terms of learning styles among other things. In support of this argument, Moberg (2014) posits that several dimensions to entrepreneurship education do exist although not much is known about their effectiveness. For entrepreneurship education to effectively take place, a combined effort by policy makers, entrepreneurship education experts and teachers is necessary (Arensburg 2015). In a study to scrutinize the effectiveness of entrepreneurship education in Kenya; Ongwae (u.d.) established that there is a limited supply of entrepreneurs because of the unfavourable portrayal of the entrepreneurship programme. The latter is also common in Zimbabwean, where the white collar jobs are more preferred as opposed to entrepreneurial ones. In this study, the researcher also probes further into Moberg's (2014) claim that not much is known about the efficacy of entrepreneurship education approaches. Table 3.1, adopted from Efe (2014), provides a summary of entrepreneurship education in the world.

Table 3.1 Entrepreneurship education across the world in a snapshot

Country	Nature of entrepreneurship education
United Kingdom	This is incorporated as a compulsory part to learning in Wales, England and Scotland secondary schools, with Standard 5 and 6 focusing on the local Scottish business case studies.
Slovenia	Business competitions are promoted in the official school system to boost creativity among the youngsters, they also train their teachers.
Czech Republic	Through the general educational programmes, entrepreneurship is introduced into their school curriculum. They focus on the project like student firms promoted by business schools.
China	Done through vocational and technical education, as well as spare time education for workers and peasants, the entire adult Chinese population form components of china's basic education to make citizens relevant to themselves and the country
Nigeria	Regardless of their areas of specialization, all Nigerian university students are mandated to be exposed to entrepreneurship development studies. More so, officials have the view that just integrating entrepreneurship into the curriculum of the public universities is not enough, and thus, since at the year 2010, only those students with the passion in developing their entrepreneurship skills are accorded the chance to enrol into the programme. Nigeria

	has also set a Centre for Entrepreneurship and Development Research (CEDR) to promote the entrepreneurial culture, skills acquisition, economic independence and self- actualization among the students.
Cameroun	Traditionally, the entrepreneurship education was in the form of vocational education through which students were trained in such areas as farming, construction, brick making and carpentry. To date however, a lot has changed with entrepreneurship graduates gaining some entrepreneurial skills through business related programmes.
Tanzania	There is no entrepreneurship curriculum as such, but, to argument entrepreneurship, creativity, national development and reduce poverty; entrepreneurship is offered in some of the institutions of higher learning.
Kenya	The education policy is progressing from vocational subjects enabling school drop-outs to be self- employed or to get employment in the informal sector at all levels, to a more wealth creation and or entrepreneurship centred curriculum.

Entrepreneurship education is offered differently at different levels of education in Zimbabwe (Mauchi et al. 2011; Dabale and Masese 2014; Nani 2014; Dumbu 2014, Bere 2019). It is offered as practical subjects in schools, as modules in colleges and other faculties in universities and as a discipline in some universities.

3.2.1 Are entrepreneurship education, entrepreneurship training and business management education synonymous?

Empirical evidence reveals that entrepreneurship education is said to be offered at different levels depending with the nature of the education system in a given nation (Fayolle 2013; Valerio, Parton and Robb 2014; Arensburg 2015; Morberg 2014; Foss and Lyngsie 2012; Blenker, Korsgaard, Neergaard; Dabale and Masese 2014; Nani 2014; Mauchi et al. 2011; Thrane 2011). Whilst most authorities are not clear as to the definition and or nature of entrepreneurship education, Valerio et al. 2014 put it into two related but distinct groups, that is, training and education programs. Whilst they both aim to encourage entrepreneurship; their major difference pointed out was their purpose and outcomes explained as follows:

“Entrepreneurship education programs focus on building knowledge and skills about or for the purpose of entrepreneurship whereas entrepreneurship training programs focus on building knowledge and skills in preparation for starting or running an enterprise. Entrepreneurship education programs target secondary and higher education students including undergraduates and graduates studying towards formal degree granting programs. Entrepreneurship training programs target potential and practicing entrepreneurs who are not part of formal, degree granting programs” (Valerio et al. 2014:2).

Business management education groom learners to fit in the already existing structures and serve as executives in already established organizations; whereas entrepreneurship education training goes further to address the unique conditions faced by entrepreneurs, and helps students to reflect the transformation of specific mindset and skills related to entrepreneurship (Valerio et al. 2014).

Whilst entrepreneurship education and entrepreneurship training are often used interchangeably, the two are different as clarified below.

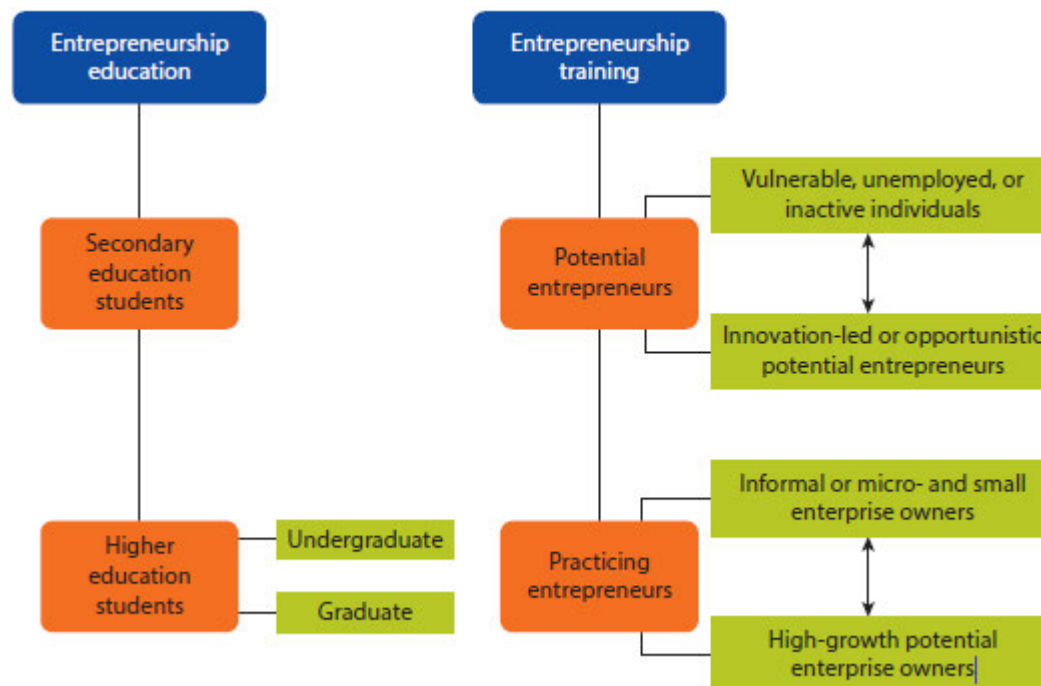


Figure 3.1 Entrepreneurship education and training not synonymous

(Adopted from Valerio, Parton and Robb 2014)

Belwal et al. (2015) confessed that the Oman educational system lacks properly crafted entrepreneurship programs in the tertiary institutions. He said that the system does not encourage innovation and creativity, and that entrepreneurial development centres in colleges do not offer business related knowledge in the school curriculum. This can be associated with Valerio et al. 2014's view that an overlap between business education and entrepreneurship training do exist; with the later going further to address the unique conditions faced by entrepreneurs and reflecting the transformation of specific mindset and skills associated with entrepreneurship. However, Dumbu (2014) argued that entrepreneurship education and business education were synonymous. High school entrepreneurship education teachers need full support from their principals for them to contribute meaningfully towards their goals. Arensburg (2015) called for a push towards favourable policies to create awareness on the principals. This study was also intended for clearing the existing confusion on the difference between entrepreneurship education and training; and, establish the true nature of entrepreneurship education in Zimbabwe.

Valerio et al. (2014) believed that there is a positive correlation between entrepreneurial performance and higher levels of education as this will normally result in better opportunities for venture creation. In the same vein, Belwal et al. (2015) and Chihota (2019) suggest that

effective entrepreneurship education at university level should see students engaging businesses and communities for skills development. This dispels the Global Entrepreneurship Monitor (GEM) 2012's conviction of having policies meant for a variety of entrepreneurship groups such as the rural population, women, youth, the unemployed and the self-employed individuals working in the informal sector among others. Though the GEM (2012) mode of entrepreneurship may have positive outcomes, they may be effective for Small to Medium Enterprises (SMEs). According to the World Bank (2012) as cited by Valerio et al. (2014), the question whether entrepreneurs are made or born still needs exploration. Whilst empirical evidence points towards the fact that innovative thinking and creativity cannot be taught (Valerio 2014), the entrepreneurship thought leader, Schumpeter (1989), regarded entrepreneurship as a force of creative destruction, posing questions on how then is entrepreneurship education transmitted. Gyamfi (2013) contends that entrepreneurs are born and not made. He further posits that certain entrepreneurial aspects can be taught whilst others cannot. Of interest in terms of efficacy, is the nature of entrepreneurship education in Oman universities, which Belwal et al. (2015) posit that it is offered across all faculties as orientation courses. According to Valerio 2014 "there are a few tracer studies conducted to track entrepreneurship education training of graduates to see whether they become business owners or go for self-employment". This study, seeks to establish entrepreneurship graduates' perceptions on the effectiveness of entrepreneurship education.

3.2.2 The different levels at which entrepreneurship education is offered

Different authorities have different views when it comes to the level at which entrepreneurship education should be offered (Belwal et al. 2015; Valerio et al. 2014; Moberg 2014; Msarak 2014; Ugondola 2016).

As mentioned earlier, Gyamfi (2013) contends that entrepreneurs are born, not made and that it is not every aspect of entrepreneurship that can be taught, implying that in a way, entrepreneurship cannot be holistically and formally taught. Cited by Arasti et al. (2012); Rae and Carswell (2001) support that some entrepreneurial elements can be taught whilst some cannot be taught.

The Middle East and North African (MENA) universities "consider entrepreneurship education as informal training interventions for different early stage entrepreneurs" Belwal et

al. 2015. Kirby (2004) further revealed that the same is taught as extra-curricular in MENA universities. Valerio et al. (2014) also acknowledge that entrepreneurship education is most effective when taught at higher levels and that it can also be offered in secondary schools.

Belwal et al. (2015) disclosed that entrepreneurship education is being offered at almost all educational levels by universities in the United States of America (USA), Asia and Africa among others. Likewise, Muzira and Bondai (2020) Karimi, Bremans, Lans, Chizari and Mulder 2016; Kuttim 2014 expressed the same viewpoint by positing that entrepreneurship can be taught in colleges and universities. Muller and Kuffman (2016) studied seventeen (17) European countries that offer entrepreneurship education at university level, but they also indicated that it can be offered at various other levels including diploma and certificate levels. However, Msarak (2014) argued that entrepreneurship education should be restricted to schools, vocational educational institutions and technology colleges. In relation to this argument, Ugondola (2016) posits that entrepreneurship education in Nigeria is widely taught in vocational and Technical colleges as well as in universities. For effective teaching and learning of entrepreneurship to take place, Ugondola (2016) called for the increase in innovative teaching methods at universities which he believe can expose students to business activities and help to motivate and influence them to be more entrepreneurial. The main focus in this study is on entrepreneurship education offered at undergraduate level as a discipline.

3.2.3 Entrepreneurship education in Africa

In this study, the extent of entrepreneurship education in Africa in which Zimbabwe is a part was established. Fatoki (2014) revealed that in South African universities, entrepreneurship is largely being offered to students taking business related courses and not across faculties. He further revealed that it is offered as small business management and entrepreneurship modules. However, Undiyaundeye and Otu (2015) and Murwira (2020) believe that universities are there to serve as technology laboratories and to incubate entrepreneurial skills. Entrepreneurship education is looked upon as an opportunity for job creation in Africa (Undiyaundeye and Otu 2015; Garwe 2014; Fatoki 2014; Nyoni 2018). As for Efe (2014), his view is that entrepreneurship education is functional education that can be used for poverty and unemployment eradication, and for promoting national security.

According to Undiyaundeye and Otu (2015), there is too much emphasis on the value of a certificate as opposed to the skills required of a given profession. Students do whatever it takes to get a certificate and not to acquire the required knowledge and skills that can help them to become self-reliant. Although other studies are silent about this issue, this might be true with regard to higher education institutions across the globe.

Furthermore, Efe (2014), Garwe (2014), Frimpong (2015) and El-Gohari, Selim and Eid (2016) rightly acknowledge that most researchers have focused on the management of education which encompass such things as policy and availability of resources. Consequently, little is known about the graduates' perceptions on the effectiveness of entrepreneurship education in a volatile economy.

3.2.4. Entrepreneurship education in Zimbabwe

The nature of entrepreneurship education is viewed differently by different Zimbabwean researchers (Nani 2014; Garwe 2014; Dabale and Masese 2014; Mauchi et al. 2011; Njanike 2019). Nani (2014) perceives the teaching of practical subjects alone as entrepreneurship education, arguing that, learners are taught practical subjects in the bid to equip them with entrepreneurship skills. This can be at any level of education from primary school to tertiary and or higher education institutions. Many other writers across the world such as Karimi et al. (2016), Muller and Kuffman (2016), Valerio et al. (2015), Belwal et al. (2015), Efe (2014), Undiyandeye (2014), Dzenga (2019) and Mauchi et al. (2014) suggest that entrepreneurship education can be taught at tertiary level. They were however not explicit about the form of, and or approach to entrepreneurship education they were referring to.

Interestingly, Nani (2014) expects learners to convert practical skills they acquire in class into tools for setting up businesses, which he believes is what entrepreneurship should ultimately achieve. However, Nani (2014:21) does not provide a clear explanation of how this conversion has to take place. He further claims that the Zimbabwean government introduced practical subjects in its curriculum with the aim to “produce entrepreneurs who can create jobs for themselves and others, and contribute to economic growth and development”. Whether skills alone can lead to one becoming a practising entrepreneur remains a puzzle requiring someone to solve.

In addition, Nani (2014) sought to establish the relevant teaching methods in entrepreneurship education in Zimbabwean schools. Interestingly, both Nani (2014), and Nani and Mpofu (2015) found out that Zimbabwean schools and teacher training colleges offer practical subjects rather than stand-alone entrepreneurship modules.

Meaningful studies which have been carried out in African countries including Zimbabwe, include studies on students' perceptions of entrepreneurship education (Fatoki and Oni 2014; Mauchi et al. 2011; Dabale and Masese 2015; Mushipe 2013) but graduates' perceptions of the effectiveness of entrepreneurship education in Zimbabwe have not been given attention.

3.2.4.1 Entrepreneurship education in Zimbabwean tertiary institutions

As part of the mandate to encourage the entrepreneurial spirit among African university students, large corporate such as Coca Cola International initiated entrepreneurship development programs at the state owned University of Zimbabwe to help students to be able to create self-employment projects and or ventures after graduating (Mushipe 2013). Sharing the same sentiments, Dabale and Masese (2014) perceive the entrepreneurship education in Zimbabwean tertiary institutions as focusing on striking a balance between venture creation and the increasing number of graduates churned out of universities every year. From Bindura state-owned university, Mauchi et al. (2011) suggests that entrepreneurship education is becoming increasingly important since university education is no longer a guarantee for any type of job in Zimbabwe. More so, exposing students to work related learning is also useful in nurturing future entrepreneurs as well as building successful careers in academia and industry Garwe (2014). Work related learning is the norm in most state owned training institutions in Zimbabwe today including the Chinhoyi University of Technology under study.

According to Mauchi et al 2011, despite the Zimbabwean government's desire for the country to have more entrepreneurs who initiate business start-ups, innovate and create new technologies, products and business opportunities, it is of great concern that the Zimbabwe higher education curriculum does not explicitly promote entrepreneurship and that there is a cursory interest among institutions of higher learning to do so. Mauchi, et al. (2011) further noted that some higher education institutions in Zimbabwe do offer one entrepreneurship course in some cases restricted to business students, and for some institutions taking the

course is optional. They also revealed that lecturers teaching entrepreneurship in these institutions lack or have little practical know-how to operate their own entities, and, most have not had formal training in teaching entrepreneurship.

Dumbu (2014) of the Zimbabwe Open University (ZOU) has the view that the design of the tertiary institutions curriculum should allow all the enrolled students across faculties to take compulsory Entrepreneurship Education courses. This was supported by Murwira (2020) who called for extensive entrepreneurship across all universities. At a private church owned Africa University, Dabale and Masese (2014) indicated that entrepreneurship education at this institution is in the form of elective entrepreneurship and small business management modules. Disturbingly though, Nani and Mpofu (2015) observed that entrepreneurship education in Zimbabwean teachers' training colleges is not being taught by specialists and is not being taught as a standalone module. Mukurunge and Tlali (2017), Mauchi et al. (2011) and Nani and Mpofu (2015) called for strong renewal efforts to encourage entrepreneurship education at tertiary institutions in Zimbabwe.

The lecturing teaching method is the most traditional and basic approach used in teaching, and examination is the commonly used assessment technique used in the Zimbabwe tertiary institutions. There is the lack of support of trainers from higher education institutions administration and the government as there is no budget for entrepreneurship education hence, no resources to train students effectively (Mauchi et al. 2011). If entrepreneurship is to be effective, higher education institutions' executives and the government should fully support entrepreneurship training by setting aside resources to practically train students.

In this study, a funnel approach was taken to assess the extent of entrepreneurship education in Zimbabwean universities; starting from countries elsewhere, to Africa in which Zimbabwe is located, and specifically to Zimbabwe and its tertiary institutions.

3.2.5 Insights into the breadth and depth of entrepreneurship studies in Zimbabwe

Entrepreneurial activity in an economy does not always translate to economic growth. Its breadth and depth levels may be different. According to Low (2004), entrepreneurship

breadth is the widespread dispersion of entrepreneurs while entrepreneurship depth is the concentration of high value entrepreneurs.

Entrepreneurship boosts the quality of life and promotes economic affluence of an economy. High value entrepreneurs enhance economic prosperity and create significant improvements to an economy through wealth and job creation (Dhahri and Omri 2018 and Denga 2019). However, most small entrepreneurs simply enhance the local quality of life through their services and ambience (Low 2004). They add breadth and facilitate the functioning of the communities. With vast arable and fertile land, mineral resources, wildlife, good rainfall patterns and skilled labour, Zimbabwean entrepreneurs have the potential to contribute towards both the breadth and depth of entrepreneurship in the region. Muzira and Bondai (2020) called for the use of the country's readily available mineral, climatological and agricultural heritage for national development. Entrepreneurs can venture into farming, agribusiness, fisheries, wildlife management, mining businesses as well as developing technologies, software and equipment for use in these industries (breadth). They then can create employment, bring competitive advantage and add value (depth) to the nation.

3.2.5.1 Entrepreneurship education breadth

The breadth of entrepreneurship refers to the concentration of entrepreneurs in a given nation or community. According to Low (2004), the existence of a lot and variety of entrepreneurs in a nation indicates its richness in entrepreneurship breadth. Entrepreneurship education breadth is the scope or the extensive spread of entrepreneurship studies in a given nation. It can be taken to mean the types or modes of entrepreneurship, levels offered and number of entrepreneurship education institutions in a country. Zimbabwean entrepreneurship education has a wider coverage ranging from formal to informal. Formal entrepreneurship education spreads from primary school level, into secondary school up-to tertiary level. While it is currently being understood and offered differently at these levels, Dzenga (2019) asserts that there are imminent plans to unify formal entrepreneurship curriculum across all levels. Properly planned and implemented curricular should feed into each other; with the ministry of primary and secondary education focusing on competence based curriculum and Higher and Tertiary Education on teaching, research, community service, innovation and industrialisation [Chihota 2019, Murwira 2019).

Entrepreneurship education in primary and secondary schools is mainly done through the teaching of practical subjects. (Nani 2014) believed that practical subjects help in equipping learners with entrepreneurial skills.

Since 2017, Zimbabwe shifted its primary and secondary schools education system to competence based curriculum (Gory 2020). One of the objectives of this curriculum is to prepare learners for life work in an indigenised economy and increasingly globalized and competitive environment (Ngwenya 2020; Tirivangana 2019; Chisenga 2019). It focuses on life and work skills. The practical subjects offered at primary school level, include agriculture, visual and performing arts and Information and Computer Technology (ICT). Agriculture, ICT and Visual & performing arts being examinable at grade seven. In secondary schools, the subjects include agriculture, building, woodwork, metalwork, fashion and fabrics, food and nutrition, ICT, graphical design and visual performing arts. Whilst the primary school practical subjects are all compulsory, it is mandatory to just take one at secondary school level. The same approach is being used in Poland (Kee et al n.d), United Kingdom (Efe 2014) secondary schools. Selection of these practical subjects at secondary school level is usually based on student's performance or the school grading system. The 'A' classes are usually the most brilliant and taking science subjects followed by the 'B' class taking commercials and 'C' class taking arts subjects. For the practical subjects for instance, the 'A' class maybe doing ICT and agriculture, 'B' class fashion and fabrics and building studies and 'C' class woodwork and graphical design. These practical subjects are not uniform across the country although all secondary school learners are encouraged to at least take one on offer at their school. According to Denga (2019), plans are underway to make practical subjects compulsory at primary and secondary levels of education throughout Zimbabwe. This will aid the survival of primary and secondary school dropouts to venture into farming, market gardening, carpentry, fashion design, hospitality, graphical designing, music, and brick laying among other entrepreneurial ventures and activities. According to Muzira and Bondai (2020), the subjects will help the learners to use the country's readily available agricultural and minerals inheritance for survival and national development. Although this form of entrepreneurship may not contribute towards entrepreneurship depth, it benefits the society and its survival.

Different types of entrepreneurship education institutions are spread across Zimbabwe. At tertiary level, they range from universities, polytechnics and teachers' colleges. Entrepreneurship education at teachers colleges is fused in other modules (Nani and Mpofu 2015). Polytechnics curriculum is managed centrally through the government Higher Education Examination Council board (HEXCO) (Shoko, Chikomo and Chisita (2015). These award National Certificates (NC), National Diplomas (ND), and Higher National Diploma (HND) with a selected few awarding undergraduate degrees. Polytechnics take a more focused practical approach to teaching and learning. They offer the same set of subjects and practical activities for the entire year. This helps in equipping and sharpening their practical skills. Ndofirepi and Rambe (2018), however, criticized the absence of deeper practical orientation and engagement with industry by these institutions. All things being equal (conducive environment, relevant equipment, and enough capital including foreign currency among others) and their practical orientation, polytechnic graduates have the potential to become successful entrepreneurs who can start and grow meaningful ventures and contribute towards development of the country.

Entrepreneurship education is being offered differently in Zimbabwean universities. Dabale and Masese (2014) revealed that it is being offered as an elective module in some universities. Other universities offer it as a compulsory module across all schools while others offer it as a discipline yet others offer it as discipline and compulsory module to the rest of the programs. There are plans to make entrepreneurship a compulsory module across schools in all the universities in the country (Murwira 2020). Valerio et al. (2014) and Dumbu (2014), however, see an overlap of entrepreneurship training and business education. This may explain the variance in the teaching of entrepreneurship in universities.

While most universities and polytechnics are located in towns, teachers' colleges are found in both towns and rural areas. VTCs are highly concentrated in growth points, rural areas and are also found in urban areas. They are located in every district of the country to cater for the townships youths and unemployed. In Zimbabwe, most entrepreneurial activities are found in growth points and urban areas. Entrepreneurs according to Njanike (2019) constitute 99% of businesses in Africa. Majority of the owners of such entities are self-employed. Low (2004) believed that the shares of self-employed workers in a country determine the breadth of its entrepreneurship. While entrepreneurship education institutions are all over Zimbabwe, the

breadth of entrepreneurship education is widest in urban and growth points. This can be attributed to high levels of unemployment in the country with the rural populace mainly surviving on communal farming.

In Zimbabwe, entrepreneurship education is also being offered to the informal sector using both formal and informal education and training. Formally, it is being offered at Vocational Training Centres (VTC) awarding National Foundation Certificate (NFC) under the government HEXCO examination branch Shoko, Chikomo and Chisita (2015). Like polytechnics, VTCs also take a practical approach to teaching and learning. Their target participants are semi-skilled people already in practice. There are also various government and non-governmental training institutions like the ministry of Small to Medium Enterprise SMEs, EMPRETEC, SEDC and various church organizations (Ministry of SMEs 2017). These run regular training workshops to equip those already in industry with limited skills.

3.2.5.2 Entrepreneurship education depth

The depth of entrepreneurship can be measured by the value created by entrepreneurs in an economy. It is the concentration of high value entrepreneurs. The depth of entrepreneurship education can thus be the value created by entrepreneurship education to its graduate. High value graduate entrepreneurs create more value, earn more and contribute towards economic growth of an economy.

The depth of entrepreneurship education according to Low (2004) examines the value of entrepreneurship education. This may explain Ndofirepi and Rambe (2018)'s call for the improvement of the entrepreneurship education value chain to ensure depth and value addition in entrepreneurship education. They further suggest that these value additions must start from the creation of content, delivery strategy, enhanced practical orientation in teaching and the development and maintenance of training institutions and industry relations.

Real entrepreneurship education must groom entrepreneurs who go beyond helping the society to survive but create value and development in the society or nation. It has to create a link between the classroom theory and industrial practice; converting academic research to high value products and services (Dzenga 2019). Reiterating the same sentiments, Low

(2004) posits that small entrepreneurs improve quality of life while high value entrepreneurs trigger economic growth.

Entrepreneurship depth can also be viewed both in terms of value addition and in terms of income. A nation with a greater depth of entrepreneurship has self employed workers with higher average income and higher income-to- receipts ratios (Low 2004). In a way, a nation with high depth entrepreneurship education has entrepreneurs who own and run successful businesses contributing towards economic growth. According to Chihota (2019), innovation and industrialisation are pertinent issues towards the depth of entrepreneurship education and the success of an economy. The new Higher and Tertiary Education 5.0 curriculum seeks to match the country's curriculum to its developmental needs Muzira and Bondai (2020).

Entrepreneurship creates wealth and jobs within a nation that eventually leads to development. Muzira and Bondai (2020) posit that participation in national developmental programmes by universities was crucial for economic growth. Universities have to play an active role in creating value (depth) of entrepreneurship education. The depth or high value entrepreneurship can be measured by the value added to a product or service by an entrepreneur (Low 2004). While there are high breadth levels of Zimbabwean entrepreneurs, the entrepreneurs themselves are still to generate real value (depth) from their activities. Entrepreneurship in developing economies contributes positively towards social and economic dimensions of sustainable development (Dhahri and Omri 2018). There is hope for meaningful job creation, innovation and industrialisation through entrepreneurial activities in Zimbabwe.

Entrepreneurship education depth can be enhanced through various practical ways. Ndou, Secundo, Schiuma, & Passiante (2018) cited research, competition, workshops and incubation programs as enhancing entrepreneurship education depth. Staff and student exchanges with other universities across the globe; junior academic staff attachment to relevant industries for exposure; according industrialists to bring their wealthy experiences to the classrooms through teaching on part time basis and delivering public lectures in universities; combining industrialists and academics on programme advisory boards; twinning departments with other universities; post doctoral fellowships, scholarships among

others. Boldureanu, Lonescu, Bedrule-Grigoruta and Boldreanu (2020) underlined the importance of industry involvement in entrepreneurial training when they posit that successful entrepreneurial role models positively influence graduates' decision to become entrepreneurs. This was supported by Ndofirepi and Rambe (2018), who pointed at the need for deep practical orientation and engagement with industry without which the importance of tertiary level entrepreneurship education will be undermined. On the contrary, Mawonedzo, Tanga, Luggya and Nsubuga (2020) revealed that work related experiential learning does not achieve the indented outcomes as students will be engaged in unrelated activities. This is true to a turbulent economy where the supposedly mentor will be demotivated by the working conditions and fail to give the expected mentorship to the student. In some cases, the student may focus on areas or activities that directly award them as opposed to learning.

The Zimbabwe entrepreneurship education has started showing signs of development (depth). According to Muzira and Bondai (2020) and Chihota (2020), the year 2019 saw the Zimbabwean government commissioned five of its first funded state universities innovation hubs. In the same year, a sum of US\$380 million was set aside for the Higher and Tertiary Education Ministry to boost research and innovation (Ndofirepi 2020). These moves are expected to improve entrepreneurship education depth.

3.3 Training methods used in entrepreneurship education

There are different teaching methods for entrepreneurship education, common amongst them being group projects (Oyelola 2013; Arasti, Falavarjani and Imanipour 2012), case studies (Solomon 2008, Potter 2008, Arasti et al. 2012, Esmi, Marzoughi, and Torkzadeh 2015) and individual projects (Esmi et al. 2015; Arasti et al. 2012; Sharif et al. 2011). Also problem solving (Mojalal et al. 2011; Arasti et al. 2012), simulation (Esmi, Marzoughi and Torkzadeh 2015; Potter 2008) and Business planning (Porter 2008; Solomon 2008). Other teaching methods according to Esmi, et al. (2015) include business-planning preparation, developing new investment projects, monitoring young entrepreneurs' projects, and group discussions. Potter (2008) singled out venture start-ups by students, internship in small companies as well as action learning, as relevant entrepreneurship teaching methods.

In Esmi et al. (2015:173) pointed at “active training methods, and practical learning activities, presenting creativity opportunities, developing new ideas, and holding classes and specialized

workshops” as teaching methods that can be used for entrepreneurship teaching. Also, Esmi et al (2015) considered “experiences in real life and assimilated learning environments, group work, involvement in learning, action research, and permanent and continuous connection with entrepreneurs as teaching methods”. Arensburg 2015 considers projects as the most effective teaching method for entrepreneurship education in high schools.

According to Nani (2014:21), “practical subjects will equip learners with practical skills to enable them to be entrepreneurs and set up their own businesses”. Ugondola 2016 substantiate this argument when he encourages the increase in innovative teaching methods at universities which he believes can expose students to business activities, motivate and influence them to be more entrepreneurial. Nani (2014) further acknowledges that “the adoption of practical subjects by the Zimbabwean educational curriculum was aiming at producing entrepreneurs who can set up their own businesses. As a matter of fact, Mauchi et al. (2011) were very clear that Zimbabwean lecturers then, had basic entrepreneurship knowledge necessary for them to teach entrepreneurship education. They went on to reveal that the same lecturers were holders of diplomas, undergraduate degrees, Masters degrees or Doctorates, and also that they were not qualified as specialists in entrepreneurship education. To-date however, there is a plethora of entrepreneurship trained personnel and or individuals who are holders of the indicated qualifications.

3.3.1 The practical approach/ experiential learning

According to Nani (2014), the teaching and learning of hands-on subjects in the schools curricular would instil an entrepreneurial passion in the learner prompting them to start and grow their own entities. Ezeani, 2012 believed in equipping students with developmental initiative and responsibility teaching skills. Kolb and Kolb (2005) called this experiential learning, which they defined as learning through experience. Students have to do, reflect and modify their action basing on their experience before doing it again. This is in line with the creative destruction definition of entrepreneurship by Schumpeter (1989), the entrepreneurship education forefather.

Also known as action based learning, experiential learning is learning by doing and reflective practice (Mauchi et al. 2011; Dumbu 2014). Teaching methods used in this approach include live projects/ collaborations with industry, incubators and internship. Experiential learning

exists when “a personally responsible participant cognitively, affectively, and behaviourally processes knowledge, skills, and attitudes in a learning situation characterised by a high level of active involvement...” (Nani 2014:22). Real experiential learning must be done outside the classroom. In relation to this argument, Dhliwayo (2008) noted that the effectiveness of experiential learning in the form of computer simulations, group exercises, case studies as entrepreneurship teaching methods are highly questionable as they tie the learner within the classroom.

Also known as industrial attachment or internship, work related learning is intended to bridge between theory and industrial reality. It is learning through work experience using simulations and real life work scenarios. Industrial attachment assists students to develop various work related skills; including helping them to link theory with practice (Mauchi et al. 2011).

Undiyaundeye and Otu (2015) suggests that industrial training exercises, workshops and seminars and excursions help students to be able to take risks, learn from outcome and manage situations. Learning by doing is the way to go when it comes to entrepreneurship education. However, Kuttim et al. (2014) found out that coaching and networking activities are not offered as frequent as seminars and lectures even though they equip students with better entrepreneurship skills. Jones and English (2004) frankly said that departing from the traditional teacher centred teaching methods remain a challenge.

According to Bager (2008) cited in Mauchi et al. (2011:1310), “entrepreneurship centres and student business incubators have been established at numerous universities in the United States of America with the objective to assist students and graduates with emerging ventures”. These facilities offer both graduate entrepreneurs and learners access to essential business infrastructure including computers, desks, phones, seed money, mentoring and advisory services from faculty members or entrepreneurs and help them to build links with established entrepreneurs. These entrepreneurship centres created room for more and better venture start- ups by students taking entrepreneurship modules, and helped to equip them with entrepreneurship skills and mindset. Entrepreneurship centres are also desirable, in developing nations though the countries lack funds to start them. In general, there are still limited incubator facilities to support graduate start-ups.

3.3.2 Combined teaching methods

Because of the variance in, and broadness of the definition to and or meaning of entrepreneurship courses, Sirelkhatim and Gangi (2015) argued that a combination of theoretical and practical methods to entrepreneurship teaching may be necessary. Such theoretical teaching methods as the lecture method help students to appreciate procedures, processes and rules to be followed in a practical component of learning. The same sentiments were expressed by Gibb (2006) cited in Mauch et al. (2011) when they acknowledged that there is a need to have both traditional and modern, more practical entrepreneurial teaching methods complementing each other to allow students to actively participate, and to also mould and control the learning environment. Nani (2014) maintains the same argument by pointing out that the lecture delivery method can best be used together with practical sessions.

In the case of the traditional teaching method, it is the teacher and not the student who determine how the lessons are done, which makes the method inappropriate. There is also no collaboration with industry in lecture delivery. Nani (2014:21) encourages the setting-up of established entrepreneurial centres to give students the opportunity “to identify business ideas, to incubate these ideas and to implement them into viable businesses with the guidance of industrialists”. This can be very helpful in providing students with appropriate entrepreneurial skills, and it also creates room for innovation.

According to Sirelkhatim and Gangi (2015:5), the common instruction techniques that can be used in entrepreneurship education can be grouped into three categories as follows:

- i. The teacher centred theoretical content dissemination method.
“The teacher teaches about entrepreneurship and aims to increase students’ awareness about entrepreneurship as a career choice”.
- ii. Teaching for entrepreneurship
- iii. Teaching through entrepreneurship

Teaching ‘for’ and ‘through’ methods are said to be more student centred and are intended for graduate entrepreneurs and they are designed with the goal to build entrepreneurial skills. Common approaches to achieve the intended goals when using these methods include

creating a conducive environment for imitation of real business situations by students or equipping learners to start their personal ventures (Piperopoulos and Dimov 2014 in Sirelkhatim and Gangi 2015).

Education ‘for’ can be viewed as being synonymous with education ‘through’ entrepreneurship. In both cases, students are taught through action-based methods (O’Connor 2013; Pittaway and Edwards 2012 cited in Moberg 2014).

The researcher argues that no single teaching method can mould an entrepreneur, and that a combination of a few teaching methods is necessary for effective teaching. This study sought to establish the most appropriate entrepreneurship education teaching methods from the graduate’s view point.

3.3.3 Common teaching methods

Various teaching methods are used differently at different levels of entrepreneurship education as explained below;

3.3.3.1 Traditional methods

These are mainly teacher centred and complementary methods that may not be effective in teaching entrepreneurs. They include the following among others;

3.3.3.1.1 The lecture method

This means reading aloud or oral reading of a text followed by a commentary. There is no student participation but note taking whilst the teacher gives an oral presentation of facts to students (Kaur 2011). It is viewed by Afurobi, Izuagba, Obiefuna and Ifegbo (2015) as a student centred passive learning method. This instructional method is normally used to teach planned bodies of knowledge at any level of learning from primary school to tertiary level (Kaur 2011). It is used to introduce main points, to motivate learning and to summarise main points. In a way, there is no learning without the lecture method. Lectures are there to improve imagination and creativity skills as students can ask questions during lectures (Cuadrado, Garcia and Fernandez 2011). It therefore seems that depending on how it is done, a lecture may not always be wholly teacher centred.

The major advantage of the lecture method is that many facts can be impressively delivered within a short period. Its drawbacks according to Kaur (2011) include the fact that students may fail to capture notes if the lecturer happens to be fast in delivery, thus they may not have any written record of the significant points made during a lecture. It is also possible for students to miss all the points emphasised in a lecture. This method may serve no purpose if students fail to comprehend the contents of the lecture. There is also no student lecturer interaction in a lecture.

3.3.3.1.2 Tutorials

As indicated by Cuadrado et al. (2011), tutorials are regarded as a complement to theoretical and practical classes, with students attending voluntarily after normal working hours.

3.3.3.1.3 Seminars

Seminars are participative discussions of participants' opinions basing on previously researched materials for meaningful conclusions (Cuadrado et al. 2011).

3.3.3.1.4 Personalised teaching

Personalised teaching is a home based approach whereby students learn at their own pace depending on their capabilities (Cuadrado et al. 2011).

3.3.3.2 Alternatives to traditional methods of teaching

Teaching methods regarded as alternatives to traditional teaching methods are student centred and interactive methods, which when complemented by the traditional methods may be ideal for entrepreneurship education. They include the following, among others:

3.3.3.2.1 Case study

A case study is in between traditional and practical approach to teaching. Its primary objective is to sharpen the student's decision making techniques based on previous experience (Cuadrado et al. 2011). Case studies can as well be expressed as empirical examination conducted to investigate a modern "phenomenon in depth and its real life context especially when the boundaries between phenomenon and context are not clearly evident" (Yin 2014:2). Krusenvik 2016 believes that case studies allow students to have a

comprehensive investigation of the issue under study. They also give students room to practically test views relating to a given situation as they unfold. Case studies give room for students to directly observe a phenomenon in its natural environment (Arasti et al. 2012; Esmi, Marzoughi, and Torkzadeh 2015; Krusenvik 2016). Heale and Twycross (2018:7) perceive a case study as an “intensive study of a unit aimed at generalizing over several units”. The strengths of case studies as perceived by Heale and Twycross (2018) are that it allows for an in-depth understanding of the single phenomenon and gives a full picture of a given situation since it focus on a specific unit. On the other hand, a case study lacks a clearly defined procedure. However, case studies are very specific, they relate to specific units under study, hence difficult when it comes to generalizing the findings.

3.3.3.2.2 Simulation /experiential learning

Experience based teaching methods are broad and include; simulations and or business simulation games, which according to Cuadrado et al. (2011:115), promote cognitive and affective learning as well as active learning. Simulation “is the artificial representation of a real life process with sufficient loyalty to facilitate learning through immersion, reflection, feedback and practice without the risks inherent in a similar real life experience” (Krishnan, Keloth and Ubedulla 2017:84).

Common in the medical field, simulation is a very good entrepreneurship education teaching approach for various other disciplines. Krishnan et al. (2017) believe that the imitated set-ups are realistic enough to trigger the student’s emotions giving them a unique learning experience. They further argued that learners also get an opportunity to practice and apply the acquired knowledge, that is, experimental learning which at the same time gives them a deeper understanding of what they would have learnt theoretically.

Simulation as teaching approach in entrepreneurship education can prove to be very expensive especially in a developing and worse still a volatile economy in terms of infrastructure as devoting resources for such training may not be practical (Krishnan et al. 2017). The instructor-student ratio has to be very low if simulation has to be effective (Esmi, Marzoughi, and Torkzadeh 2015). As rightly argued by Krishnan et al. (2017), it is not practical to adopt an individualised approach to simulation as there are times when putting a balance between gifted and less gifted students may be necessary.

3.3.3.2.3 Business planning

Some authors such as Porter and Solomon (2008) cited in Esmi et al. (2015) regard business planning as a teaching method which is more of a blue print, road map, guiding tool or an outline giving the student direction on how the business has to run. Business planning shows the past, present and future position of a business so that a student can analyse the environment she or he operates in and adjust the business accordingly.

On the other hand, Mason Arshed (2013) argued that the business plan offered as entrepreneurship education can not affect desirability but may increase feasibility perceptions of students. They further claimed that the approach is hinged on untested assumptions hence may not be an effective entrepreneurship education teaching method.

3.3.3.2.4 Work related learning/Internship

Commonly known in higher education as learning for work or sandwich courses, work related learning is acknowledged as the kind of learning whereby undergraduate students incorporate periods of industrial placement or interaction of academic study and practical applications so that each illuminate and stimulate the other (Brennan and Little 1996). Knight and Yorke (2004) cited in Magnell and Kolmos (2017) contend that work related learning covers issues that are meant to prepare a learner for employment, and differentiate pure academic work from work activities. Glover (2014) defined work related learning as students' application of their existing skills and knowledge in a real work place while gaining new skills and knowledge at the same time. Students in this case work in established organizations for a specified period of time doing tasks related to their studies. Students are then assessed by both their work based and university supervisors whilst at work.

In Zimbabwe, students pursuing Entrepreneurship as a discipline rotate in the various departments of an established organization for them to have a feel of the entire organization. A trainee working in an organization to gain work experience or as partial fulfilment of a specific training program, can sometimes do so for no remuneration. This may happen in both small and big companies.

According to Sirelkhatim and Gangi (2015), instruction techniques differ depending on the goals to be met. These techniques as further explained by Sirelkhatim and Gangi (2015:1) may vary from theoretical approaches “aiming to increase entrepreneurial awareness to practical oriented ones that aim to produce graduates ready to start a business. Practical oriented modules correlate with entrepreneurial learning suggestions for practices to engage students in acquiring entrepreneurial competencies”.

3.3.4 Complexity of entrepreneurship education teaching methods

Different teaching methods are available for teaching entrepreneurship at different levels. Valerio et al. (2014:25) claimed that “little is known about the effective teaching approaches and the corresponding learning outcomes; as well as how the content of certain programs or learning strategies help develop skills that result in entrepreneurial activity”. According to Arasti, Falaverjani and Imanipour (2012:1), “there is no universal pedagogical recipe to teach entrepreneurship” rather, “the choice of techniques and modalities depends mainly on the objectives, contents and constraints imposed by the institution context”. This premise is what influenced Nani (2014) to think that the Zimbabwean educational curriculum include the teaching of practical subjects to satisfy the shrinking job market objective which enabled learners to become entrepreneurs. Whilst scholars talk of different entrepreneurship education objectives, its major objective is to ensure that learners have its clear understanding for them to practice it.

In general, there is no consensus on what and how to teach entrepreneurship modules. According to Sirelkhatim and Gangi (2015), the absence of consensus in the definition of entrepreneurship has rendered the variance in courses, that is, the lack of uniformity, making it difficult to generalise the common and best methods of teaching entrepreneurship. Nani (2014) advocated for allowing entrepreneurship students to be given the opportunity to discover themselves, to test and learn by experience, arguing that entrepreneurship teaching methods are not universal, and also that content and objectives determine the choice to be used. Arensburg (2015) reiterate the same views arguing that there is no guarantee of efficacy in the various entrepreneurship programs in the market place due to the variations in terms of learning styles among other things. Likewise, Moberg (2014) posits that not much is known about the efficiency of the several documented teaching approaches to entrepreneurship. A

consultative approach by key stakeholders, that is, entrepreneurship experts and policy makers is necessary for entrepreneurship education to be useful (Arensburg 2015).

To demonstrate the complexity of entrepreneurship education in line with answering the questions; when, where, what and why, it should be offered, advocates of the pedagogy-oriented perspective believe that it must not be offered at too early a stage. This will pose challenges to communicate its significance to the recipients since they will be still far from the labour market. On the contrary, advocates of the content oriented perspective to entrepreneurship education propose that entrepreneurship should be taken as a topic at primary level to instil confidence in the learner to take entrepreneurship as a discipline and career option (Johannisson 2010 cited in Moberg 2014). The questions when, where, what and why entrepreneurship education should be offered are also known as entrepreneurship education's 'W's, and they remain a mystery which researchers need to solve and agree on. The indicated 'W's are further explained as follows:

When: This has to deal with the level at which entrepreneurship education should be offered.

