MODELLING VENTURE CREATION INTENT IN HIGHER EDUCATION INSTITUTIONS THROUGH ENTREPRENEURSHIP EDUCATION: A CASE STUDY OF CHINHOYI UNIVERSITY OF TECHNOLOGY.

By

Tafadzwa Gerald Dikito

(C22153096Q)

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School of Entrepreneurship and Business Sciences

Chinhoyi University of Technology

Zimbabwe

Supervisors: Prof. Desdeiro Chavunduka

Dr. Nothando Msipah

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CHINHOYI UNIVERSITY OF TECHNOLOGY

APPROVAL FORM

The undersigned certify that they have read and recommended for acceptance to the Directorate of Research and Graduate Studies, Chinhoyi University of Technology, Tafadzwa Gerald Dikito's dissertation titled " **MODELLING VENTURE CREATION IN HEIs THROUGH ENTREPRENEURSHIP EDUCATION: A CASE STUDY OF CHINHOYI UNIVERSITY OF TECHNOLOGY,"** submitted as part of the requirements for the Master of Philosophy Degree in Business Management and Entrepreneurship.

Name of Supervisor: Prof D Chavunduka

Signature

Date: 28\04\25

DECLARATION

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Signature:

Date: 29/04/24

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ABSTRACT

This study explores the potential for enhancing venture creation through the development of a model for effective entrepreneurship education (EE) in Zimbabwe's higher education institutions. While previous research has addressed this topic, few studies have specifically focused on modeling EE for venture creation in Zimbabwe. Empirical evidence indicates a positive correlation between entrepreneurship education and venture creation; however, the situation in Zimbabwe presents challenges. Despite a significant number of entrepreneurship education graduates each year, the venture creation rate remains disappointingly low. This study aimed to examine the impact of various factors, including teaching methods, content, assessment methods, and the role of innovation and incubation centers on venture creation. Guided by pragmatism philosophy and drawing on Experiential Learning Theory and Social Cognitive Career Theory, the research utilized a survey design, the research involved stratified random sampling to classify participants from eight faculties. A total of 342 graduates from the Chinhoyi University of Technology (CUT) were selected from a target population of 2,350. Additionally, qualitative data were gathered through interviews with nine lecturers to gain deeper insights into the effectiveness of entrepreneurship education. Data were analyzed using SPSS version 22, employing correlation and regression analyses to assess the relationships between independent variables and venture creation intentions. The findings confirm that teaching methods and entrepreneurship education content and incubation centers positively influence venture creation whilst assessment method and perceptions were found to have no significant impact on venture creation intention. Based on these results, the study recommends integrating business-related courses into the curriculum, overhauling teaching methods to emphasize experiential learning, and enhancing the support provided by incubation centers to promote business startups. Future research should examine multi-stakeholder dynamics including parental influence and industry partnerships, expand to multi-institutional analysis across Zimbabwean universities, and investigate contextual uniqueness of entrepreneurship education in resource constrained economies.

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LIST OF ABBREVIATIONS

CUT	**Chinhoyi University of Technology**
EE:	**Entrepreneurship Education**
HEIs:	**Higher Education Institutions**
VCI:	**Venture Creation Intention**

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The importance of entrepreneurship in human existence makes it impossible to leave it to chance, and entrepreneurship education can inspire students to launch their own businesses. Therefore, a concerted effort should be made to instill it in citizens. Formal schooling is the most effective means. According to Wibowo et al. (2018), everyone can learn about entrepreneurship. The conventional wisdom once held that entrepreneurship was innate, but there has been a significant change to the idea that it can be learnt. According to Bulgaru et al. (2021), entrepreneurship education fosters entrepreneurial intention since it can evoke participants' interest and provide the drive to launch a business through the knowledge and skills they acquire.