Where: Whether teaching and learning entrepreneurship should be done inside or outside the classroom.

What: This is about the content to be taught.

Why: The reasons for which it should be taught, that is for understanding it and for career option.

Moberg (2014) argued that there is a difference between entrepreneurship education at school and at tertiary levels and also that teaching methods should focus on venture creation since students will be near the labour market. Jones and English (2004) contend that the resource-based view of a firm supports the teaching of entrepreneurship. This structure directly translates into a means for teaching entrepreneurial practice.

3.3.5 Challenges affecting entrepreneurship teaching and practice in Zimbabwe

The teaching and learning of entrepreneurship is very complex. There are various different challenges that affect entrepreneurship teaching and learning across the globe. In Zimbabwe they include product dumping and unfair competition decimating businesses and jobs, the prominence of Western sanctions and the collapse of the local industry, toxic politics in and

their effect on entrepreneurship and business and the flight of skilled labour and senior academics to other countries and its effects on university teaching, research and business.

3.3.5.1 Product dumping and unfair competition decimating businesses and jobs in Zimbabwe

The penetration of the Asian products into the African market has brought more challenges than benefits. Although consumers welcome their low prices, they shun their poor quality. According to Nhlabatsi (2014), the decision to make a purchase in developing economies is based on the product price. Entrepreneurs bemoan unfair competition from these foreign players that are decimating local businesses and reducing employment in Zimbabwe and most African countries. According to the WTO (2020) and Iloh, Nwokedi, Onyebukwa, and Ekeocha (2020), dumping is when the export price of a product imported into a country is less than the price at which a like product is sold in the domestic market of the exporting country. According to Nhlabatsi (2014), dumping takes place when a foreign company sells its products to another country at very low prices. He further pointed out that when a foreign company sells its goods at a lower price compared to similar goods in the local market, the latter views it as a competitor and a threat to business.

The most affected products by the Chinese imports are footwear, clothing, electronic goods, and electrical goods, electronic and electrical equipment. Schloemann (2020) posits that obsolete and inefficient air conditioners that are environmentally harmful are being dumped in Africa. The dumping was necessitated by the increase in demand of the product since 2016. This came as a result of the increased urbanisation in Africa.

African industries are being threatened by the Chinese cheaper goods. Priest – Cardozo (2019) acknowledged that the Chinese operations in Africa put down legitimate competitors fuelling unfair competition. This has forced many local firms to shut down or down-scale their operations. Other challenges brought by the cheap Chinese products include, increase in unemployment in the manufacturing sector. Those employed by these Chinese companies are underpaid and work long hours. Caruana, Crane, and Gold (2020) called this modern slavery, which they described as a severe form of labour exploitation. While such exploitations benefits the Chinese companies, The Zimbabwean firms will be impacted negatively through

loss of profits, slow growth in output, loss of market share, loss of livelihoods. Domestic producers have and continue to lose their market share to the Chinese markets (Weng et al 2018).

Nhlabatsi (2014) posits that it is necessary to allow cheap imported goods where domestic markets are struggling. This stimulates competition that benefits consumers. In Zimbabwe however, what is more worrisome is the fact that these Chinese companies are even expanding to every other sector. They are moving into agriculture, mining, construction and tourism sectors. In the mining sector, the Chinese are known for land degradation, they do not heed the Environmental Management policies. The Zimbabwean general populace do not respect the Chinese firms for their negligence of the Environment. Weng et al (2018) cited environmental risks across sectors. These include biodiversity losses such as the extinction of certain tree species, long-term soil depletion, and soil and water pollution by toxic metals. These Chinese also neglect labour laws; awarding their workers below minimum wages whilst working longer than standard hours. Ojakorotu and Kamidza (2018) posit that as long as Zimbabwe has no other partners for development, China will continue to take advantage, to manipulate and exploit their relationship.

3.3.5.2 The prominence of Western sanctions and the collapse of Zimbabwean industry

Sanctions have been used by countries to achieve political agendas. The United States (US) and the European Union (EU) targeted sanctions against Zimbabwe have been in place for several years. These sanctions have however failed to achieve the EU and US political objectives due to several violations of the financial restrictions and travel bans (Grebe 2010).

The International Monetary Fund (IMF) introduced structural adjustment programmes (SAPs) in Zimbabwe in the 1990s. These were intended to bring macro-economic stability to the country and limit the balance of payment deficit, however, a sharp increase in unemployment and economic stagnation was registered instead (Grebe 2010).

There are various challenges in Zimbabwean which are associated with sanctions amongst them economic breakdown. Bilateral relations were compromised with Zimbabwe shifting towards the look east policy (Caruana, Crane, and Gold 2020 and Weng et al 2018). This disengagement from its former political masters saw the closure of many multi-national

companies including financial institutions. Many people lost employment and standards of living went down. The Chinese took advantage of all this to enrich themselves with no meaningful development in the country (Ojakorotu and Kamidza 2018).

Cancellation of bilateral agreements by the western block also affected Zimbabwe and its industries in terms of supply of goods and services, scholarships, donor community withdrawal. Some local companies used to export beef, fish, flowers, fruits and vegetables to the EU countries (Bennett 2019), while others were sourcing industrial equipment and machinery from those countries. The western block also put some embargoes on the Zimbabwean ivory, gold, diamond and other minerals. They labelled it 'blood diamond' and banned it from the international market after political killings of people in Marange diamond fields. This could have partly forced the Zimbabwean government to turn to the Chinese for international trade partners. They imposed the look east policy affecting many industries in the process (Ojakorotu and Kamidza 2018).

3.3.5.3 Toxic politics and their effect on entrepreneurship and businesses in Zimbabwe

Robert Mugabe ruled Zimbabwe for thirty-seven years since its independence from colonial rule in 1980 up-to 2017. According to Mukori (2018) he assumed several strategic positions in various government institutions becoming the sole centre of power during his tenure as president. The deterioration of the socio-economic situation in the country during the Mugabe regime further divided the ruling party and subsequently takeover of the government by his second in command. According to Hutchings (2017), Mnangagwa's coming to power put to an end Zimbabwe's political drama. Mistrust amongst the ruling party members grew Gagare (2008). These toxic politics affected all the country's sectors and sharpened the differences between political parties.

For more than a decade now, the country has been under sanctions from the EU and US with its key government officials under travel bans. This has derailed the country's development.

Zimbabwe experienced the worst hyperinflation in 2008 and poor governance became the order of the day. There were rampant land evasions targeting mainly the white owned farms and related infrastructures were destroyed. According to Mkodzongi, and Lawrence (2019), land redistribution generated polarised opinions between those in favour of and those against

the objective. The indigenisation policy also targeted foreign owned companies forcing them to give up 51% of their shareholding to the locals in all sectors (Nyoni 2018 and Marazanye 2016). This move saw the retrenchment of many workers from industry.

The flight of specialist skilled labour and senior academics to other countries affected higher education in Zimbabwe. It left a vacuum and seriously affected teaching, learning and research particularly universities. Waghid and Divala (2010) supported that teacher migration affects the quality of education. Universities were left with few skilled and specialist industrialists to teach on part time and mentor students on work related learning or newly qualified graduates. Boldureanu et al. (2020) posit that successful industrial role models positively impact practical university learning. Most experienced academics left the country for lack of professional satisfaction (Ndlovu 2018). Inflation levels and rate of payment to skilled labour have also contributed towards labour migration in Zimbabwe.

The health sector was also seriously affected with specialist doctors, engineers, nurses, physiotherapists, and psychotherapist, pharmacists, science teachers. Their movements were fuelled by the economic and social instability caused by the political destabilization Rokita-Poskart (2016). Mobility of highly skilled workers presents developing countries with shortage of specialist in the country. It is sad that human capital development in Zimbabwe benefits others, they just incur training costs and others benefit.

Production oriented companies like mines and other agro-based companies who relied on the western block for the spare parts of their equipment were also affected. There was no meaningful production in farms taken over by the natives. Marongwe (u.d.) revealed that they did not fully utilize the land. This reduced the country from being the bread basket of Africa to begging for food. Macheke (2019) sadly revealed that man made starvation is slowly making its way in Zimbabwe despite it being once the bread basket of Africa. Many farm workers lost their jobs and their living standards have seriously been reduced.

Zimbabwean politics affected business operations in the country particularly entrepreneurs. Companies including entrepreneurs normally 'donate' towards political events or activities in the country. Companies make such provisions to gain political favour. Such 'donations' can be in the form of transport provisions for those in that sector, food including beasts for those in the farming sector, groceries for those in the retail sector, free accommodation for those in the hospitality industry. All these compromise the financial position of those entrepreneurs.

3.3.6 Factors affecting entrepreneurship in Zimbabwe

Several factors affect entrepreneurship in Zimbabwe. These include lower national budgetary allocation for research and development as compared to the three (3) percent of budget by world standards. Ncube (2019) bragged of the country's skilled manpower as its greatest asset and becoming the envy of the region. Ironically though, the country's research budget is not usually clearly documented or if it is, the amount will not practically be availed to the expected users.

The absence of considerable national prizes for best researchers is another factor that affects entrepreneurship in Zimbabwe. According to RCZ (2019) The Zimbabwe International Research Symposium attracts researchers, industry, and commerce, policy makers among other users of research results to showcase their research results, network and create partnerships. RCZ (2019) further revealed that the awards categories are the residential awards, sectorial awards and academic awards. Academic awards include; university student research award, college student research award, young scientist (secondary school, young scientist (primary school). The monetary value to these awards is however very insignificant and only the best candidate is awarded. This diminishes research interest in potential researchers. It forces researchers to focus on other aspects that bring income to them. In the long run, this attitude affects new product development.

Lack of fully functional and well funded science and technology parks, innovation hubs for venture incubation also affect entrepreneurship. The Zimbabwean government has however started developing innovation hubs at its state universities (Murwira 2019 and Muzira and Bondai 2020). According to Ndofirepi (2020), the government commissioned the first five innovation hubs at its universities in 2019. What is left is to see the funding and efficacy in the running of these hubs.

The country of origin status influences consumers' perception of the quality of a product or service. It is place based branding representing a product's country of production or design. Chattalas, Kramer and Takada (2008) revealed that there are country specific stereotypes associated with products and services. In Africa, the Chinese products (electrical, electronic,

clothing, footwear) are associated with poor quality. Chen, Wright, Gao, Liu and Mather (2021) posits that the country of origin philosophy induces the regulatory environment. Import quotas, trade sanctions, trade agreements are regulated according to country of origin (FRD 2020). The negative country of origin effect and pariah status of Zimbabwean products and services seriously affect their placement and acceptability in foreign markets.

3.4 The influence of experiential learning on entrepreneurship intentions and creativity

Experiential learning is learning by doing, Sirelkhatim and Gangi (2015), and as indicated earlier, Moberg 2014 calls it teaching for and through entrepreneurship. It is the procedure of knowledge creation through experience conversion (Kolb 1984) cited in Nenzhelele 2014. Dhliwayo (2008:335) indicated that

“entrepreneurship curricula for such schools as the London Business school, Babson college, MIT Sloan school of management have adopted a ‘learn by doing’ approach that include creating and operating small businesses on campus, internships with start-ups emphasising the development of bankable business plans for possible funding”.

Clark and White (2010) cited in Nenzhelele 2014 share the same sentiment when they suggest that real entrepreneurship education has to include a component of experiential learning. Muzira and Bondai (2020) and Barron and Osher (2020) believe that the approach motivates and helps learners to gain experience. However, Mason Arshed (2013) argue that while experiential education is necessary and important the world over, little is known about the form it has to take.

Dhliwayo (2008) emphasized that to gain insight on how business operates; the University of Wales match students with Small to Medium Enterprises (SME). This is in line with Moore, Boyd and Dooley’s (2010) argument as cited by Nenzhelele (2014) that proper learning is through students’ experiences, and the assessment and reflection of their knowledge and skills. Learning by doing unlocks potential since it is action based as opposed to theory Jennings and Wargneir (2010) in Nenzhelele 2014). Jones and English 2004 reinforced that it is achieved through any action based teaching method.

According to Kolb (1984) quoted in Nenzhelele (2014), experiential learning has the following steps:

1. Concrete experience where the student must be willing and actively involved in the experience.
2. Reflective observation: The learner must be able to reflect on the experience
3. Abstract conceptualization, whereby the learner must have and use analytical skills to conceptualise the experience
4. Active experimentation, which means that a the learner must have problem solving and decision making skills to be able to use new ideas gained from experience

While there is no research evidence stating whether non-entrepreneurship modules influence students' entrepreneurship intentions, Nenzhelele (2014) eloquently revealed that experiential learning produces entrepreneurs in the same way it produces engineers, doctors and nurses. Similarly, Cuadrado et al. (2011) acknowledge that experiential learning promotes active learning.

For learning by doing to take place and for students to gain experiential knowledge, Williams-Middleton, Mueller, Blenker, Neergaard and Tunstall (2014) supports that student ought to engage entrepreneurial processes. Furthermore, experiential learning according to Neck and Greene (2011) cited by Mason and Arshed (2013) suggested that entrepreneurship education requires using, applying, acting and practice and not merely understanding, knowing and talking about it. On the contrary, Williams-Middleton et al. (2014) contended that it is not experience but the lessons derived from experience that trigger experiential learning.

There are several teaching methods that give students the opportunity to experience leaning (Mauchi et al. 2011; Moberg 2014; Valerio 2014). Of interest is whether the Zimbabwean entrepreneurship curriculum gives room to, or promotes experiential learning.

3.4.1 The experiential learning cycle

Effective learning can be measured when a learner progresses through a cycle, which Kolb (1984:1) explains as

“having concrete experience, before observation of, and reflection on that experience which leads to the formation of abstract concepts or analysis and generalizations and or conclusions which are then used to test hypothesis in future situations resulting in new experiences”.

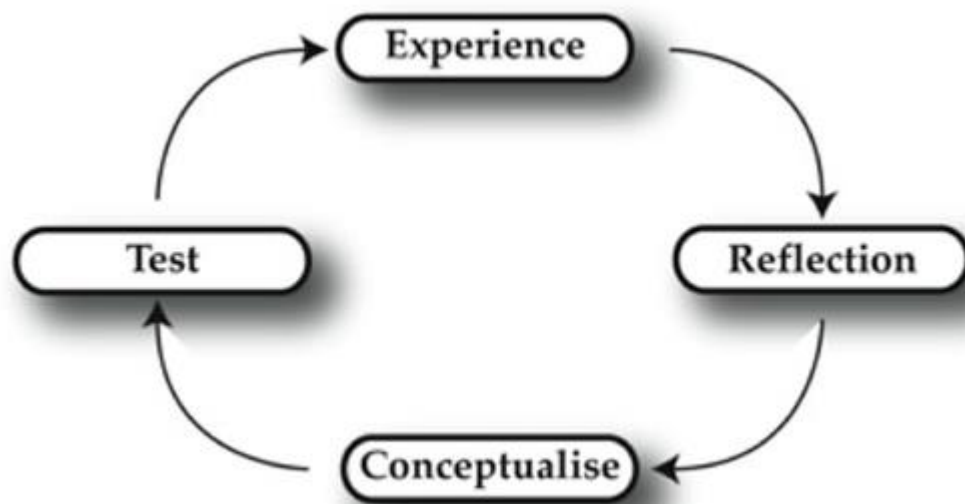


Figure 3.2: The experiential learning cycle

(Adopted from Kolb 1984)

The model denotes that learning is an essential process of mutually supportive stages feeding into each other. A learner can start and follow through the cycle from any phase. No single stage is however effective on its own, a learner has to go through all the four indicated stages if experiential learning is to take place.

This also means that no single teaching method can be used to address everything if effective entrepreneurship education and experiential learning is to take place; implying that different methods of teaching have to be adopted

3.4.2 Highlights of the Zimbabwean undergraduate entrepreneurship training program

The Bachelor of Science (honours) degree in Business Management and Entrepreneurship (BSBE) is a four year degree programme. It is aimed at educating entrepreneurs to be able to

plan, organize, lead and control an organization. The expected end product is that graduates should be able to begin and efficiently grow a venture and also that they should be able to introduce new products into the market.

3.4.2.1 Part of the training programme objectives

Students undertaking this degree programme are expected to be able to do the following among others:

Create ventures in inter-disciplinary teams.

- a. Apply the learnt concepts, theories and models in an efficient cost effective, sustainable and flexible manner to the business environment they operate in.
- b. Demonstrate understanding of the significance of planning, coordination, leading, and evaluating, as well as professional ethics and Corporate Social responsibility in business organizations.
- c. Select and develop new products for sale, pricing, promoting and distributing in a way that enables the organization to achieve customer needs and wants profitably.
- d. Justify the concept of sustainable entrepreneurship and how it can significantly contribute towards corporate financial productivity and quality.
- e. Demonstrate a solid academic foundation for further tertiary level studies in entrepreneurship and other areas of study related to it.

3.4.2.2 Career options

Graduates of the entrepreneurship training program have several career options, such as starting own businesses, becoming consultants and being employed as business managers.

3.4.2.3 Work placement

As mentioned by cut (2008), the key elements of work placement in entrepreneurship degree programme include the following:

- a. Work placement is to be done during the fifth and the sixth semester (third year) of the degree programme and students to be attached for a minimum of eight (8) and a maximum of twelve (12) months.
- b. The industrial attachment is to be governed by the relevant university ordinance, and, entrepreneurs being all-rounders are expected to rotate in all the attached organization's departments to have a feel of the entire organization.

- c. Both the academic and industrial supervisors are to assess the student.
- d. Students are expected to write a report and carry a mini research whilst on industrial attachment to be submitted to the university towards the end of the attachment period for marking by the academic supervisor.
- e. The organization where the student is attached is required to submit the supervisor's continuous assessment report to the university by the prescribed date.

3.4.3 Course synopses for the Bachelor of Science Honours in Business Management and Entrepreneurship adopted from the CUT regulations, 2015.

The following course synopses for the Bachelor of Science Honours in Business Management and Entrepreneurship were adapted from the CUT regulations in 2015:

3.4.3.1 Principles of Management

The purpose of the module is to help learners appreciate the evolution and role of a manager in achieving the objectives of an organization. Emphasis is on the procedure to, and significance of planning, coordinating, leading and controlling as the principal pillars of a manager. The course also helps students to understand the following: major schools of thought in management, globalization impact, corporate social responsibility, change as well as business ethics and their significance to modern business practice.

3.4.3.2 Business communication

The business communication course is intended for equipping students with effective business communication skills

3.4.3.3 Financial accounting for Business

Basic financial concepts and their application to business practice are introduced to the student in this module. This course also helps students to be able to interpret accounts records and financial statements, and to evaluate stock and cash flows. The following are also addressed in the module: source documents, books of original entry, the double entry principle, balance sheets, financial statements, non-trading organizations and accounting ratios.

3.4.3.4 Principles of economics

This course is intended to offer students a general understanding of how the general economy operates. It introduces students to the microeconomics issues such as economic models, fallacies, and the economic problem of scarcity, choice, and opportunity costs. Students are also expected to learn the behavior of economic agents especially the consumer and firm, the national output determination under closed and open economies, money and banking sector, inflation and unemployment.

3.4.3.5 Information technology and computer applications

This course is intended to provide students with the foundation of the computer and information technology and their application to the work place. It covers an introduction to the physical structure of a computer, software, windows operating systems and practical use of packages, word processing, spreadsheet, presentation, and internet and web development. In addition, aspects of computer as a basis for data processing, research, communication and decision making are addressed.

3.4.3.6 Principles of marketing

The module initiates learners to the foundations of marketing for both profit and non-profit making organizations and it is aimed at giving students an overall appreciation of basic marketing principles in a dynamic marketing environment. Students learn the various marketing concepts related to the dynamic needs of the consumer. The course covers the basic marketing process of selecting and developing products for sale, pricing, promoting and distributing in a way that enables a company to achieve customer needs and wants profitably.

3.4.3.7 Marketing Management

This course is built upon principles of marketing, and it introduces students to the marketing process and engages them in decision making and practical application of the key marketing concepts.

3.4.3.8 Organizational behaviour

This course is intended for equipping students with individual and the group dynamic behavior and to help them understand how this is translated to organizational behavior. Aspects covered in this course include the following: managing individual behavior,

organizational politics, basics of group behavior and dynamics, decision making, organizational culture as well as organizational development.

3.4.3.9 Introduction to Statistics

The course focuses on mathematical and statistical concepts, tools, skills and techniques in the analysis, interpretation and application of numerical information and testing of theoretical fundamentals. It encompasses basic concepts of marketing statistics, statistical results presentation, measures of central tendency and dispersion including probability concepts, confidence intervals, hypothesis testing, index numbers, time series analysis, regression and correlation analysis as well as financial calculations.

3.4.3.10 Business and its Environment

This course helps students to understand how business interacts with its environment. The course covers the following areas: forms and purposes of business, how businesses operate, business as a product of the environment and the changing nature of the business environment. Other areas covered in this course are theoretical analysis of business environment nationally, regionally and internationally; the need to create new businesses, practical application of SWOT and PEST in analyzing the business environment, including the status of businesses in Zimbabwe and the way forward.

3.4.3.11 Small Business Management

This module is intended to widen understanding of small businesses and how they operate. The primary objective is to equip students on how small businesses are initiated and developed. The course covers characteristics of small business enterprises, types of small businesses in Zimbabwe and the entrepreneurship theory. All aspects of initiation, growth, and development, trends in small business enterprise, status of SMEs in Zimbabwe, promotion of small businesses as well as policy issues governing small businesses in Zimbabwe are emphasized.

3.4.3.12 E-Business

The e-business course is intended to teach students the benefits and costs of integrating information technology into business models. The focus is on the general e-commerce

environment; social legal, ethical, ecological and technological aspects of e-commerce. It also addresses issues on internal records, marketing intelligence gathering, internet trading, web-analysis, marketing information systems, creating a web storefront, online trading finance options and international payment systems as well as the automation tools and systems aspects of international operations.

3.4.3.13 Commercial Law

This course is aimed at helping learners to grow knowledge and appreciation of the general legal framework within which business people operate and to develop an awareness of and an ability to understand common law. The course helps learners to appreciate the legal framework and understand the legal implications of their day-to-day transactions. The nature of law, law of contract, sale and purchase, lease, agency and insolvency are covered.

3.4.3.14 Principles of Entrepreneurship

The aim of this course is to develop entrepreneurial acumen in students. The course enables students to analyze and explain the impact of the PESTLEG factors on the entrepreneur and scan for the available global business options. It also helps them to be able to design a bankable business plan, identify business opportunities and generate business ideas and to understand the characteristics of a successful entrepreneur and the challenges they face, In addition, this course also helps students to be able to identify different ways of starting a business and identify different entrepreneurship supporters in Zimbabwe.

3.4.3.15 Financial Management

The course is aimed at identifying what organizational financial executives have to focus on to gratify the stakeholders' needs; and, to instill ideas, and corporate analytical skills in learners that will allow them to meet this goal. The course covers critical areas such as the organizational goals, the agency theory, time value concepts and valuation of bonds and shares, the dividend policy, introduction to the capital asset pricing model, risks and returns, working capital and financial statement analysis.

3.4.3.16 Corporate Governance and Business Ethics

The module seeks to provide learners with the essential principles and knowledge on how organizations are run, paying particular attention to best practices and ethical behaviors. Areas covered include principles of corporate governance, corruption, whistle blowing and industrial espionage, principles of business ethics in international context pricing, products, promotion, distribution ethics, environmental ethics and industrial relations ethics.

3.4.3.17 Human Resources Management

This module is aimed at giving learners an appreciation of the nature of human resource management. It enriches their human resource knowledge by providing a framework for conducting ‘human resource planning, recruitment, selection, performance and reward management as well as training and development’.

3.4.3.18 New Product Development

This course is intended for equipping learners with the necessary information and skills on the new product development and product reengineering processes. The course covers the types of new products that can be brought onto the market; ‘idea generation and screening, concept development and testing, market analysis and commercialization’, new products protection including brand management and product life cycle are also taught.

3.4.3.19 Applied Entrepreneurship

This interdisciplinary module is intended to introduce learners to the sustainable entrepreneurship concept. It aims to build entrepreneurial attitudes and behaviours that which leads to innovative solutions to organizational and community challenges. Module topics include the ‘history of entrepreneurship, the role of entrepreneurs in the 21st century global economy and the identification of entrepreneurial opportunities time management, stress management and entrepreneurial strategies’. ‘Innovative problem-solving and development of a business concept/model, examination of feasibility studies and the social/moral/ethical implications of entrepreneurship’ are also modules to be taught in this degree programme.

3.4.3.20 Change Management

The course enables students to appreciate change and manage it. The focus is on the various models and types of change, the significance of change and how they can facilitate it in organizations, and also understanding resistance to change and how to counter it.

3.4.3.21 Industrial Attachment Report

This course is report based, whereby students develop a report and research during their eight-to-twelve (8-12) months attachment period. The thrust of the report is to relate theory covered at university to practice in the industry. It enables students to identify and bridge the gap between the university and the industry. Students are also expected to identify a problem at their place of attachment and carry out research in relation to the identified problem and make recommendations to the affected stakeholders. CUT-based guidelines for the writing of the research and report are issued to the student.

3.4.3.22 Industrial Attachment Continuous Assessment

Approved industrial attachment of not less than 8 months and not more than 12 months is aimed at providing exposure to the students in their third year of study. The aim of the industrial attachment is to expose students to professional working life and give them adequate exposure to relate theory to real life situations in industry. The student is expected to rotate within the company in order to be exposed to all the functions of that organization. The student must be appraised by each departmental supervisor who assigns the student day to day duties. Each department in which a student is attached is required to give the student a percentage score before the student leaves for the next department. The scores from each departmental supervisor are aggregated at the end of the attachment period to give a final industrial supervisor's mark. During the attachment the student is expected to complete a logbook that will inform the academic supervisor during their assessment, and it has to be done once every semester.

3.4.3.23 Project Management

The module introduces learners to the prevailing principles used in the budding Project management specialized field. The focus is on the application of the sequential steps of the project management framework, the significance and purpose of project management and the application of the project process, namely: initiating, planning, implementation, evaluating and finalizing the project'. Other topics include; function of the project manager and project

team members, as well as the effective means through which a project manager can converse with the team; clients and sponsors. Other aspects which are covered in this module are as follows: management of the project span, time and work flow, budgets and cost, resources, quality, the project's personnel requirements', project communication (correspondence, reports and meetings), risk and changes as well as the project charter are covered in this module.

3.4.3.24 Venture Creation

This course aims at imparting knowledge on how to develop innovative views relevant for commercial utilization of venture start-ups. Environmental scanning to understand the market dynamics, planning and risk management with the intention to transform creative ideas into successful venture start-ups. The course covers such issues as; entrepreneurial mind set, innovation and idea creation, examining entrepreneurial opportunities, viability studies and market analysis. Furthermore, focus is on developing marketing plans, financial preparation, positioning and capacity planning, team building, legal issues and risk analysis for venture start-ups. The course also provides learners with comprehensive skills for the development of successful business plans for raising capital.

3.4.3.25 Innovation and Techno-preneurship

The module is intended to create understanding of innovation in organizations and its role in organizational sustainability and technology intensive business ventures. Areas that are covered in this module include the following: the role of change and innovation in development; creating a culture of innovation in organizations; technology as a toll for innovation as well as integrating technology and enterprise development in the new millennium. Other area covered in this module include fostering innovation and encouraging the creation of high-tech companies; business partnerships; opportunities for techno-preneurship in rural areas as well as the philosophy and models of techno-prenuership. Learners are expected to develop and execute a realistic business plan.

3.4.3.26 Production and Operation Management

This module introduces learners to the concepts of production and operations in an organisation. It enables students to be familiar with the production process and the operation strategies that any organisation can use. Students are expected to be able to plan and control

as a component of production and operation management. The following topics are covered in this module: production design, service production, productivity, layout facilities, location and design of the plant, inventory management and quality management as well as productivity calculations for wise decision making in the industry.

3.4.3.27 National Industrialization strategy

This module introduces learners to the economics of industrialization and how entrepreneurs can take advantage of the government's industrialization programmes and policies. It covers economic principles governing the success of business, indigenization, industrialization theories, industrialization strategies, the historic perspectives of industry in Zimbabwe, why the industry fails and how to uplift its performance.

3.4.3.28 Strategic management

The course helps students to think strategically about a firm's current position, its long term direction, resources and competitive capabilities. It also address such aspects as the vision, mission, goals, stakeholder analysis, market analysis as well as competitor analysis

3.4.3.29 Research project in business management

During the final two semesters, students are required to do a study of a minimum of 12000 words on an approved entrepreneurship related topic, aimed at giving them the opportunity to solve practical entrepreneurial problems in real life.

All of the modules indicated above may be relevant for entrepreneurship education. However, with the exception of the new product development module, all the other modules are theoretically taught. In the former, students are given a problem to solve; they then develop a prototype and present its functions and mitigatory impact before a panel of judges and the university community at some stage. Interestingly though, most of these prototypes have not yet gone through the full process of patenting and commercialization.

3.5 The influence of entrepreneurship education on venture creation and creativity

Various entrepreneurship interventions are being done in different countries throughout the world to try to boost innovation and creativity amongst their citizens at different levels. These interventions are believed to boost self-employment and employment creation by those who would have graduated from such training. However, as shown in the sections that follow, different schools of thought regarding the influence of entrepreneurship education on venture start-ups exist.

3.5.1 Positive impact

Some authorities view entrepreneurship education as having a positive impact on creativity and venture creation across the globe (Nabi and Linan 2011; Hussain 2015; Arensburg 2015; Efe 2014; Undiyaundeye and Otu (2015). Small to medium business skills can be acquired by promoting entrepreneurship education (Ilyas et al. 2015). As mentioned by Efe (2014), many nations have adopted entrepreneurship education as a means of boosting self-reliance through business start-ups, national development and poverty eradication programmes among others. Both Nabi and Linan (2011) and Ilyas et al. (2015) rightly argued that entrepreneurship education help learners acquire the essential skills, awareness and motivation which are at central to lucrative venture creation.

Entrepreneurship education according to Hussain (2015:45)

“encourages students to innovate and start new businesses, resulting in the creation and supply of new firms by students. If such initiatives are done at tertiary level, it will help to increase the supply of potential entrepreneurs by making more students conscious of entrepreneurship as a career option”.

Sharing the same sentiments, Rengiah (2013) acknowledges that entrepreneurship education in tertiary institutions enhances creativity and innovation which, over and above that, Arensburg (2015) pointed out that it changes the spirit amongst students. As also perceived by Hussain (2015:45), the module-based entrepreneurship education is correlated to entrepreneurial intentions because it “helps students to learn and identify new business opportunities which enhance innovation and technology”.

Entrepreneurship education is viewed by Fatoki (2014) as a panacea to the high rate of unemployment of graduates in South Africa since it is hoped that graduates become job creators. Undiyaundeye and Otu (2015) believes entrepreneurship education helps to create

employment, enterprising skills and to boost students' attitude towards becoming entrepreneurs. Frimpong (2014), Karimi et al. (2016) acknowledged that a positive influence of entrepreneurship education on learners' entrepreneurship intention exists. To further unpack that claim, Frimpong (2014:64) argued that, "partnership venture intentions increase with years of experience in running a venture". He also argued that

"early intention towards a partnership venture has a positive association with longer periods of running a venture, and called for training institutions to structure and or review their entrepreneurial programmes to ensure that students get exposure to running partnership ventures while undertaking training so as to increase students' intention towards venture creation in their entrepreneurship undertakings".

Frimpong (2014) further called for tertiary institutions to organize their entrepreneurship curriculum in a way that focuses on venture creation. In line with Frimpong's (2014) view, Fatoki (2014) called for the introduction and strengthening of entrepreneurship education in training institutions, arguing that the development of successful ventures is inevitable when students are introduced to entrepreneurship from an early age.

3.5.2 Negative impact

Whilst entrepreneurship education is a contemporary and significant educational aspect linked to employment creation and creativity (Undiyaundeye and Otu 2015; Fatoki 2014), some researchers believe that it has no impact on venture creation and innovation (Arensburg 2015; Fenton 2013; Njeje (2015). Fenton (2013) argued that the view that entrepreneurship education boosts the number of graduate entrepreneurs is unrealistic given the fact that graduate entrepreneurs' route to self-employment is not linear. According to Njeje (2015), entrepreneurship education had no positive impact and or influence on entrepreneurial intention as many students skipped entrepreneurship classes due to the lack of motivational sessions to promote their engagement. Arensburg (2015) supports this view when he asserts that there is minimal evidence supporting the claims that entrepreneurship education can result in an increased rate of employment and economic growth.

Entrepreneurship education may not be the only aspect that promotes innovation, venture creation and intention. In relation to this point of view, Nabi and Linan (2011) acknowledged

that a complex relationship between entrepreneurial intention and entrepreneurship education exist since a lot more factors including family support, nationality, age, student commitment may influence business start-ups and students' intentions. The availability of funds for venture start-ups, the business environment, social factors as well as prior experience of running a business also influence venture start-ups (Frimpong 2014). In the same view, Njeje (2015:14) argued that longer programs in entrepreneurship education may deter student from taking entrepreneurship as a career path;

“the longer a training programme takes the more time a participant need to reflect and develop his/her attitudes and intentions toward a target behaviour. In a way, the more students become involved in entrepreneurial tasks the more they realize that it is not their career destined path”.

On the contrary, Frimpong (2014:64) suggests that the passion for running a

“venture develops with time and exposure to its running. He argued that there is a positive correlation between partnership venture intention and longer periods of running a venture. To increase student's intention towards venture creation an entrepreneurial programme revisit by training institutions that ensures that students experience these partnership ventures during their training was necessary”.

3.5.3 Mixed views

There are mixed views concerning the influence of entrepreneurship education on venture creation (Frimpong 2014; Fenton 2013; Nabi and Linan 2011; Fatoki 2014; Garwe 2014). Fenton (2013) regards initiatives done by Higher Education institutions to support entrepreneurship education as positive, while on the other hand he believes that entrepreneurship education does not fully prepare students for self- empowerment. Sharing the same sentiments, Li (2014) posits that entrepreneurial modules do not adequately put emphasis on the development of innovative capabilities. He further pointed out that it “remains not so clear how to effectively kindle the creativity relevant to entrepreneurial contexts”. Although Arensburg (2015) acknowledges that entrepreneurship education helps to boost innovation and to change the spirit amongst students, he also believes that there is little proof to support the claims that entrepreneurship education can result in the increased rate of employment and economic growth. Entrepreneurship education, according to Nabi and Linan (2011), can develop the entrepreneurial intent and facilitate business start-ups, though

little is however known about how that happens. They believe that entrepreneurial inspiration and not entrepreneurship education programme benefits, relates positively to business start-ups.

According to Zainuddin and Rejab (2010), cited by Ooi and Nasiru (2015), entrepreneurship education helps to increase entrepreneurial self efficiency and boosts the intention to be self employed. Kuttim et al. (2013) argued that although not entirely conclusive, entrepreneurship education has proved to contribute to the development of students' entrepreneurial intentions. The authors further disclosed that while specialised modules such as family business management, social entrepreneurship, technology entrepreneurship, innovation and idea generation, coaching, and networking were commonly on offer in developed countries; general entrepreneurship, financial management in entrepreneurship, entrepreneurial marketing and business planning are mainly offered in developing countries. The major difference is that some countries are innovation driven whilst others are efficiency driven hence the differences in what they offer and produce.

The purposes of entrepreneurship education according to Undiyaundeye and Otu (2015) include the following:

- To provide students with enough training for them to become innovative in identifying business opportunities.
- To allow students to be self reliant in their own style.
- For job creation for the citizens.
- To sharpen student's skills for them to establish small to medium businesses.
- To instil a perseverance spirit in students in whatever business venture they embark on.

3.5.4 Factors influencing students' attitudes towards venture creation

Figure 3.3 clearly shows that there are several aspects that influence students' attitudes towards business start-ups. These include; module content and delivery, the learning environment, student's age, student's level of motivation, student's ability to take and or contain risk as well as entrepreneurial ability among others.

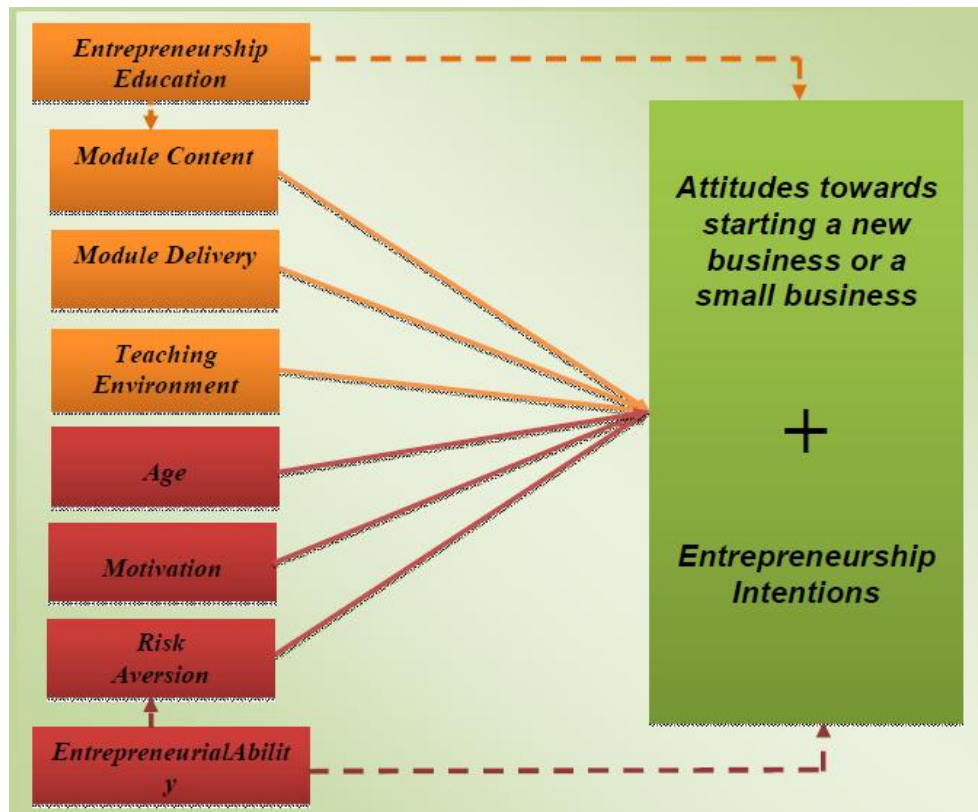


Figure 3.3 Factors influencing students' attitudes towards venture creation

(Adopted from El Gohary et al. 2016)

Frimpong (2014:64) believes that

“the intention to set up a business and become self-employed depends on the individual’s perceptions of desirability (do I want to do it?) and feasibility (do I have the resources to do it?) in relation to starting a business”.

He further alleged that

“life changes influence a change in entrepreneurial intention and behaviour. This can either take place in a positive form such as financial support or in a negative form such as loss of a job”.

Social factors include family support, even if one comes from a background where they do not have a small business of their own, encouragement from the family alone can influence a student to start their own business. Closer to the family are friends. Again, friends can play the role model part in influencing students to become entrepreneurs. Words of encouragement from family and friends can as well motivate and give confidence to a student to start own business. Hussain (2015) posits that a positive relationship exists between entrepreneurship career intention and social desirability.

If entrepreneurship education institutions teach for, about and through entrepreneurship, then a positive influence of entrepreneurship education on venture creation and creativity is inevitable. Various studies (Rengiah 2013; Undiyaundeye and Otu 2015; Rasli et al 2013; Siegel and Wright 2015) indicate that graduates' intent to venture start-ups and creativity is determined by a number of things which the entrepreneurship education approach is all about.

Empirical evidence shows that most researchers studied entrepreneurship education at different levels of learning; namely: informal entrepreneurship education (Belwal et al 2016) primary and secondary schools (Msaraki 2014; Nani 2014; Valerio et al. 2014, Rosendahl-Huber et al. 2012), teacher training centres and other colleges (Karimi et al. 2016; Msaraki 2014; Nani and Mpofu 2015) as well as universities (Undiyaundeye and Otu 2015; Muller and Kuffman 2016; Karimi et al. 2016; Efe 2014). The Eurydice report (2016) suggests that entrepreneurship can be taught across the board; informally, in schools (primary and secondary), as well as tertiary institutions.

Dabale and Masese (2014) conducted “an analysis of the influence of entrepreneurship education on beliefs, attitudes and intentions of Africa University alumni” who graduated in the faculty of management having taken small business management and entrepreneurship as optional modules in their final year. In Zimbabwe, no known study has focused on the graduates who studied entrepreneurship as a discipline let alone in a turbulent situation. The lack of studies conducted to explore perceptions of the graduates with reference to the usefulness of the entrepreneurship curriculum and training had left a big gap which needed to be filled.

3.6 Chapter summary

This chapter outlined the scope of entrepreneurship education in Zimbabwe, Africa and beyond; the common training methods used in entrepreneurial education; the influence of experiential learning on entrepreneurial intentions and creativity as well as the influence of entrepreneurship education on venture creation and creativity. The aim was to unfold the truth behind the efficacy of entrepreneurship education in a turbulent economy with special reference to the perceptions of entrepreneurship graduates in Zimbabwe.

CHAPER FOUR

THEORETICAL AND CONCEPTUAL VIEWS ON ENTREPRENEURSHIP EDUCATION IN A VOLATILE ECONOMY

4.1 Introduction

Cases and theories pertinent to the efficiency of entrepreneurship education in a turbulent economy are discussed in this chapter. The theoretical framework underpinning this study is also discussed this chapter. The focus is on the dynamic capabilities, resource based and experiential learning theories, which have been scrutinised to establish their contributions to the topic at hand before selecting the one(s) underpinning this study. Empirical evidence addressing the thematic areas in this study is also explored. Various authorities who made their contribution towards the body of knowledge in topics that are related to the topic at hand were consulted for the purpose of having a clear understanding of the subject under study. The former was also regarded as necessary for helping the researcher to gain insights from previous research findings, and to establish the basis for this research.

4.2 Contributions pertinent to this study

The articles and or case studies from different countries were explored in this section to obtain insights for addressing this study.

4.2.1 Students' perception of the effectiveness of entrepreneurship education at a South African university

Fatoki and Oni (2014) studied “students’ perception of the effectiveness of entrepreneurship education at a South African university”. They established that entrepreneurship education is not always effective, arguing that it is effective in certain aspects yet ineffective in others. Their study also reveal that entrepreneurship education provide learners with relevant skills necessary to become entrepreneurial and assist them to take up entrepreneurship as a profession. They, however, pointed out that entrepreneurship education is not instrumental in assisting students to access finance and linking them to innovative business players.

Moreover, Fatoki and Oni (2014) recommended that entrepreneurship lecture delivery should be done by practicing entrepreneurs and business people. Student mentorship should also be done by the same people; collaborations between universities and business; engaging students in work related learning to boost their business experience; encourages universities to adopt innovative ways of assessing entrepreneurship students. They also recommended that each university ought to have an entrepreneurship incubation centre. They even suggested the involvement by government agencies that support entrepreneurship and banks in the teaching of entrepreneurship particularly business plan development.

Although South Africa is a developing African country bordering Zimbabwe, its state of economy is totally different from that of Zimbabwe. Findings from this study may not be applicable to the entire country of Zimbabwe. In Zimbabwe, work related learning is compulsory to all students pursuing entrepreneurship as a discipline and other programmes as well. Fatoki and Oni (2014) were not explicit about the innovative assessment methods they suggested be used.

The teaching of business plan writing and related entrepreneurship skills by banks and government agencies may be a pointer to a missing link in this South African university entrepreneurship curriculum. Business plan has to be one of the key entrepreneurship components to be taught to students at universities. The study is not clear on whether students under study were taking entrepreneurship as a module or discipline. It also remains unclear and a challenge as to how students were to measure the effectiveness of a programme they were still to complete, and or, before facing the industry.