There is a growing need for improved entrepreneurial skills and capacities to manage risks and uncertainties due to the growing popularity of entrepreneurial behavior. The ability to innovate, be creative, self-assured, take risks, be adaptable, and find different approaches to problems has become increasingly crucial in order to meet the ever-changing political, social, and economic difficulties. It is true that entrepreneurship is tied to all of these qualities. By improving the cognitive skills necessary for seizing business opportunities and starting new ventures, entrepreneurship education is supposed to encourage entrepreneurship (Obschonka et al., 2021). Students can acquire and absorb the theories and strategies required for startup by being exposed to the experiences of seeing and seizing a business opportunity. These cognitive consequences suggest that entrepreneurship education should improve identifying or discovering opportunities (Arruti & Paños-Castro, 2020).

Around the globe, entrepreneurship has shown to be an essential instrument for changing economies. Research conducted in India on the effect of opportunity recognition and entrepreneurship education in relation to the entrepreneurial intention of Indian university students (Hassan et al., 2020). In their testimony, the authors discussed how self-efficacy, entrepreneurial intention, and opportunity recognition are all influenced by entrepreneurship education. The

findings supported previous research (Anwar et al., 2020) by demonstrating that the influence of self-efficacy on entrepreneurial intention was significantly boosted with an increase in entrepreneurship education. The perceived levels of entrepreneurial self-efficacy and intention are directly increased by entrepreneurship education, and the relationship between self-efficacy and intention is also strengthened. According to Asimakopoulos et al. (2019), self-efficacy is more likely to increase entrepreneurial intention when entrepreneurship education is properly and adequately imparted. This means that if a person believes they are capable of taking on an entrepreneurial task and feels they can accomplish it, then education can greatly enhance their intention to take on that venture. Moreover, the association between entrepreneurial self-efficacy and intention is revealed to be significantly moderated by entrepreneurship education. By strengthening people's belief in their entrepreneurial competencies, it raises their perceived degree of self-efficacy and, in the end, strengthens the relationship between entrepreneurial self-efficacy and entrepreneurial intention.

In a study conducted by Mohamad et al. (2019), a sample of 1998 undergraduate students majoring in a variety of subjects from 20 Malaysian public higher learning institutions (PHLIs) was used to examine the efficacy of entrepreneurship education in fostering entrepreneurial thinking among students at Malaysian public higher learning institutions. The results demonstrated that while the level of entrepreneurial thinking among students enrolled in the required basic entrepreneurship (CBE) course is moderate, the level of opportunity recognition and risk-taking is high. Regarding creativity and innovation, there was a moderately high degree of ambiguity tolerance displayed. Additionally, Othman and Juhdi (2022) conducted research on the behavior of students and the moderating effect of their programs on pre-start-up entrepreneurship education. According to the findings, every direct relationship was found to be stable. Additionally, it was discovered that the association between pre-start-up conduct and entrepreneurship education is moderated by student programs. The results also showed that risk management should be emphasized in the curriculum since it is an essential part of entrepreneurship education.

Additionally, according to Anjum et al. (2021), it is thought that specialized entrepreneurship education may help to develop the EI. The desire to be their own boss also encourages students to pursue an entrepreneurial career, as demonstrated by Nabi et al. (2020) study on school of engineering sciences and technology students in Spain, which confirmed the positive impact of

entrepreneurship education and training in students' entrepreneurial intentions. Academics contend that certain facets of entrepreneurship can be successfully imparted to students in order to provide them with the requisite knowledge and competencies (Lackéus, 2020). In addition to providing knowledge about the fundamental personality traits needed to be a successful entrepreneur, researchers have discovered that teaching entrepreneurship exposes students to the environment of venture creation and development. Some scholars emphasize the intrinsic motivation to launch and manage a business, which may or may not be acquired through courses on entrepreneurship before an entrepreneurial endeavor (Obschonka et al., 2023). According to Shirokova et al. (2023), EI is conceptualised as "the conscious state of mind that precedes action and directs attention toward entrepreneurial behaviors such as starting a new business and becoming an entrepreneur." According to a Chinese study by Lin and Fayolle on 327 college students (Bergmann et al., 2023), taking entrepreneurship courses increased students' ambitions to become entrepreneurs but had no discernible effect on their attitude toward entrepreneurship.