4.2.2 Impact of entrepreneurship on economic growth.

Martin, Carree and Thurik (2010) conducted a study on “the impact of entrepreneurship on economic growth”. Their key findings were that there is limited empirical evidence that was created to link measures of entrepreneurial activity for regions and their economic performance. Martin et al. (2010) pointed out that the above view is held across western economies. This study is silent about the stability of the economic and political environment necessitating further research in a turbulent environment.

4.2.3 Entrepreneurship as a strategy for boosting human capital development and employability in Nigeria

Sofoluwe, Shokunbi, Raimi, and Ajewole (2013) made their contribution on entrepreneurship “as a strategy for boosting human capital development and employability in Nigeria” with the intention to examine the possibility of revising entrepreneurship education to sharpen skills and increase employment. Key findings were that entrepreneurship education facilitates economic development among other things. The authors recommended that government should support the initiative to instil the entrepreneurship culture in graduates across the tertiary institutions in Nigeria. They also encouraged curriculum enrichment through various methods of experiential learning as well as making sure that lecturers instil entrepreneurship traits in the students.

Whilst Nigeria is a developing country, the study is silent about its economic situation. There is still a gap on the effectiveness of entrepreneurship education in a turbulent economy from an entrepreneurship graduate’s viewpoint. Although the study was learner /graduate centred, recommendations were divorced from the learners/graduate and focused on other stakeholders. It is also confusing to note that the researchers sought to establish the level of employability of an entrepreneurship graduate when the graduate is meant to create and not seek employment. The need to sharpen skills as the authors recommended is a clear gap, which in the current study the researcher intended to close through student collaborations from different areas of specialisation.

Also, the study by Sofoluwe, Shokunbi, Raimi, and Ajewole (2013) was quite broad since it refers to tertiary institutions in Nigeria. In Zimbabwe, different training institutions, for instance universities and polytechnics have different training approaches and entry qualifications although they both seek to mould entrepreneurs.

4.2.4 The role of entrepreneurship education on economic growth

Uhunmwangho and Osayomanbor (2014) studied the “role of entrepreneurship education on economic growth”. They recommended that entrepreneurship be taught across all the disciplines; and, entrepreneurially minded students be identified early and motivated to follow their dreams. Entrepreneurship education according to Uhunmwangho and Osayomanbor (2014) should be taught from as early as kindergarten to tertiary level.

The nature of entrepreneurship in Nigeria is different from what it is in Zimbabwe. Small to Medium Enterprise (SMEs) in Nigeria seem to grow into bigger businesses but in Zimbabwe, most SMEs remain Small to Medium. Whilst it is prudent to teach entrepreneurship as early as primary school, students will be too young and immature to choose a career option. Career options usually change with time / or maturity. Teaching and learning generic subjects up to high school before one can seriously specialise in a given area is necessary. Having a good foundation of education is important so that even if one chooses to be an informal entrepreneur, one does it with a reasonable educational background. In Zimbabwe, people who acquire entrepreneurial skills at an early age usually drop out of school to pursue their dreams with limited knowledge to run businesses.

4.2.5 Entrepreneurship education programme in Kenya

Ongwae (n.d), evaluated entrepreneurship education programme in Kenya. Focus was on examining the usefulness of entrepreneurship education programme in Kenya. Findings were that entrepreneurship has a significant role in instilling the entrepreneurship culture into students to enhance employment creation and reduce poverty. According to Ongwae (n.d:17), Kenya needs more entrepreneurship education graduates.

The sample size for this study is not known, making it difficult to judge and generalise results. Subjective secondary data were mainly used in this study. Ongwae (n.d) revealed that for this study, data was collected from public records, media and education through experience in the field. A study to establish the effectiveness of entrepreneurship education from the standpoint of graduates who specialised in entrepreneurship degree programs is necessary. For reliable findings, data should be collected directly from graduates who have experienced both the training as well as the impact of such training in the industry.

4.2.6 The influence of entrepreneurship education on beliefs, attitudes and intentions as a cross sectional study of Africa University graduates

Dabale and Masese (2014), sought to establish the “influence of entrepreneurship education on beliefs, attitudes and intentions as a cross sectional study of Africa University graduates”. They recommended that entrepreneurship should be a common module for every student pursuing any programme at Africa University (AU) in Zimbabwe. Interestingly, some

researchers limit entrepreneurship to a specific module yet in reality, it is a broad area of study. The study by Dabale and Masese (2014) was therefore narrow in scope since it was limited to students who took only a single entrepreneurship module. In addition, the sample size of only 60 graduates was too small for the researchers to capture the views of Zimbabwean universities' graduates and generalise results. The researchers also sought to establish the "influence of entrepreneurship education on beliefs, attitudes and intentions" among AU graduates in Zimbabwe. This leaves the entrepreneurship graduates' perceptions on the relevance of entrepreneurship education in a turbulent environment unattended.

AU is a private, church run university that obtains its funding not only from Zimbabwe, but also from donors across the world. Therefore, as much as we may talk about the turbulence in the Zimbabwean environment, the latter may not directly affect training at AU in the same way it might affect training at government run universities. This therefore necessitates further studies in the context of a government run universities.

4.2.7 Entrepreneurship education lessons from Zimbabwean tertiary institutions

Mauchi, Karambakuwa, Gopo, Kosmos, Mangwende and Gombarume (2011) studied the entrepreneurship education lessons using a case study of Zimbabwe tertiary education. The aim was to establish the scope of the spread of entrepreneurship education in Zimbabwean tertiary institutions. The study established that lecturing was the most commonly used teaching method in entrepreneurship, whilst examinations were the main assessment tool in the Zimbabwean education system. Entrepreneurship was mainly practiced by business students. It was also established that entrepreneurship lecturers lacked practical exposure to run their own businesses, and that entrepreneurship education could not be effectively taught because of the lack of resources and an entrepreneurship budget. Mauchi et al. (2011) recommended the use of more experiential learning teaching methods and encouraged entrepreneurship lecturers to practise entrepreneurship. The authors also recommended tertiary institutions management should create networks and interaction platforms between entrepreneurship students and practising entrepreneurs for inspiration.

The tertiary education system in Zimbabwe ranges from universities, polytechnics, teachers training colleges, health training colleges, agricultural colleges, vocational Training Centres (VTCs), among others. This renders the study by Mauchi et al. (2011) too broad. The study is

also limited to the levels at which entrepreneurship education has spread in Zimbabwean tertiary institutions, but the sample was derived from one area of the whole sector. The study was carried out 6 years ago and a lot of things, particularly the volatility level of the economy have drastically changed prompting the need to further investigate the claims made by the authors indicated in this section.

The period 2013 to 2021 has seen a disturbing increase in unemployment in Zimbabwe. This and other reasons have resulted in civil unrests with residents from all angles (professionals, unemployed graduates, informal sector traders, pensioners, human rights activists among others demanding the restoration of the economy. A new body of knowledge to establish the effectiveness of entrepreneurship education from the graduates' perspective given the prevailing turbulent environment in the country is necessary.

Like the Nigerian Sofoluwe et al. (2013), all the recommendations are silent about the entrepreneurship student contribution. Blame is shifted towards the teaching methods, lecturers' skills, tertiary institutions contributions as well as the limited government support from the government. Getting feedback from the graduates who underwent the university training and now experiencing the impact of their training in different industries is therefore important.

Whilst it is prudent to recommend that entrepreneurship lecturers walk the talk by practising entrepreneurship, the following founders and successful entrepreneurs dropped out of college to pursue their dreams without any formal entrepreneurship education: Michael Dell, Dell founder, left college to pursue his project when he was 19 years old; Apple founder Steve Jobs also dropped out at 19; Julian Assange, Wikileaks founder, dropped out at 19 years old; Bill Gates, Microsoft founder, dropped out at 20 years old and Evan Williams, Twitter co-founder, dropped out at 20 years old. Also, Mark Zuckerberg, Facebook founder, dropped out at 20 years old; Larry Ellison, Oracle founder, dropped out at 20 years old; Jan Koum, WhatsApp founder, dropped out at 21 years old; Travis Kalanick, Uber founder, dropped out at 21 years old and John Mackey, Whole Foods founder, dropped out at 22 years old (Fundersandfounders 2016). This implies that the saying that practice makes one a perfect trainer or implementer is not always the case; but, sometimes, it is all about one's passion, the availability of resources as well as dream focus.

Such conclusions as “there is the lack of events to promote entrepreneurship” are already outdated since there are currently many platforms such as the Research and Intellectual Expo-Science as well as the Engineering and Technology (RIE-SET) platform. The latter was established to display scholarly work by local Zimbabweans as well as those abroad. Zimbabweans did this to capture talent and intellectual work for the development of the nation. The women’s desk caters for female students with registered companies and assists them to showcase their products for free.

At the time when this study was in progress, no research had been carried out to establish graduates’ perceptions with regard to the effectiveness of entrepreneurship education in a turbulent environment in Zimbabwe. This study was necessary for closing the indicated gap.

Research done in other countries does not apply to the Zimbabwean context. This is mainly because the Zimbabwean economy is highly volatile, it is turbulent. The dynamics in the Zimbabwean context have rendered studies done in other countries invalid for Zimbabwe. Findings from such studies may not fit in the Zimbabwean environment, thus creating both theoretical and contextual gaps. The whole situation in Zimbabwe calls for an economic and ideology re-invention partly through formal entrepreneurship education.

4.3 Theoretical framework

In the sections that follow, the resource based, dynamic capabilities, and experiential learning theories are scrutinised to establish their contributions to the topic at hand before selecting the one(s) underpinning this study.

4.3.1 Resource based theory

The theory suggests that a firm’s specific assets and capabilities of its specific mechanisms determine its performance (Barney 1986; Peteraf 1993; Wernerfelt 1984). A firm’s assets are its source of competitive advantage. They have a competitive advantage when they have relative advantage over another firm and when the said advantage is not being implemented by any competitor. At the same time, a firm is said to have sustained competitive advantage when the relative advantage it has over another firm is not being implemented by any competitor and competitors are not able to duplicate the benefits of this strategy. Wernerfelt

(1934) describes the Resource Based Theory as a collection of resources semi-permanently tied to a firm. Hawarden (2010) called it the resource dependency theory, which in his view, seeks to link the organization to other resources. He believes that an organization's ability to connect to external but significant resources makes it successful. On the other hand, Grant (2001) believes that resources and capabilities are sources of a firm's direction. Its resources determine its industrial and geographical boundaries. The theory also seeks to establish the

“relationship between competition, resources and profitability including the analysis of competitive imitation, the appropriateness of returns to innovations, the role of imperfect information in creating profitability, differences between competing firms and the means by which the process of resource accumulation can sustain competitive advantage” (Grant 2001:114).

Grant (2001) argues that a firm has to be defined according to what it is capable of doing and the needs it has to satisfy. The attractiveness of a given industry in its location and its establishment of competitive advantage over rivals determines a firm's profitability.

Bridoux (2004) believes that firms compete on the basis of their resources and capabilities. When all external environmental factors are held constant, this resource based) theory focuses on the firm's internal and external conditions which it contends with for its competitive edge.

However, different firms perform differently with a given set of resources and capabilities. The differences in competitiveness of firms in the same sector emanate from their levels of efficiency. On their own, resources are not valuable unless a firm performs activities that create competitive advantage in specific markets. The latter is what seems to be lacking in Zimbabwe.

Furthermore, changes in technology, consumer tastes, and competitor behaviours eliminate or enhance the competitive value of resources. Foss (1998) perceives firms as generating their competitive advantage from strategy and not individual resources.

Barney's (1991) and Bridoux's (2004:3) contributions to the research based view are almost similar. They both believe that a firm's possessions must be "rare, valuable, imperfectly imitable and substitutable to be a source of sustainable competitive advantage".

The resource-based theory, according to Locket, Thompson and Morgenstern (2009) "is about the nature of firms" and not their reason of existence. A firm's endowments determine its performance, and different firms have different endowments. Citing Barney (1991), Locket et al. (2009) believes that a firm's competitiveness is determined by its resources.

On resources and performance, Locket et al. (2009) suggest that valuable resources work as tools to exploit opportunities and help a firm to counter threats. Rare resources are scarce and are not fairly distributed across firms in the same industry. Inimitability is the complexity in the replication of resources of a given firm by other players and or competitors. Non-substitutability is just a fact that one resource cannot be replaced by another.

To address the issues of adaptability and pro-activeness, and since resources and opportunities change, management's responsibilities in the resource based theory include repositioning of firms. Management's decisions also change the nature of competition in markets. Resource functionality in the resource based theory entails that a firm's growth can be limited by the size of its productive opportunity set.

Locket et al. (2009) borrowed most of their arguments from Penrose (1959) who argued that resources on their own cannot be regarded as valuable, and also that a combination of resources is central to capabilities. In support of these views, Ambrosini and Bowman (2009) posit that dynamic capabilities must, therefore, be viewed as a complement to the resource based view. They further argued that apart from being influenced by resource usage, the managers' ability to combine resources to produce productive services and or capabilities influences the opportunity set.

The resource based theory, however, ignores the external factors of a firm such as the demand side of the market, and puts emphasis on the internal side of firms. It is possible for a firm to fail to draw customers to their products and or services despite having valuable, rare, difficult to imitate and un-substitutable resources. The theory also limits managers in terms of decision making since it focuses on a firm's resources.

4.3.2 Dynamic capabilities theory

A lot can be said about the dynamic capability theory. Teece, Pisano and Shuen (1997) regard it as the ability by a given firm to join together, build and re-arrange both external and internal capabilities to deal with changes in the environment. The indicated authors acknowledged that change is inevitable in a turbulent environment, and that it may result in uncertainty. Constant environmental scanning by firms may help them to survive in such environments. Environmental scanning helps firms to establish their position in terms of their internal capabilities and the possible opportunities from outside.

The theory seeks to establish the strategies adopted by firms in the increasingly changing environments particularly technological changes for wealth creation. It also endeavours to uncover the firms' sources of wealth in a turbulent environment. Most firms fail to kick-start and grow in such an environment. On the contrary, however, a turbulent environment may be the reason for start-up and growth for some firms.

Grant (2001) reinforced Teece et al. (1997)'s view regarding dynamic capabilities when they posit that it as an analysis of the sources and methods of wealth creation used by firms operating in high technological change settings. Teece et al. (1997) believe that such intangible assets, as management skills and technology among others, were central to a firm's success. They further revealed that the assets' position, processes and dynamic capability are what differentiate firms. For self re-positioning, a firm requires such aspects as resource allocation systems, governance structures and management systems. Though wordy, everything pointed out by Teece et al. (1997) simply imply management systems.

Furthermore, Teece et al. (1997) also believe that the current or existing range of capabilities and or strengths of a firm determine its future and long-term range of capabilities. In a way, a firm's future growth depends on its current position. A firm's capabilities need to be properly nurtured since they develop with time. As rightfully captured by Helfat and Peteraf (2003), the dynamic capabilities theory is a revision of-the-resource-based view on the competitive advantage and strategy in markets and it portrays organizational capabilities as being dynamic and flexible.

Pisano (2015) argued for the need to revisit the dynamic capabilities theory around fundamental strategic problem facing firms and how to choose capabilities that lead to competitive advantage. In his view, firms have challenges when it comes to choosing from amongst their capability bundles those that enhance productivity and growth.

Pisano (2015)'s major contributions were that; to gain competitive advantage, firms must nurture their assets position, processes and paths. Assets in this case include skills, knowledge and any other firm competences. He believes that a firm's current position in terms of capabilities determines its future position. Talking of processes, Pisano put forward that a firm's capacity depends on such aspects as its corporate governance policies, management systems and resource allocation processes. Dynamic capabilities, therefore, are a firm's ability to arrange or combine its asset position and the processes that underlie this capacity. It is interesting to note that most capabilities commit to paths since they develop over time.

Pisano (2015) acknowledges that the biggest challenge that confronts firms is their inability to commit to paths for capability creation leading to competitive advantage. More so, path selection by managers and the pre-existing asset positions and processes to organize also remain challenges to firm capability differences.

Whilst this theory sounds quite relevant especially in a turbulent economy, it captures more of the environmental scanning of firms that is necessary in both volatile and normal economies. However, this theory does not fully address the turbulent economy as it sounds. Depending on the business culture in a given economy, a volatile environment may itself be a causal effect of the dynamic capability of a firm. Most Zimbabwean firms capitalize on the volatile political and economic situation in the country and charge exorbitant prices of goods obtained through dubious means. What remains unknown is whether entrepreneurship graduates are able to respond and use their capabilities to survive in this economy. This study addresses this and other questions.

4.3.3 Experiential learning theory

Kolb (1984) believes that learning is not an event but an ongoing procedure through which knowledge creation is done through experience transformation. According to Mcleod (2017), four levels of learning form the learning process are as shown in Figure 4.4.

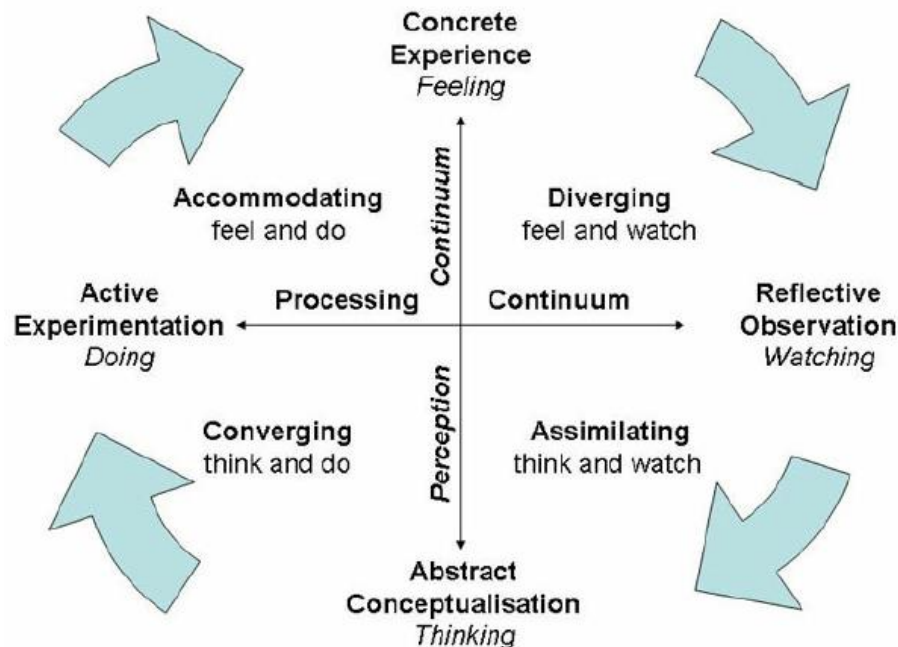


Figure 4.4 Kolb's experiential learning cycle

(Adopted from Mcleod 2017)

For effective entrepreneurship education to take place, students have to undergo Kolb's learning cycle as follows:

1. Concrete experience: this can emanate from a re-interpretation of an already existing experience or a new experience of an encounter.
2. Reflective observation: this is usually the reflection of the new experience with the intention to uncover any discrepancies between experience and understanding.
3. Abstract conceptualization: creation of new views or altering the already existing abstract concepts
4. Active experimentation: this is done by the student to establish the existing results.

Kolb highlights the following four categories of learners and leaning styles which he believe can be adopted for effecting leaning to take place: :

1. Assimilators who require sound logical for them to learn better.

2. Convergers, these learn and understand more when subjected to hand-on applications of concepts.
3. Accommodators understand concepts more when given practical experiences
4. Divergers enjoy collecting a wide range of information after observations. They believe in discovery learning.

Like Kolb (1984), Dewey (1997) also acknowledges that learning is a process. He further posits that the teacher's role is to facilitate and guide the process. In a way, the teacher has to assist the students to discover meaning of the subject under study on their own. He believes that effective learning takes place and can be reinforced by practically performing activities, experimenting and being innovative than using already made up information and findings.

Dewey (1997) suggest that learning must not be centred on producing specified skills, but on allowing students to discover or realise their full potential and measure their ability to solve societal challenges using the same skills. In a way, students must not be limited to what is known by their teacher but they should discover different things depending on their potential.

From the combination of Kolb's (1984) and Dewey's (1997) views, Nani (2014) defined entrepreneurship as the "process of conceptualising, organising, and launching through innovation nurturing a business opportunity into a potentially high growth venture". Entrepreneurs are known for creating value both for their own and the society's benefit. Experiential learning becomes a relevant teaching style for entrepreneurship for it affords students the opportunity to generate business ideas and incubate the ideas before developing them into business in a conducive environment. Nani (2014) contends that new entrepreneurs can benefit by learning from those who have gone through the same training. However, Nani (2014) was quick to accept that there is no agreed teaching method for entrepreneurship. Arasti et al. (2012), suggest that content, objectives and training institutions challenges determine the appropriate teaching method to adopt.

Experiential learning forms the basis for entrepreneurship training. The contributions made by Kolb (1984), Dewey (1997) and Nani (2014) in this theory are deeply rooted in experiential learning and, as such, they are regarded as components of the theories that underpin this study.

The resource-based theory is a relevant theory for a normal business environment. It is however the basis for the formulation of the dynamic capability theory which caters for a dynamic environment. Students seem to lack the dynamics of running firms in a turbulent economy. This study addresses the former, having first established the true relationship between entrepreneurship education and a turbulent environment.

4.4 Theoretical underpinnings

A combination of the dynamic capabilities and the experiential learning theories underpins this study.

4.4.1 Dynamic capabilities theory

This theory also captures the resource-based theory since it takes into consideration organizational capabilities. If one is to view organizational capabilities as being dynamic and flexible, then the dynamic capabilities theory will help entrepreneurs in fitting in the dynamic volatile environment, and help them to not just focus on their imitability and un-substitutability capabilities.

The dynamic capability theory is significant for putting emphasis on the need for entrepreneurs to choose capabilities that lead to competitive advantage. The theory encourages entrepreneurs to choose from amongst their capability bundles, those that enhance productivity and growth. This means that, even in turbulent times such bundles do exist. Entrepreneurs need to just scan for, identify and focus on those aspects of their businesses that give them a competitive advantage as well as more returns in whatever type of economy. The theory encourages entrepreneurs to combine resources which enhance growth of their ventures.

4.4.2 Experiential learning theory

This theory suggests that learning must not be centred on producing specified skills but on allowing students to discover or realise their full potential and measure their ability to solve societal challenges using the same skills. In a way, students must not be limited to what is known by their teachers but discover different things depending on their potential. If this approach is implemented in the teaching of an entrepreneur, then there will be diversity in

thinking and in the combination of the capability bundles. This is what seems to be lacking in such turbulent economies as the Zimbabwean one.

The experiential learning theory is an ideal theory to underpin this study since specific entrepreneurship education objectives and the challenges associated with a given training institutions are considered in a bid to determine the appropriate teaching method to adopt. It therefore means that there are no umbrella teaching methods relevant for entrepreneurship education but, challenges associated with a given training institution may determine the teaching approach to be adopted.

Entrepreneurs have to employ their resources to do what their competitors cannot. This can be facilitated by the adoption of the experiential learning approach. After experiencing learning, learners can, depending with their levels of innovation and creativity, generate new ideas, and, effectively use the available resources. If properly implemented, the principles of the experiential learning theory will enable entrepreneurs to thrive during turbulent times.

Experiential learning becomes the relevant teaching style for entrepreneurship education, for it helps learners to generate business decisions and to incubate the generated ideas before developing them into business. In this way, entrepreneurs would create value for themselves and society.

4.5 Conceptual framework

According to Li (2014), entrepreneurial education has “received increased criticism over the years, suggesting that entrepreneurship courses do not sufficiently emphasize the development of creative capabilities”. Li (2014) further explained that “although several scholars and educators emphasize the need for nurturing creativity in entrepreneurial education, how to efficiently stimulate the creativity pertinent to entrepreneurial contexts remains unclear”. This is a clear research gap that can only be filled by the dynamic capabilities theory. Experiential learning, Kolb’s learning cycle to be specific, is helpful for facilitating innovation in entrepreneurship education. A study aimed at establishing the effectiveness of universities’ entrepreneurship programs from the perspective of graduates themselves is in this case unavoidable. Figure 4.5 provides the conceptualised entrepreneurship education process in a turbulent economy.

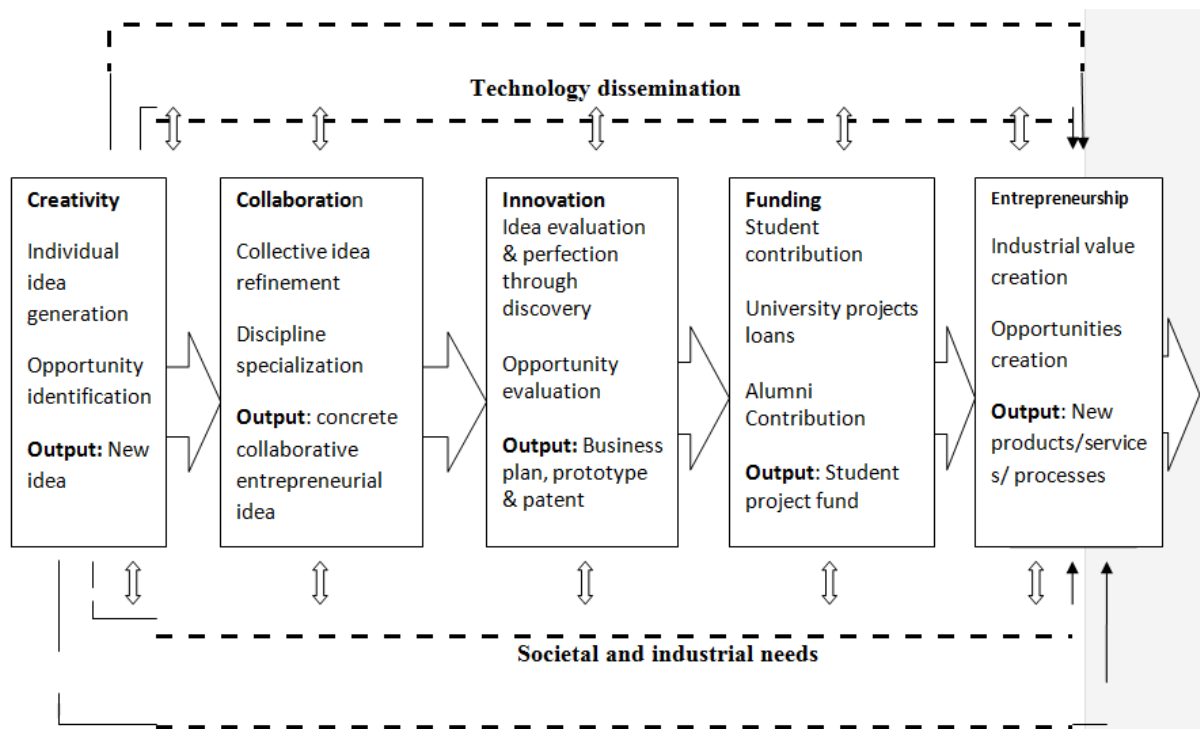


Figure 4.5: The Conceptualised entrepreneurship education process in a turbulent economy

Entrepreneurship education at a university has to be systematic, and, ought to promote innovation, experiential and discovery learning. In the model demonstrated by figure 4.5, students from different disciplines specialise in their different programs whilst working on identifying people with similar interests from other disciplines with the intention to collaborate and start their ventures. Whilst specializing in different programs, all students will have to take basic entrepreneurship modules like principles of entrepreneurship, venture creation, principles of management, communication skills, across the board. After agreeing on a project of interest, business students will evaluate the possible commercial viability of the said project Vi~na (2013). Project members will then register their venture with the incubation centre for mentorship and other transactional benefits. Business students will then generate a business plan in consultation with other members while the technical members such as engineering, art, hospitality and agriculture experts will work on the prototype. The incubation centre authorities will then assist students to register their venture. The university's directorate of innovations and technology transfer will also assist students to commercialize their prototype under the CUT banner. The implementation then follows.

Students will not be limited to operate in Chinhoyi Town or Masholand West Province but anywhere in the country or even beyond.

A Board of Directors runs the incubation centre and other employees who will receive their salaries from the nominal fees charged for some services. Their major role will to link incubates with industry and to continuously inform students of the latest technology, societal and industrial needs and expectations. The centre will offers free; mentorship, entrepreneurship education and seminars, networks, and guidance for prototype commercialization among other things.

For fees less than commercial rates, incubatees will also access the following services from the incubation centre: basic administration services, internet and telephone services, photocopying and printing services, basic laboratory and workshop services, office space, furniture and legal advice from voluntary lawyer academics. Students with promising projects will be allowed to borrow from their departmental projects among others. The centre will also link incubates with reputable entrepreneurs/industrialists for high-tech equipment hire. The centre to also run prototype competitions every semester with the intention to encourage innovation as well as to help the best incubates to raise capital.

The arrow at the end of Figure 4.5 depicts a process. Students may revisit any stage where necessary. Broken lines depict the interaction between individual project members and the outside world for new equipment and technologies, new societal demands and problems as well as for new research findings by academics for possible opportunities and diversifications. Students must start the implementation by their third year, which happens to be their industrial attachment year. During this period, they may be attached to reputable but related companies where entrepreneurship students will rotate in the various departments in their attached firms to have a feel of the entire firm. Technical students will be attached to their specific areas of specialization to sharpen their skills and to allow them to learn by doing. During the same year, students will be expected to concurrently run their ventures. By their fourth and final year, students may be in full charge of their ventures and they will be doing only two taught modules to allow them to concentrate on their ventures. Unannounced, constant visits by lecturers to incubate at their ventures, say once per fortnight to assess and record progress should be done.

Students will also be expected to fund the production of their prototypes. In a turbulent economy, if people are to be given everything for free, they usually divert funds and or resources meant for projects and put it to personal use, and they may not take the business seriously. Students have to experience risk taking by investing their money into their businesses and learn by discovery how to protect and grow their investments.

Upon gaining independence in 1980, the Zimbabwean government introduced free education for all, tertiary education grants, farming loans, mining loans, youths' projects loans, women projects among others. These loans were meant to be revolving funds, but the funds were never recovered; and people expect the government to meet their maintenance costs for their projects. This government dependence syndrome is not health in a volatile economy; it has crippled the citizens' mindset. According to the OECD (2012:43) one of the common drawbacks of entrepreneurship education in developing economies is the difficulty in putting in place "support structures for business start-ups, business centres, business incubators and enterprise" space. This may be because it is difficult to be accountable for government owned infrastructure and equipment.

Unlike the traditional recruitment, in this conceptualised model students learn each other and decide on the personalities they want to work with. Recruitment in a particular project will be guided by students' passion. The fact that students will be working together from idea generation to product launch implies that students' belongingness to the projects will increase; hence, the chances for the projects to die at their infancy stage will be reduced.

Moreover, as rightfully put across by Klein (2012); and Politis (2005), ownership is the key ingredient in entrepreneurship education. Both Klein (2012); and Politis (2005) believe that students ought to be initiators of their entrepreneurial projects, and that they have to contribute towards their capitalization as well as their day to day running.

4.6 Chapter summary

This chapter looked at entrepreneurship education in different African economies. Theories that informed the study were traced. These included the resource based, dynamic capabilities and experiential learning theories. The Conceptualised entrepreneurship education process in a turbulent economy was also captured in this chapter.

CHAPTER FIVE

RESEARCH METHODOLOGY

5.1 Introduction

The previous chapter focused on empirical evidence addressing thematic areas in the effectiveness of entrepreneurship education in a turbulent economy. This chapter clearly outlines the methodology through which this study was conducted. The research philosophy, design, strategies, sampling methods, data collection instruments, as well as the quality control issues are addressed in this chapter. The chapter sought to give a scrutiny, an analysis and justification of the factors that influenced the research design, approach, sampling strategy, and research instruments adopted in this study. Further elucidation was done to clarify, and or, justify the reliability and validity of the study and to establish whether the findings of this study could or could not be generalized. Ethical concerns as well as the general and overall limitations to the study were also addressed.

Methodology, according to Howell (2013), “is the research strategy that outlines the way one goes about undertaking a research project”. Garner (2012) shared the same view when he called it a theory of how a study is to be undertaken. Saunders, Lewis and Thornhill (2009), added that research methodology focuses on the way in which one collects data to answer research questions. Rajasekar, Philomation and Chinnathambi (2013:5) view research methodology as a logical way to problem solving. They further posit that, it is a process by which researchers “...describe, explain and predict a phenomenon”. According to Bonnell (2011), research methodology enables researchers to organize their efforts into a single cohesive and conceptual product. Leedy and Ormrod (2014) posit that methodology dictates the acquisition of data, arranges it into logical relationships, provide the means of refining raw data and determines the means through which the underlying meanings of the collected data will be made clear.

The researcher clarified the research philosophy, the research design, the sampling strategy and data collection tool used in this study. The extent to which findings can be generalised has also been made clear in this chapter. The manner in which the validity and reliability of findings was measured as well as steps that were taken to make sure that participants are not forced to participate or that their rights are not infringed has been clearly elucidated under the ethical considerations part to this chapter.

5.2 The importance of research methodology

The primary purpose for doing research methodology is to enable researchers to organize their efforts into a solid and conceptual view. Rajasekar et al. (2013:5) believed that methodology

“lays out the research work plan. Research methodology also makes researchers aware of the existence of various research methods which will assist them in choosing the most appropriate option for data collection. Makes researchers get acquainted with the dos and don'ts associated with specific approaches”.

This will guide researchers on the “practices they need to follow in order to properly implement the selected approach” (Bryman, Bell, Hirschsohn, Dos Santos, Du Toit Masenge, Van Aardt and Wagner 2011:XXXii).

For data to make sense to the reader, and for it to fill existing research gaps, it has to be logical, well organised and coordinated using appropriate methodologies and the rules pertaining to specific approaches. Figure 5.1 provides suggestions made by Saunders et al. (2012) with regard to research methodology.

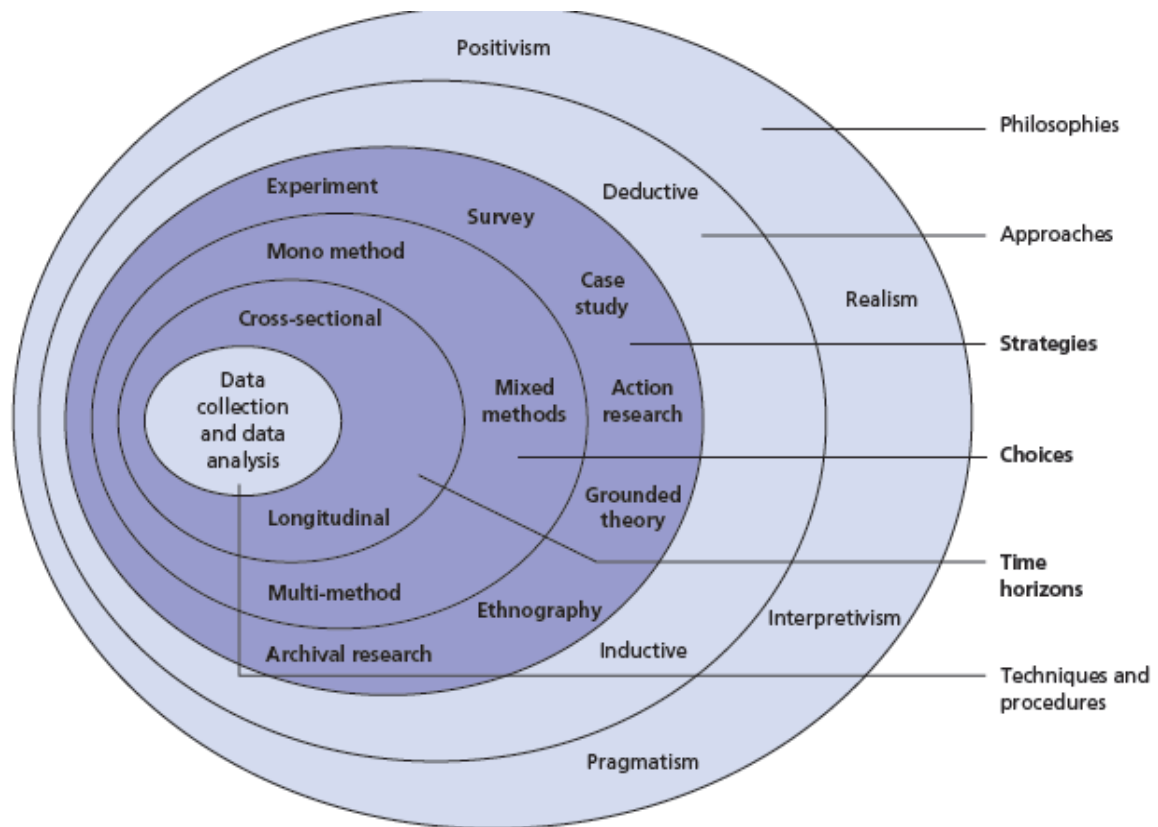


Figure 5.1: Research methodology

(Adopted from Saunders et al. 2012)

Several authorities were consulted in this study; among them are Chawla and Sondhi (2011), Howell (2013) as well as Saunders et al. (2012). These were used to select the best and appropriate research methodology as summarised in Table 5.1.

Table 5.1: Research Methodology in a snapshot

Research Philosophy	Positivism
Research design	Descriptive
Research approach	Quantitative
Research strategies	Survey
Sampling methods	Probability: Cluster
Data collection methods	Questionnaire
Quality control	Pilot study Cronbach Alpha Test

Different research methodologies are applicable in different scenarios. No single methodology is best applicable in every research situation, hence, the need for critical analysis of the available methodologies with the intention to select the best. Methodologies used in this study were clearly elucidated with the intention to establish entrepreneurship graduates' perceptions in the effectiveness of entrepreneurship education in a turbulent economy.

5.3 Research philosophy

Research design is pertains the research process, from the theoretical underpinning to the collection and analysis of the data. It is a broad plan for a research study outlining the “methods of data collection and analysis, as well as displaying how the research strategy addresses the specific objectives for the study” (Creswell 2014:17). A research design is a structure meant to establish answers to questions. It sets the ground for the accurate measurement of the correlation of the dependant and independent variables of a study. This means that, the design spells out how objectives of a study are to be achieved. This also suggests that a good design translates into valid results.

As viewed by Saunders et al. (2012) research philosophy is an approach used to address the research problem and is determined by the nature of a problem, how data was collected, analysed and interpreted. It is a shared belief or agreed principle on how data relating to a given phenomenon has to be gathered. Different philosophies have their own merits and demerits and can be applied situationally as follows:

5.3.1 Realism philosophy

Realism philosophy is a branch of epistemology associated with scientific studies. Realism assumes that what researchers view as reality is in fact the truth (Saunders et al. 2012; Harrison, Birks, Franklin and Mills 2017). Bryman (2012) shared the same sentiments when he pointed out “there is an external reality to which scientists direct their attention”. In a way, a truth is disconnected from our descriptions.

Empirical realism states that reality can be understood using appropriate methods (Saunders et al. 2012; Bryman 2012). This implies that there is a perfect correspondence between reality and the term used to describe it. The philosophy is however shallow. In critical realism, the

reality of the natural order of the social world is recognized, and it is argued that people can only fully understand the social world if they identify the structures that surrounds it. Realists believe that the scientific conceptualization is just but a way of knowing reality (Bryman 2012).

5.3.2 Interpretivism philosophy

This is associated with qualitative research and according to Saunders et al. (2012; Bryman 2012 and Harrison et al. 2017) it entails the interaction between people and their environment. Researchers would understand meanings from the various events taking place within the environment.

“Interpretivists believe that if research findings are reduced to law-like generalizations or theories, meaningful insights into complex research will be lost. They underscored the need by researchers to understand human beings in their role as social actors. This clarifies the difference between researching on human beings against researching on objects. They further posit that human beings interpret their social roles in line with meanings they assign to the roles. Interpretation even of other people is associated with their own set of meanings” (Saunders et al. 2009:116).

Bryman (2012:399) regards interpretivism as drawn from the notion that there is need for a strategy “that respects the difference between people and objects of natural sciences”.

The major drawback to the interpretivism philosophy is its impracticality in terms of the researchers entering and understanding their subjects’ world from the subjects’ perspective. It is not practical for the researcher in this case to have a common meaning or appreciation of the entrepreneurship graduates’ perspective of the effectiveness of entrepreneurship education in a volatile economy. As much as empirical evidence provided by Harrison et al. (2017); Leedy (2014), Yin (2014); Bryman (2012) and Saunders et al. (2012) specify that interpretation is crucial for business management related studies, the business anatomy is complex and the operating environments also differ, hence the difficulty in understanding the different perspectives from different environments. Furthermore, this philosophy is associated with qualitative studies, thus, not suitable for this study.

5.3.3 Objectivism philosophy

In objectivism philosophy, it is claimed “social entities exist in reality external to social actors” (Saunders 2009:110). This means that selected participants in this study are very different from those pursuing other programs but they have graduated in the same years.

5.3.4 Pragmatism philosophy

According to this philosophy, research questions are the ones that determine the type of philosophy to be used (Saunders et al. 2012). Different philosophies may be used to answer different questions in a given study. Philosophies ropes in the belief that if it is not clear whether a study is aligning with the positivist or interpretivist philosophy; then it follows that it is aligning with pragmatism. Similar to the manner in which quantitative and qualitative paradigms which according to Otieno (2009) are inseparable (since there is no research which is either 100 percent quantitative or qualitative), pragmatism is a combination of the positivist and interpretivist philosophies. The pragmatism philosophy was not e completely discarded in this study.

5.3.5 Positivism philosophy

As a quantitative in research, this study adopted the positivism research philosophy. It advocates for working with observable social reality, quantifiable variables that can be subjected to statistical analysis and produce law-like generalizations (Gorard 2013; Saunders 2007; Harrison et al. 2017). Its purpose is to explain, confirm and validate a given theory.

Positivism philosophy was used in this study because quantitative observations that lead to statistical analysis are commonly used with the positivism research approach. To create a strategy for data collection using this philosophy, the researcher uses the existing theory for hypothesis development. To further develop the said theory using positivism philosophy, hypotheses are then tested for either approval or disapproval (Chawla and Sondhi 2011; Saunders et al. 2012). Positivism is generally not concerned with impression but facts, hence the idea of it being called observable social reality (Saunders et al. 2012). This philosophy was preferred due to its principle of not allowing -interference by the researcher. The

researcher is independent of, and, is neither affected nor affects the research subject (Bryman et al. 2012, Saunders et al. 2012).

“Positivism research philosophy provides the foundation for true knowledge and the methods, techniques and modes of operation of the philosophy to offer the best framework for investigation of the social world. Human behaviour is predictable, caused and subject to both internal and external pressures. These aspects can be observed and measured” (Hitchcock and Hughes 1989:18).

According to Gill and Johnson (2002), in Saunders (2009), positivist researchers believe in the use of structured methodology to facilitate duplication. Positivism philosophy is good at exploring social patterns. It can be used to study and measure human behaviour.

The philosophy was favoured for its non-interference by the researcher. To establish the entrepreneurship graduates’ perceptions on the efficacy of entrepreneurship education in a volatile economy, the positivism philosophy was seen as the one which makes data collection possible without the researcher taking part in the data collection process. The latter was necessary due to the fact that the researcher is the participants’ former lecturer thus, not having direct contact with the participant but still being able to collect relevant data was important.

5.4 Research approach

A quantitative approach with a descriptive design was adopted in this case. Focus was on 2012-2016 entrepreneurship graduates at Chinhoyi University of Technology (CUT) in the Mashonaland West Province of Zimbabwe. All CUT students take entrepreneurship modules, but interest was on those who took it as a discipline.

The approach helped to assign values to variables thereby quantifying their significance. The measurement of variables becomes very easy and meaningful. For instance, the extent to which some variables relate can easily be established quantitatively, which is of much benefit to the reader.

The quantitative approach was adopted mainly because quantitative data can easily be measured and patterns can clearly be established. Hitchcock and Hughes (1989) rightly believed that there can be challenges in relying on quantifiable measures only without paying attention to the interpretations and meanings assigned by individuals to events and situations

in a qualitative way. However, correlation, and or establishing the degree of fitness, agreement or association between various factors can only be done using the quantitative approach (Saunders 2014). Frequency tables, cross tabulations, tests of association, Kruskal Wallis tests and ordinal or multinomial logistic regression statistical techniques are to be used to analyse data in this study.

While the qualitative approach to data analysis is, “good at simplifying data without destroying complexity and content” (Otieno 2009:16); it is also highly demanding. Yin (2003) specified that due to the lack of knowledge on how to conduct data analysis, some researchers leave collected data unanalysed for some time. Qualitative data analysis is a challenge to many since justification of data is subjective. In qualitative research, researchers mainly rely on content analysis which needs to be reinforced by some authorities. Without such augmentation qualitative data remains subjective. One cannot assign frequencies to a statement as could be the case with the quantitative approach. Ambiguities which are intrinsic in human language are always associated with qualitative research. It also does not show relationships, degree of fitness, and association between different variables as can be done using the quantitative approach.

Whilst Chawla and Sondhi (2011); and Bryman et al. (2011) argued that quantitative research questions may influence the respondent into answering in a certain way, thus affecting the accuracy of the study; Saunders et al. (2012) believed that such structuring ensures reliability of an instrument since the same questions would be asked on each and every participant. It is also crucial to note that experts can subject quantitative data collection instruments to statistical analysis for validity (Otieno 2009). Quantitative research is empirical in nature and is a scientific research approach whose rigorous clarifications of issues ensure validity of results.

This research aimed at ascertaining graduates’ perceptions on entrepreneurship education in a dynamic economy. Due to its capacity to enable the researcher to establish the extent of the relationships of the various variables that exist, the quantitative approach was regarded as the best approach for this study. Ordinal logistic regression analysis was done out to establish the connection between entrepreneurship education and the turbulent economy, and the Cronbach alpha test was also done to analyse the reliability of the constructs.

5.4.1 The difference between quantitative and qualitative data

Researchers seek the best strategy to collect and analyse data. Whilst qualitative and quantitative data can be matched; quantitative data consists of numbers while qualitative data is made up of words.

“Qualitative data can be coded quantitatively and anything qualitative can be assigned meaningful numerical values. These values can then be used to achieve greater insights into the meaning of the data and examine specific hypotheses. In a way, there is less distinction between qualitative and quantitative data. Any form of qualitative data can be quantitatively coded in different ways. Recognizing the similarities between qualitative and quantitative data opens up possibilities for interpretation that might otherwise go unutilized. All quantitative data is based on qualitative judgement. Numbers on their own cannot be interpreted without understanding the assumptions which underlie them. The bottom line is that quantitative and qualitative data are at some point practically inseparable” (Otieno 2009:17).

As much as researchers may want to justify their choice of specific research approaches; Otieno (2009) has argued it to be a mammoth task to perform. The differences between qualitative and quantitative approaches do, however, exist as depicted in Table 5.2.

Furthermore, since qualitative data would be non- standard, it can be misleading especially when researchers wrongly categorise phrases in the gathered data. Also, unlike figures, words can be ambiguous hence deceptive. However, it can be argued that no single research approach can be effectively used on its own.

Table 5.2: Quantitative and qualitative research approaches compared

Quantitative data	Qualitative data
Meanings are drawn from figures	Meanings are derived from words
Results are in numerical and standardised data	Results are in non-standardised data which require sorting.
Analysis is done using diagrams and statistics	Analysis is done using conceptualisation

Adapted from Saunders et al. (2012)

For the interpretation of data, the quantitative approach has to be augmented with the qualitative approach and vice versa, if research is to be meaningful Chawla and Sondhi 2011. It is not practical to interpret statistics using quantitative but qualitative approach. The quantitative research approach was used in this study, all the questions sort to gather quantitative data.

Quantitative data were interpreted and explained qualitatively using descriptive methods. Data collected using these two approaches were used to approve or disapprove the set questions. Various patterns and relationships between entrepreneurship education and; its effectiveness in a dynamic economy were explore and deduced from the collected quantitative and qualitative data.

5.5 Research design

The descriptive research design was used for this research. This design describes variables in a specific area of interest to the research (Saunders et al. 2012). The study was carried out at once and captured specific periods of time, namely 2012, 2013, 2014, 2015 and 2016.

The descriptive research design is scientific in nature and involves observation and description of behaviour of the subjects under study without influencing them.

5.5.1 Case study

This is a research strategy as involving a practical study of a given modern “phenomenon within its real life context using multiple sources of evidence” Robson (2002:178) in Saunders et al. 2012). This strategy enables researchers to get a clear understanding of the study context and the procedure being enacted. The strategy can also be ideal for its ability to produce responses for what, why and how questions; and it is a useful strategy of exploring existing theory. A case study strategy can as well be used to “challenge an existing theory and provide a source of new research questions” (Saunders et al. 2009:147). Yin (2014) views a case study as the best approach for investigating a modern incident in its natural or real life situation. Talking of the significance of context in this design, Saunders et al (2009:144) revealed that the “boundaries between the phenomenon being studied and the

context within which it is being studied are not clearly evident”. It is for that reason that this strategy was not used.

5.5.2 Survey

A survey, according to Check and Schutt (2012), is a collection of information from participants through their responses to questions. It allows for a variety of methods to engage participants, collect data, and caters for a variety of instruments (Saunders et al 2012, Bryman 2012). According to Ghauri, Gronhaug and Strange (2020), it is possible to link dependent and independent variables to ascertain the extent of the cause and effect relationship using a cross sectional survey. This study adopted a cross sectional survey to determine the cause and effect relationship of entrepreneurship education and entrepreneurship. In this study, a survey strategy using a questionnaire instrument for data collection was used. A survey strategy allows the researcher to collect large amounts of data in a fairly short space of time. It is less expensive and can be used to collect information on a broad range of variables including personal facts, past behaviours, attitudes and opinions. A descriptive research design as used in this study answers “what” is going on. It also enables the researcher to manipulate various data collection techniques including questionnaires as used in this survey.

5.6 Target population

The term population refers to the total number of subjects from which a sample can be drawn from. Maryann (2016) called it an aggregate of “all the objects or subjects or members that conform to a set of specification”.

Saunders et al. (2012) explained that a logical population choice has to be made if conclusions are to be generalised across the entire population. The population distribution for this study is abridged as indicated in Figure 5.3.

Table 5.3: CUT entrepreneurship graduates, 2012-2016

	Graduates	
Year	Number of graduates	Percentage of contribution to the total number of graduates in the country (%)
2016	114	22
2015	117	22
2014	162	31
2013	83	16
2012	50	9
Total	526	100

(Source: Chinhoyi University of Technology (CUT) student records 2016)

This study sample was drawn from a population composed of all the candidates who graduated with a Bachelor of Science Honours Degree in Entrepreneurship and Business Management at CUT between 2012 and 2016. The graduates that pursued entrepreneurship as a discipline at CUT and graduated between 2012 up to 2016 formed the target population for this study.

The CUT entrepreneurship graduate was targeted because out of the current four (4) Zimbabwean universities offering entrepreneurship as a degree program, CUT was the first to offer this programme. The assumption was that CUT has undergone more program reviews than all the other Zimbabwean universities offering the same program, thus its programme is more refined compared to what is offered in the other Universities. The total of five hundred and twenty six (526) entrepreneurship graduates formed the target population.

5.7 Sample Size

Collecting data from every subject who fall under the description of a given population or conform to a set of specification can be cumbersome. A true representation from a target population has to be selected in order for the researcher to generalize results.

A sample is the number of subjects who participate in a given study. It is called a subset of the total population (Maryann 2016). Individuals who graduated with a Bachelor of Science

Honours Degree in Entrepreneurship and Business Management at CUT between 2012 and 2016 were selected as participants in this study.

Raosoftware's (2004) sample size calculator was used to calculate the sample for this study, following which a sample of 223 participants was selected out of the total population of 526. The sample was selected at 5% margin of error, which is, the accuracy required for any approximations made from a given sample. The minimum sample size recommended for this study was selected from a population of 526 using the probability cluster sampling strategy (Table 5.4).

Table 5.4: CUT entrepreneurship graduates sample size

	Graduates		
Clusters	Population per cluster	Sample per cluster	Percentage contribution
2016	114	49	22
2015	117	49	22
2014	162	69	31
2013	83	35	16
2012	50	21	9
Total	526	223	100

Margin error is the amount of error that the researcher can tolerate. Larger sample sizes are ideal for lower margin of error. Confidence level entails the amount of uncertainty the researcher can tolerate. It is the level of assurance that the characteristics of the total population will be represented by the characteristics of the collected data. The confidence level of 95% was adopted for this study. Higher confidence levels require larger sample sizes, thus based on the size of the sample, 95% confidence level was regarded suitable for this study. A 50% response distribution, that is, the expected results for each question was anticipated.

According to Saunders et al. (2012), and Leedy and Ormrod (2014), it is difficult to achieve 100% response rate in most studies, hence the need for a large sample to ensure adequate responses for the required margin of error. The larger the sample size, the lower the rate of

error in generalising the target population. In this study, a sample of 223 out of a total population of 526 was considered large enough to meaningfully generalise results.

5.8 Sampling strategies

Different sampling techniques can be applied differently depending on the type of the study. Some are ideal for quantitative whilst others target qualitative studies.

Sampling as put forward by Saunders et al (2012: 423) is a “process of selecting items from the population so that the sample characteristics can be generalized to the population”.

5.8.1 Non-probability

This type of sampling is usually a qualitative based strategy “in which elements in the population do not have a known chance of being selected as participants” Bryman (2012). This sampling strategy is normally used when factors other than generalisability are important (Sekaran 2003). Generalisability is the level at which results from a given study can apply to the entire target population.

Non-probability sampling techniques include quota, convenience, judgemental and purposive. These sampling methods were not used in this study since they were not suitable for a quantitative study.

5.8.2 Probability sampling strategy

In probability sampling, “the elements in the population have a known chance of being selected as participants” (Bryman 2012:187). When it is necessary to ensure representation of a sample probability sampling is used to select a sample. Probability sampling methods are ideal for quantitative studies, and they include stratified random, simple random, cluster as well as systematic.

5.8.2.1 Stratified random sampling strategy

Stratified sampling involves the “process of segregation followed by random selection of subjects from each stratum” Sekaran (2003:272). The researcher ought to have knowledge of the different groups that exist in the target population for proper strata to be established. The researcher divides the target subjects into different strata. The reason for grouping has to

be made known within each group to make it possible to have different probabilities of selection. It is important to note that sampling larger proportions of small groups improves intergroup comparisons.

According to Bryman (2012), the stratified sampling strategy ensures that the elements used as stratifying criteria are distributed in the same way in the resulting sample as in the population.

5.8.2.2 Simple random sampling strategy

This strategy ensures that every “element in the population has an equal chance of being selected and every combination of elements has an equal probability of selection” Saunders (2012:632). Sekaran (2003:270) supported the same sentiments when he pointed out that “every element in the population has a known and equal chance of being selected as a subject”. Furthermore, Sekaran (2003) indicated that less bias and generalisability of findings are the most prominent merits of using simple random sampling to select a sample. However, simple random sampling can be cumbersome and expensive. In some cases, it may not be possible for researchers to have an updated target population required.

5.8.2.3 Systematic random sampling strategy

Sekaran (2003: 271) defined systematic sampling as “drawing every n th element in the population starting with a randomly chosen element between 1 and n ”.

Each element has the same chance of being chosen, but combinations of elements have dissimilar chances. As indicated by Bryman (2012:191), researchers “select units directly from the sampling frame without resorting to a table of random numbers”. Systematic random sampling strategy has a similar rate of error as the simple random sampling strategy if the population is not orderly, that is, it is in a random or haphazard order. Moreover, systematic random sampling is prone to bias.

5.8.2.4 Cluster sampling strategy

As posited by Saunders et al. (2012) this strategy is almost similar to stratified sampling since population is sub-divided into discrete groups before sampling. The indicated authors further

explained that the sampling frame in this case is the complete list of clusters as opposed to a complete list of individual cases within the population. Using simple random strategy, clusters are then selected before data can be collected from each cluster.

Saunders et al. (2012) talked of the three stages involved in cluster sampling as follows:

1. Choosing the cluster grouping for a sampling frame.
2. Marking each cluster with a unique identity; such as, 1, 2, 3....
3. Using the random sampling strategy to select the sample.

In this study, the researcher used the probability cluster sampling strategy, whereby the population was divided in such a way that elements within clusters were heterogeneous while ensuring that there was homogeneous between clusters. Cluster sampling was useful since the population in this study was widely dispersed, and drawing a simple random sample out of it was not practical. CUT entrepreneurship graduates were all over the country, the region and even the world. Graduates from all the five years under study were represented, with each year constituting a cluster.

Any sampling strategy that uses some form of random selection is a probability sampling strategy (Yin 2014). For any probability sample, a list of all the cases in the population constitutes a sampling frame from which a sample is drawn from.

All the candidates duly registered and graduated with a Bachelor of Science Honours Degree in Entrepreneurship and Business Management at CUT between 2012 and 2016, and they formed the target population for this study. A sample was then selected from this population. According to Saunders et al (2012), and Leedy and Ormrod (2014), a wrong or incomplete sample frame translates into misrepresentation of the total population since some cases would have been left out, and it would not be practical for every case in the population to have a opportunity of being selected. A good sampling frame must not be biased.

Cluster sampling strategy has lower costs of sampling a cluster as compared to the other probability sampling strategies (Sekaran 2003; Saunders et al. 2012), thus it was preferred for this study. It also offers convenience; and it makes it easy to inspect an assortment of units packed inside a given stratum. Figure 5.7 provides a summary of what to consider when choosing a sampling method.

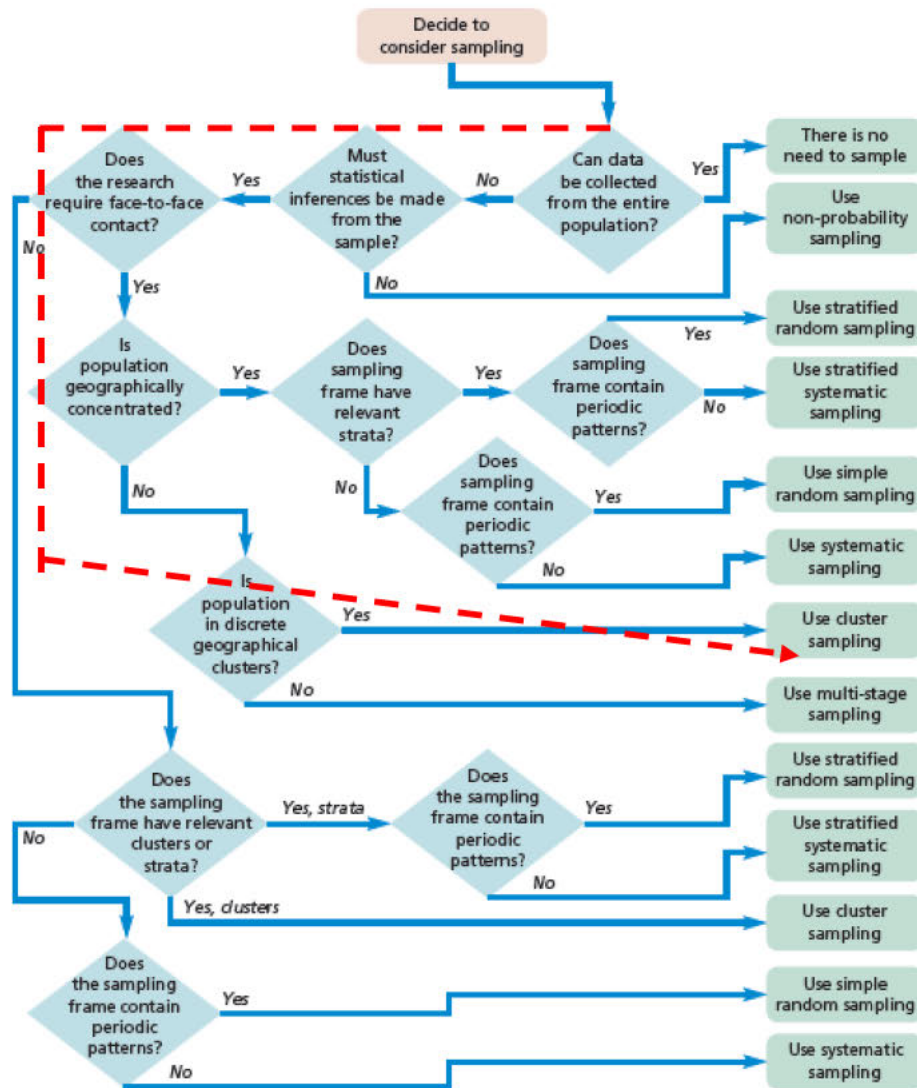


Figure 5.7 selecting a probability sample

(Adopted from Saunders et al. 2012)

In previous entrepreneurship graduate related studies, researchers extracted data from participants whose industry experiences were not known. In this study, different clusters were used to obtain perceptions based on the length of period participants spent in the industry, and the perceptions were extracted from the graduates themselves.

5.9 Sources of data

Saunders et al. (2012) argued that it is not logical to assume that the way one collects data yields valid results, and also that when interviewing executives one is likely to get only

positive remarks. The authors also argued that there is no guarantee for obtaining unbiased data from press cuttings or data sources related to the former. In research, data sources can be either secondary or primary.

5.9.1 Secondary data

Secondary data are various documents or articles related to the topic under study that can be used to gather relevant information pertaining to the study objectives and or questions. It is data collected for other purposes other than the study at hand and can be used to answer or address research questions Saunders et al. (2012). Such data provides a critical source from which specific research questions can be answered (Maryann 2016). In fact, secondary data is readily available to the advantage of the researcher. Sources of secondary data include journal articles, textbooks, organizational records, periodicals, company websites and databases, daily newspapers, payrolls, letters, minutes of meetings, sales records and government official statistics among others.

5.9.2 Primary data

Also known as field source, primary data is raw and original in nature. It is first hand data collected by researchers for a particular purpose (Saunders et al. 2012). In agreement, Maryann (2016) views it as data collected by researchers directly from the source and or study sample. Sekaran (2003:219) explained it as “data collected first hand for subsequent analysis to find solutions to the problem researched”. Although it is time consuming and costly to collect data using primary sources, it is assumed that this data is more accurate and trustworthy as it is collected direct from the sources.

Both secondary and primary data were used in this study. Secondary data was collected by reviewing literature. Various authorities were consulted and examined to establish their different views in line with the objectives of this study. Literature was also reviewed to identify gaps worthy of being filled through this research and address the thematic areas of this study.

Primary data was collected from CUT entrepreneurship graduates of the years 2012 to 2016 using questionnaires to establish their views on the usefulness of entrepreneurship education in a turbulent economy.

5.9.3 Data Collection methods

Different methods can be used for different studies as detailed below.

5.9.3.1 Interviews

An interview according to Saunders et al. (2012:419) is a “data collection method in which researchers verbally asks for information from respondents”. These can be unstructured, semi structured or structured. Structured interviews are interviewer administered questionnaires in which researchers read out the same questions to respondents and record answers on a “standardised schedule with pre-coded answers” Saunders et al. (2012:320). Structured interviews are known for collecting quantified data.

Unstructured and semi-structured interviews are usually used to collect qualitative data (Bryman 2012). In semi structured interviews, researchers ask questions according to themes, and the questions may not be exactly the same throughout the questionnaire (Saunders et al. 2012). Unlike the flow of an interview, which is quite important, the order of the questions may not be important, hence the possibility of having different questions for different respondents.

Questions are not pre-determined in unstructured interviews; the focus is on a given objective (Saunders et al 2012). In general, researchers need to know what they want to cover.

Although interviews give room for clarification of questions and clear doubts; they are costly when the area to be covered is wide; and they also pose challenges on confidentiality and anonymity issues (Sekaran 2003).

5.9.3.2 Observation

Saunders et al. (2012:421) describes observation as the “collection of data by observing people or events in the work environment and recording the information”. Observations can be structure or unstructured. Structured observations are the ones in which researchers write down participants’ specific behaviour and activities according to the pre-set objectives Saunders et al. (2012). In unstructured observation, researchers observe and write down every activity and behaviour by participants without any pre-written areas of interest (Saunders et al. 2012).

Observational findings are believed by (Saunders et al. 2012; Sekaran 2003 and Bryman 2012) as being free from participant bias; having potential to make it easy to record environmental influence on specific outcomes, and make it easy to observe unique groups of people, from whom it would otherwise be difficult to get information. However, the process the process of collecting data through observations is monotonous, slow and costly. Furthermore, observations invade participants' lives (Creswell 2014). This is a key factor that made the researcher not to consider using this data collection method.

5.9.3.3 Questionnaire

Empirical evidence shows that questionnaires are usually used to collect quantitative data (Saunders et al. 2012; Creswell 2014; Bryman 2012). Maryann (2016:35) defined a questionnaire as a “printed self- report form designed to elicit information that can be obtained through the written responses of the subjects”. Saunders et al. (2012:422) viewed this as a “pre-formulated written set of questions to which the respondent records the answers, usually within rather closely delineated alternatives”.

Questionnaires can be self- administered and completed by respondents in the absence of the researcher; they can also be done electronically using intra or internet, or they can be mailed to respondents (Saunders et al. 2012).

Whilst Hitchcock and Hughes (1989) argued that structured questionnaires are less flexible to gather participants' real thoughts; this instrument was chosen in line with Saunders et al. (2012), Sekaran (2003) and Creswell's (2014) argument with regard to the benefits of this instrument. They include its high rate of anonymity; being ideal for collecting data from large groups and scattered people; being economical in terms of travelling, facilitating reference for analysis and allowing respondents to study and analyse questions during their own time.

A questionnaire was ideal for this descriptive research. Descriptive research in this case enabled the researcher to identify and describe the inconsistency in graduates' opinions, attitudes and perceptions as well as organizational (CUT) practices. The instrument is less sensitive when correctly administered; and it also requires less skill to administer it.

The questionnaires used in this study were both electronically and self administered. With the permission of the university authorities students' contact details were retrieved from the institution's records. Structured questionnaires were used to collect primary data from CUT entrepreneurship graduates of the years 2012- 2016. Close ended questions using the five (5) points Likert scale ranging from "strongly disagree" to "strongly agree" were mainly used to collect data. Each participant responded to the "same set of questions in a predetermined order" as suggested by Saunders et al. (2012). This questionnaire was totally standardised with the questions phrased exactly in the same way for all respondents.

To capture the multi- dimensional outcomes of entrepreneurship education as put forward by Borchers and Park (2011) in Fatoki (2014), questions were divided into four main groups as indicated below:

1. Behavioural and or attitudinal pointers that address such behaviours as venture creation, participation in entrepreneurial activities or exhibiting any entrepreneurial related behaviours.
2. Cognitive pointers; which include the knowledge or mental capacity to run a business, or having an understanding of a business anatomy.
3. Affective or sentimental pointers: which have motivational outcomes such as goal commitment and self- efficacy among others.
4. Skills based pointers which include the ability to implement entrepreneurial knowledge and business acumen.

The questionnaire addressed the above pointers as follows:

Behavioural and or attitudinal pointers were addressed by exploring the extent of entrepreneurship education in Zimbabwean Universities; and the influence of entrepreneurship education on venture creation and creativity sections.

Cognitive pointers were addressed by studying the effectiveness of training methods used in entrepreneurship education in enabling learners to become entrepreneurs.

Affective or sentimental pointers were captured through investigating the graduates' dynamic capabilities to operate in a volatile economy section.

Skills based pointers were addressed by investigating the influence of experiential learning on entrepreneurship education; as well as organizational resources to train entrepreneurship practically

5.10 Data quality control

To ensure a strong correlation of questions on the research instruments, and control the quality of collected data, reliability and validity of the data collection tools has to be tested.

5.10.1 Validity

Validity entails the accuracy of data in measuring the intended objective. It is the extent to which a data collection instrument possesses the quality of being accurate as far as can be judged (Amisk 2007). Validity is the relevance and appropriateness of information including the strength of its association with the concepts under study.

5.10.2 Reliability

This entails consistence and dependability of instruments. It is the degree to which a research tool measures what it is anticipated to measure even on recurring tests (Kimberlin and Winterstein 2008). Supporting this argument, Bickman and Rog (2015) described reliability as the repeatability of findings if the study were to be carried out a second time and yield the same results. It is when there is a low variation between results of different samples of the same population.

Questionnaires were pilot tested for validity using CUT entrepreneurship final year students. These students spent their third year in industry for work related learning. The assumption was that they have undergone and experienced the same training as those graduates under study. It was further assumed that like the graduates under study, they had a feel of the industry during trying times. These final year students were also mature, and have enough conceptual skills to see what needs to be done since they were in their final semester. They were also undertaking their dissertations in partial fulfilment of their studies; therefore, they would treat any research material with all the respect it deserves. Pilot testing helps in clarifying the language used in questioning; it helps to establish the viability of the study, and

to confirm that the target population is indeed appropriate in terms of having the required information.

The Cronbach alpha test is helpful for exposing “the consistency and stability of the measuring instrument” Saunders (2012:422). In this study, it was used for reliability testing. Pilot testing was used to establish flaws and fine tune the questionnaire for better reliability of a set of questions for specific thematic areas. This test is an internal consistency tool normally used to calculate the correlation values among the answers on an instrument (Sullivan 2011). Saunders et al. (2012:422) believed that pilot testing is done to “test the understandability and appropriateness of the questions to be included in a regular survey, using a small number of respondents”.

The researcher collected data with the help of research assistants. To enhance the reliability and trustworthiness of data, a standardised questionnaire was used to collect data. A full day training workshop for research assistants discussing objectives of the study, ethical considerations, the instrument and the targeted population was conducted. The researcher remained accountable for the research assistants’ activities.

5.11 Data analysis

Raw data need to be analysed and assigned meanings for it to be useful. As put forward by Maryann (2016), data analysis entails “the science of examining raw data with the purpose of drawing conclusions”.

SPSS version 22 was used to analyse collected data. Both descriptive and inferential statistics were used to analyse data. Research Assistants captured the primary data for verification by the researcher, and a statistician was employed to conduct the analysis of data using SPSS version 22. The collected data were sorted for analysis, thereafter responses were grouped according to thematic areas

5.12 Ethical considerations

Researchers need to exhibit high levels of morality or uprightness for effective research to take place. Fairness, goodness, wellness, justice for any research activity are important attributes when conducting research. Ethics are societal demands or expectations in relation

to a given phenomenon. Saunders et al. (2012) view ethics as expected societal norms. As rightly argued by Cooper and Schindler (2014), and also as shown in Figure 5.8, ethical consideration or its absence may motivate or de-motivate the selected participants to participate in research, respectively.

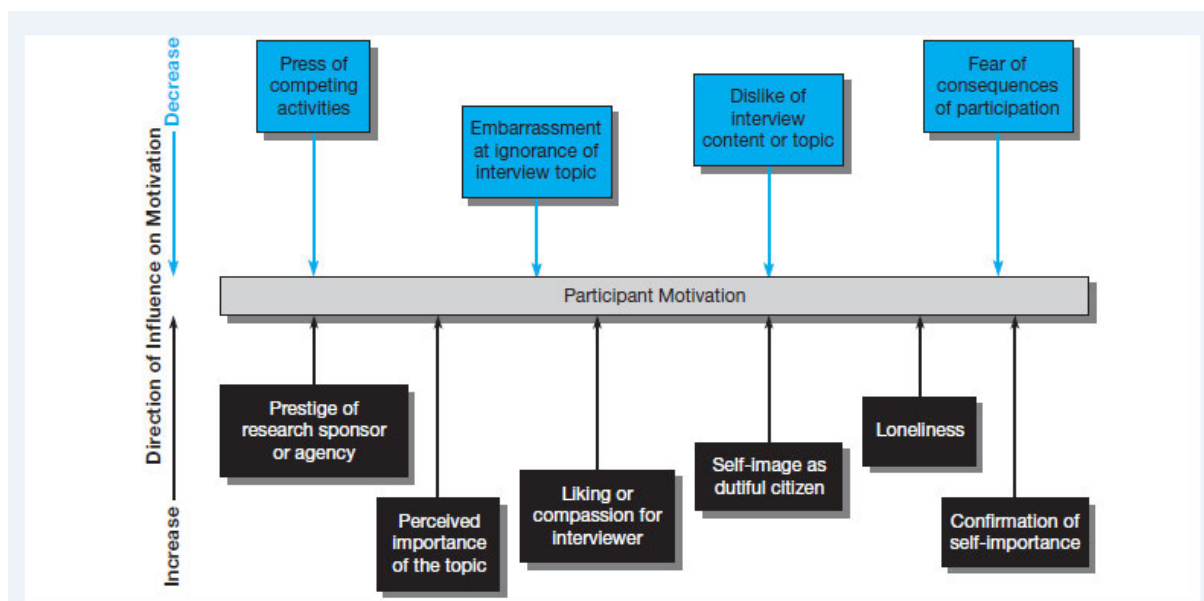


Figure 5.8: Push factors of participants' motivation

(Adopted from Cooper and Schindler 2014)

Several authors such as Saunders et al. (2012), Creswell (2014); Maryann (2016) and Bryman (2012) share the view that international ethical principles consist of the following aspects:

- Integrity and objectivity of researchers
- Respect for participants
- Avoiding harming participants
- Respecting and maintaining participant's privacy.
- Voluntary participation and withdrawal from participation.
- Obtaining informed consent from participants
- Ensuring participants anonymity and confidentiality of collected data

As recommended by Maryann (2016), anonymity should be upheld and no sensitive or confidential information is to be requested from participants. All the information gathered in

this study was regarded as private and only used for academic purposes. Privacy and human dignity were maintained at all times. Participants were furnished with adequate information pertaining to the study before participating, and they were not forced to take part in the study. Letters of consent for participation were collected from participants, and were told of their right to take part in, or withdraw from the study.

Since human subjects form part of the study, informed consent and respect in engagement with human participants were exercised. The anonymity of participants was also maintained.

Permission was granted by the Chinhoyi University of Technology to the researcher to collect relevant data from the database of the university; the researcher was also granted a certificate of ethical clearance by the University of KwaZulu-Natal after having met all the ethical requirements.

5.13 The study limitations

The study focused on Zimbabwean universities graduates and results may not be generalised to other regions where the volatility levels and economic environment may be different. Data was gathered in the current Zimbabwean turbulent environment hence variables, responses and results may only be limited to such an environment.

Also, the study focused on a developing nation graduates' perceptions of entrepreneurship education, and findings may not apply to developed nations.

Lastly, there was also limited time at the researcher's disposal due to other academic commitments and this hampered progress in terms of the time frame upon which compilations and resolutions were made available to the public domain. However the researcher limited social engagements to make use of every other spare time including public holidays, evenings and weekends to strike a balance.

5.14 Chapter summary

This chapter addressed the significance of methodology, research philosophy, research paradigm, research strategy, target population, sample size, sampling strategies, sources of data, data quality control, data analysis, ethical considerations as well as the study limitations.

The following chapter centres on data presentation and interpretation as well as the discussion of study findings.

CHAPTER SIX

PRESENTATION OF FINDINGS

6.1 Introduction

The previous chapter provided an outline of the research methodology which was followed in this study. The study philosophy, design, approach, strategies, sampling methods, population, sample size, data collection methods and quality control were clearly specified.

In this chapter, data gathered from CUT entrepreneurship graduates of 2012-2016 is presented. Questionnaires were used for data collection which was then analysed using the Statistical Package for Social Sciences (SPSS) version 20. From the total population of 526 CUT entrepreneurship graduates of 2012-2016, Raosoft sample size calculator (2004) was used to select 223 as the representative sample for the study.

6.2 Reliability of Findings

Cronbach's coefficient alpha was used to test for data reliability. As shown in the Table 6.1

Table 6.1 Questionnaire reliability test

Cronbach's Alpha	N of Items
0.838	32

The Cronbach's Alpha score presented in Table 6.1 of 0.838 indicates that the questionnaire was reliable to provide consistent data from the respondents. When the score is below 0.6, then it is concluded that the questionnaire is/was not reliable.

The findings for the questionnaire reliability test and participants demography, the extent of entrepreneurship education in Zimbabwean universities and graduates' perceptions on the effectiveness of training methods used in entrepreneurship education in enabling learners to become entrepreneurs; are presented in this chapter. Furthermore, findings regarding the graduates' perceptions of the influence of experiential learning on entrepreneurship education

as well as graduate's perceptions of the influence of entrepreneurship education on venture creation and creativity are also presented in this chapter.

6.3 Response rate

Table 6.2 Response rate

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Responded	188	84.3	84.3	84.3
Valid Non Response	35	15.7	15.7	100.0
Total	223	100.0	100.0	

Out of the 223 questionnaires issued out, 188 were returned. This gives a response rate of 84 percent. Newman (2013) posits that a response rate above sixty percent is satisfactory to allow for further statistical analysis ensuring reliability and validity of findings. As validated by Cooper and Schindler (2014); Babie (2004), that a response rate of 50% is sufficient and acceptable for investigation and publication of results, 60% is good and 70% is tremendous. The research's response rate of 84% is therefore good enough to ensure validity and reliability of findings. This excellent response rate as Mugenda and Mugenda (2003) put it across can be attributed to the self administration of questionnaires and the target respondents' level of understanding to the significance of such a study.

Gender of respondents

Table 6.3 shows that one hundred and one out of the 188 respondents (53.7%) were female and only 87 (46.3%) were male (Table 6.3). This can be attributed to the more female - less male ratio in the national population of Zimbabwe.

Table 6.3: The respondents' gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	87	46.3	46.3	46.3
	Female	101	53.7	53.7	100.0
	Total	188	100.0	100.0	

As shown in Table 6.4, the 26-30 years age range dominated and, only 1 respondent was aged 42.

Table 6.4: The respondents' age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20 - 25 years	39	20.7	20.9	20.9
	26 -30 years	120	63.8	64.2	85.0
	31 – 35 years	27	14.4	14.4	99.5
	42 years	1	0.5	0.5	100.0
	Total	187	99.5	100.0	
Missing	System	1	0.5		
Total		188	100.0		

The 31-35 years as well as the 42 years age ranges are most likely to be block release programme graduates. This means that the majority of the participants proceeded to higher education straight from high school, and this can be attributed to high levels of unemployment in the country.

Only 82 (43.6%) out of the 188 respondents were married, and one respondent did not respond to the question regarding marital status (Table 6.5).

Table 6.5: Respondents by marital status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Married	82	43.6	43.9	43.9
	Not Married	105	55.9	56.1	100.0
	Total	187	99.5	100.0	
Missing		1	0.5		
Total		188	100.0		

Table 6.5 above shows that less than half of the participants were married. This can be attributed to high unemployment and Zimbabweans believe in settling for marriage when gainfully engaged.

Table 6.6: Time when respondents got married

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Before Graduating	32	17.0	39.0	39.0
	After Graduating	50	26.6	61.0	100.0
	Total	82	43.6	100.0	
Missing		106	56.4		
Total		188	100.0		

A marginal (50) respondents got married after graduating compared to 32 who were married before graduation (Table 6.6).

The fact that a larger number of respondents got married after graduating may mean that most participants consider marriage after securing a reliable source of livelihood. This may be due to poor economic activity in the country, which may pave the way to the perception that marriage without a stable income can be a burden.

Table 6.7 shows that e post-graduation during which the respondents got married.

Table 6.7: Period post graduation

A5 For how long have you been a Graduate?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Year	24	12.8	12.8	12.8
	2 Years	32	17.0	17.0	29.8
	3 Years	33	17.6	17.6	47.3
	4 Years	52	27.7	27.7	75.0
	5 Years	47	25.0	25.0	100.0
	Total	188	100.0	100.0	

The modal class interval was composed of graduates in the four years category as witnessed by a percentage frequency of 28 percent of the total respondents. Values preceded by 25% in the class interval of five years. There is normal distribution of findings with the class interval of 4 years representing the peak of respondents and outliers inclusive of the five years and one year class intervals.

Table 6.8: Respondents' family birth order

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	First born	84	44.7	44.7	44.7
	Last born	42	22.3	22.3	67.0
	Only child	12	6.4	6.4	73.4
	Other	50	26.6	26.6	100.0
	Total	188	100.0	100.0	

First born children dominated at 84 (44.7%), followed by 'other' at 50 (26.6%) and respondents who were the only children in their families were only 12 (6.4%). This implies that many Zimbabwean first born children are more entrepreneurial compared to the others.

Ninety out of the 188 respondents (47.9%) were self- employed and 49 (26.1%) were employed by someone (Table 6.9).

Table 6.9: Respondents' employment status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Employed by someone	49	26.1	26.2	26.2
	Self – employed	90	47.9	48.1	74.3
	Not employed	48	25.5	25.7	100.0
	Total	187	99.5	100.0	
Missing	-	1	0.5		
Total		188	100.0		

Table 6.9 further shows that entrepreneurship education is yielding results in Zimbabwe because the number of the self- employed individuals (90) in this study was almost double (49) the number of employed participants. This is so because with few formal jobs, high employment, contracted economy among others in a turbulent economy, many have turned to entrepreneurship as an alternative source of livelihood. It is also possible that there are others who are self- employed amongst those employed by someone as it is the norm in Zimbabwe. This means entrepreneurship education plays a critical part in the creation of employment in Zimbabwe.

6.4 Demographic cluster comparison

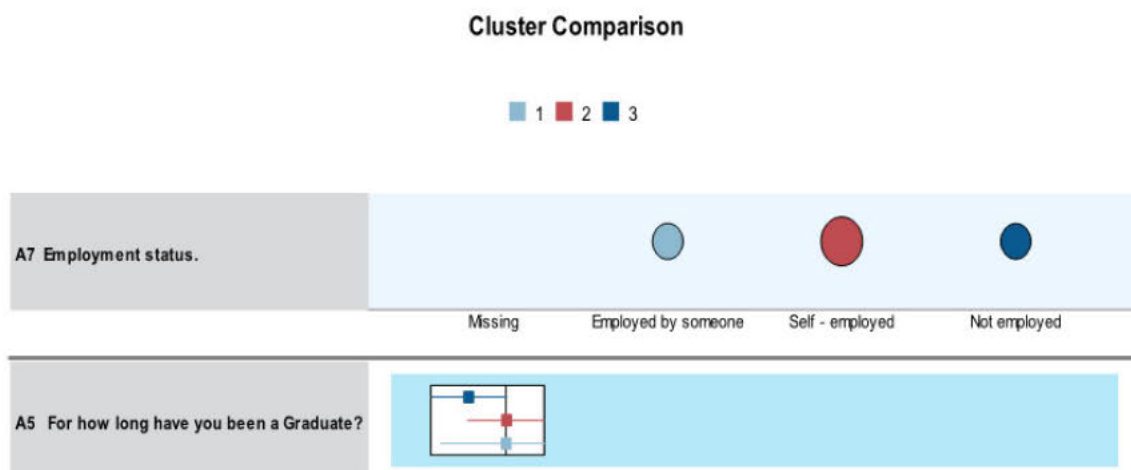


Figure 6.1: Employment status cluster comparison

Cluster one (1) was comprised of graduates who had been employed r 43 months (3.59 years) after graduation and they were employed by someone; cluster two (2) was made up of self- employed

graduates who employed themselves almost four years after graduating. Cluster three (3) was the largest with new graduates, who were still unemployed less than three (3) years after graduating. This suggests that graduates tend to look for employment after graduation hence the size of cluster three. With time however, they see the need for creating employment for themselves. This means that venture creation takes time to kick off.

6.5 The extent of entrepreneurship education in Zimbabwean universities

In this section, results of the extent of entrepreneurship education in Zimbabwean universities are presented.

6.5.1 The adequacy of Entrepreneurship Education offered to other programmes at CUT

The findings above reveal that the majority (131 = 70.1%) of the respondents felt that there is adequate entrepreneurship education offered to students in other programmes at the Chinhoyi University of Technology while 56 (29.9%) expressed the contrary (Figure 6.2). A close examination of the findings shows that the percentage of female and male who expressed the adequacy of the entrepreneurship education offered at CUT is almost the same, that is, 71% and 69% respectively within each sex category. This means that entrepreneurship education offered at CUT is adequate across programs.

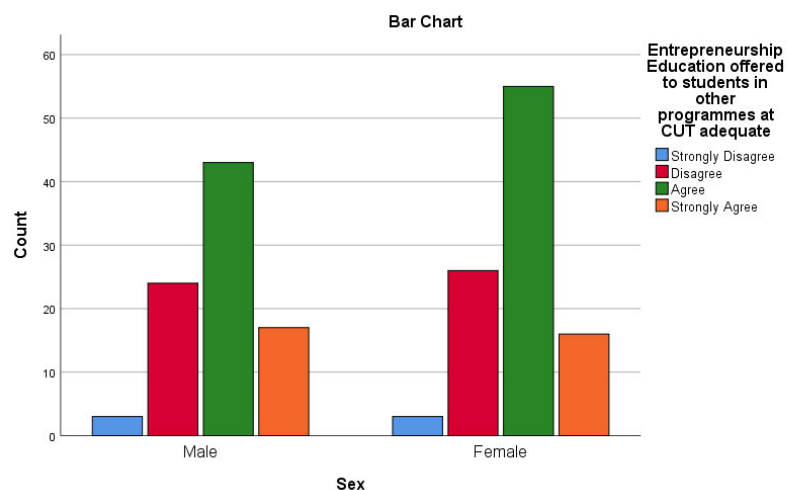


Figure 6.2: The adequacy of CUT's Entrepreneurship Education to other programmes

6.5.2 Graduate unemployment levels signifies gaps in Entrepreneurship Education

The majority (107 = 57%) of the respondents indicated that the level of graduate unemployment signifies the shortfalls of entrepreneurship education in Zimbabwean universities (Figure 6.3). This is so since in a contracting economy with high unemployment and small GDP, among others, people tend to rely on Small to Medium ventures known to be manned by entrepreneurs in such economies. The shortfalls in this case maybe in the form of practical training, among others. It is further revealed that the frequency of male to female who expressed the adequacy of entrepreneurship education was almost equal at 54 and 53, respectively. This suggests that the Zimbabwean entrepreneurship curriculum has put a positive mark in the levels of employment in Zimbabwe.

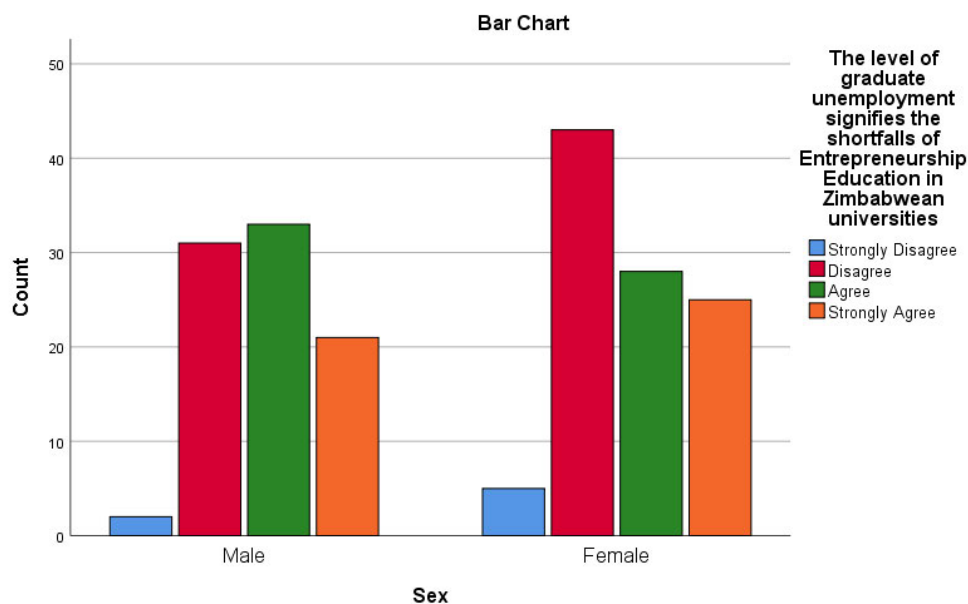


Figure 6.3: Graduate unemployment levels signifies gaps in Entrepreneurship Education

6.5.3 Demographic data and the extent of entrepreneurship education in Zimbabwean universities

Findings from cross tabulation of entrepreneurship education extend and demographic data are presented in this section.