According to Turulja et al. (2020) found that perceived entrepreneurial capacity increases entrepreneurial intention. They also examined entrepreneurial capacity as a predictor of the propensity for entrepreneurship. The development of the necessary mindset in students to pursue entrepreneurship is greatly aided by entrepreneurship education. Students who receive an education are equipped with the knowledge and real-world experiences necessary to shape their attitudes and goals toward entrepreneurship. A quality training program would equip the learner with the essential abilities and mindset, enabling them to become less fearful of failing and more self-assured (Obschonka et al., 2021). Students' aspirations to become entrepreneurs are fueled by education, which increases their capacity for entrepreneurship.

The best strategy to encourage the formation of new businesses and facilitate the transition of graduates from higher education to the workforce is through EE. The United States saw a boom in entrepreneurship that started in the early 1970s and is still going strong now. According to Sexton and Smilor (1997), the United States saw small business boom that produced 27 million new jobs between 1980 and 1995 as a result of the advent of entrepreneurship education and institutions. According to Kee et al. (2021), secondary vocational schools in Poland offer entrepreneurial basics as a required subject. The subject covers topics like enterprise creation and the development of entrepreneurial attitudes. In Austria, secondary technical vocational education programs teach

entrepreneurship through the operation of fictitious businesses. The Dutch government creates lesson plans and provides teacher training for experimental programs aimed at introducing entrepreneurial education into secondary education. In Ireland, the leaving certificate vocational program and the transition year give pupils the chance to learn about and practice entrepreneurship. Real-world learning takes place in vocational training facilities in Germany, where students have the opportunity to start their own firms and are put in both businesses and schools. The government works with Young Enterprise Norway to implement the policy for entrepreneurial education in Norway.

EE is regarded as an extremely important field of study in Africa. Research conducted in Uganda (Olutuase et al., 2020), South Africa (Chauke & Obadire, 2020), and other countries demonstrated that EE was essential for the development, empowerment, and creation of job opportunities for young people enrolled in higher education institutions. This is because entrepreneurs who lack the requisite training, expertise, and skills usually fail.

Examining the value of Kenya's entrepreneurial education program was the main goal. The results showed that entrepreneurship education plays a big part in helping students develop an entrepreneurial mindset, which helps to increase job creation and lower poverty. Kenya needs more graduates in entrepreneurial education (Ongwae, 2015). Mwangi (2022) reports that a study carried out in Kenya looked into how entrepreneurship education in technical training colleges improved the management abilities of entrepreneurs in the unorganized sector. A case study of Nairobi's informal sector operators was carried out. A combination of in-depth interviews and observations were used to gather qualitative data. The Grounded theory was used to analyze the data. The study's conclusions demonstrated how informal sector business owners accessed the informal sector market and managed their enterprises by utilizing the entrepreneurial skills they had learned at technical training institutions. This supports the notion that individuals who had received entrepreneurship education typically have successful businesses (Mwangi, 2022). The study conducted by Musyimi and Mwasiaji (2023) in the Kajiado Region, Kenya, on entrepreneurship education for small and medium-sized commercial enterprises revealed that the performance of these firms is significantly impacted by entrepreneurship education. The stance adopted by the study is that, in addition to being essential for acquiring pertinent entrepreneurial capabilities for improved performance, entrepreneurship education also plays a crucial role in fostering an