6.5.4 Age of Respondent and the adequacy of CUT Entrepreneurship Education to other programmes

Responding to whether entrepreneurship education offered to students in other programmes at CUT was adequate in relation to age; the 26-30 age group dominated all the variables, whereby 21 respondents who strongly agreed as well as 64 who agreed with this view were from this age group (Figure 6.4). Furthermore, 30 participants who disagreed and 4 who strongly disagreed with the indicated view were also from this age group. Overall, 85 respondents from this group were in agreement with the indicated view. Age-wise, the 26-30 group dominated in all the responses. This shows the existence of some mixed perceptions across ages by the CUT entrepreneurship graduates.

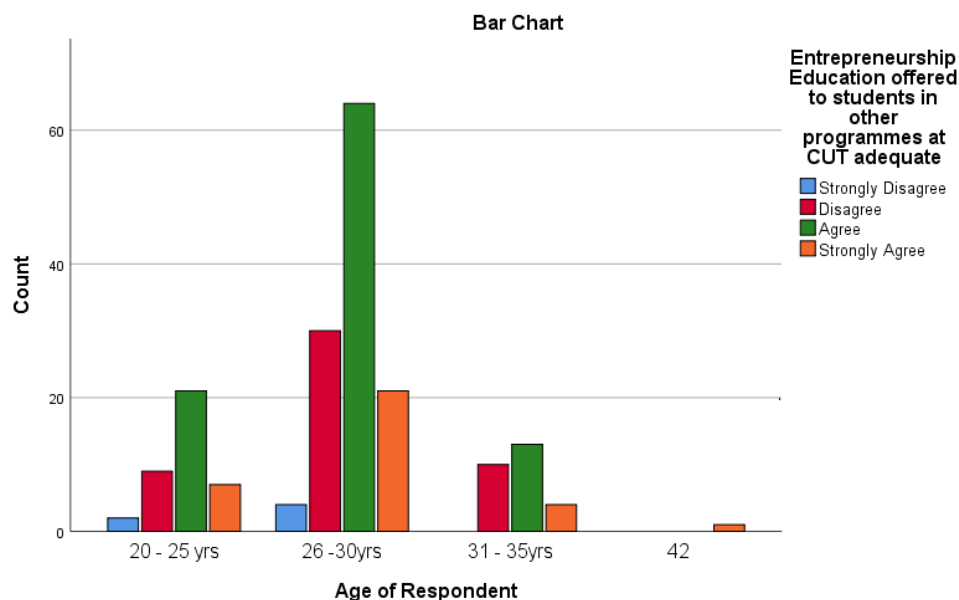


Figure 6.4: Age of respondent and the adequacy of CUT entrepreneurship education to other programmes.

6.5.5 The Length of time in years during which the respondents had been graduates * The adequacy of CUT's entrepreneurship education curriculum to other programmes

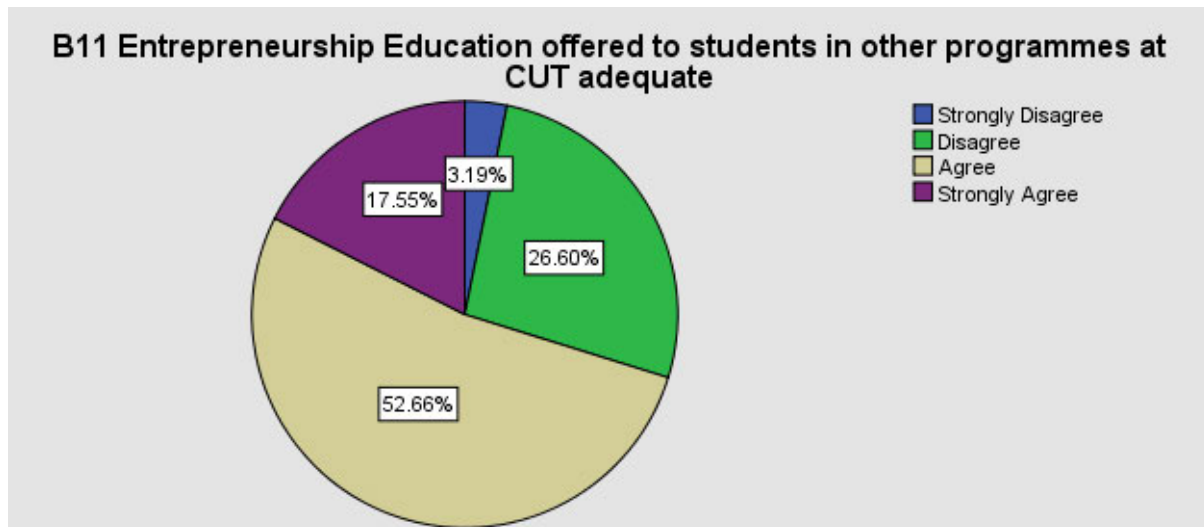


Figure 6.5; The Length of time in years during which the respondents had been graduates and the adequacy of CUT's entrepreneurship education curriculum to other programmes

As it can be seen from the findings in Figure 6.5, seventy-one (71) percent showed agreeableness with the assertion that entrepreneurship Education offered to students in other programmes was adequate. However, a marginal of twenty-nine percent disagreed. This shows a possibility of operational failure features in the delivery of entrepreneurial education to other degree programmes.

6.5.6 The Length of time in years during which the respondents had been graduates and Graduates unemployment level signifies gaps in Entrepreneurship Education

Findings in Figure 6.6 show mixed views amongst respondents. Majority of these respondents were more in support of the view that the level of graduates' unemployment signifies gaps in entrepreneurship education in Zimbabwean universities. Overall, (43%) respondents disagreed and (57%) agreed with this view. This implies that graduates regard entrepreneurship as a source of employment and a form of employment creation.

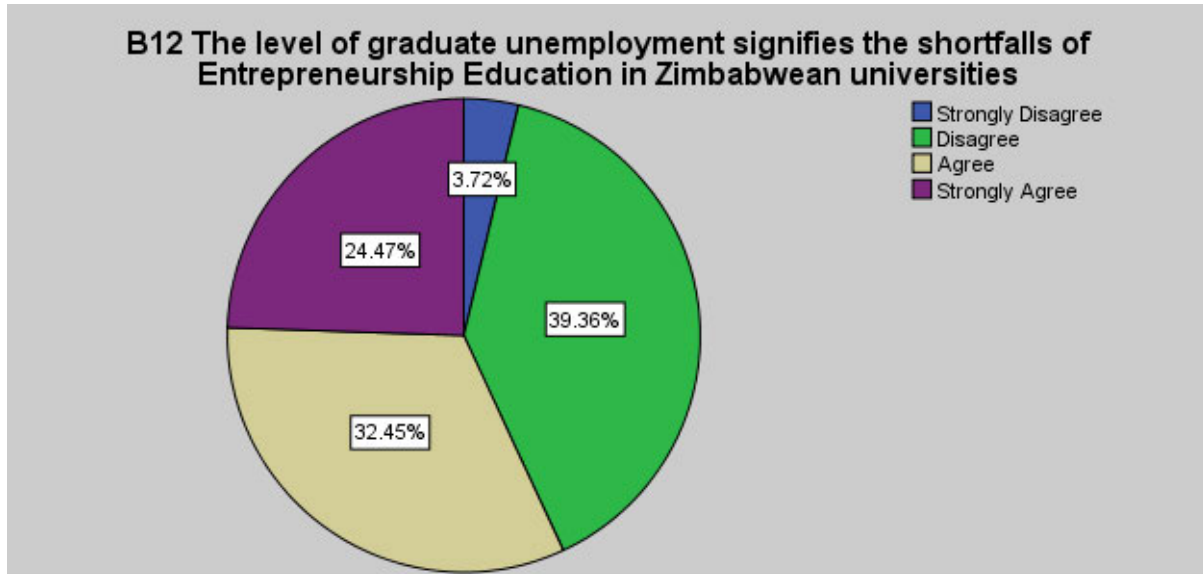


Figure 6.6: The Length of time in years during which the respondents had been graduates and graduates unemployment level signifies the shortfalls in Entrepreneurship Education.

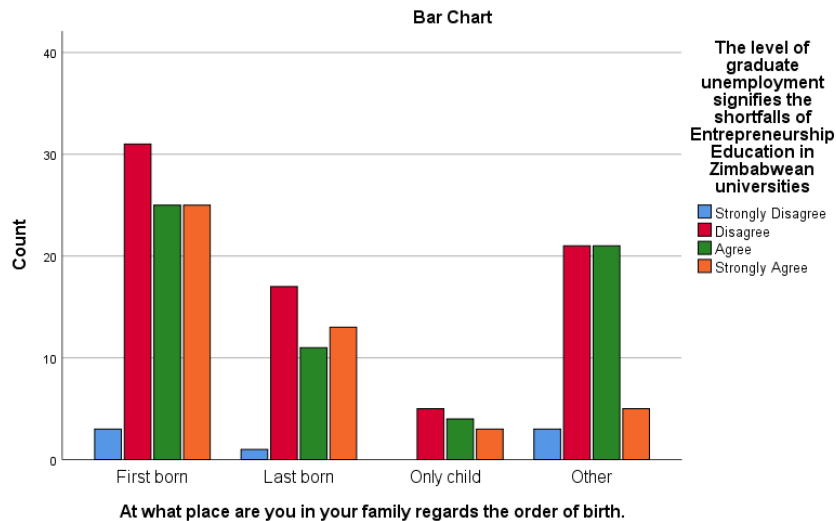


Figure 6.7: The Length of time in years during which the respondents had been graduates and graduate unemployment levels signify gaps in Entrepreneurship Education.

Findings in Figure 6.7 show that the total of 50 (26.6%) of the first born respondents affirmed the notion that the level of graduate unemployment signifies the shortfalls of

Entrepreneurship Education in Zimbabwean universities. This suggests that the first born child seriously consider entrepreneurship education as a solution to unemployment if it was not for its shortcomings.

6.5.7 Employment status and CUT curriculum had dedicated entrepreneurship education courses

Respondents in all of the three employment status categories affirmed that CUT's curriculum had dedicated courses for entrepreneurship education (Figure 6.8). More of the affirmation was from the self- employed category, from which 30 respondents (16.2%) agreed and 56 (30.2%) strongly agreed to the indicated view. These respondents' ability to see and acknowledge the entrepreneurship related courses offered could be the same reason why they are practising as entrepreneurs.

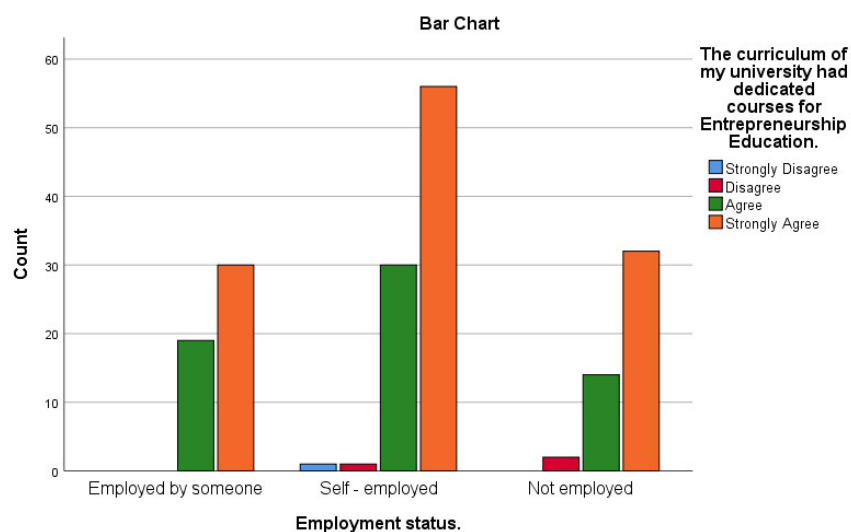


Figure 6.8: Employment status and CUT's curriculum had dedicated Entrepreneurship Education courses

6.5.8 Employment status and Graduate unemployment level shows gaps in Entrepreneurship Education

Whilst respondents from all the three employment statuses affirmed the notion that the level of graduate unemployment signifies the shortfalls of entrepreneurship education in Zimbabwean universities, the self-employed individuals were more in agreement with this view at the total frequency of 54, out of which 22 strongly agreed and 32 agreed with the indicated view (Figure 6.9). This means that participants view entrepreneurship education as a source of employment creation.

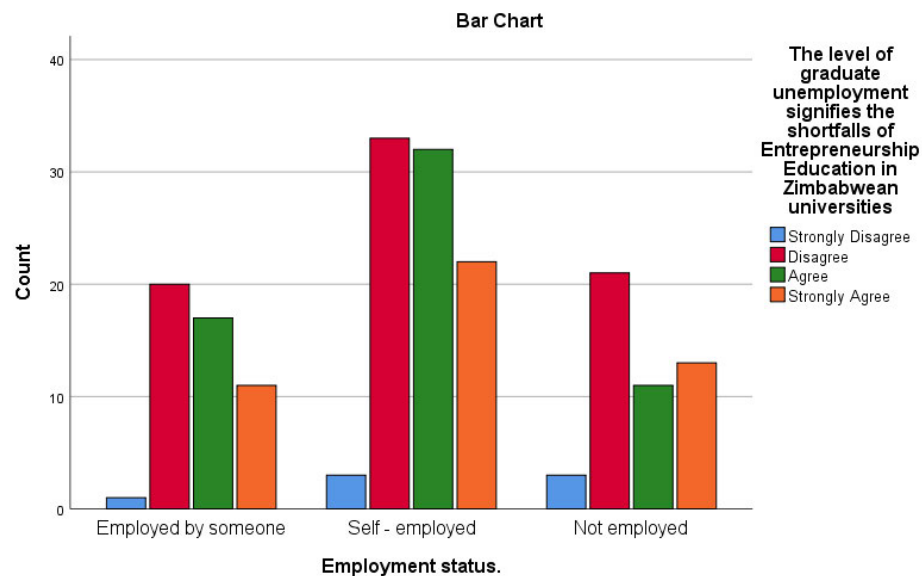


Figure 6.9: Employment status and Graduate unemployment level shows gaps in entrepreneurship education.

6.6 The effectiveness of training methods used in entrepreneurship education in enabling learners to become entrepreneurs

C24. Which of the following teaching methods for entrepreneurship education do you view as the most effective?

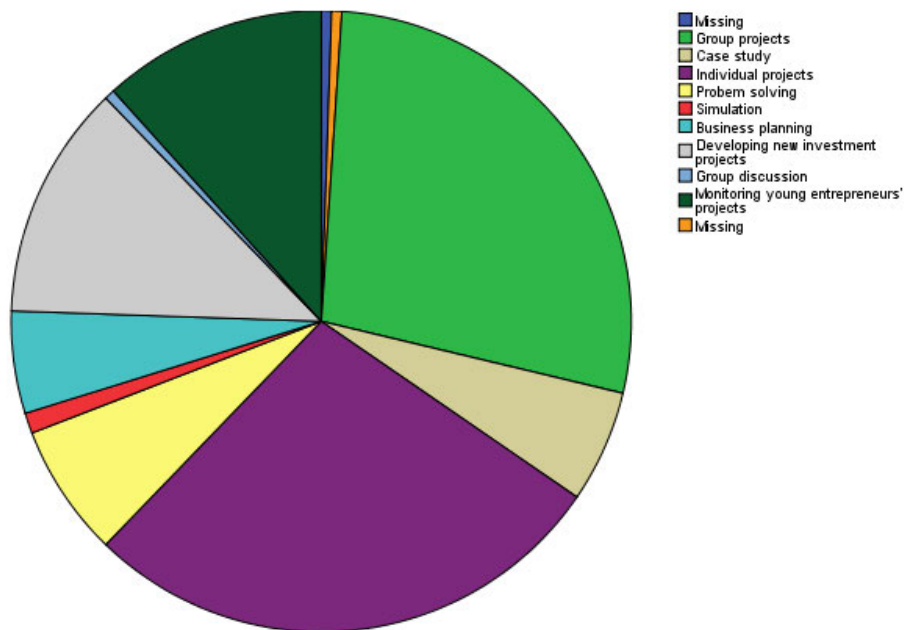


Figure 6.10: Entrepreneurship Education teaching methods perceived as the most effective

The findings show that respondents preferred projects more than any other approaches; with individual and group projects at ties with 52 (27.6%) scores each.

The least preferred were group discussion and simulation which had one and two scores respectively. This is a clear indication that respondents favour practical approaches which are student centred in learning entrepreneurship.

Table 6.10: Effective entrepreneurship education practical teaching methods

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Venture start-ups by students	120	63.8	63.8	63.8
Internship in small companies	28	14.9	14.9	78.7
Action learning	40	21.3	21.3	100.0
Total	188	100.0	100.0	

C25. Of the three entrepreneurship education methods below, which one do you perceive to be the most effective?

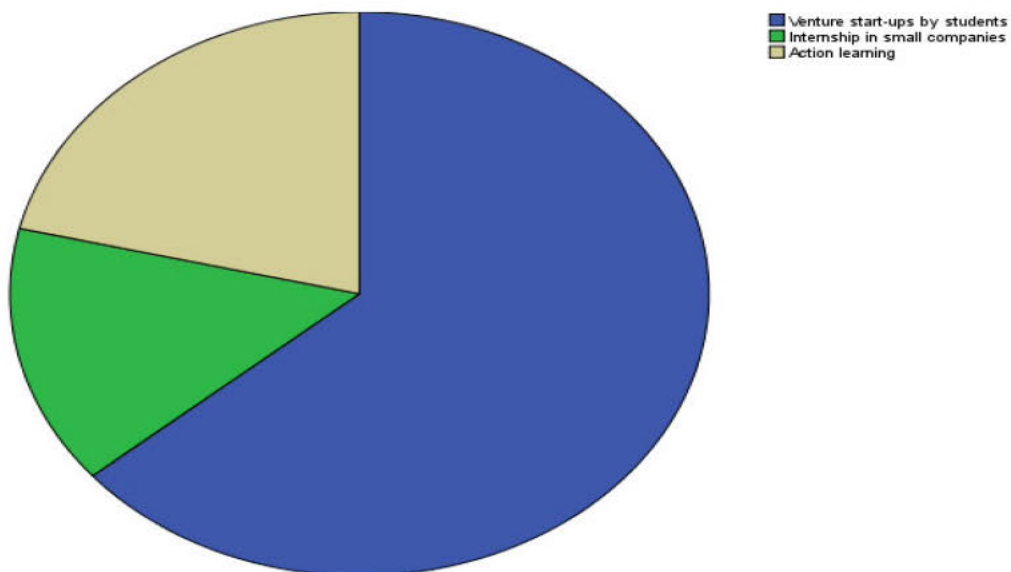


Figure 6.11: Effective Entrepreneurship Education practical teaching method

A large number of respondents (120 = 63.8%) perceived venture start-ups as the most effective way of teaching entrepreneurship education. Internship in small companies was the

least preferred, with only 28 (14.9%) respondents regarding it as the most effective method. This implies that respondents favoured the practical approach to entrepreneurship learning.

6.7 Graduates' perceptions of the influence of experiential learning on entrepreneurship education

The findings in Table 6.11 shows that the majority of both male and female respondents agreed with the view that a turbulent economy drives people to seek entrepreneurial education with an overall frequency of 153 (81.8%) out of the 187 and a proportional frequency of 67 (77%) out of 87 male as well as 86 (86%) out of 100 female respondents respectively. This indicates that more female participants were in agreement with the view and can be attributed to their femininity nature of enterprising.

Table 6.11: A turbulent economy drives people to seek Entrepreneurial Education

		A turbulent economy drives people to seek Entrepreneurial Education				
		Strongly Disagree	Disagree	Agree	Strongly Agree	Total
Sex	Male	6	14	41	26	87
	Female	5	9	52	34	100
Total		11	23	93	60	187

Table 6.12: Economic turbulence is crucial for entrepreneurial inventions

		Economic turbulence is crucial for entrepreneurial inventions.				
		Strongly Disagree	Disagree	Agree	Strongly Agree	Total
Sex	Male	1	20	37	29	87
	Female	3	14	54	30	101
Total		4	34	91	59	188

The majority 66 (75.9%) of the 87 male and; 80 (79.2%) of the female respondents agreed that economic turbulence is crucial for entrepreneurial inventions (Table 6.12). Only 38 (20.2%) respondents did not believe such a relationship exists between economic turbulence and entrepreneurial inventions. This shows that there is no significant difference between the female and male respondents' views in this study pertaining to the relationship between economic turbulence and entrepreneurial inventions.

Table 6.13: Graduate unemployment and the gaps in Entrepreneurship Education

		The level of unemployment in the turbulent Zimbabwean economy can be reduced through Entrepreneurship Education.				
		Strongly Disagree	Disagree	Agree	Strongly Agree	Total
Sex	Male	0	14	42	31	87
	Female	5	12	42	42	101
Total		5	26	84	73	188

Overall, 157 (83.5%) of 188 respondents, 73 (46.4%) of them being male and 84 (53.6%) female agreed with the view that unemployment can be reduced through entrepreneurship

education (Table 6.13). This implies that there is no significant difference between male and female views pertaining to the relationship between unemployment and entrepreneurship education in a turbulent economy.

Table 6.14: The impact of collaborations between techno parks and entrepreneurship education

		Collaborations with techno parks have a positive impact on entrepreneurship education in a turbulent economy.				
		Strongly Disagree	Disagree	Agree	Strongly Agree	Total
Sex	Male	0	4	44	39	87
	Female	1	3	50	47	101
Total		1	7	94	86	188

The majority 180 (95.7%) of respondents affirmed that “collaborations with techno parks have a positive impact on entrepreneurship education in a turbulent economy” (Table 6.14). Eighty three of these respondents were male while 97 were female. This explains that an insignificant variance between the male and female participants in this study regarding the indicated view exists.

Table 6.15: The relationship between established organizations and entrepreneurship education

		Collaborations with established organizations have a positive impact on entrepreneurship education.				
		Strongly Disagree	Disagree	Agree	Strongly Agree	Total
Sex	Male	0	6	41	40	87
	Female	1	3	48	49	101
Total		1	9	89	89	188

Eighty-one (93.1%) of the 87 male and 97 of the 101 (96%) female respondents either agreed or strongly agreed that collaborations with established organisations have a positive impact on entrepreneurship education (Table 6.15). Overall, 178 (94.7%) out of 188 respondents agreed with the indicated view. This means that both male and female graduates benefitted immensely from such collaborations during their work related learning period.

Table 6.16: The impact of running tried and tested projects on entrepreneurs

		Allowing students to run tried and tested projects from lecturers' researches or industry positively impacts entrepreneur				
		Strongly Disagree	Disagree	Agree	Strongly Agree	Total
Sex	Male	2	12	48	25	87
	Female	2	17	60	22	101
Total		4	29	108	47	188

The total of one hundred and fifty five (82.4%) out of the 188 respondents agreed with the view that allowing students to run projects that have been tried and tested by lecturers through research or by the industry positively impacts entrepreneurs (Table 6.16). Seventy

three (47.1%) and 82 (52.9%) male and female respondents, respectively, agreed with the indicated view. This means that both female and male graduates believed in the practical approach to learning.

Table 6.17: The impact of innovative ventures on entrepreneurship education

		Exposing students to highly innovative ventures helps the case of entrepreneurship education.				
		Strongly Disagree	Disagree	Agree	Strongly Agree	Total
Sex	Male	1	3	40	43	87
	Female	2	3	49	47	101
Total		3	6	89	90	188

The view that exposing students to highly innovative ventures is helpful in entrepreneurship education was affirmed by 179 (95.2%) of the 188 respondents, 83 (46%) of them being male and 96 (53.6%) female (Table 6.17). This shows that more female participants believed in innovation than their male counterparts.

Table 6.18: Ownership as an ingredient in entrepreneurship education

		Strongly Disagree	Disagree	Agree	Strongly Agree	
Sex	Male	2	13	39	32	86
	Female	3	14	49	35	101
Total		5	27	88	67	187

With respect to ownership as a key ingredient in entrepreneurship education in a turbulent economy, 155 (82.4%) respondents affirmed the view (Table 6.18). Overall, the male and

female respondents who acknowledged this assertion are proportionally the same, that is, 82.6% and 83.2% respectively. There is no doubt that this view was not based on gender bias.

Table 6.19: The impact of the apprenticeship approach on entrepreneurship education

		An apprenticeship like approach to entrepreneurship education which combines instructional and real life projects is necessary				
		Strongly Disagree	Disagree	Agree	Strongly Agree	Total
Sex	Male	0	1	36	50	87
	Female	2	3	48	48	101
Total		2	4	84	98	188

Almost all of the respondents (182 = 96.8%) expressed that an apprenticeship like approach to entrepreneurship education which combines instructional and real life projects is most ideal (Table 6.19). Further findings also show that 86 (98.9%) out of 87 male participants and 96 (95%) out of 101 were female participants agreed with the indicated view. This reveals that graduates advocate for experiential learning.

6.8 Additional cross-tabulations

6.8.1 Age of Respondent and a turbulent economy drives people to seek entrepreneurial education

The findings in Figure 6.12 show that the majority (89) of the respondents in the 26-30 age group agreed with the idea that a turbulent economy drives people to seek entrepreneurial education. Overall, participants in all the age groups who participated in this study agreed with the indicated view. This shows that entrepreneurship education can be the answer in an environment where the rate of economic disturbances is high.

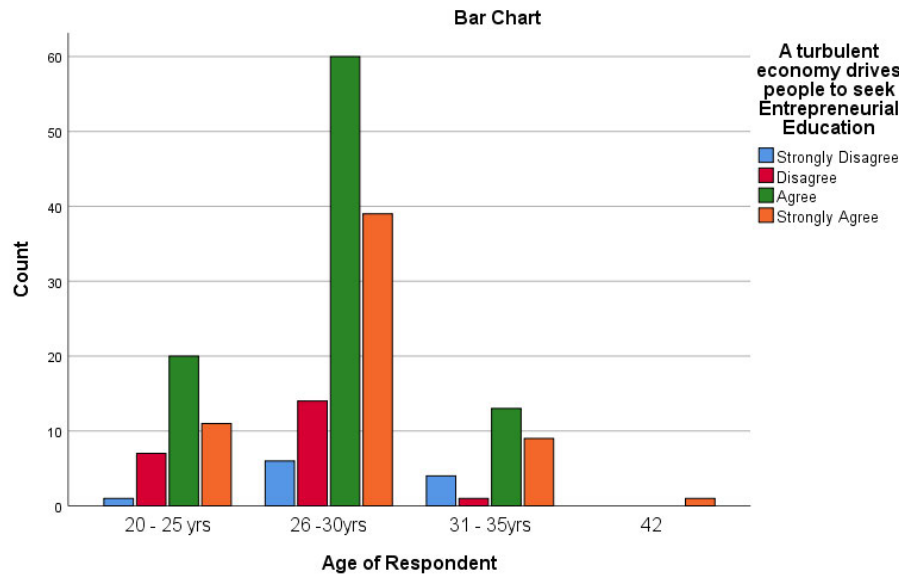


Figure 6.12: Age of Respondent and a turbulent economy drives people to seek Entrepreneurial Education.

6.8.2 Age of Respondent and the economic turbulence is crucial for entrepreneurial inventions

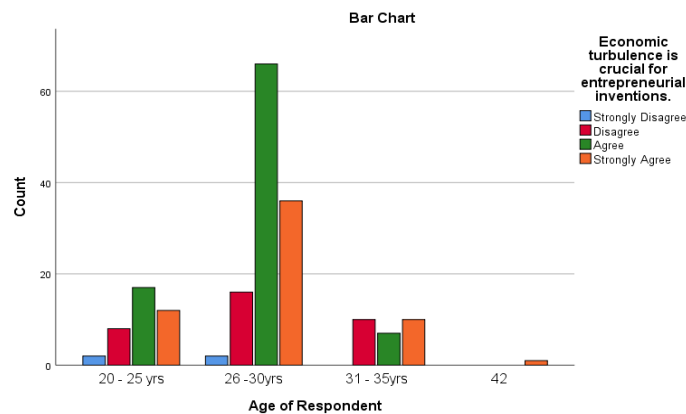


Figure 6.13: Age of Respondent and the economic turbulence is crucial for entrepreneurial inventions

The view that economic turbulence is crucial for entrepreneurial inventions was affirmed more by respondents in the 26-30 age group. Furthermore, findings also revealed that respondents from all the age groups (149 =79.6%) agreed to the indicated idea. This suggests that when the rate of unemployment is low and the economic situation is volatile, people can successfully turn to entrepreneurship education and venture creation.

6.8.3 Age of Respondent and entrepreneurship Education impact on unemployment

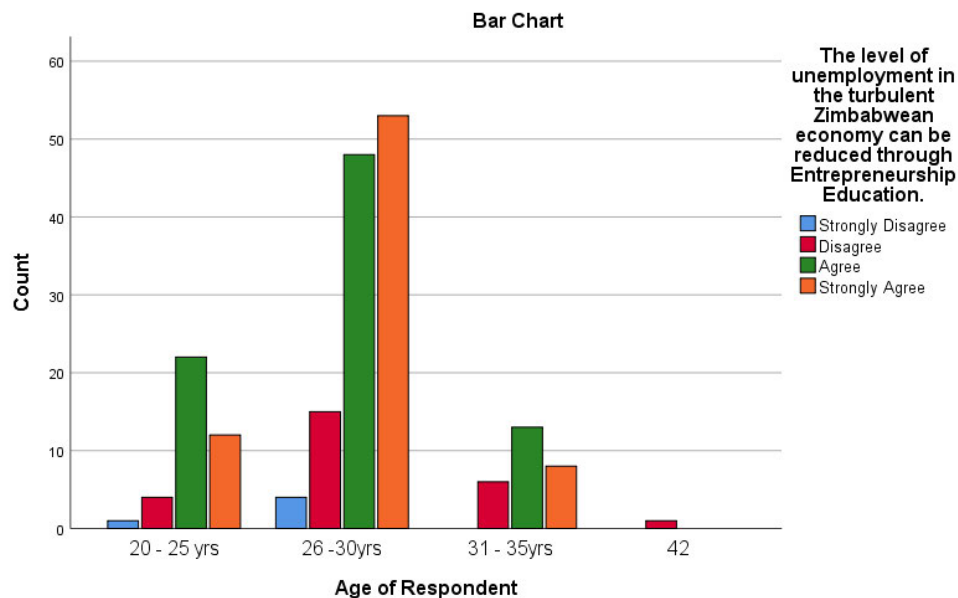


Figure 6.14: Age of Respondent and entrepreneurship Education impact on unemployment

Figure 6.14 shows that a total of 156 (83.4%) across the age groups agreed with the view that the level of unemployment in the turbulent Zimbabwean economy can be reduced through entrepreneurship education. A larger number of the participants from the 26-30 years age group supported the indicated view compared to the number of respondents from the other age groups. Interestingly though, the most mature respondent disagreed with this view. This suggests that some these are factors other than entrepreneurship education which may reduce the level of unemployment in the volatile Zimbabwe.

6.8.4 Age of Respondent and the impact of collaborations with techno parks on entrepreneurship education

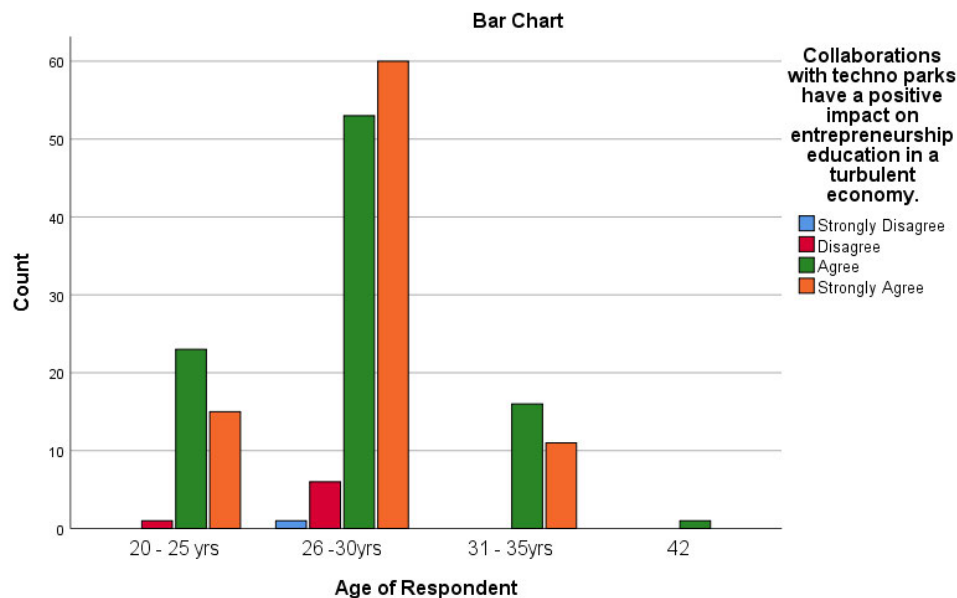


Figure 6.15: Age of Respondent and the impact of collaborations with techno parks on entrepreneurship education

Findings in Figure 6.15 indicate that all the age groups affirmed the notion that collaborations with techno parks have a positive influence on entrepreneurship education in a turbulent economy. This view was agreed on by overall of 179 (95.7%) out of 187 respondents. Also, all o 27 (100%) out of 27 respondents from the 31-35 years age group and 1(100%) out of 1 respondent from the 42 years age groups agreed with the indicated view. This means that with age, graduates positively view collaborations with techno parks as a solution to a turbulent economy.

6.8.5 Age of Respondent and innovative ventures on entrepreneurship education

A total 178 (95.2%) respondents from all age groups were in agreement with the view that exposing students to highly innovative ventures is helpful for implementing entrepreneurship education (Figure 6.16). The most mature respondent strongly agreed with this view and the respondents from the 26-30 years age group outstandingly (114=60.6%) affirmed it.

This shows that the practical approach to learning is regarded as having the capacity to bring positive results to a turbulent economy.

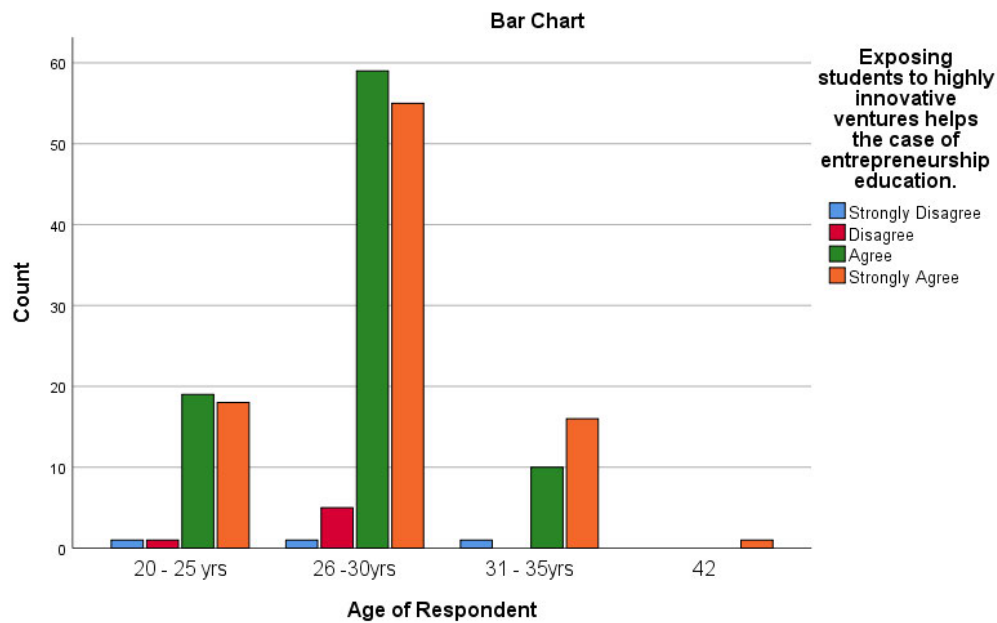


Figure 6.16: Age of Respondent and innovative ventures on entrepreneurship education

6.8.6 Age of Respondent and ownership as an ingredient in entrepreneurship education

Respondents from all age groups were in agreement with the notion that ownership is a key ingredient in entrepreneurship education in a turbulent economy (Figure 6.17). A total of 154 (82.8%) participants and 103 (86.5%) out of 119 participants from the 26-30 years age group dominated the assertion. The 26-30 years age group being the most active sub- group in this study; more participants from this age group believed that active participation in entrepreneurship education helps to solve the challenges associated with a turbulent economy compared to the number of respondents from the other age groups who also had the same view. Participants from the 26-30 years age group advocated for active participation by learners in entrepreneurship.

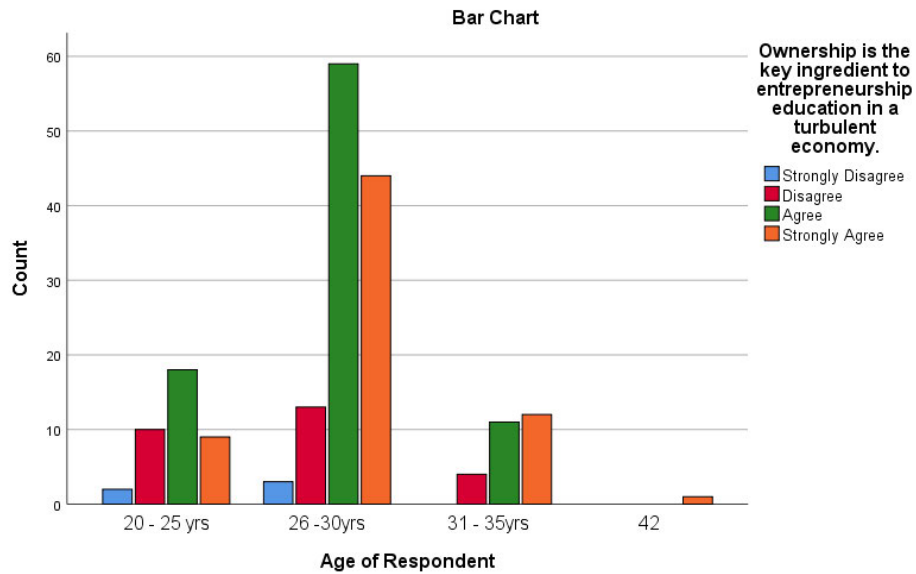


Figure 6.17: Age of Respondent and ownership as an ingredient in entrepreneurship education

6.8.7 Age of Respondent and the impact of an apprenticeship approach to entrepreneurship education

Figure 6.18 reveals that all the age groups agreed with the notion that an apprenticeship like approach to entrepreneurship education which combines instructional and real life projects promotes entrepreneurship education. Overall, 181 (96.8%) out of 187 respondents and 118 (98.3) out of 120 respondents from the 26-30 year age group affirmed the indicated assertion. This proves that the middle aged individuals strongly believe in projects which have tangible results.

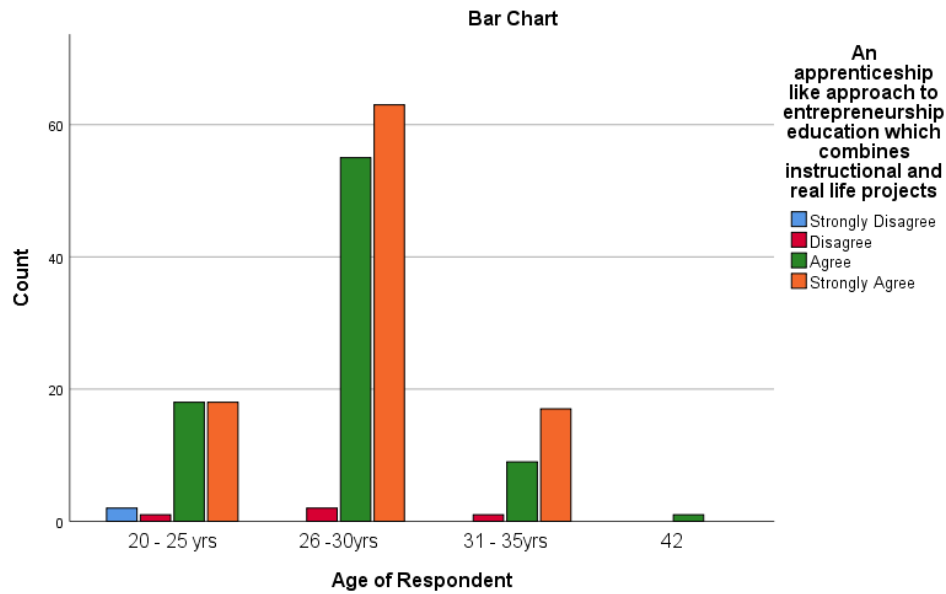


Figure 6.18: Age of Respondent and the impact of an apprenticeship approach to entrepreneurship education

6.8.8 Marital Status of Respondent and entrepreneurial Education crucial for Economic turbulence

Figure 6.19 shows that both the married and unmarried respondents agreed to the view that a turbulent economy drives people to seek entrepreneurial education. A total of 152 (81.7%) out of 186 participants agreed with this view.

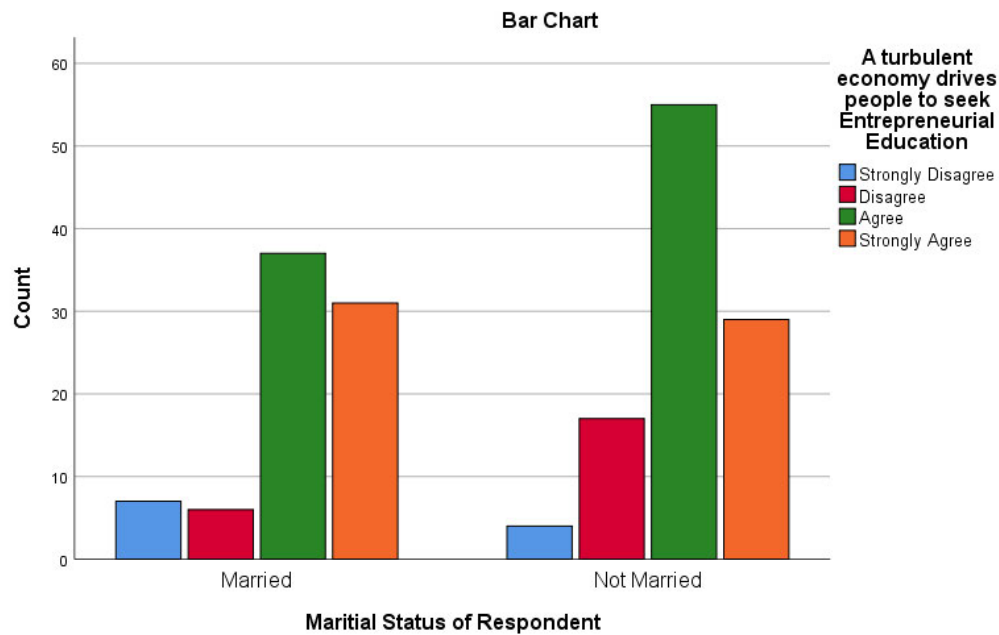


Figure 6.19: Marital Status of Respondent and entrepreneurial Education crucial for Economic turbulence

Furthermore, 68 (83.9%) out of 81 participants who were not married agreed to this view as opposed to 84 (80%) out of 105 married respondents who also agreed with this view. This means that more of the unmarried individuals are driven into entrepreneurship education for self-employment and sustainability compared to the married ones.

6.8.9 Marital Status of Respondent and economic turbulence is crucial for entrepreneurial inventions

Figure 6.20 shows that both the married and unmarried participants were in agreement with the view that economic turbulence is crucial for entrepreneurial inventions in a turbulent economy. Sixty seven 67 (81.7%) out of 82 married participants affirmed this view as opposed to 82 (78%) out of 105 unmarried respondents who also affirmed the indicated view. Overall, 149 (79.7%) out of 187 respondents agreed with the indicated view.

It therefore seems that a slightly higher number of married respondents were likely to respond to a turbulent economy through venture creation as compared to the unmarried respondents.

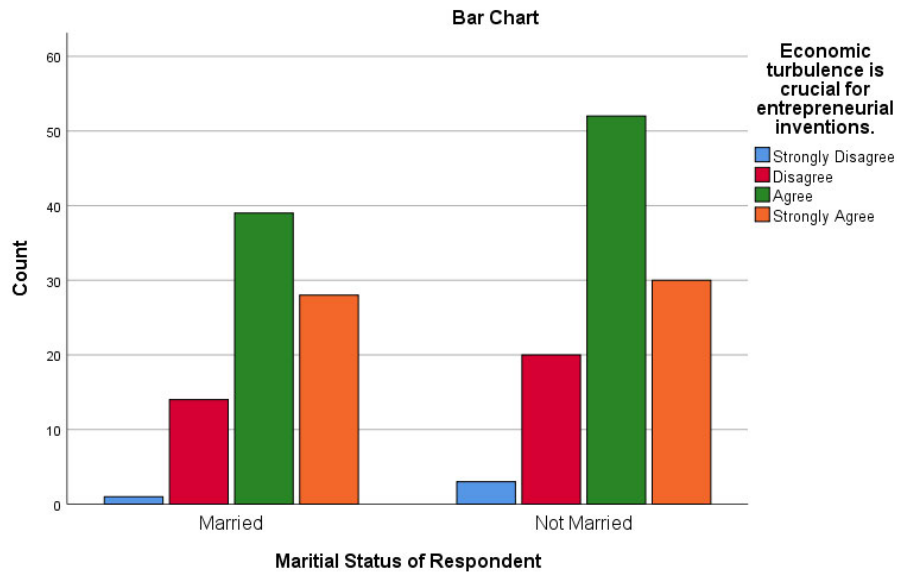


Figure 6.20: Marital status of respondent and economic turbulence is crucial for entrepreneurial inventions.

6.8.10 Marital status of respondent and the impact of entrepreneurship education on unemployment

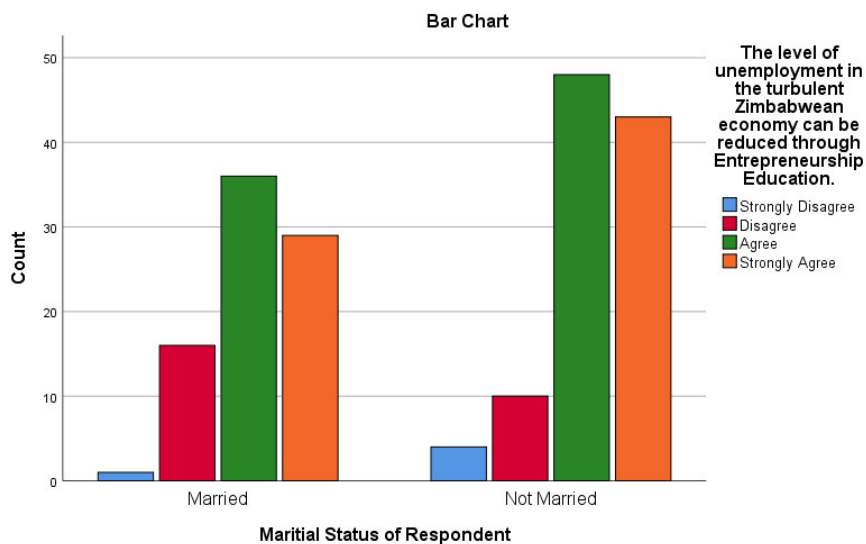


Figure 6.21 Marital status of respondent and the impact of entrepreneurship education on unemployment

As findings in Figure 6.21 indicate, both the unmarried and married respondents affirmed the assertion that the level of unemployment in the turbulent Zimbabwean economy can be

reduced through entrepreneurship education. An overall of 156 (83.4%) out of 187 respondents agreed to this view. Furthermore, 91 (86.6%) out of 105 respondents who were not married and 65 (79.2%) out of 82 married respondents agreed with this view. There was no bias towards marital status in relation to the influence of entrepreneurship education on employment creation in a turbulent economy amongst participants.

6.9.11 Marital status of respondent and the impact of techno parks on entrepreneurship education

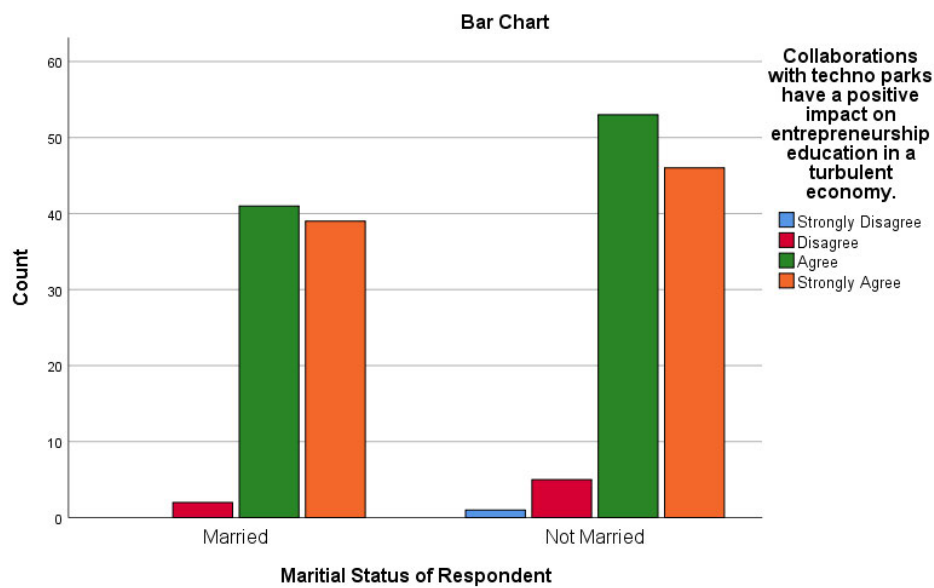


Figure 6.22 Marital Status of Respondent and the impact of techno parks on entrepreneurship education

The findings in Figure 6.22 show that both the married and unmarried respondents affirmed the assertion that collaborations with techno parks have a positive relationship with entrepreneurship education in a turbulent economy. Ninety nine (94. 2%) out of 105 unmarried and 80 (97.5%) married respondents agreed with this view. Overall, 179 (95.7%) out of 187 respondents agreed with this view. This implies that there is an insignificant difference between married and not married participants regarding the existence of a positive impact of entrepreneurship learners' collaborations with techno parks in a turbulent economy.

6.8.11 Marital status of respondent and the impact of ownership on entrepreneurship education

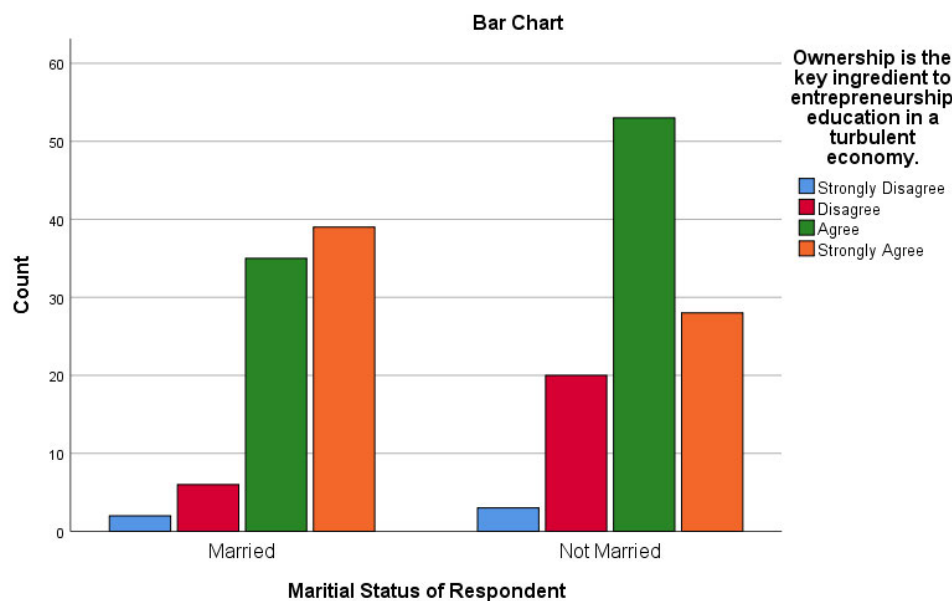


Figure 6.23: Marital status of respondent and the impact of ownership on entrepreneurship education

Both the married and unmarried respondents affirmed the assertion that ownership is a key ingredient in entrepreneurship education in a turbulent economy (Figure 6.23). Seventy four (90.2%) out of 104 married respondents and 81 (77.8%) out of 104 unmarried respondents supported this view. In total, 155 (83.3%) out of 186 respondents agreed with the indicated view. This shows that there is no bias towards marital status when it comes to the adoption of ownership and or experiential learning of entrepreneurship in a turbulent economy.

6.8.12 Marital status of respondent * Apprenticeship like approach to entrepreneurship education

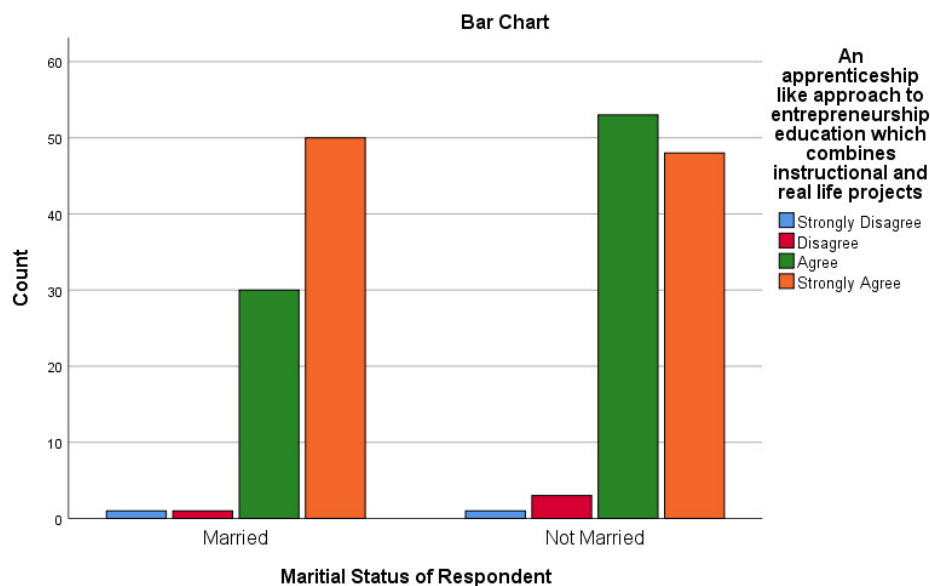


Figure 6.24: Marital status of respondent and apprenticeship like approach to entrepreneurship education

As shown in Figure 6.24, both the unmarried and married respondents agreed with the view that an apprenticeship like approach to entrepreneurship education which combines instructional and real life projects promotes entrepreneurship education. Eighty (97.5%) out of 82 married and 101 (96.2%) out of 105 unmarried respondents agreed with this view. Overall, 181 (96.8%) out of 187 respondents were in agreement with this view. This shows that both married and unmarried participants appreciate the work related learning they undertook during their training.

6.8.13 The period during which the participant got married and the impact of entrepreneurship education on unemployment

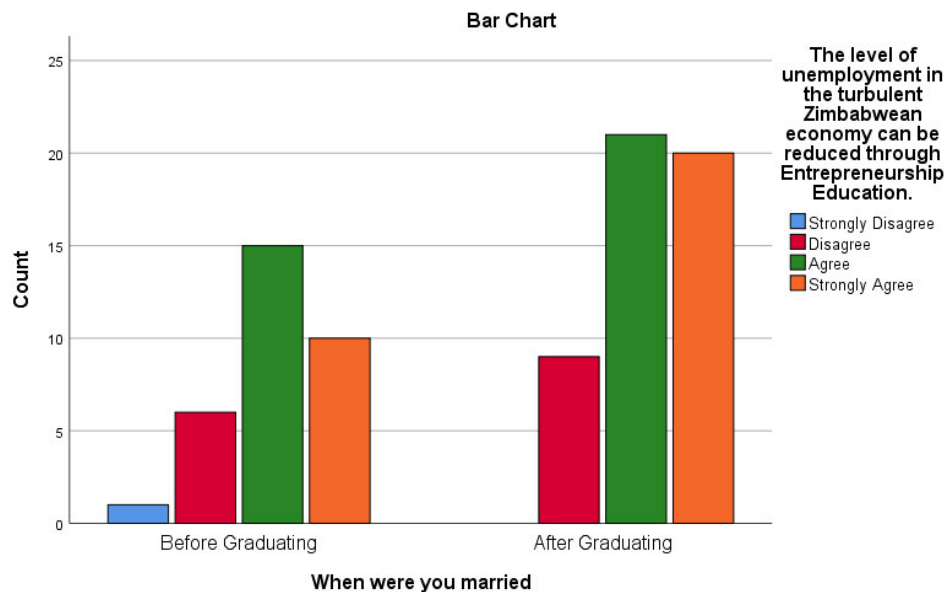


Figure 6.25: The period during which the participant got married and the impact of entrepreneurship education on unemployment

Figure 6.25 shows that both groups were in agreement with the belief that the unemployment level in the turbulent Zimbabwean economy can be reduced through entrepreneurship education. A total of 66 (80.4%) out of 82 respondents agreed with this view, whereas and 41 (82%) out of 50 respondents who got married after graduating and 25 (78.1%) who got married before graduating responded positively to this view. This implies that participants acknowledged entrepreneurship education as being one of the major factors contributing towards the reduction of unemployment in a turbulent economy.

6.8.14 The length of time during which participants had been graduates and a turbulent economy drives people to seek Entrepreneurial Education

Findings in Figure 6.26 show that 153 (81.8%) out of 187 respondents who were in agreement with the assertion that a turbulent economy drives people to seek entrepreneurial education had graduated 1-6 years before the time when this study was being conducted.

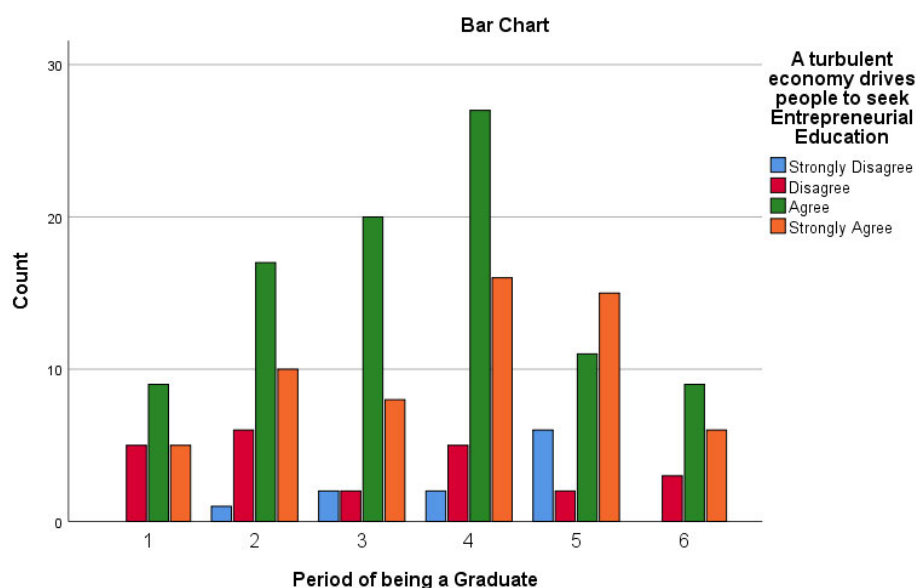


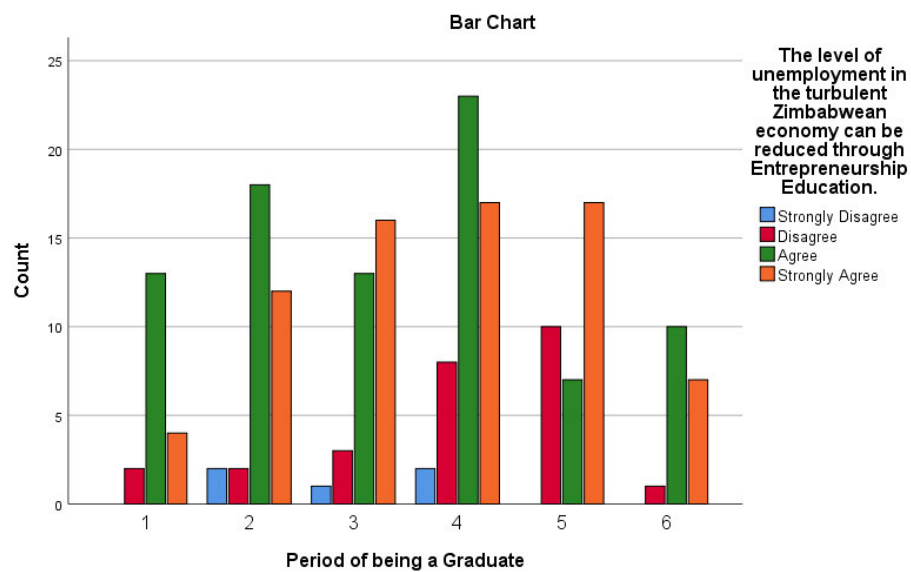
Figure 6.26: The length of time during which participants had been graduates and a turbulent economy drives people to seek Entrepreneurial Education

Furthermore, 28 (87.5%) out of 32 respondents who were in their third year post graduation, 43 (86%) who were in their fourth year post graduation and 15 (83.3%) out of 18 who were in their sixth year post graduation at the time when this study was being conducted were in agreement with the indicated view. This agreement can be attributed to maturity and experience acquired by the participants after graduation, and it shows that with time, entrepreneurship education can solve economic problems.

6.8.15 The length of time during which participants had been graduates and the impact of entrepreneurship education on unemployment

As shown in Figure 6.27, participants who agreed with the view that the level of unemployment in the turbulent Zimbabwean economy can be reduced through entrepreneurship education came from all of the six categories of the length of time during

which participants had been graduates at the time when this study was being



conducted.

Figure 6.27: The length of time during which participants had been graduates and the impact of entrepreneurship education on unemployment

Seventeen out of 18 (94.4%) participants who were in their 6th years post- graduation, 17 out of 19 (89.4%) who were in their first year post- graduation and 30 out of 34 (88.2%) who were in their second year post graduating affirmed the indicated view. Therefore a total of 157 out of 188 (83.5%) respondents agreed with the indicated view. This shows that entrepreneurial education plays a critical part in employment creation in a volatile Zimbabwean economy which is characterised by high levels of unemployment.

6.8.16 The length of time during which participants had been graduates and the impact of techno parks on entrepreneurship education

Figure 6.28 reveal that 101 (53.7%) out of 188 respondents agreed that collaborations with techno parks have a positive impact on entrepreneurship education in a turbulent economy.

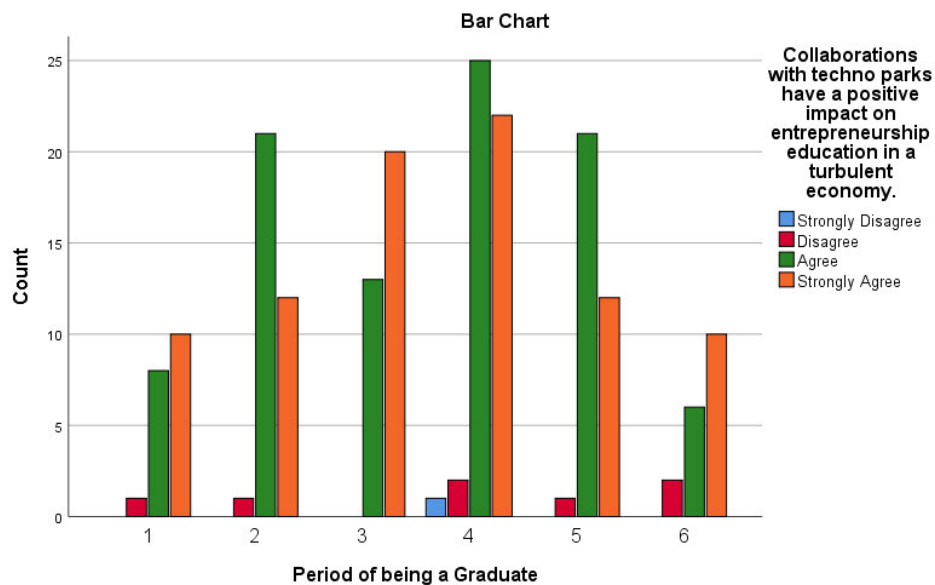


Figure 6.28: The length of time during which participants had been graduates and the impact of techno parks on entrepreneurship education

Thirty three (100%) out of 33 respondents who were in their third year post graduation wholly agreed with the indicated view. Likewise, 33 (97%) 5 years (out of 34 and 2 years (33=97%) out of 34 respondents. This reveals that the hands-on approach to learning entrepreneurship helped graduates to be more innovative and experience what they learn.

6.8.17 The length of time during which participants had been graduates and collaborations with established entrepreneurship organizations

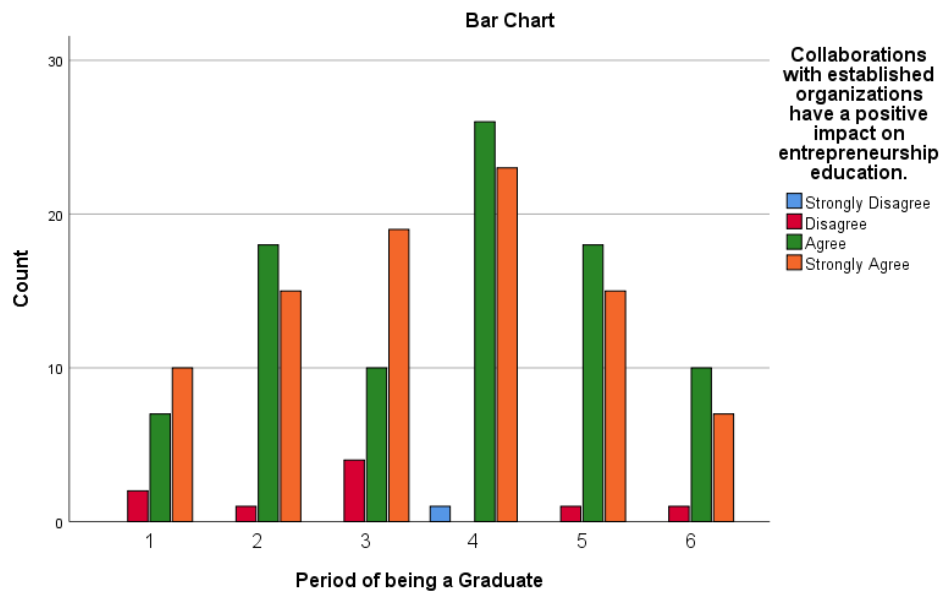


Figure 6.29: The length of time during which participants had graduates and collaborations with established entrepreneurship organizations

Except for a single respondent (0.5%) in the category of students who were in their fourth year post graduation, the rest of the respondents did not strongly disagree with the mantra that collaborations with established organizations have appositive impact on entrepreneurship education. The majority (178) of the respondents (94.6%) agreed with the indicated view. This implies that almost all participants perceived the indicated collaborations as having the capacity to give the learner the opportunity to experience learning.

6.8.18 The length of time during which participants had been graduates and lecturers' tried and tested projects and industry researches on entrepreneur

The total of 154 (81.9%) respondents from the various categories of the length of time during which participants had been graduates affirmed the view that allowing students to run tried and tested projects from lecturers' or industry researches impacts positively on the entrepreneurs (Figure 6.30). Also, 33 (17.5%) of the participants disagreed with this view. This shows that the majority of the participants had the perception practice helps learners to experience learning.

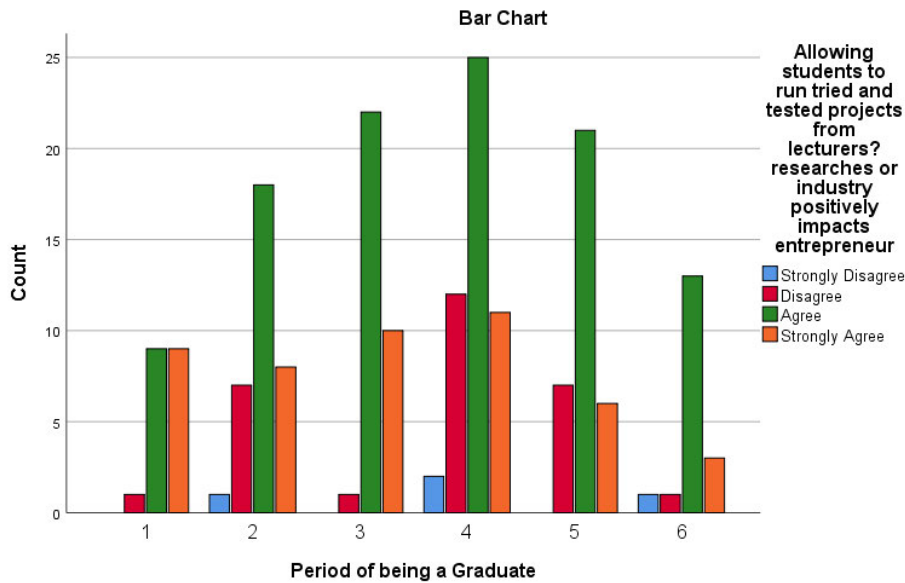


Figure 6.30: The length of time during which participants had been graduates and the impact of students' practice through projects from lecturers' and industries' tried and tested researches on entrepreneurs

6.8.19 The length of time during which participants had been graduates and highly innovative ventures impact on entrepreneurship education

Overall, 179 (95.2%) out of the 188 respondents drawn from all the six categories of the length of time during which participants had been graduates affirmed the view that exposing students to highly innovative ventures is helpful for entrepreneurship education. All participants who were in their sixth year post graduation agreed with this view (Figure 6.31). Also, 18 out of 19 participants who were in their first year post graduation, 33 out of 34 participants who were in their second year post graduation and 32 out of 33 participants agreed with the indicated view. This suggests that with maturity, graduates feel the need to start and grow their own ventures.

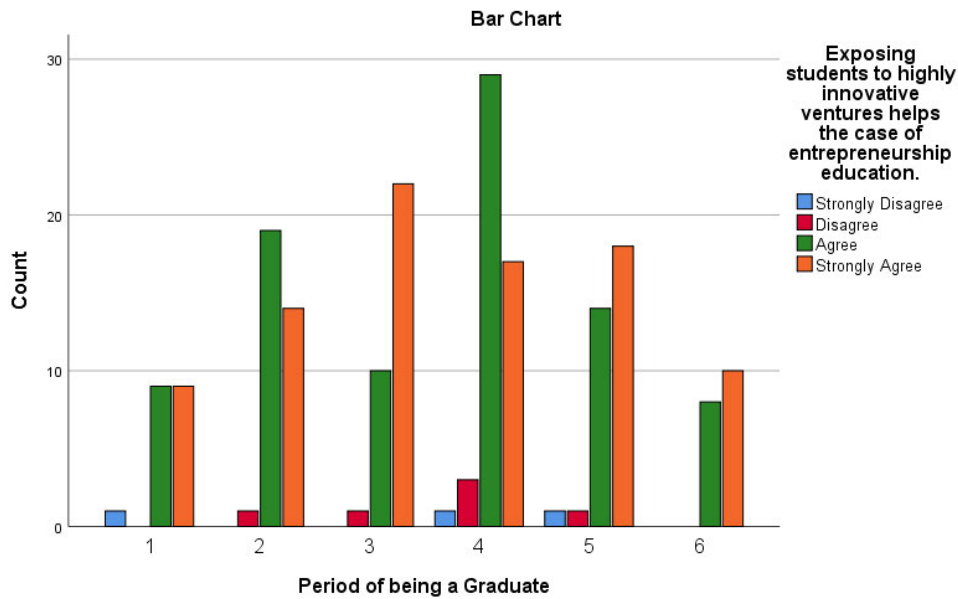


Figure 6.31: The length of time during which participants had been graduates and the impact of highly innovative ventures on entrepreneurship education.

6.8.20 The length of time during which participants had been graduates and ownership as an ingredient in entrepreneurship education

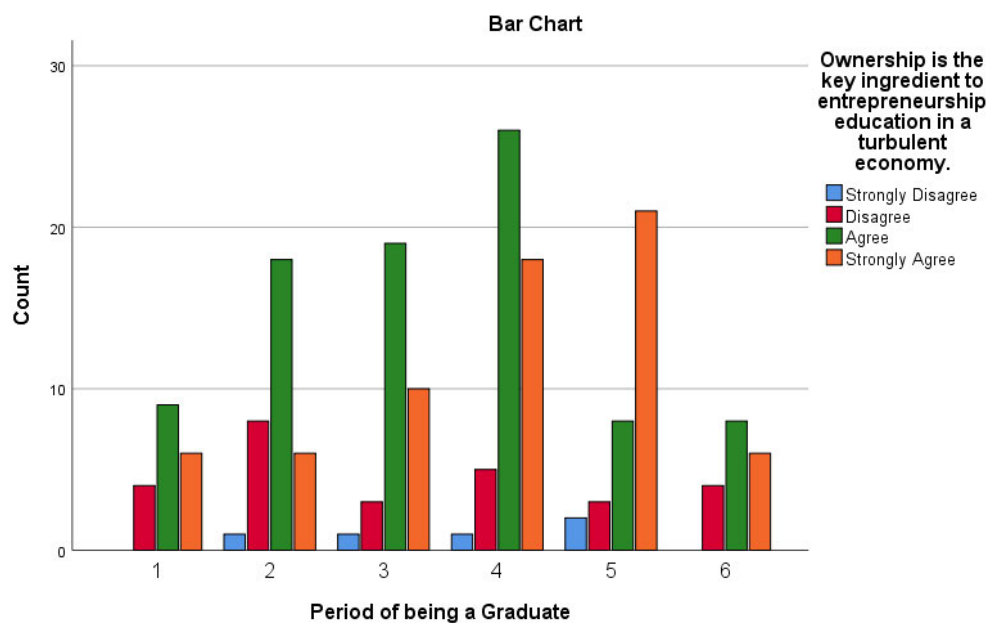


Figure 6.32: The length of time during which participants had been graduates and ownership as an ingredient in entrepreneurship education

As revealed in Figure 6.32, overall, 155 (82.8%) out of the 188 respondents from all the six categories of the length of time during which participants had been graduates affirmed that ownership of venture by students help in augmenting entrepreneurship education since there will be experiential learning and education with production. Eighty eight (47%) of those who affirmed the indicated view simply agreed whilst 67 (35.8%) of them strongly agreed to the view. The perception that running an owned entity is necessary in the volatile Zimbabwean economy was common to all participants regardless of how long they had been graduates.

6.8.21 The length of time during which participants had been graduates and an apprenticeship like approach to entrepreneurship education

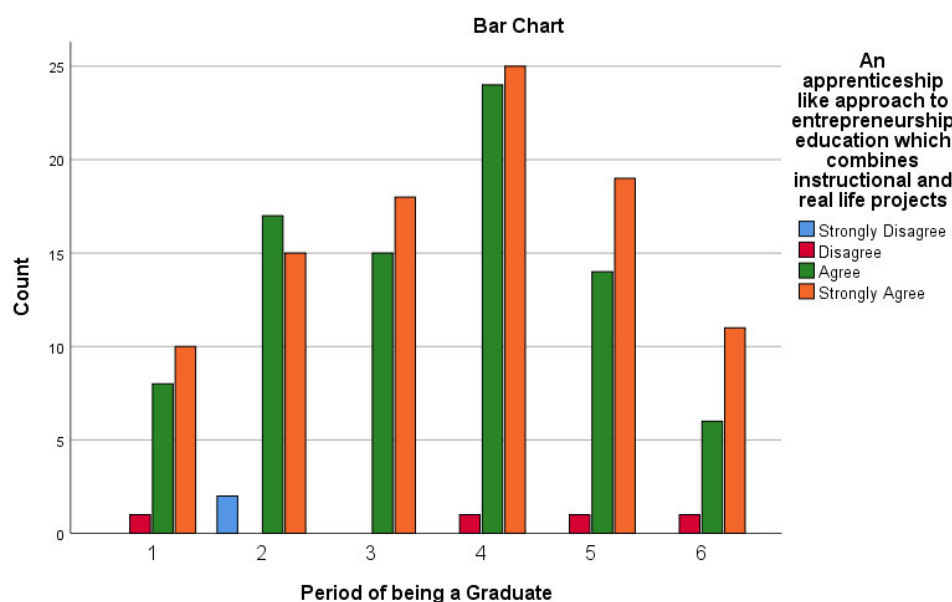


Figure 6.33: The length of time during which participants had been graduates and an apprenticeship-like approach to entrepreneurship education

Thirty three respondents who were in their third year, post-graduation, wholly affirmed that an apprenticeship like approach to entrepreneurship education which combines instructional and real life projects is necessary (Figure 6.33). Only one respondent from each group of respondents who were in their first year, fourth, fifth and six years 6 post graduation disagreed with the indicated notion. Overall, 182 (96.8%) affirmed this view. This shows that there was an insignificant difference between participants drawn from different post graduation periods regarding the adoption of a practical apprenticeship like approach to entrepreneurship education.

6.8.22 Employment status and a turbulent economy drives people to seek Entrepreneurial Education

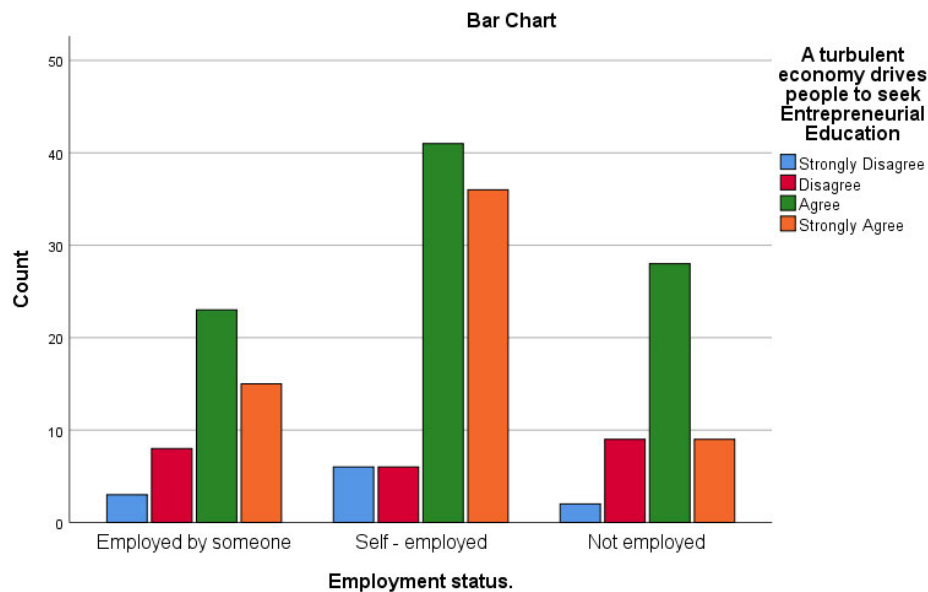


Figure 6.34: Employment status and a turbulent economy drives people to seek Entrepreneurial Education

Figure 6.34 shows that participants from all employment status categories affirmed the assertion that a turbulent economy drives people to seek entrepreneurial education. Overall, 152 (83.5%) out of 186 respondents agreed with this view, and the highest number of scores was from the self employed respondents. Seventy-seven (86.5%) out of 89 of the self employed respondents agreed to the indicated view. This means that respondents are committed to entrepreneurship education as a strategy to fill in the unemployment gap.

6.8.23 Employment status and the impact of economic turbulence on entrepreneurial inventions.

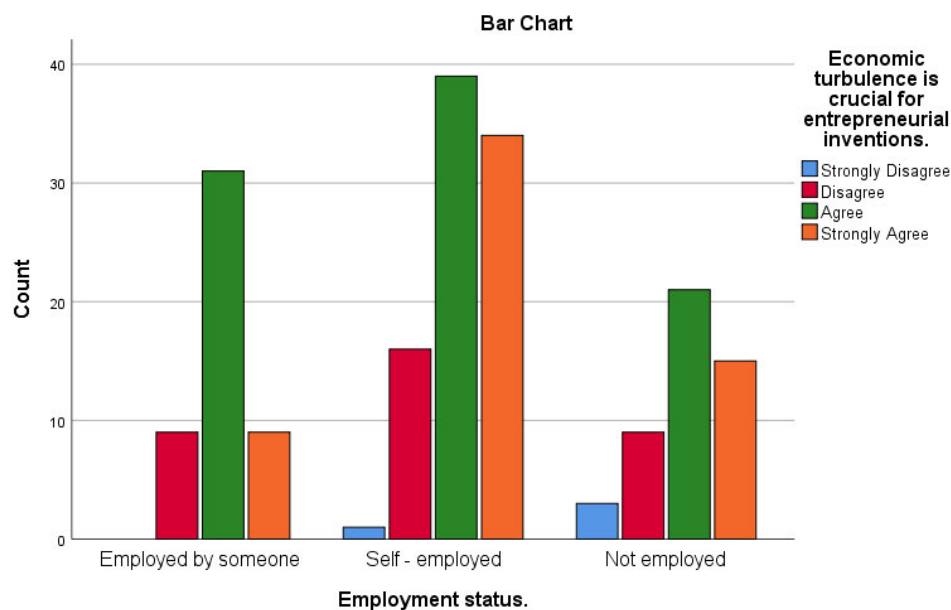


Figure 6.35: Employment status and the impact of economic turbulence on entrepreneurial inventions

Findings in Figure 6.35 show that participants from all employment status categories affirmed the assertion that a turbulent economy drives people to seek entrepreneurial education. In general, the majority (149) out of 187 respondents (79.6%) agreed to this view, and among these, 40 (81.6%) were out of the 49 respondents in the ‘employed by someone’ category, 36 (75%) were out of the 48 respondents in the ‘not employed’ category. The fact that the ‘employed by someone’ category had the highest scores may mean that graduates appreciate entrepreneurship education but only consider it as a career option in the long run after exhausting the avenues for looking for jobs.

6.8.24 Employment status and the impact of entrepreneurship education on unemployment

Participants from all employment status categories affirmed the assertion that the level of unemployment in the turbulent Zimbabwean economy can be reduced through entrepreneurship education (Figure 6.36).

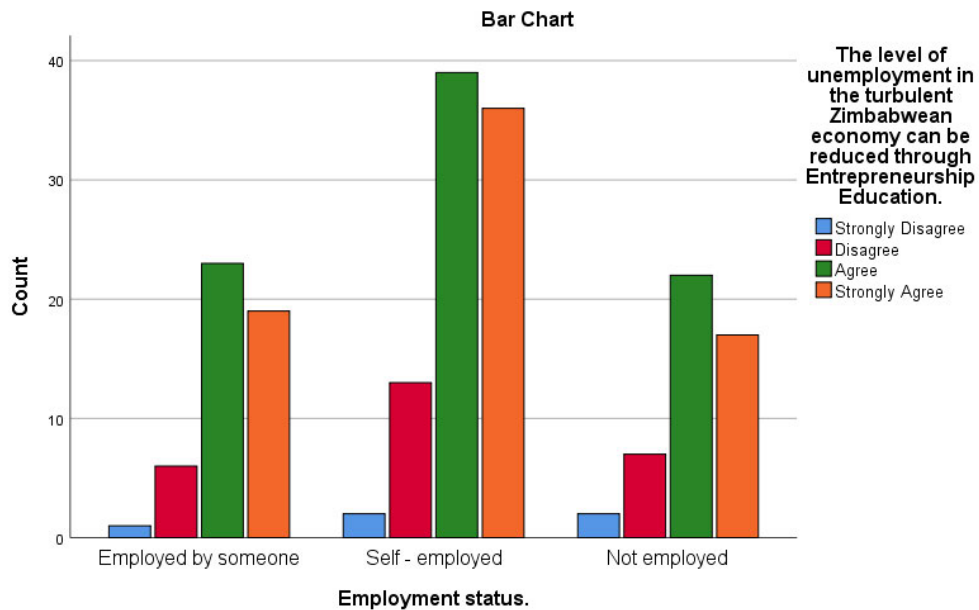


Figure 6.36: Employment status and the impact of entrepreneurship education on unemployment

A total of 156 (83.4%) out of 187 respondents agreed with this view. Specifically, 42 (85.7%) were from the 49 respondents in the 'employed by someone' category and 39 (81%) were from the 48 respondents in the 'not employed' category. This shows that respondents' perceptions on this view were insignificantly different. Although the highest number of scores from participants who agreed with the indicated view was from the 'employed by someone' category, generally, respondents believed that entrepreneurship education play an important part in the reduction of unemployment in a turbulent economy.

6.8.25 Employment status and the impact of techno parks on entrepreneurship education

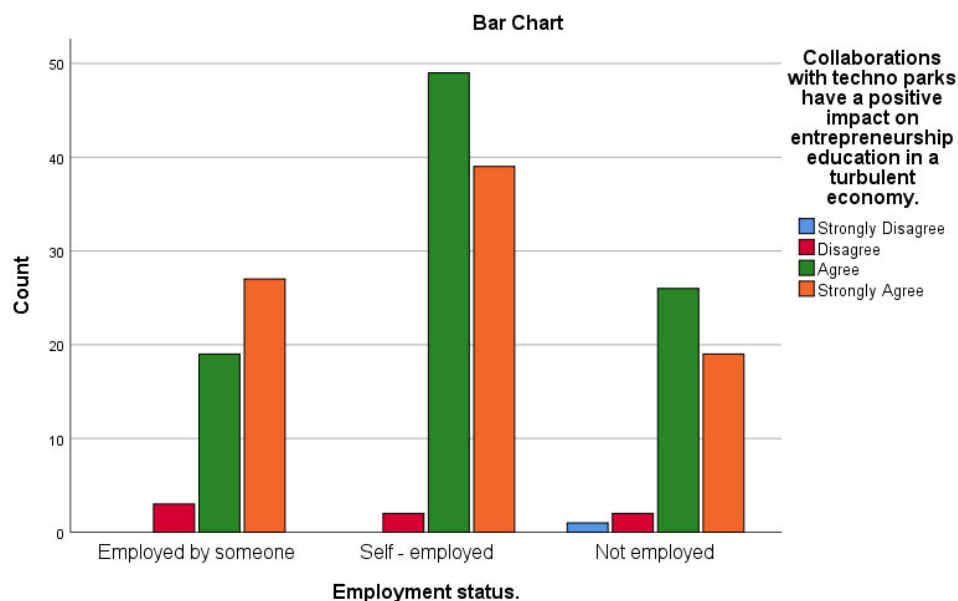


Figure 6.37: Employment status and the impact of techno parks on entrepreneurship education

Figure 6.37 shows that participants from all three employment statuses agreed that collaborations with techno parks positively impact entrepreneurship education in a turbulent economy. Overall, 179 (95.7%) out of 187 respondents agreed with this view. Interestingly, 88 (97.7%) out of 90 respondents in the “self employed” category 46 (93.8%) out of 49 respondents in the “employed by someone” category and 45(93.7%) out of 48 participants in the “not employed” category agreed with the indicated assertion. This clearly shows a positive correlation between employment status and a practical approach view to entrepreneurship education. The responses made by the participants’ from the ‘self employed” category were based on experience.