entrepreneurial culture and stimulating economic growth. The study on the impact of entrepreneurship education on the economic growth of Kenyan government agencies found out that economic growth and the establishment of socio-economic stability depend on entrepreneurship (Ngigi et al., 2020). Tshehla (2018) evaluated how students' intentions toward professions in entrepreneurship in South African high schools were impacted by entrepreneurship education. 240 grade 12 students with entrepreneurial education from the three townships in the City of Tshwane—Mamelodi, Atteridgeville, and Soshanguve—participated in a quantitative study. To gather information, a closed-ended, structured questionnaire was employed. Using SPSS software, data was analyzed using both inferential and descriptive statistics. Results have demonstrated that learners' intentions towards entrepreneurship are correlated with both theoretical education and practical learning, with experiential learning having a major impact on learners' growth of entrepreneurship intention. Furthermore, Omoniyi (2022) studies showed that well-packaged and enhanced entrepreneurship education can aid in capacity building, skill acquisition, entrepreneurial development, and accelerating economic growth and development in South Africa. In order to educate and train aspiring entrepreneurs, it was recommended that the government set up excellent study centers with qualified staff. Additionally, funds for business formation should be made available to them at the conclusion of the program. Finally, the curriculum for entrepreneurship education should be improved and repackaged for use in South African colleges and universities.

Aiming to identify the factors that influence Moroccan youth's ambition to start their own business by emphasizing the value of action-based entrepreneurship education among recent graduates of public universities, a face-to-face questionnaire was used to gather data from management students who had finished an action-based entrepreneurship program. Both exploratory (PCA using IBM SPSS Statistics 26) and confirmatory (PLS-SEM using Smart PLS 3) factor analyses were included in the data analysis design (Boubker et al., 2022). Results indicated that attitudes toward entrepreneurship and perceived entrepreneurial ability are positively and significantly impacted by entrepreneurship education. Furthermore, Abderrahim and Naoui (2022) observed that entrepreneurship education is increasingly becoming recognized as a catalyst for the formation of new businesses in their study on the effect of entrepreneurial education on the development of entrepreneurial intention among students. According to a study conducted among students at

Hassan II University in Casablanca, taking entrepreneurship courses or attending seminars boosts the development of entrepreneurial intention and promotes the creation of businesses and entrepreneurship. While a small percentage of these students still choose to work in the public or private sectors, the majority clearly state that they would like to start their own business. In fact, entrepreneurship education gives students the know-how, abilities, and drive to support successful entrepreneurship in a variety of settings.

Nyoni (2019) argues that Zimbabwe's circumstances are distinct because of a high rate of unemployment among graduates. It is alarming that Zimbabwean graduates of entrepreneurship are not significantly improving employment creation, economic advancement, or community well-being (Mabhanda, 2022). This raises the question of whether or not recipients of Zimbabwean education are encouraged to pursue entrepreneurship. The Zimbabwean government, led by Robert Gabriel Mugabe at the time, enacted the Indigenization Act in 2008. Its objective was to encourage young people to become entrepreneurs (Nyoni, 2019).

The Zimbabwean government formed the Zimbabwe Council for Higher Education (ZIMCHE) with the purpose to execute the Zimbabwe National Qualifications Framework from the Ministry of Higher and Tertiary Education in order to provide more transparency to the country's educational system. In order to prepare for the switch from the Higher and Tertiary Education 3.0 model to the new Higher and Tertiary Education 5.0 model (HTE 5.0), the modification was done. In contrast to the prior model's emphasis on teaching, research, and community service, the new model (HTE 5.0) integrates innovation and industrialization (Chihota, 2020). Education 3.0 did not yield the outcomes that developing industries had hoped for because of a disconnect between the knowledge acquired in the Higher and Tertiary Education system and the local environment as a result of the system's apparent focus on exotic application domains (Murwira, 2020). Additionally, the Ministry of Higher and Tertiary Education received a total of US$380 million in 2019 to fund research and innovation (Ndofirepi, 2020). This happened when five state universities received funding from the government to create and launch innovation hubs (Ndofirepi, 2020).