6.8.26 Employment status and the impact of collaborations with established organizations on entrepreneurship education.

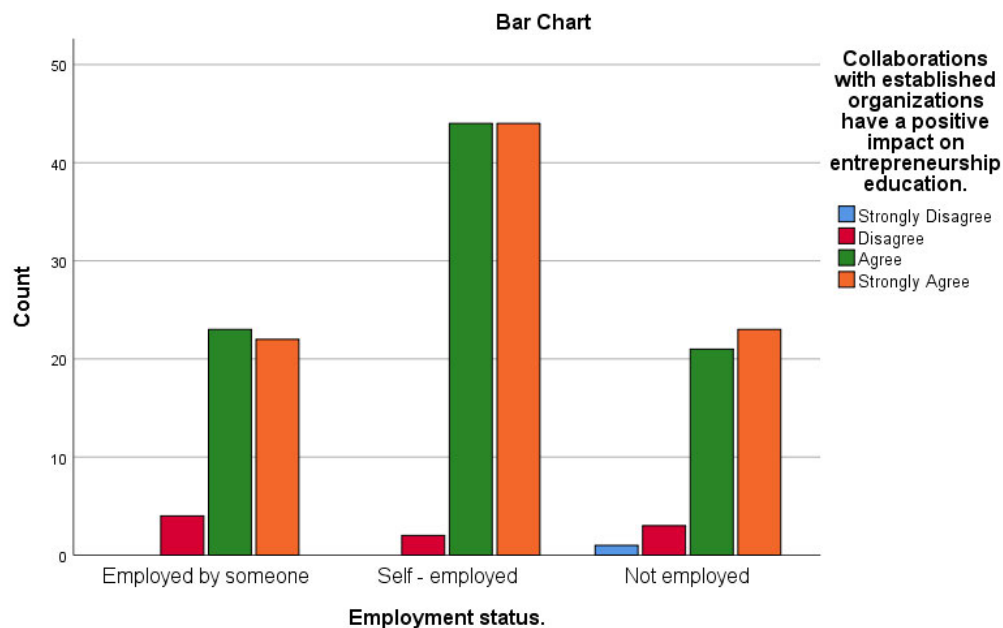


Figure 6.38 Employment status and the impact of collaborations with established organizations on entrepreneurship education.

Figure 6.38 indicates that a total of 177 (94.6%) out of 187 participants from all employment categories agreed that collaborations with established organizations have a positive impact on entrepreneurship education. Almost all {88 (97.7%)} out of 90 self employed respondents responded positively to this view. This shows that respondents advocate for more practical approaches to entrepreneurship education learning.

6.8.27 Employment status. and the impact of Lecturers' projects and industries' researches on entrepreneurs

Figure 6.39 reveals that participants from all employment categories agreed that allowing students to run tried and tested projects from lecturers' researches or from industries impacts positively on entrepreneurs.

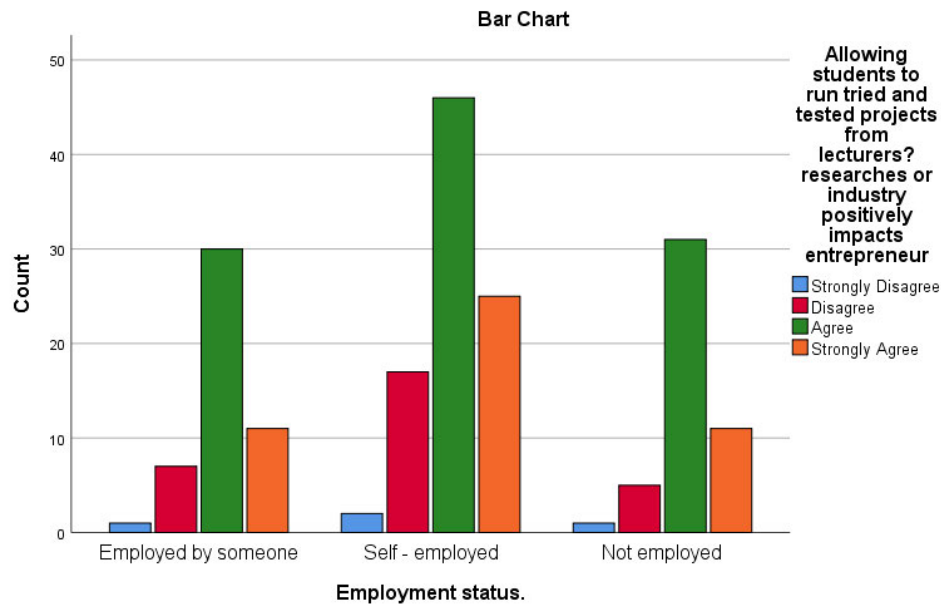


Figure 6.39: Employment status ant the impact of tried and tested projects from lecturers' and industries' researches on entrepreneurs

A total of 154 (82.3%) out of 187 respondents agreed with this view. Furthermore, amongst the respondents who agreed with this view, 42 (87.5%) were from the 48 participants in the 'not employed' category and 71 (78.8%) were from the 90 participants in the 'self-employed' category. The difference in the number of respondents from these two categories who affirmed the indicated view can be attributed to the fact that the 'self-employed' had a feel of both learning and conducting own business, whereas respondents in the 'not employed' category believed so much in their lecturers (*fundis*) since they had not experienced the other side of industry.

6.8.28 Employment status and the impact of innovative ventures on Entrepreneurship Education

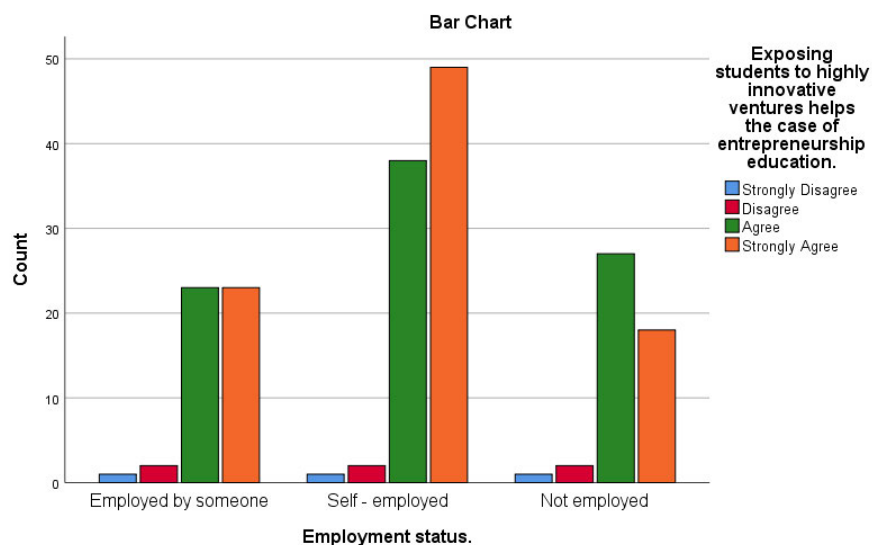


Figure 6.40: Employment status and the impact of innovative ventures Entrepreneurship Education.

Figure 6.40 reveals that a total of 178 (95.1%) out of 187 respondents from all three employment categories agreed that exposing students to highly innovative ventures is helpful for entrepreneurship education. Eighty seven (96.6%) out of 90 self-employed respondents, 46 (93.8%) out of 49 respondents who were employed by someone else and an almost similar proportion of 45 (93.7%) out of 48 respondents who were not employed agreed with the indicated view. There is an insignificant difference between respondents' views regarding the indicated view, suggesting that their belief is hinged on a hands-on approach to entrepreneurship education.

6.8.30 Employment status and ownership as an ingredient in entrepreneurship education

Figure 6.41 shows that a total of 155 (83.3%) out of 186 respondents from the three employment status categories agreed with the assertion that ownership is a key ingredient in entrepreneurship education in a turbulent economy.

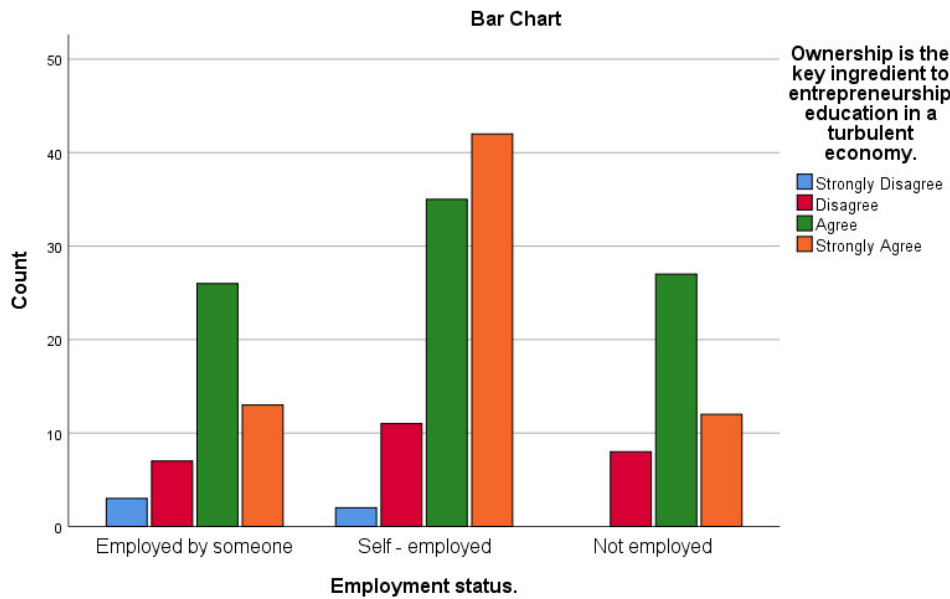


Figure 6.42: Employment status and ownership as an ingredient in entrepreneurship education

In general the highest number of 77 (85.5%) out of 90 self- employed respondents agreed with the indicated view. This has interestingly revealed that ownership of entities is the way to go. It also seems that the ‘self employed’ participants were talking from their own experience of running entities.

6.8.31 Employment status and the impact of an apprenticeship like approach on entrepreneurship education

Figure 6.43 shows that a total of 181 (96.8%) out of 188 respondents from all three categories of employment status agreed with the assertion that an apprenticeship like approach to entrepreneurship education which combines instructional and real life projects is necessary. The highest proportion of respondents who agreed with this view {49 (100%) out of 49} constituted the respondents who were employed by someone else. This shows that experiential learning as likened to work related learning was appreciated by almost all (96.8%) respondents.

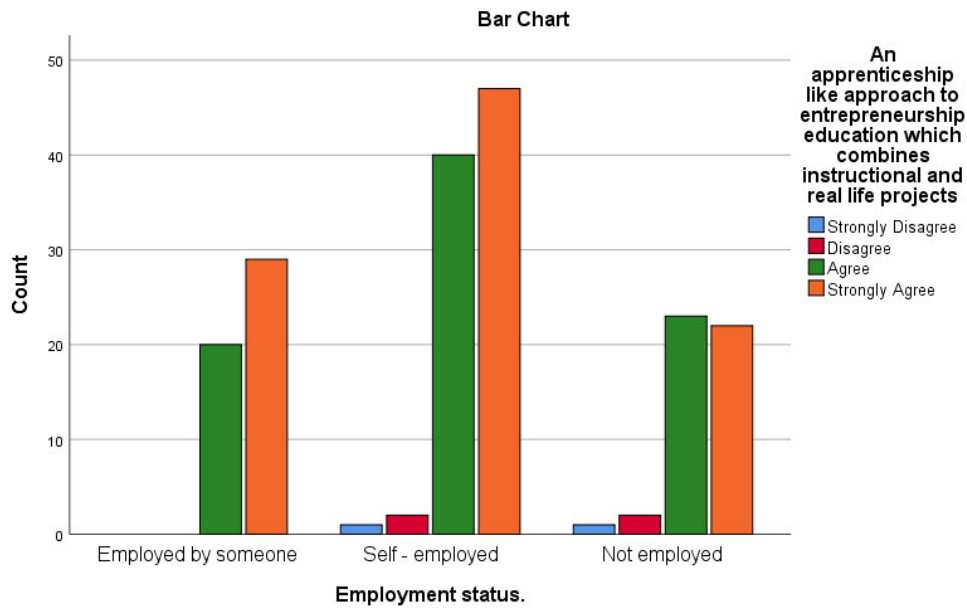


Figure 6.43 Employment status and an apprenticeship like approach on Entrepreneurship Education

6.9 The influence of entrepreneurship education on venture creation and creativity

For the 17 factors considered in this research objective, three had the highest number of respondents who strongly agreed or simply agreed with them. These factors are as follows:

- “A strong focus on entrepreneurship education” promotes pro-activity in a turbulent economy
- “A strong focus on entrepreneurship education” promotes creativity in a turbulent economy,
- and, “A strong focus on entrepreneurship education” promotes innovations in a turbulent economy’

The indicated factors had statistical loads of 0.749, 0.758 and 0.778, respectively. The second categories of factors are as follows:

- Entrepreneurship education increases competences such as self-efficacy, pro-activeness and risk taking (0.696);
- Entrepreneurship education has led to employment creation in Zimbabwe’ (0.656), and,

- Sustainable venture creation is an outcome of entrepreneurship education' (0.632).

These findings reveal that respondents have a strong view that entrepreneurial education lay the foundation for innovation and creativity for sustainable venture creation in the country.

As the findings show, there are two factors which show that respondents did not think entrepreneurship education influences venture creation and creativity because their factor scores were less than 0.30. These factors are: 'The CUT Entrepreneurship education and or its courses do not sufficiently emphasize development of creative capability'; and, 'Entrepreneurs are born and not made'.

Table 6.20: The influence of entrepreneurship education on venture creation and creativity

Objective: The influence of entrepreneurship education on venture creation and creativity	
	Component 1
E35 Sustainable venture creation is an outcome of entrepreneurship education.	0.632
E36 Entrepreneurship education has led to employment creation in Zimbabwe.	0.656
E37 A strong focus on entrepreneurship education promotes creativity in a turbulent economy.	0.758
E38 A strong focus on entrepreneurship education promotes pro-activity in a turbulent economy.	0.749
E39 A strong focus on entrepreneurship education promotes innovations in a turbulent economy.	0.778
E40 Entrepreneurship education increases competences such as self-efficacy, pro-activeness and risk taking.	0.696

E41 Entrepreneurship education raises intention towards self-employment in a turbulent economy.	0.541
E42 Entrepreneurship education boosts creativity, build-up mitigating attitude to risk, influence the strategic utilization	0.536
E43 A positive relationship exists between entrepreneurship education and entrepreneurial intentions.	0.493
E44 The need for highly paying jobs with good working environments makes most graduates reluctant to start their venture	0.343
E45 The CUT Entrepreneurship education and or its courses do not sufficiently emphasize development of creative capability	
E46 Effective entrepreneurship education is a key component in job creation and economic growth.	0.696
E47 Any undergraduates, irrespective of their areas of academic specialization must be equipped with entrepreneurial ski	0.544
E48 Turbulent economies can positively be transformed if entrepreneurship education is embraced.	0.338
E49 Entrepreneurs are born not made.	
E50 Bureaucratic barriers are hindering the success of venture creation in Zimbabwe's turbulent economy.	0.351
E51 Viewing innovation failure as an attempt to go in a new direction would promote practical entrepreneurship in Zimbabwe	0.426

Table 6.21: Findings from KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.852
	Df	136
	Sig.	0.000

The KMO and Bartlett's Test score of 0.852 shown above indicates that there are enough items predicated by each factor in this research objective. This is because any score greater than 0.70 is considered adequate. Furthermore, the significance score of 0.000 as indicated implies that the variables were correlated highly enough to give a reasonable basis for factor analysis for this research objective. Below is an interpretation of the factor analysis results tabulated above.

6.11.1 Scree plot showing the influence of entrepreneurship education on venture creation and creativity using the Principal Component

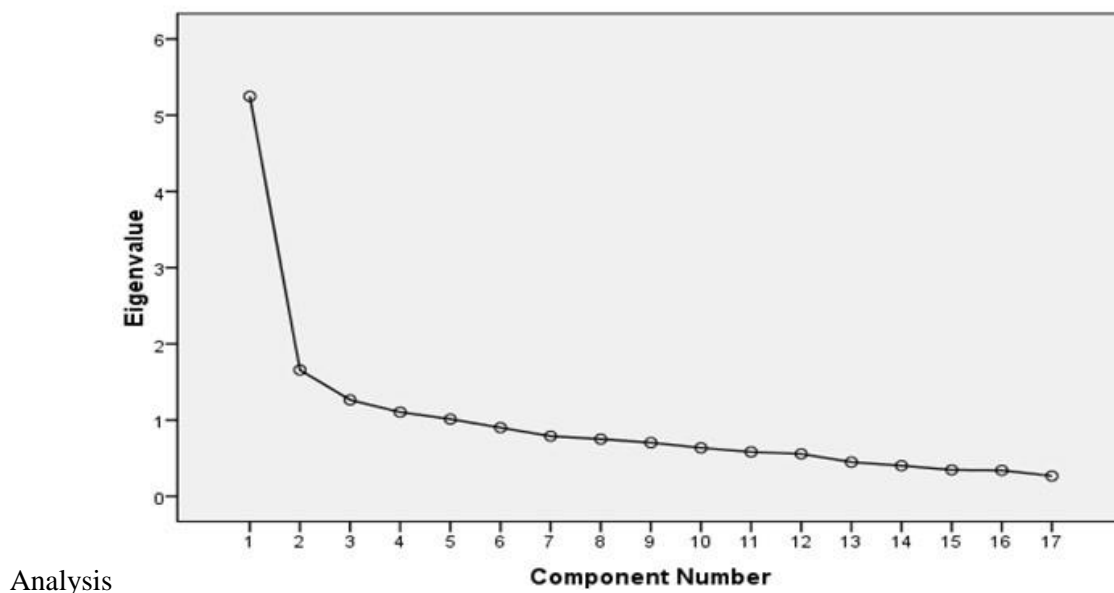


Figure 6.44: Scree plot on the influence of entrepreneurship education on venture creation and creativity

This “scree plot shows that the first 5 factors account for most of the total variability in data (given by the eigenvalues)”. The “eigenvalues for the first factors account for a very small proportion of the variability and are likely unimportant”.

6.10 Organisational resources to train entrepreneurship practically

Table 6.22: KMO and Bartlett’s test for the adequacy of organizational resources to practically train entrepreneurship

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.681
Bartlett's Test of Sphericity	Approx. Chi-Square	314.243
	Df	36
	Sig.	0.000

Table 6.23 Organizational Resources to train entrepreneurship practically

Objective: Organisational Resources to train entrepreneurship practically	
	Component
	1
F52 CUT raises awareness of the value of developing the entrepreneurial mind-set, behaviour and abilities amongst staff and students	0.532
F53 The organisational structure at CUT stimulates and supports the development of the entrepreneurial mindset and skills.	0.687
F54The staff at CUT always bring to the fore the benefits of developing the entrepreneurial capabilities.	0.457
F55 CUT provides opportunities to experience entrepreneurship.	0.584

F56 The university provides support for both individuals and groups to move from entrepreneurial ideas to auctioning.	0.763
F57 Mentoring by academics and industrialists is available.	0.622
F58 CUT facilitates access to private financing for potential entrepreneurs.	0.436
F59 The university's business incubation centre is accessible.	0.440
F60 The Government of Zimbabwe has policies in place to support the practical entrepreneurship agenda in a turbulent economy.	0.498

The KMO and Bartlett's Test of 0.681 shown in Table 6.23 shows that there are fairly sufficient items predicated for each factor in this research question. This is because any score above greater than 0.70 is considered adequate. Furthermore, the significance score indicated here of 0.000 means that the variables are correlated highly enough to provide a reasonable basis for factor analysis for this research objective.

For the nine factors which address the research question (Organisational resources to train entrepreneurship practically), only one factor, namely: "The University provides support for both individuals and groups to move from entrepreneurial ideas to auctioning" had the majority of respondents who strongly agreed or agree with this view (Table 6.23). The second category of factors which also contributed fairly to the objective were as follows:

- The organisational structure at CUT "stimulates and supports the development of an entrepreneurial mind-set and skills" (0.687),
- Mentoring by academics and industrialists is available (0.622), and
- CUT "raises awareness of the value of developing entrepreneurial mind-set, behaviour" (0.532).

These findings reveal that respondents have a fair understanding on the view that the organization (CUT) has almost adequate resources to train entrepreneurship practically.

A factor score of 0.4 on most of the variables in the findings indicate that respondents did not think that CUT has adequate resources for offering practical entrepreneurship training.

6.11 Graduates' capabilities to operate in a volatile economy

Table 6.24: KMO and Bartlett's test for graduate' capabilities to operate in a volatile economy

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.782
	Df	15
	Sig.	0.000

The KMO and Bartlett's Test of 0.782 shown above indicates that there are enough items predicated by each factor in this research objective. This is because any score greater than 0.70 is considered adequate. Furthermore, the significance score indicated here of 0.000 means that the variables tabulated in Table 6.25 “are correlated highly enough to provide a reasonable basis for factor analysis for this research objective”.

Table 6.25 Graduates' capabilities to operate in a volatile economy

Graduates' capabilities to operate in a volatile economy	
	Component 1
G61 As a graduate you are committed to collaboration and knowledge exchange with others in the industry and in the society.	0.746
G62 As a graduate you can demonstrate active involvement in your partnerships with the industry and the society.	0.663
G63 You maintained strong links with former classmates and value social links as avenues for the dynamic exchange of knowledge	0.612

G64 You provide yourself with opportunities to take part in business conventions on entrepreneurial activities locally	0.615
G65 As an Entrepreneurship graduate, consulting the academia and the established entrepreneurs is best practice in a turbulent economy	0.696
G66 Findings from research, your way of education and experience in the industry all inform your decision making as an applied exchange of knowledge	0.636

As shown in Table 6.25, six factors were considered for this research objective under study in this section, and only one of them, namely: “As a graduate you are committed to collaboration and knowledge exchange with others in industry and in the society had the highest number of respondents who expressed the ‘strongly agree’ or ‘agree’ viewpoints with a factor analysis score of 0.746. These findings suggest that the respondents strongly perceived the graduates’ capability to operate in a volatile economy as an intense function of collaboration and knowledge sharing in the industry and the society at large. The rest of the factors were perceived as having moderate influence on the former.

This means that CUT’s Entrepreneurship graduates still need mentorship to be able to operate in a turbulent environment.

6.12 Chapter summary

This chapter focused on the presentation and interpretation of the study findings in terms of reliability, participants’ response rate, demographic data and its implication to the study. It also outlined findings on the following thematic areas; extent of entrepreneurship education in Zimbabwean universities, the effectiveness of training methods used in entrepreneurship education, graduates’ perceptions of the influence of experiential learning on entrepreneurship education. Influence of entrepreneurship education on venture creation and creativity, organisational resources to train entrepreneurship practically as well as the graduates’ capabilities to operate in a volatile economy were other thematic areas addressed.

The next chapter focuses on relating findings to literature, to establish where findings concur or refute literature or empirical evidence.

CHAPTER SEVEN

DISCUSSION OF FINDINGS

7.1 Introduction

Findings of this study were presented in the previous chapter with the intention to establish the effectiveness of entrepreneurship education in a turbulent economy. In this chapter, research questions are addressed by interpreting findings and explaining the implication of the findings. This chapter combines primary data and or results from the previous chapter and secondary data and or empirical evidence reviewed in Chapter Three. The idea is to see where the study findings concur with, or disagree with reviewed literature. Focusing on the study objectives, the discussion addresses thematic areas surrounding entrepreneurship education in a turbulent economy.

7.2 Demographic data

Demographic variables are crucial determinants of findings in any research. In this study, various demographics such as age, gender, marital status, the length of participants' post graduation period, employment status as well as religious beliefs were regarded as useful in the formulation of participants' thinking regarding entrepreneurship education in the turbulent Zimbabwean economy.

7.2.1 Gender of participants

One hundred and one (53.7%) respondents were female whilst only 87 (46.3%) were male (Table 6.3). This concurs with findings of a research by Belwal et al. (2015) to investigate students views on entrepreneurship and enterprise education in Oman, which revealed that “an increasing number of female students have enrolled in the Higher Education Institutions in Oman compared to males. In Zimbabwe, this can be attributed to the more female - less male ratio in the national population. Empirical evidence shows that women are generally more entrepreneurial than men (Pacifique 2010). A study carried out by the university in Ruanda showed that women entrepreneurs in Rwanda contribute in many ways towards the development of their country. Furthermore, Rwanda has the biggest proportion of female entrepreneurs in Africa after Ghana. This means that African women are generally

entrepreneurial as compared to their male counterparts. Moreso, efforts to promote entrepreneurship education in Zimbabwe must focus more on females since they dominate in numbers, and they are more committed to take up entrepreneurship as a discipline and career.

7.2.2 Age of participants

The 26-30 age range dominated in this study (Table 6.4). This means majority of the participants proceeded to higher education straight from high school, and this can be attributed to high levels of unemployment in the country. In a similar study by Belwal et al. (2015), participants predominantly (90 per cent) belonged to the 20-25 age groups. This is so since the later focused on students while this study focused on graduates. In essence, the young, energetic and most productive ages participated more in entrepreneurship education related studies. Furthermore, entrepreneurship education has to be more experiential and learner centred to stimulate and harness the young graduate's proactive thinking.

7.2.3 Marital status of participants

This study's findings (Table 6.5) shows that only 82 (43.6%) of the participants were married and majority were single. This finding is almost the same with Wambua Peter and Munyithya (2015)'s study that indicated that marital status influenced entrepreneurial success.

7.2.4 Employment status of participants

Of the 188 respondents, 90 (47.9%) were self employed and 49 (26.1%) were employed by someone (Table 6.9). These findings imply that entrepreneurship education is yielding results in Zimbabwe as the number of self employed participants (90) was almost twice the frequency of the employed (49) participants. It is also possible that there are others who are self- employed amongst those employed by someone as is the norm in Zimbabwe. This means entrepreneurship system of education has a critical role in the creation of employment in Zimbabwe. In a related Zimbabwean study, Nani (2014) supported this thinking when he acknowledges "Dewey's experiential learning that emphasises the need for learners to be actively involved and not just be mere recipients". Moreso, Williams-Middleton et al., (2014) further support the view. That is what effective entrepreneurship education should entail.

Furthermore, Figure 6.1 shows employment status cluster comparison of participants which suggests that graduates tend to look for employment after graduation. With time however,

they see the need for creating employment for themselves. In another related study, Mushipe (2013) believed that through entrepreneurship education, graduates can achieve material and personal success, gain independence and control over the products of their labour. This means that venture creation takes time to kick off hence the need for more practical approaches to entrepreneurship education to instil skills into graduates during training.

7.3 Research objectives

In the sections that follow, the research objectives stated in chapter one are linked with the empirical evidence compiled in chapter three in order to establish the extent to which the set objectives were met. The discussion elucidates where the study findings and the existing body of knowledge agree and disagree so as to fill in the research gap.

7.3.1 The extent of entrepreneurship education in Zimbabwean universities

In this section, participants' views on the extent of entrepreneurship education in Zimbabwean universities are discussed in line with the reviewed literature.

To establish the scope of entrepreneurship education in Zimbabwean universities, respondents agreed that CUT is committed to the country's entrepreneurship education through the provision of entrepreneurship as a career option. These results confirm findings by Efe (2014) that learners who have a passion in developing their entrepreneurial skills are taking it as a programme. The findings however refute the previous view by Dabale and Masese (2014) who argued that Zimbabwean entrepreneurial education was being offered as a career option. Dabale and Masese (2014) believed that in Zimbabwe entrepreneurship education is mainly in the form of elective small business management and entrepreneurial modules; whereas Nani (2014) views it as the teaching of practical subjects at any level from primary school to tertiary and or higher education institutions. The indicated finding also refutes the argument made by Mauchi, et al. (2011) who claimed that the Zimbabwean entrepreneurship education is being offered as a single course, and also that in some cases it is restricted to business students, and that it is sometimes optionally taken. The arguments made by the indicated authors may explain Dumbu (2014)'s advocacy for the compulsory enrolment of Entrepreneurship Education courses across faculties in tertiary institutions. Sharing the same sentiments; Mauchi et al. (2011) as well as Nani and Mpofu (2015) called for strong renewal efforts to encourage entrepreneurship education at tertiary institutions in

Zimbabwe.

Elsewhere, Belwal et al. (2015) confessed that the Oman educational system lacks properly crafted entrepreneurship programs in tertiary institutions. So, in a way, there is a need for entrepreneurship education redesign in Zimbabwe. While entrepreneurship education is on offer in Zimbabwean universities, not much is documented in terms of entrepreneurship graduates and entrepreneurship as a programme. This explains the following contradictory views by entrepreneurship education writers: it is offered in primary and secondary schools (Van Praag 2012), in the informal sector, as extra curricula (Kirby 2004) from primary schools to universities (Arensburg 2015). Moberg 2014 also believes that entrepreneurship education is taught to various people in different disciplines and levels.

The majority (70.1%) of the respondents felt that there is adequate entrepreneurship education offered to students in other programmes at the Chinhoyi University of Technology while (29.9%) expressed the contra (Figure 6.2). This finding is similar to Efe (2014)'s finding that in Nigeria, all Nigerian university students are mandated to be exposed to entrepreneurship development studies regardless of their areas of specialization. Similarly, CUT also offer Entrepreneurship principles and communication skills across the board with other business related modules such as management principles, financial management, communication skills, new product development being offered across schools except the school of natural sciences. In a study carried out by Kee, Rodrigues, Kundu, and Racine (u.d.) they discover that entrepreneurship education in India and Europe exists through business management courses. These modules equip graduates with innovative thinking, and venture start up skills. A close examination to the findings shows that the percentage of female and male who expressed the adequacy of the entrepreneurship education offered is almost the same for both of the gender categories, that is, 71% and 69%, respectively. This means that entrepreneurship education offered at CUT is adequate across programs as seen by CUT entrepreneurship graduates regardless of their gender. Entrepreneurship education in Zimbabwe is thus adequately offered at different levels from primary schools right up to colleges and universities.

7.3.1.1 Cross tabulation of demographic data and the extent of entrepreneurship education in Zimbabwean universities

The discussion of findings from cross tabulation of the extent of entrepreneurship education and demographic data is done in this section.

7.3.1.2 The length of time during which respondents had been graduates and graduate unemployment levels signifies gaps in entrepreneurship education

As shown in Figure 6.6, there were mixed views amongst respondents who were in their first, second, third and sixth years post-graduation having more of positive than negative responses. respondents who were in their fourth and fifth years post-graduation however, disagreed more with the notion that the level of graduate unemployment signifies the shortfalls of Entrepreneurship education in Zimbabwean universities. Overall, 57% of the respondents agreed whereas 43% disagreed with the indicated notion. This implies that whilst graduates regard entrepreneurship as a source of employment creation, they also believe that there are other factors contributing towards the latter. In a turbulent economy, no variable may single-handedly affect or influence negatively or positively on a specific phenomenon. A combination of a variety of factors influences entrepreneurial intention (Njeje 2015; Lin and Xu 2017). While the absence of entrepreneurship education may play a role in this situation, various other factors do make a contribution towards the unemployment levels in Zimbabwe.

7.3.2 Effectiveness of training methods used in entrepreneurship education in enabling learners to become entrepreneurs

Findings shown in Figure 6.10 reveal that respondents preferred projects more than any other approaches; with individual and group projects tying at 27.6% each. This is a clear indication that respondents favour practical approaches which are student centred in learning entrepreneurship. This finding supports Efe (2014)'s findings that in the Czech Republic, focus is on the project like student firms promoted by business schools. Crawford-Lee and Moorwood (2019) also uphold practical learning at having the potential to add value to the training organization. Furthermore, Arensburg (2015) and Ugondola (2016) called for the increase in innovative teaching methods at universities to expose students to business activities, to motivate and to influence them to be more entrepreneurial. On the contrary,

Arensburg (2015) argued that there is no guarantee of efficacy in the various entrepreneurship programs in the market place due to the variation of learning styles among other factors. Regarding the same view, Moberg (2014) posits that there is limited knowledge about the usefulness of the several existing approaches to teaching entrepreneurship. This can be attributed to the fact that most researchers were focusing on students and curriculum other than the graduates themselves. In this case, findings from graduates are clear that they prefer projects that help them to see their progress.

The least preferred teaching approaches were group discussions and simulations, which were preferred by one and two respondents, respectively. Simulation “is the artificial representation of a real life process with sufficient loyalty to facilitate learning through immersion, reflection, feedback and practice without the risks inherent in a similar real life experience” (Krishnan, Keloth and Ubedulla 2017). Although this approach triggers the students’ emotions giving them a unique learning experience, it does not afford them the opportunity to practically do things in a real life situation.

As indicated by 63.8% of the respondents, the most popular practical approach to entrepreneurship education teaching was venture start ups; whereas internship in small companies was the least preferred (Figure 6.11). This implies that there is more to learn through trial and error since the learner will be learning from their mistakes and they will not only be waiting for theoretical guidance. These findings affirm Potter’s (2008) argument that venture start-ups by students is an ideal entrepreneurship teaching method.

7.3.3 Graduates’ perceptions of the influence of experiential learning on entrepreneurship education – cross tabulated discussion

7.3.3.1 Gender and the relationship between established organizations and entrepreneurship education

Table 6.15 shows that 81 (93.1%) of the 87 male and 97 of the 101 (96%) female respondents respectively agreed with some even strongly that collaborations with established organisations have a positive impact on entrepreneurship education. Overall, 178 (94.7%) of 188 respondents acknowledged the mantra. This means that both male and female graduates

benefitted immensely from such collaborations. At CUT, such collaborations can be done during the work related learning period which students spent the whole attached to an established company. Garwe (2014) acknowledged, “exposing students to work related learning as useful in nurturing future entrepreneurs as well as building successful careers in academia and industry”. Abehla, Fernandes, Mesquita, Seabra and Ferreira-Oliveira (2020), Mauchi et al. (2011) and Dumbu (2014) further affirm that collaborations with industry make entrepreneurship education meaningful. In a way, collaborations help in the grooming of entrepreneurs.

7.3.3.2 Gender and ownership as an ingredient in entrepreneurship education

With respect to ownership as a key ingredient in entrepreneurship education in a turbulent economy, 155 (82.4%) affirmed the notion. Overall, the male and female respondents who acknowledged this assertion are proportionally the same that is 82.6% and 83.2%, respectively (Table 6.18). There is no doubt that this notion is not gender biased. These findings confirm Klein’s (2012) and Politis’s (2005) view that ownership is the key ingredient in entrepreneurship education. The high percentage of percentage of both male and female participants who agreed with this view signifies the significance of entrepreneurship and venture start-ups as a means of reducing unemployment in a turbulent economy like Zimbabwe. Business ownership in a turbulent economy stimulates interest in participants as they can get to evaluate themselves and plot their growth, and at the same time be a source of their livelihood. The former forces participants to take learning seriously since they will be growing their own entity. Being associated with the end product was also found to fascinate participants in this study.

7.3.3.3 Age of Respondents and A turbulent economy drives people to seek Entrepreneurial Education.

Findings as represented in Figure 6.12 show that majority (89) of the 26-30 age group agreed with the notion that a turbulent economy drives people to seek entrepreneurial education. Overall, some participants from all the age groups agreed with this view. This shows that entrepreneurship education can be the answer in an environment where the rate of economic disturbances is high. A turbulent economy is generally characterised by high inflation and high unemployment rate. With regard to the latter, Deloitte and Touch (2016) explained that in Zimbabwe there was a decline in the rate of company creation, whilst the Reserve Bank of

Zimbabwe 2016 revealed that unemployment rate in Zimbabwe was pegged at over 95%. Such an economy requires people who are able to identify opportunities as well as to create and grow ventures (Msipah et al. 2013). Entrepreneurship graduates in this case would use their refined skills to create the well-needed businesses to address the existing economic needs.

7.3.3.4 Age of Respondents and the impact of collaborations with techno parks on entrepreneurship education

Findings in Figure 6.15 indicate that individuals from all the age groups affirmed the notion that collaborations with techno parks have a positive influence on enterprise education in a turbulent economy with an overall of 179 (95.7%) out of 187 respondents agreeing with this view. A closer look at the results shows that 100% of the respondents from two age groups, namely, the 31-35 years and the 42 years age groups agreed with the view under discussion. This is in line with Foss and Lyngsie 2012's recommendation for collaborations between entrepreneurship learners, techno parks and established organizations. It also means that with age, graduates positively view collaborations with techno parks as a solution to a turbulent economy. Abehla, Fernandes, Mesquita, Seabra and Ferreira-Oliveira (2020) concurred with the view when they revealed that collaborations enhance graduates competence and employability. Furthermore, this finding also affirm Mauchi et al. (2011)'s observation that in Zimbabwean universities and other tertiary training institutions students are involved in such collaborations. At CUT specifically, students across schools are engaged in work related learning to boost their business experience and their levels of innovation.

7.3.3.5 Age of Respondent and the impact of innovative ventures on entrepreneurship education

As revealed in Figure 6.16, almost all respondents from the various age groups were in agreement with the view that exposing students to highly innovative ventures helps with entrepreneurship education. The most mature respondent strongly agreed and 60.6% of the respondents from the 26-30 years age group affirmed this view. This shows that respondents perceived the practical approach to learning as having the capacity to bring positive results to a turbulent economy. As supported by Darling-Hammond, Flook, Cook-Harvey, Barron and Osher (2020), this motivates and helps learners to gain experience. Mauchi et al. (2011), and,

Dumbu (2014) called for practical and student centred teaching approaches to promote innovative ventures. Real life practice during learning facilitates and probes proactive thinking, idea generation, and risk taking in the learner. Students learn how to respond to an ever changing business environment for a grade or mark and subsequently for profit.

7.3.3.6 Age of Respondent and Ownership as an ingredient in entrepreneurship education

Figure 6.17 reveals that a large number of respondents (82.8%) from all the age groups were in agreement with the notion that business ownership is the key ingredient in entrepreneurship education in a turbulent economy. This fully supports Klein (2012) and Politis (2005) findings with regard to the importance of the ownership approach for teaching entrepreneurship. The 26-30 years age group being the most active sub group had the majority (103 out of 119 = 86.5%) of respondents who agreed with the view being discussed. A large number of participants in this age group believed that active participation in entrepreneurship education helps to solve challenges associated with a turbulent economy, thus they advocated for active participation by learners in entrepreneurship.

7.3.3.7 The length of time during which participants had been graduates and a turbulent economy drives people to seek Entrepreneurial Education

Findings depicted in Figure 6.26 show that a large number of the respondents {153 (81.8%) out of 187} who agreed with the view that a turbulent economy drives people to seek Entrepreneurial Education came from each of the six categories of the length of time during which participants had been graduates. Further analysis revealed that the majority {28 (87.5%) out of 32} of respondents who were in their third year post graduation lead agreed with the view under discussion. Also, 43 (86%) of the respondents who were in their fourth year post graduation and 15 (83.3%) out of 18 respondents who were in their sixth year post graduation agreed with this view. This can be attributed to maturity and experience after graduation, showing that with time, entrepreneurship education can solve economic problems. This finding concurs with findings by Fatoki (2014) and Nyoni (2018) that entrepreneurship education is a panacea to unemployment, and that it helps graduates to become job creators.

As citizens of a former British colony, Zimbabweans have the belief and tendency to seek for employment. They believe in white collar jobs and are risk averse. Like in Kenya, entrepreneurship as an occupation has not yet been meaningfully celebrated; it is looked down upon (Ongwae u.d.). Graduates look for employment in already established companies upon completion of their undergraduate degrees. Usually, they would realize that they can create their own and others' employment after failing to secure it elsewhere. This supports findings by Undiyaundeye and Otu (2015) and supported by Chisoko and Zharare (2018) who posits that entrepreneurship education helps to create employment and enterprising skills, and also that it helps to boost students' attitude in relation to becoming entrepreneurs. With more and more graduates joining the job market every year, graduates are beginning to see the need for taking entrepreneurship as a profession and as the basis for venture creation.

7.3.3.8 The length of time during which participants had been graduates and ownership as an ingredient in entrepreneurship education

Figure 6.32 reveal that overall, out of the 187 respondents drawn from all the 6 segments of the length during which participants had been graduates, 155 (82.8%) affirmed that exposing students to highly innovative ventures is helpful for entrepreneurship education. Amongst those who affirmed this view, 88 (47% simply agreed whilst 67 (35.8%) did so strongly. Despite the period during which they had been graduates, respondents believed that running an owned entity is the way to go in the volatile Zimbabwean economy. A turbulent economy characterised by companies' closure, employment reduction, and hyperinflation require professional entrepreneurs to create viable ventures. Whilst unemployment rate in Zimbabwe stands at 95% (RBZ 2016), the remaining 5% is comprised of mainly Small to Medium Enterprises (SMEs), the majority of which are owned by indigenous entrepreneurs (Njanike 2019). In a way, entrepreneurship education students have to take the hands on approach to learning entrepreneurship. This facilitates the perfection of their entrepreneurial skills and enhances the economic situation in the country.

7.3.3.9 Employment status and a turbulent economy drives people to seek Entrepreneurial Education

Figure 6.34 shows a number of participants from each of the employment status categories affirmed the assertion that a turbulent economy drives people to seek Entrepreneurial

Education, amounting to 152 (83.5%) out of 186 respondents. The ‘self employed’ category had the largest number {77 (86.5%) out of 89} of respondents who agreed with the view under discussion. The dominance of the ‘self employed’ respondents in this regard means that a bigger fraction of the respondents are committed to entrepreneurial education as a strategy to fill in the unemployment gap. This concurs with Nyoni (2018)’s advocacy for business start-ups and self employment by university graduates. These finding concur with Karimi et al. (2016)’s argument that a positive influence of entrepreneurship education on the learner’ entrepreneurial intention exists. The findings are quite interesting since a large number of respondents were expressing the indicated view based on their own experience of being self employed. As also rightly argued by Efe (2014), entrepreneurship education promotes self employment. In Zimbabwe, entrepreneurship as a career option is slowly gathering momentum and it is filling the unemployment gap.

7.3.3.10 Employment status and economic turbulence on entrepreneurial inventions

As indicated in Figure 6.35, participants from all of the three employment status categories amounting to a total of 149 (79.6%) out of 187 respondents, affirmed the assertion that a turbulent economy drives people to seek entrepreneurial education. A large number of participants who agreed with this view {40 (81.6%) out of 49 respondents} were from the ‘employed by someone’ category, and the lowest number {36 (75%) out of 48 respondents} was from the ‘not employed’ category. These findings imply that respondents in the ‘employed by someone’ category were not happy with their working conditions as employees and consider going entrepreneurial. It means they see better opportunities outside their employers companies. This is in line with conclusions made by Undiyaundeye and Otu (2015) that entrepreneurship education creates employment, enterprising skills and boosts the student’s attitude to become entrepreneurs. In a way, graduates appreciate entrepreneurship education but only consider it as a career option in the long run; after getting a feel of working for someone else. This also supports Fernandes (2018)’s work. It may also mean that some of the respondents were ‘employed by someone’ and running their own entities at the same time.

7.3.3.11 Employment status and the impact of entrepreneurship education on unemployment

Participants from all employment status categories amounting to 156 (83.4%) out of 187 respondents affirmed the assertion that the level of unemployment in the turbulent Zimbabwean economy can be reduced through entrepreneurship education (Figure 6.36). Also, a large number of 42 (85.7%) out of 49 respondents in the ‘employed by someone’ category and 39 (81%) out of 48 in the ‘not employed’ category affirmed the indicated view. This shows that respondents’ perceptions on this view were insignificantly different. Though dominated by the ‘employed by someone’ group, but generally, respondents believed that entrepreneurial education helps in the reduction of unemployment in a turbulent economy. The findings confirm the much talked about ‘formalizing the informal’ topic in Zimbabwe by writers as such Mutingwende (2015) and ILO (2016). What used to be regarded as the informal sector is now a source of livelihood to many since individual entrepreneurs and not government or multinational companies are growing their own ventures, employing many in the process. Frimpong 2014, Karimi et al. (2016) acknowledge that a positive influence of entrepreneurial education on learners’ entrepreneurship intention exists. Entrepreneurial activities were highly linked to the informal sector. Ongwae (u.d) rightfully hypothesizes that entrepreneurship programmes were looked down upon. Because of the high unemployment levels and the positive experiences from such countries as Rwanda (Babson Rwanda Center); it entrepreneurship is currently receiving the attention it deserves in Zimbabwe. This affirms findings by Fatoki (2014) that entrepreneurship education is a panacea to the high unemployment rate of graduates in South Africa. There are calls to even revisit the entrepreneurship curricular with the intention to promote entrepreneurship and innovation covering all the education levels in the country.