According to Zimbabwe Congress of Trade Unions (2021), despite all of these initiatives to promote entrepreneurship, there does not appear to be an increase in economic growth and a reduction in the country’s unemployment rate, which stands at 90% nationally. The majority of

Zimbabwean institutions offer programs and courses on entrepreneurship because it is clear that today's university students will likely become successful entrepreneurs in the future. One prominent topic covered in these offerings is the topic of venture creation among students, about which not much research has been done. In addition to attempting to close this gap, this study aims to create an entrepreneurship education model that will support students' capabilities for venture creation and lower Zimbabwe's unemployment rate.

As a result of poor EE efficacy, Zimbabwe's unemployment rate has remained high and is currently predicted to be 90% (Phiri et al., 2020). These findings are consistent with a 2017 UN report that claimed Zimbabwe's jobless rate is currently over 95%, which is like a ticking time bomb about to go off at any moment. Additionally, according to the African Development Bank (2021), the failure of entrepreneurship education to encourage the establishment of new ventures has led to high levels of poverty, which stood at 70.5%.The number of students enrolling in universities is rising annually, with over 30,000 graduating each year (Ministry of Higher and Tertiary Education, 2023). This has led to an increase in literacy rates to 95% (UNECA, 2019; Munyoro & Phiri, 2021), yet only 5% of these graduates are able to obtain employment (Moyo, 2017). Nyoni (2019) reiterated these views, pointing out that graduates' high unemployment rate is concerning not just in Zimbabwe but throughout Africa. This is a result of more students enrolling in higher tertiary institutions, which has led to a rise of graduates. According to Nyoni (2019), 74% of Zimbabwean graduates do not have a job. Despite large numbers of learners graduating each year, venture creation rate is relatively low, making up about 5% of all registered businesses in operation. In contrast, Ivory Coast has 25% of all businesses, while Uganda has nearly 35% (ILO, 2022). However, the underlying premise here is that entrepreneurship education is viewed as a means of augmenting the pool of venture creation talent, which is then anticipated to establish and nurture new firms that will create jobs and wealth for the country's economy, in addition to offering the more pragmatic skills that university graduates need once they graduate.

1.2 Statement of the problem

Zimbabwe has a low venture creation rate despite the fact that a significant number of Zimbabwean entrepreneurial graduates qualify for the industry each year (ILO, 2021; Mabhanda, 2023; Zimbabwe National Statistics Agency, 2024). Venture creation rate is 5% of all registered businesses in operation (ILO, 2021; Zimbabwe National Statistics Agency, 2024). Lack of new

ventures has contributed to high levels of unemployment and a shrink in economic growth (Future Africa Forum, 2023; ILO, 2019; RBZ, 2016). Zimbabwe needs to create ventures in order to lower the unemployment levels prevailing in the country (Mabhanda, 2023). According to Vinogradova et al. (2023), venture creation is a critical mechanism for reducing unemployment. There is fear that the government and its supporting structures might continue losing resources educating people doing little conversion of acquired knowledge into ventures. This indicates a gap in the knowledge that trained individuals possess and the need for them to launch their own businesses. Therefore, the entrepreneurship education literature has not yet addressed the crucial subject of the relationship between entrepreneurship education and venture creation by graduates who take part in entrepreneurship education programs. Creation of an entrepreneurial education model and the implementation of reforms that can better address the educational and financial needs of the local community depend on this kind of research.

1.3 Research objectives

1. To examine the influence of entrepreneurship education teaching methods on venture creation intent.
2. To determine the influence of entrepreneurship education assessment methods on venture creation intent.
3. To establish the influence of entrepreneurship education content on venture creation intent.
4. To assess the influence of university incubation centres on venture creation intent.
5. To determine the perceptions of graduates on the influence of entrepreneurship education on venture creation intent.
6. To develop an entrepreneurship education model for venture creation.

1 .4 Research questions

1. How does entrepreneurship education teaching methods influence venture creation intention among university students?
2. What is the influence of assessment methods on venture creation intention?
3. How does entrepreneurship education content influence venture creation intention among university students?
4. What is the influence of university incubation centres on venture creation intention?

5. What are the perceptions of university students on the influence of entrepreneurship education on venture creation?
6. What is an appropriate entrepreneurship education model for venture creation?

Hypothesis.

H_1: Entrepreneurship education teaching methods positively influences venture creation.

H_2: Entrepreneurship education assessment methods positively influence venture creation.

H_3: Entrepreneurship education content positively influence venture creation.

H_4: University incubation centres positively influence venture creation.

H_5: Students perceptions towards entrepreneurship education positively influences venture creation intention.

1.5 Significance of the study

The findings of this study are expected to be significant in a variety of ways:

Providing reasons for the existence of the proposed topic is equally important since it help to come out with solutions to the problems. Justifying the research problem gives the rationale behind the study. Entrepreneurship education is an integral part of any future in academic programmes in schools. The study is important in the following ways:

Educators and policy makers will have an insight on why entrepreneurship education may have a positive effect at first glance. Better understanding of the role of the impact on venture creation is needed and tuning the goals of entrepreneurship education relative to its participants particularly to Zimbabwean contextual situations. Knowledge on the impact of specific education components is crucial when designing an effective education curriculum. There is no specific agreed way of teaching entrepreneurship with some advocating for more theory and some favouring practical approaches. Understanding how specific education components influences entrepreneurship intentions will help to design a model on how best to teach entrepreneurship. The study will help to ascertain the influence of specific education components on entrepreneurship intentions and will provide important implication for learning and teaching entrepreneurship.

The study will benefit other scholars studying the effectiveness of entrepreneurship education 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. Also the study contributes to the existing body of knowledge.

1.6 Scope of the study.

It is necessary to define the scope in order for the research to remain manageable like any other research. The research shall focus on final year students from Chinhoyi University of Technology in Zimbabwe Mashonaland West Province. Entrepreneurship intention which is a predictor of future behavior is the dependent variable as an impact measure of education programme.

1.7 Definition of terms

This section focuses on defining key terms. These are venture creation intention and entrepreneurship education (EE).

1.7.1 Venture creation intention (VCI)

While it has been claimed that there is no consistent concept of venture creation intention in previous research, the concept has been used to refer to starting a new business or being self-employed (either by starting a new business or buying an existing one). Venture creation intention, according to Mohamad et al., (2021) and Badri and Hachicha (2019), is the exploration of knowledge and other tools in order to start a business. It is a personal dedication to a new business. For the purpose of the study venture creation intention is a person's self-admitted conviction that they want to start a business, revamp an existing one and actively intend to do so in the future.

1.7.2 Entrepreneurship Education (EE)

According to Shah et al. (2020), the purpose of EE is to train students to acquire skills, ideas and managerial abilities and capabilities of self-employment rather than being employed for pay. Entrepreneurship education is that educational experience that often triggers motivation for venture creation and self-employment (Galvão, Ferreira and Marques, 2018). According to Adelaja et al., (2018) EE is formally structured dissemination of entrepreneurial ideas, skills, and knowledge used by individuals to start or develop a venture.

For the purpose of the study entrepreneurship education (EE) is the type of education that is intended to produce job creators not job seekers, graduates who can identify opportunities and

develop ventures, through setting up new businesses or developing and growing part of an existing venture.