7.3.4 The influence of entrepreneurship education on venture creation and creativity

The KMO and Bartlett's Test on the influence of entrepreneurialism on venture start-ups and creativity of 0.852 shown in Table 6.22 indicates that there are enough items predicated by each factor in this research objective. This is because any score greater than 0.70 is considered adequate. Furthermore, the significance score indicated here of 0.000 shows that the variables were highly correlated to give a logical basis for factor analysis for this research objective.

Entrepreneurship education is foundational to creativity and innovation for sustainable venture creation in the country. This argument is represented by the statistical loads of 0.749, 0.758 and 0.778 to the following factors: ‘A strong focus on entrepreneurship education promotes pro-activity in a turbulent economy’; ‘A strong focus on entrepreneurialism promotes creativity in a turbulent economy;’ and ‘A strong focus on entrepreneurship education promotes innovations in a turbulent economy’. These findings affirm Rengiah’s (2013) claim that entrepreneurship education in tertiary institutions enhances innovation and creativity. Furthermore, Chihota (2019) confirms that the HTE5.0 model include innovation and industrialization to boost entrepreneurship.

7.3.5 Principal Component Analysis of the impact of entrepreneurial education on venture creation and creativity using the Principal Component Analysis

The scree plot (Figure 6.44) depicts that the first five elements account for most of the total variability in data (given by the eigenvalues). The eigenvalues for the first elements account for a very small fraction of the variability and are improbably significant.

7.3.6 Organisational Resources to train entrepreneurship practically

The KMO and Bartlett's Test of 0.681 shown in Table 6.22 indicates that there are fairly sufficient items predicated for each factor in this research question. This is because any score above greater than 0.70 is considered adequate. Furthermore, the significance score indicated here of 0.000 implies that the variables are related highly enough to provide a sensible basis for factor analysis for this research objective.

CUT did not have adequate resources to train entrepreneurship practically. This is so since out of the nine factors which address the research question (Organisational Resources to train entrepreneurship practically), only one, namely: “The University provides support for both individuals and groups to move from entrepreneurial ideas” to auctioning’ had the majority of respondents who strongly agreed or simply agreed to this view. This upholds findings by Mauchi et al. (2011) that in Zimbabwe, “there is lack of support from higher education institutions administration and from the government as there is no budget for entrepreneurship education hence, no resources to train students effectively”. On the same line, lack of adequate resource could have the major reason that triggered the Zimbabwean

government's vision 2030 that includes the development and funding of innovation hubs in universities (Muzira and Bondai 2020, Murwira 2020)

CUT strives to train entrepreneurship practically. This is evidenced by 0.687 scores towards the view that the organisational structure at CUT “stimulates and supports the development of entrepreneurial mind-set and skills”, 0.622 scores for the view that mentoring by academics and industrialists is available and 0.532 scores for the view that CUT raises awareness with regards to the value of developing the entrepreneurial mind-set. This means that generally, CUT strives to train their students practically but they lack the resources to effectively do that. This finding supports the argument made by Barney (1986), Peteraf (1993), Wemerfelt (1984), that a firm's specific assets and capabilities of its specific mechanisms determine its performance. It is also in line with Mukurunge and Tlali (2017) who bemoaned the inadequacy of the Lesotho tertiary level curriculum inadequacy in preparing graduates for venture start ups.

7.3.7 Graduates' capability to operate in a volatile economy

The KMO and Bartlett's Test of 0.782 presented in table 6.25 shows that there are enough items predicated by each factor in this research objective. This is because any score above greater than 0.70 is considered adequate. Furthermore, the significance score indicated here of 0.000 means that the elements tabulated below are correlated highly enough to provide a sensible basis for factor analysis for this research objective.

The CUT Entrepreneurship graduate still needs mentorship for them to effectively work in a turbulent environment as evidenced by a moderate influence of five out of six factors used to establish the graduates' capabilities to operate in a volatile economy. This agrees with the dynamic capability views by Teece, Pisano and Shuen (1997) regarding the ability of a given firm to join together, to build and re-arrange both external and internal capabilities to address changes in the environment. More has to be done in terms of fitting in, and being profitable in a volatile environment.

7.4 Chapter summary

This chapter discussed the study's findings in relation to entrepreneurship education literature to establish where the study findings and empirical evidence converge or diverge. The

discussion was guided by objectives set in Chapter One, and largely, the key findings of this study agree with empirical evidence.

In the next chapter, the researcher put emphasis on the major findings, conclusions and the study's adding value to the body of knowledge, and provides recommendations as well as suggestions for future research.

CHAPTER EIGHT

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

8.1 Introduction

This chapter provides highlights of various issues addressed in previous chapters of this thesis. Key findings, conclusions and the new knowledge created through this study are the contents of this chapter. Recommendations as well as the research gap for further studies are also highlighted.

8.2 Summary of the thesis

This study aimed at establishing the entrepreneurship graduates' perceptions of the effectiveness of entrepreneurship education in a turbulent economy with special reference to Zimbabwe. The thesis is made up of eight chapters.

Chapter One introduces the thesis covering such aspects as the study background; statement of the problem as well as the objectives. Objectives covered in this thesis include the assessment of the extent of entrepreneurship education in Zimbabwean universities; the examination of the graduates' views on the usefulness of training strategies used in entrepreneurial education in enabling learners to become entrepreneurs; the establishment of graduates' perceptions of the role of experiential learning on entrepreneurial education; as well as the determination of graduate's perceptions of the impact of entrepreneurialism on venture creation and creativity. The study questions were directly derived from these objectives.

Chapter Two consists of an outline of the case under study. The outline was regarded necessary for unpacking the level of volatility in the country and for defining CUT. The areas addressed in this chapter include the turbulent situation in the Zimbabwean economy and the development of CUT; the 2018 new Zimbabwean dispensation, CUT Schools and the programs it offers, academic staff establishment and student enrolment for the years 2012 - 2017 as well as the challenges faced by CUT over the years and the solutions implemented to-date.

In Chapter Three, empirical evidence addressing thematic areas was explored. Various sources of entrepreneurship education were used to establish literature that supports or refutes the study objectives mentioned in chapter one. This was done to unearth the efficiency of entrepreneurship education in a volatile environment.

In Chapter Four the researcher addressed the theoretical framework by discussing different theories underpinning entrepreneurship education in a turbulent economy. These include the resource-based theory, the dynamic capability theory as well as the experiential learning theory. Contributions from these theories helped the researcher to construct a conceived idea for boosting entrepreneurship education effectiveness in a turbulent environment.

In Chapter five the research plan or methodology used for data collection was presented. The positivism philosophy, descriptive design, quantitative approach, survey strategy, probability cluster and the sampling method formed part of this study methodology. Questionnaires were used to collect data from the selected 223 out of 526 CUT graduates of 2012 to 2016. Pre-testing was done to ensure the quality of data, and the Cronbach Alpha test result of 0.838 indicated that the data's levels of reliability were high.

To account for ethical conduct, consent was sort for and granted by CUT and its graduates. An ethical clearance letter (E.C. number HSS/0030/018D) was also granted to the student by UKZN through the "Humanities and Social Sciences Research Ethics Committee" (Ethical clearance letter). Quantitative data was analysed using SPSS package, version 22.0.

In chapter six, inferential and descriptive statistics were used to present, interpret and analyse data.

In Chapter Seven the researcher discusses the implications of the findings presented in chapter six. The study findings and empirical evidence used to address the research objectives as outlined in chapter one were compared. This was done by marrying empirical evidence with the research objectives to establish where findings and literature converge or diverge. Findings from this study confirmed that entrepreneurship education comes in different forms at different levels, and that it plays a critical role in venture creation. However, whilst many

studies were carried out on entrepreneurship education, very few focused on graduates, let alone a volatile economy.

Chapter Eight provides a summary of the study, conclusions derived from the discussion, recommendations made in this study and the research gap.

8.3 Conclusions

Four research questions directly linked to research objectives were postulated in the first chapter of this study as follows: what is the extent of entrepreneurship education at CUT, how graduates view the efficiency of training strategies used in teaching entrepreneurship to enable learners to become entrepreneurs; how does experiential learning influence entrepreneurship education as perceived by graduates, and how does entrepreneurship education influence venture creation and creativity as perceived by graduates? This study addressed these questions and the answers are detailed in the coming sections as follows:

8.3.1 The extent of entrepreneurship education in Zimbabwean universities

Entrepreneurship education in Zimbabwe is offered at different stages from primary to secondary schools up to tertiary and or higher education institutions like colleges, polytechnics and universities. There is no agreed definition to entrepreneurship education in Zimbabwe since some scholars view it as the mere teaching of practical subjects mainly at primary school level; others view it as taking a single entrepreneurship module at university, yet others believe it is all about business related modules offered by universities.

- CUT is committed to entrepreneurship education in the country through the provision of entrepreneurship as a profession. This is true since the university has entrepreneurship as a discipline or programme.
- Adequate entrepreneurial education is offered to all the CUT students across disciplines. It also offers Entrepreneurship principles and communication skills across the board with other business related modules such as management principles, financial management, and communication skills being offered across schools. These modules equip graduates with innovative thinking, and venture start up skills.

8.3.1.1 Cross tabulation of demographic data and the extent of entrepreneurial education in Zimbabwean universities

- While the absence of entrepreneurship education may increase the unemployment rate, various other factors do have a contribution in unemployment levels in Zimbabwe. In a turbulent economy, no variable may single-handedly influence a specific phenomenon. The more experience respondents who were in their fourth and fifth years post graduation disagreed more with the notion that the level of graduate unemployment signifies the shortfalls of entrepreneurship education in Zimbabwean universities.
- There is no employment status bias on the fact that the CUT curriculum had dedicated courses for entrepreneurship though the self-employed graduates upheld the view more than the graduates from the other categories did.
- Few tracer studies track entrepreneurship education as training graduates for self-employment or to become venture owners in Zimbabwe and beyond.

8.3.1.2 The effectiveness of training methods used in entrepreneurship education in enabling learners to become entrepreneurs

Innovative teaching methods that expose students to business activities motivate and influence them to be more entrepreneurial are the most preferred entrepreneurship education teaching methods in universities; and projects are regarded as the most effective entrepreneurship education training approaches. However, there is no guarantee of efficacy in the various entrepreneurship programs in the market place due to the variation of learning styles.

- Not much is known regarding the efficiency of the several existing methods to teaching entrepreneurship. This can be attributed to the limited body of knowledge on entrepreneurship graduates.
- Graduates prefer projects that help them see their progress. Although group discussions and simulations trigger student's emotions giving them a unique learning experience, it does not afford them the opportunity to practically do things in a real life situation.

- Respondents regarded venture start-ups as the most popular practical approach to entrepreneurship education teaching. This implies that there is more to learn through trial and error since the learner will be learning from their mistakes and not only waiting for theoretical guidance.

8.3.1.3 Graduates' perceptions of the influence of experiential learning on entrepreneurship education – cross tabulated discussion

- Collaborations with established organisations positively influence entrepreneurship education. Both male and female graduates benefitted immensely from such collaborations especially during their work related learning period which required that CUT students spend a full year attached to an established company. Such exposure nurture future entrepreneurs and builds successful careers in academia and in the industry.
- There is no gender bias in ownership as a key ingredient in entrepreneurship education in a turbulent economy. Ownership of entities in a turbulent economy stimulates interest in pursuing the business and can be a source of livelihood. It forces participants to take learning seriously since they will be growing their own entities, and, being associated with the end product also fascinates participants in this case.
- There is no age-based bias towards the notion that collaborations with techno parks positively influence entrepreneurial education in a turbulent economy.
- Exposing students to highly innovative ventures is a practical approach to entrepreneurship education learning which promotes entrepreneurship education in a turbulent economy. This view was shared by graduates across all age groups. Students learn how to respond to an ever-changing business environment for a grade or mark and subsequently for a profit.
- Regarding the length of the post graduate period, running an owned entity was believed to be the way to go in a volatile environment. A turbulent economy characterised by companies' closure, employment reduction and hyperinflation requires professional entrepreneurs to create viable ventures.
- There is no employment status based bias in believing that a turbulent economy drives people to seek entrepreneurial education. Graduates see better opportunities outside their places of employment. However, though Zimbabwean graduates appreciate

entrepreneurship education, they only consider it as a career option in the end; after getting a feel of working for someone else.

- The level of unemployment in the turbulent Zimbabwean economy can be reduced through entrepreneurship education. This view is not employment status biased. What used to be regarded as the informal sector is now a source of livelihood to many in Zimbabwe since individual entrepreneurs and not government or multinational companies are growing their own ventures, employing many in the process.
- The Entrepreneurship discipline is slowly receiving the attention it deserves although previously it was looked down upon in Zimbabwe. It is becoming a panacea to high unemployment levels of graduates in the country.

8.3.1.4 The influence of entrepreneurship education on venture creation and creativity

Entrepreneurship education is foundational to creativity and innovation for sustainable venture start-ups in the country. This argument is affirmed by statistical loads of 0.749, 0.758 and 0.778 to the following factors:

- High focus on entrepreneurial education promotes pro-activity in a turbulent economy;
- A high focus on entrepreneurship education promotes creativity in a turbulent economy; and
- ‘A strong concentration on entrepreneurialism promotes innovations in a turbulent economy’.

8.3.1.5 Organisational Resources to train entrepreneurship practically

- CUT did not have adequate resources to train entrepreneurship practically. This conclusion is hinged on the belief that out of the nine factors which address the research question (Organisational Resources to train entrepreneurship practically), only one, namely: “the University provides support for both individuals and groups to move from entrepreneurial ideas to auctioning” was positively upheld.
- CUT has almost adequate resources to train entrepreneurship practically. This is evidenced by the fair contribution of the scores for the KMO and Bartlett’s Test conducted, which were as follows: 0.687 for: “the organizational structure at CUT

stimulates and supports the development of entrepreneurial mind-set and skills”, 0.622 for ”mentoring by academics and industrialists is available”, and 0.532 for “CUT raises awareness concerning the value of developing the entrepreneurial mind-set”.

8.3.1.6 Graduate’ capabilities to operate in a volatile economy

- CUT’s Entrepreneurship graduates still need mentorship to actively operate in a turbulent environment. This is evidenced by the poor contribution of the scores for the KMO and Bartlett’s Test conducted, which were as follows:
 - i) 0.746 for: “as a graduate you are committed to collaboration and knowledge exchange with others in industry and in the society”
 - ii) 0.663 for: “as a graduate you can demonstrate active involvement in your partnerships with industry and society”
 - iii) 0.612 for: “you maintained strong links with former classmates and value social links as avenues for the dynamic exchange of knowledge”
 - iv) 0.615 for: “you provide yourself with opportunities to take part in business conventions on entrepreneurial activities locally”
 - v) 0.696 for: “as an entrepreneurship graduate, consulting the academia and the established entrepreneurs is best practice in a turbulent economy”
 - vi) 0.636 for: “your way of education and experience in industry all inform your decision making as an applied exchange of knowledge”.

8.3.1.7 Graduates’ perceptions of the effectiveness of the Zimbabwean entrepreneurship education

- CUT is committed to entrepreneurship education in the country through the provision of relevant entrepreneurship curriculum leading to innovation, technology, employment creation and community development. This was evidenced by its offering entrepreneurship as a discipline.

8.4 The scholarly contribution of the study to the body of knowledge

Entrepreneurship education is an area that is getting much attention from researchers, industrialists, governments, policy makers and the general populace at large. It is regarded as an answer to employment creation in most economies including Zimbabwe (Mzira and

Bondai 2020; Ndofirepi 2020; Osene 2015; El-Gohari, Selimand Eid 2016; Garwe 2014). The link between entrepreneurship education and graduates' intent is also another area reasonably studied (Hussain and Norashidah 2015; Frimpong 2014). Although not much has been written about the state of the economic environment; various studies pointing towards the positive influence of entrepreneurship education on economic growth have been done in Europe (Kume, Kume and Shahini 2013; Prodromou 2009; Martin, Carree and Thurik 2010; Arensburg 2015), Asia (Rengiah 2013) and Africa (Efe 2014, Frimpong 2015; Ongwae u.d), including Zimbabwe (Dzenga 2019; Dabale and Masese 2014; Mauchi et al. 2011). Whilst researchers write about the positive contribution being made by entrepreneurship education towards economic growth, prior to this study the graduate's voice regarding this matter had not been heard. This led to very little being known about the graduates' perceptions of the usefulness of entrepreneurship education in a turbulent economy.

This study could be the first of its kind especially in a turbulent economy like Zimbabwe. The study's findings and recommendations will no doubt form the basis for replicating this study in other places. Furthermore, this study will inform policy makers, academics, entrepreneurs and many others with regard to manoeuvring in such an economy.

Previous entrepreneurship studies focused on SMEs and the challenges they face (Tinarwo 2016), as well as on survival strategies (Nyanga, Zirima, Mupani, Chifamba and Mashavira 2013). In Zimbabwe, these SMEs include graduate entrepreneurs. This study demystifies findings by Ongwae (u.d.) that entrepreneurship graduates were being looked down upon. It clarifies issues around entrepreneurship in the context of a turbulent economy, and it also promotes the entrepreneurship graduate in the wake of high unemployment in Zimbabwe. SMEs and entrepreneurial ventures contribute towards the 5% employment level in Zimbabwe (Njanike 2019). This is an indication that entrepreneurship education is definitely impacting positively on struggling economies. Entrepreneurship is the way to go in a volatile environment. What is important is for people to change their mind set regarding entrepreneurship and entrepreneurs. Different stakeholders need to fully rally behind entrepreneurs for the growth of their entities and for meaningful employment creation to occur.

Collaborations and ownership were found to play critical roles towards innovation, venture creation and growth. In Zimbabwe, however, the private sector is instrumental in the placement on industrial attachment of students since most universities are still developing innovation hubs and incubation centres (Garwe 2014). In this case, ownership without full time mentorship is not likely to produce meaningful results. Entrepreneurs need a step by step mentoring and guidance in the development of their entities through established and well equipped hubs for the success of their start ups. This might be the reason for the call made by Kee, Rodrigues, Kundu, and Racine (u.d.) in relation to the development of logical entrepreneurship education initiatives by state authorities, claiming that such initiatives are still limited in most countries. In line with the above, Murwira (2020) and Ndofirepi (2020) advocate for innovation hubs for every Zimbabwean state university with the first five having already been commissioned in 2019.

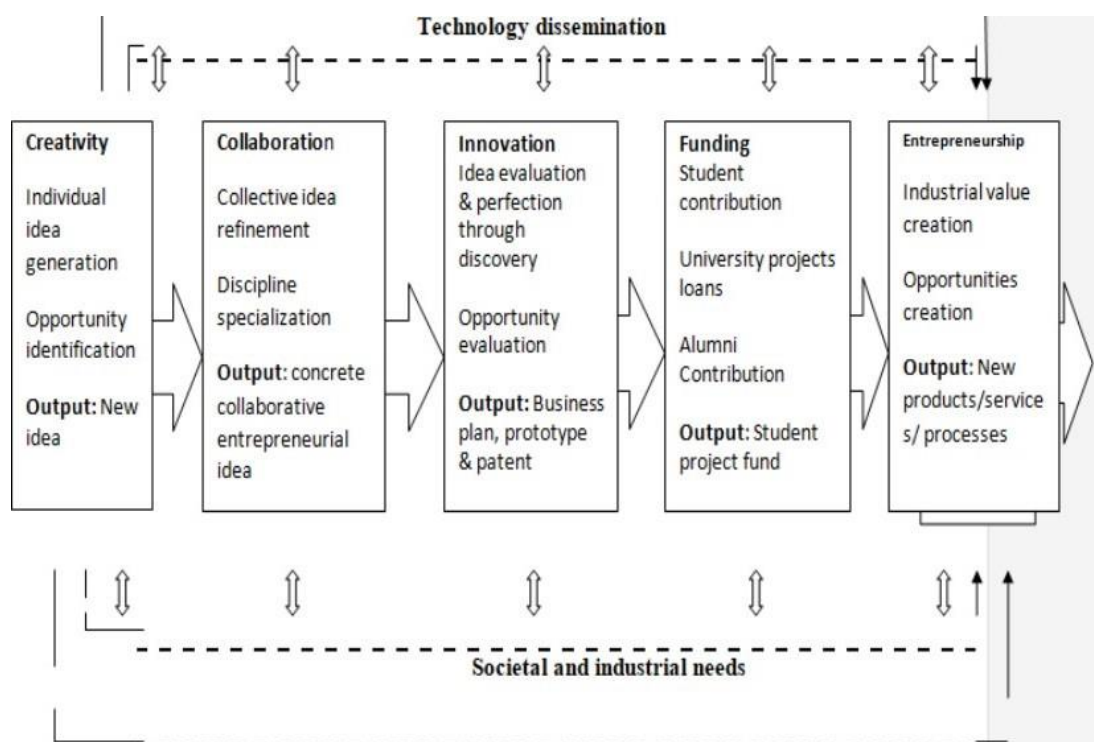


Figure 8.1: A model for an effective entrepreneurship education process in a turbulent economy

Based on this study question, Figure 8.1 provides a summary of a model for an effective entrepreneurship education process in a turbulent economy; hinged on creativity, collaboration, innovation and funding.

8.5 Recommendations: implications for policy and practice

The objective approach is taken to reach to some recommendations for this study. It is important to establish the new knowledge created for each objective. The following recommendations are drawn from the findings of this study:

8.5.1 The extent of entrepreneurship education in Zimbabwean universities

The Zimbabwean entrepreneurship education must be properly coordinated from the ministerial level so that the curriculum at each educational level is made known to all. This recommendation is hinged on the premise that entrepreneurship education is offered at various educational levels. Different people also understand it differently hence the need for synchronization.

Universities should continue to offer entrepreneurship as a discipline and profession in order to boost the levels of employment in the country and create graduates who are equipped with innovative approaches to problem solving.

University executives must strive to take a practical approach to entrepreneurship teaching that go beyond innovative thinking and venture start up skills. Management related modules offered to other programs must groom practical entrepreneurs.

8.5.2 The effectiveness of training methods used in entrepreneurship education in enabling learners to become entrepreneurs

CUT should fully adopt innovative teaching methods that expose students to business activities while also motivating and influencing them to be more entrepreneurial. This is because graduates prefer such teaching methods in universities.

The institution has to stick to the practical teaching approaches to guarantee efficacy of the entrepreneurship program. This is called for due to the existing variations of learning styles in the market place, which have led to mixed views regarding the effectiveness of the current teaching methods. Graduates preferred projects more since these help them to see their progress. Venture start-ups were also favoured because they give room for learning through

trial and error since the learner will be learning from their mistakes and not only waiting for theoretical guidance.

Properly monitored inter-discipline collaborations by students should be encouraged and sponsored by the ministry of Higher and Tertiary education so that they can be able to meet societal and industrial demands.

8.5.3 Graduates' perceptions of the influence of experiential learning on entrepreneurship education

CUT executives should maintain the work related learning year for their programs to allow students to have more interaction with the industry and the community at large. The institution must also adopt more collaborative approaches including techno parks that give students room for experiential learning, nurture future entrepreneurs and help to build successful careers.

Policy makers must make it mandatory for every tertiary institution particularly universities to have fully functional incubation hubs. This allows students to take ownership of their own ventures under the guidance of academics and industrialists. Ownership in a turbulent economy stimulates interest and forces participants to take learning seriously since they will be growing their own entities.

CUT must expose its students to highly innovative ventures to prepare them for the ever-changing business environment. This must be extended to junior academics with no industrial experience as faculty/school attachment to help them to be innovative in their teaching.

- To enhance entrepreneurship teaching at CUT, the following practical entrepreneurial engagements can be adopted; CUT must engage in student and staff exchanges with other universities across the globe. They must also encourage and increase the number of industrialists who participate in part time teaching. This definitely enhances teaching since these professionals will bring with them their wealth of experience in the classrooms.

- Twinning departments and universities with other international universities through scholarships, overseas internships and postdoctoral fellowships would also enhance entrepreneurship teaching.
- Blending academics and industrialists on Programme Advisory Boards will also help to blend their experiences for the betterment of the classroom delivery.

The Zimbabwean government needs to create a practical policy that fully supports professional entrepreneurs with the relevant skills (graduate entrepreneurs) to run profitable businesses and create employment. This recommendation emanates from the respondents' support for the view that a turbulent economy drives people to seek entrepreneurial education. The government should formalise the informal sector since it has proved to be a source of livelihood to many in Zimbabwe as individual entrepreneurs and not the government or multinational companies are growing their own ventures and employing many people in the process. The former can be an economic solution in the turbulent Zimbabwean environment.

8.5.4 The influence of entrepreneurship education on venture creation and creativity

Entrepreneurship education is foundational to creativity and innovation for sustainable venture creation in a turbulent economy; as such, universities have to focus on activities that promote pro-activeness, creativity and innovations. They have to equip entrepreneurship hubs in order to promote the learners' creativity. Normal human beings would want to be associated with the result, so, an environment that is conducive to inspiring learners to be creative has to be created for them to display their creativity.

The Zimbabwean government should also formulate clear policies and help with the commercialisation of students and or universities proto-types. Nominal and not commercial fees have to be paid for such models; and the process should be kept as short as possible.

The government should come up with pragmatic policies for nurturing entrepreneurship education to stimulate the creativity pertinent to entrepreneurial contexts. They should ensure that university entrepreneurship education is systematic, promote innovation, experiential and discovery learning.

8.6 Organisational Resources to train entrepreneurship practically

Students should partly fund the production of their prototypes in the form of levies by the university to ensure belongingness to the ventures. In a turbulent economy, if people are to be given everything for free, they usually divert funds and or resources to personal use. Students have to experience risk taking by injecting their money into their ventures and learn by discovery how to protect and grow their investments.

The political, economic, socio-cultural, legal and technological composition of a country plays a critical role in influencing entrepreneurship. The turbulent Zimbabwean environment is not conducive for entrepreneurs to raise capital for venture creation. Local, regional and international Venture Capital funding can be mobilised for attractive and investable student projects. Lecturers and students themselves can also create Venture Capital Companies (VCC) with initial seed capital coming from the two groups. This can help students to meet pre-incorporation expenses including company registration.

The university should source for meaningful resources to trigger an entrepreneurial zeal in their students through practical learning.

CUT should also upgrade its available resources for practical learning. This can be done through the commercialisation of its academic researches, obtaining donations from its alumni, as well as levying its incubation hub users.

Such modules as Innovation and techno-preneurship, Production and Operation Management as well as National Industrialization Strategy should be taken seriously not only by students taking entrepreneurship as a discipline. Students have to be groomed in such a way that they gain knowledge, and also experience the production process and the operation strategies used in companies. Furthermore, entrepreneurship students should also gain experience in the economics of industrialization and on how to take advantage of government programmes and policies towards industrialization.

8.7 Graduate' capabilities to operate in a volatile economy

Universities should mentor their entrepreneurship graduates to be dynamic and able to run their ventures in a turbulent environment.

The universities directorate of innovations and technology transfer should assist students to commercialize their prototypes under their specific university banner. In addition, students' products must go beyond commercialization. The government, through the Ministry of Higher and Tertiary Education should help students with industrialization of their products or services. In that way, resources will be fully utilized since entrepreneurs will be trained to produce not for certification only.

The incubation centre should also run prototype competitions every semester with the intention to encourage innovation and help the best incubates to raise capital.

The Ministry of Higher and Tertiary Education should then incentivise the university that mentored the best student per semester to ensure commitment and to motivate both students and universities.

8.8. Graduate perceptions on the effectiveness of Zimbabwean entrepreneurship education

Police makers must fully support; fund, and make follow ups of universities training in order to produce well-groomed entrepreneurs.

Relevant Zimbabwean government departments such as the ZIMCHE should take an active role in regulating state universities' activities for quality control; and the Ministry of Small to Medium Enterprises and SEDC should collaborate with universities and EMPRETEC to assist with the commercialisation of research.

Revisiting and upgrading the entrepreneurship curriculum for one that leads to innovation, technology, employment creation and community development is also recommended.

8.9 Methodological implications

A quantitative approach to research was adopted in this study due to its various merits, mainly its ability to gather data from an assortment of scattered graduates within a short space of time. Future researchers in entrepreneurship education are hence encouraged to use the same approach.

8.10 Limitations of the study and proposals for future research

The aim of this study was to establish the entrepreneurship graduates' views of the usefulness of Entrepreneurial Education in a turbulent economy.

This study adopted the quantitative approach to research, and the researcher admits the limitations /weaknesses associated with the method. The study focused on a single out of the four Zimbabwean universities currently offering entrepreneurship as a discipline. Though the targeted graduates were scattered throughout the country and region, generalization of results could be difficult since only 223 entrepreneurship graduates were used. The age range of the sample under study was 20-42 hence the study's findings may not be applicable to older graduates. The study was also restricted to CUT entrepreneurship graduates who graduated with entrepreneurship as a discipline in 2012-2016. In line with the findings and discussions of this study, the researcher proposes areas for further research.

A clear entrepreneurship Education policy framework to guide policy makers and graduates in a turbulent environment is indeed necessary. Future research efforts focusing on the commercialization and industrialization of entrepreneurship graduate's products and services are required. Only one out of six factors testing the graduates' capability to operate in a turbulent environment had a positive response. More factors that have the potential to have a positive impact on the graduate's ability to operate in a volatile environment need to be established.

Since the study only focused on CUT graduates, a limited number of participants were selected. As such, a similar, but comparative study of selected Zimbabwean universities may help in the generalization of findings.

According to the empirical evidence in this study, entrepreneurship education was said to be broad. It ranged from technical modules backed by a single entrepreneurship module, technical modules backed by selected business related modules and purely entrepreneurship modules. It would be interesting to conduct a comparative study to establish the views of graduates drawn from different schools at a specific university.

Another area worthy researching further can be the impact of resource sharing on entrepreneurship graduates operating in a dynamic environment. This view emanates from

the fact that the university under study was found to have limited resources to practically train its students, particularly those pursuing entrepreneurship as a discipline.

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APPENDIX 1: RESEARCH QUESTIONNAIRE

QUESTIONNAIRE IDENTIFICATION
NUMBER:

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Effectiveness of Entrepreneurship Education in a Turbulent Economy: The Perceptions of Entrepreneurship Graduates in Zimbabwe

My name is Mirriam Jengeta, I am studying towards a PhD in entrepreneurship at the University of KwaZulu Natal (UKZN). I am carrying out a research to establish the **effectiveness of entrepreneurship education in a turbulent economy: the perceptions of entrepreneurship graduates in Zimbabwe**. Participation in this study is voluntary, anonymous and responses will be treated as confidential, and will be used for academic purposes only. Participants are free to withdraw from the research at any time without any negative or undesirable consequences to themselves. May you please fill in the informed consent form attached?

SECTION A: DEMOGRAPHICS

Where you are to choose, encircle your response.

A1 Indicate your Sex.

1. Male 2. Female

A2 State your Age. _____ years

A3 Indicate your Marital Status.

1. Married 2. Not Married

A4 For how long have you been a Graduate? _____ years

A5 Employment status.

1. Employed by someone 2. Self - employed 3. Not employed

SECTION B: The Extent of Entrepreneurship Education in Zimbabwean Universities

Using **1 = Strongly Disagree**, **2 = Disagree**, **3 = Agree** and **4 = Strongly Agree** may you indicate your level of agreement with each of the following opinion statements by writing the corresponding digit in the box next to it.

B6	The curriculum of my university had dedicated courses for Entrepreneurship Education.	
B7	Entrepreneurship Education offered to students in other programmes at CUT adequate	
B8	The level of graduate unemployment signifies the shortfalls of Entrepreneurship Education in Zimbabwean universities.	
B9		

SECTION C: The Effectiveness of Training Methods used in Entrepreneurship Education in Enabling Learners to Become Entrepreneurs

Using **1 = Strongly Disagree**, **2 = Disagree**, **3 = Agree** and **4 = Strongly Agree** may you indicate your level of agreement with each of the following opinion statements by writing the corresponding digit in the box next to it.

C10	Educating students to be entrepreneurially minded is different from educating students to pursue entrepreneurship as a profession.	
C11	The content approach to entrepreneurship education encourages learners to consider entrepreneurship as a career option.	
C12	The teaching of practical subjects alone is equivalent to entrepreneurship education.	
C13	Venture start-ups by students are a relevant way of exposing students to entrepreneurship education.	
C14	Internship in small companies is a relevant way of exposing students to entrepreneurship education.	

C15	Action learning is a relevant way of exposing students to entrepreneurship education.	
C16	Holding classes and specialized workshops is a teaching method that is effective in entrepreneurship education.	
C17	Experiences in real life and assimilated learning environments are necessary for effective entrepreneurship education.	
C18	Encouraging students to develop new ideas is effective in entrepreneurship education.	
C19	Permanent and continuous connection with entrepreneurs is useful in entrepreneurship education.	
C20	Entrepreneurial education at CUT is driving the entrepreneurship development in Zimbabwe's volatile economy.	

C21. Which of the following teaching methods for entrepreneurship education do you view as the most effective?

1. group projects 2. case study 3. individual projects
4. problem solving 5. simulation 6. business planning
7. developing new investment projects 8. group discussion
9. monitoring young entrepreneurs' projects

C22. Of the three entrepreneurship education methods below, which one do you perceive to be the most effective?

1. Venture start-ups by students 2. Internship in small companies
3. Action learning

SECTION D: The Influence of Experiential Learning on Entrepreneurship Education

Using **1 = Strongly Disagree**, **2 = Disagree**, **3 = Agree** and **4 = Strongly Agree** may you indicate your level of agreement with each of the following opinion statements by writing the corresponding digit in the box next to it.

D23	A turbulent economy drives people to seek Entrepreneurial Education	
D24	Economic turbulence is crucial for entrepreneurial inventions.	

D25	The level of unemployment in the turbulent Zimbabwean economy can be reduced through Entrepreneurship Education.	
D26	Collaborations with techno parks have a positive impact on entrepreneurship education in a turbulent economy.	
D27	Collaborations with established organizations have a positive impact on entrepreneurship education.	
D28	Allowing students to run tried and tested projects from lecturers' researches or industry positively impacts entrepreneurship education in Zimbabwe's volatile economy.	
D29	Exposing students to highly innovative ventures helps the case of entrepreneurship education.	
D30	Ownership is the key ingredient to entrepreneurship education in a turbulent economy.	
D31	An apprenticeship like approach to entrepreneurship education which combines instructional and real life projects aids entrepreneurship education in a turbulent economy.	

SECTION E: The Influence of Entrepreneurship Education on Venture Creation and Creativity

Using **1 = Strongly Disagree**, **2 = Disagree**, **3 = Agree** and **4 = Strongly Agree** may you indicate your level of agreement with each of the following opinion statements by writing the corresponding digit in the box next to it.

E32	Sustainable venture creation is an outcome of entrepreneurship education.	
E33	Entrepreneurship education has led to employment creation in Zimbabwe.	
E34	A strong focus on entrepreneurship education promotes creativity in a turbulent economy.	
E35	A strong focus on entrepreneurship education promotes pro-activity in a turbulent economy.	

E36	A strong focus on entrepreneurship education promotes innovations in a turbulent economy.	
E37	Entrepreneurship education increases competences such as self-efficacy, pro-activeness and risk taking.	
E38	Entrepreneurship education raises intention towards self-employment in a turbulent economy.	
E39	Entrepreneurship education boosts creativity, build-up mitigating attitude to risk, influence the strategic utilization of scarce resources.	
E40	A positive relationship exists between entrepreneurship education and entrepreneurial intentions.	
E41	The need for highly paying jobs with good working environments makes most graduates reluctant to start their ventures.	
E42	The CUT Entrepreneurship education and or its courses do not sufficiently emphasize development of creative capabilities.	
E43	Effective entrepreneurship education is a key component in job creation and economic growth.	
E44	Any undergraduates, irrespective of their areas of academic specialization must be equipped with entrepreneurial skills to enable them to create their own income generating ventures.	
E45	Turbulent economies can positively be transformed if entrepreneurship education is embraced.	
E46	Entrepreneurs are born not made.	
E47	Bureaucratic barriers are hindering the success of venture creation in Zimbabwe's turbulent economy.	
E47	Viewing innovation failure as an attempt to go in a new direction would promote practical entrepreneurship in Zimbabwe's turbulent economy.	

SECTION F: Organizational Resources to Train Entrepreneurship Practically

Using **1 = Strongly Disagree**, **2 = Disagree**, **3 = Agree** and **4 = Strongly Agree** may you indicate your level of agreement with each of the following opinion statements by writing the corresponding digit in the box next to it.

F48	CUT raises awareness of the value of developing entrepreneurial mindsets, behaviour and abilities amongst staff and students.	
F49	The organisational structure at CUT stimulates and supports the development of entrepreneurial mindsets and skills of the student.	
F50	The staff at CUT always bring to the fore the benefits of developing entrepreneurial capabilities, seeking out and seizure of opportunities.	
F51	CUT provides opportunities to experience entrepreneurship.	
F52	The university provides support for both individuals and groups to move from entrepreneurial ideas to auctioning on them.	
F53	Mentoring by academics and industrialists is available.	
F54	CUT facilitates access to private financing for potential entrepreneurs.	
F55	The university's business incubation centre is accessible.	
F56	The Government of Zimbabwe has policies in place to support the practical entrepreneurship agenda in a turbulent economy.	

SECTION G: Graduates' Dynamic Capabilities to Operate in a Volatile Economy

Using **1 = Strongly Disagree**, **2 = Disagree**, **3 = Agree** and **4 = Strongly Agree** may you indicate your level of agreement with each of the following opinion statements by writing the corresponding digit in the box next to it.

G57	As a graduate you are committed to collaboration and knowledge exchange with others in industry and in the society.	
G58	As a graduate you can demonstrate active involvement in your partnerships with industry and the society.	
G59	You maintained strong links with former classmates and value social links as avenues for the dynamic exchange of knowledge.	
G60	You provide yourself with opportunities to take part in business conventions on entrepreneurial activities locally, externally or both.	

G61	As an Entrepreneurship Graduate, consulting the academia and the established entrepreneurs is best practice in a turbulent economy.	
G62	Results from research, your way of education and experience in industry all inform your decision making as an Applied Entrepreneur in a turbulent Zimbabwean economy.	

THANK YOU.

UNIVERSITY OF KWAZULU-NATAL
School of Management, IT and Governance

Dear Respondent,

Research Project

Researcher: [Mirriam Jengeta] (Telephone number: [+263774394301]) (Email: [mjengeta@gmail.com])

Supervisor: [Professor Maxwell Phiri] (Telephone number: +27332605843) (Email: [phirim@ukzn.ac.za])

Research Office: Humanities & Social Sciences Research Ethics Administration, Govan Mbeki Building,
Westville Campus, Tel: + 27 (0)31 260 8350, Email: hssreclms@ukzn.ac.za

I, Mirriam Jengeta am a PhD student in the School of Management, IT & Governance, at the University of KwaZulu-Natal. You are invited to participate in a research project entitled:

Effectiveness of entrepreneurship education in a turbulent economy: the perceptions of entrepreneurship graduates in Zimbabwe.

The aim of this study is to: establish whether entrepreneurship education yields positive results in any economy, and the views have to be directly from graduates who were pursuing entrepreneurship as a discipline.

Your participation in this project is voluntary. You may refuse to participate or withdraw from the project at any time with no negative consequences. There will be no monetary gain from participating in this research project. Confidentiality and anonymity of records will be maintained by the researcher and School of Management, IT & Governance, UKZN. All collected data will be used solely for research purposes and will be destroyed after 5 years.

This study has been ethically reviewed and approved by the UKZN Humanities and Social Sciences Research Ethics Committee (approval number: HSS/0030/018D).

The questionnaire should take about 20 minutes to complete. Thank you for your time.

Sincerely



Researcher's signature

Date

[Mirriam Jengeta]

This page is to be retained by participant

**UNIVERSITY OF KWAZULU-NATAL
School of Management, IT and Governance**

Research Project

Researcher: [Mirriam Jengeta] (Telephone number: [+263774394301]) (Email: [mjengeta@gmail.com])

Supervisor: [Professor Maxwell Phiri] (Telephone number: +27332605843) (Email: [phirim@ukzn.ac.za])

Research Office: Humanities & Social Sciences Research Ethics

Administration, Govan Mbeki Building, Westville Campus, Tel: 27 31

2604557, Email: HSSREC@ukzn.ac.za

CONSENT

I _____ (full
names of participant) hereby confirm that I understand the contents of this
document and the nature of the research project, and I consent to
participating in the research project. I understand that I am at liberty to
withdraw from the project at any time, should I so desire.

Signature of Participant

Date

This page is to be retained by researcher

APPENDIX 2: AUTHORITY TO CARRY OUT STUDY



CHINHOYI UNIVERSITY OF TECHNOLOGY

✉: P. Bag 7724, Chinhoyi ☎: 263-67-22203-5 📠: 263-67- 27214 E-mail : vicechancellor@cut.ac.zw

Vice-Chancellor's Office: Prof. D. J. Simbi - PhD, BSc, MIM, CEng, FZ'weE, FICorr, FZAS, Hons FZ'weE

HUMAN RESOURCES DEPARTMENT

11 April 2017

Ms Miriam Jengeta
c/o Chinhoyi University of Technology
P. Bag 7724
CHINHOYI

Dear Ms Jengata

RE: REQUEST TO CARRY OUT A RESEARCH STUDY AT CHINHOYI UNIVERSITY OF TECHNOLOGY

We acknowledge receipt of your application letter seeking permission to undertake a research study under a title that reads: *Investigating entrepreneurship graduates' perceptions on the effectiveness of entrepreneurship education in a turbulent Zimbabwean economy.*

You are kindly advised that permission to undertake your study is hereby granted. However, you are reminded to observe the University Official Secrecy Oath.

The University would also expect results of your research upon completion.

Thank you.


T. A. Kaseke (Mr)
DEPUTY REGISTRAR, HUMAN RESOURCES



APPENDIX 3: PROOF OF READING LETTER



Interdisciplinary Research and consultancy

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EDITING CONFIRMATION

Report on dissertation by: Mirriam Jengeta, 216076839

Thesis title: *The effectiveness of Entrepreneurship Education in a Turbulent Economy: the Perceptions of Entrepreneurship Graduates in Zimbabwe.*

This document serves to confirm that language editing for the thesis indicated above was done by a language editor at Programme for Interdisciplinary Research and Consultancy (PIRaC) using the track changes tool. The document was returned to the author for the implementation of the suggested changes. The final, corrected document was not proofread by PIRaC editors.



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APPENDIX 4: ETHICAL CLEARANCE LETTER

16 January 2018

Ms Mirriam Jengeta (216076839)
School of Management, IT & Governance
Pietermaritzburg Campus

Dear Ms Jengeta,

Protocol reference number: HSS/0030/018D

Project title: Effectiveness of entrepreneurship education in a turbulent economy: The perceptions of entrepreneurship graduates in Zimbabwe

Approval Notification – Expedited Application

In response to your application received on 15 January 2018, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully



Dr Shamila Naidoo (Deputy Chair)

/ms

Cc Supervisor: Professor Maxwell Phiri
Cc Academic Leader Research: Professor Isabel Martins
Cc School Administrator: Ms Debbie Cunynghame

Humanities & Social Sciences Research Ethics Committee

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