1.8 Chapter Summary

The chapter establishes entrepreneurship education (EE) as a critical pedagogical tool for fostering venture creation intention (VCI) and addressing Zimbabwe's severe unemployment crisis, where graduate unemployment exceeds 90% despite high literacy rates. Globally, EE develops skills, self-efficacy, and opportunity recognition to transition learners from job seekers to job creators. However, Zimbabwe's venture creation rate remains critically low at 5% of registered businesses, indicating a failure of existing EE frameworks to translate education into entrepreneurial action despite policy shifts like the HTE 5.0 model emphasizing innovation. The study addresses this gap by examining how specific EE components (teaching methods, assessment practices, curriculum content, and university incubation support) influence VCI among final-year students at Chinhoyi University of Technology. It employs six research objectives and hypotheses to test these relationships. Findings aim to develop an evidence-based EE model for Zimbabwe, providing educators and policymakers with insights to realign curricula with local economic needs, enhance graduate venture creation, and ultimately reduce unemployment. The research contributes to academic discourse on EE efficacy in developing economies while offering scalable solutions for similar contexts.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

There is a clear and articulated relationship between entrepreneurship and education (Belitski et al., 2017; Matlay, 2008; Nabi et al., 2017). Entrepreneurship is broadly acknowledged as a driving force behind innovation, job creation, and economic development. Similarly, education plays a crucial role in cultivating the entrepreneurial skills necessary for engaging in entrepreneurial ventures. Therefore, it is essential to harness the potential of entrepreneurship education to develop the human capital required for such activities. This educational opportunity equips individuals with the necessary skills and mindset for entrepreneurial behavior across diverse fields and contexts. In this chapter, various experts were consulted to help meet the research objectives and answer the research questions. The insights drawn from these authorities, who contributed to related subjects, were examined to clarify their contributions and enhance the comprehension of the topic being explored. This process significantly aids the researcher in understanding previous research findings and lays the groundwork for future studies. The thematic areas addressed in this investigation included examining the impact of entrepreneurship education components in universities (such as assessment methods, teaching approaches, and content); the role of incubation centers in venture creation; and graduates' perceptions of the effects of entrepreneurship education. The aim was to develop a model for entrepreneurship education to encourage venture creation.

2.1 Definition of key Terms

2.1.1 Entrepreneurship Education

Entrepreneurship Education (EE) refers to structured pedagogical interventions designed to cultivate individuals' competencies in identifying opportunities, innovating, managing risk, and mobilizing resources for entrepreneurial action, whether through new ventures, intrapreneurship, or social initiatives (Morris et al., 2020). According to Shah et al. (2020), the purpose of EE is to train students to acquire skills, ideas and managerial abilities and capabilities of self-employment rather than being employed for pay. Entrepreneurship education is that educational experience that often triggers motivation for venture creation and self-employment (Galvão et al.,2018).

According to Adelaja et al., (2018) EE is formally structured dissemination of entrepreneurial ideas, skills, and knowledge used by individuals to start or develop a venture. For the purpose of the study entrepreneurship education (EE) is the type of education that is intended to produce job creators not job seekers, graduates who can identify opportunities and develop ventures, through setting up new businesses or developing and growing part of an existing venture.

2.1.2 Venture Creation Intention

According to recent research, Venture Creation Intention (VCI) is a deliberate and conscious mental state that reflects a person's committed plan and determination to launch a new, independent business venture within a specified future timeframe (Barba-Sánchez et al., 2022; Nabi et al., 2021; Sousa-Filho et al., 2023). As a result, VCI is a crucial dependent variable for evaluating how well interventions such as entrepreneurship education develop future business owners. For the purpose of the study venture creation intention is a person's self-admitted conviction that they want to start a business, revamp an existing one and actively intend to do so in the future.

2.2. Understanding Entrepreneurship Education (EE)

Any educational strategy or method aimed at cultivating a start-up mindset and essential skills is classified as entrepreneurial education (Hahn et al., 2017). This form of education is viewed as a pedagogical initiative designed to equip learners with the necessary entrepreneurial skills, knowledge, and ethical standards, facilitating their transition from business ideas to entrepreneurial actions and intentions (Duong, 2021). The primary objective of entrepreneurial education (EE) is to shift students' focus from merely seeking traditional employment after graduation to embracing an entrepreneurial culture, ultimately aiming to nurture fully developed business owners (Kim, 2017). Research by Yasir et al. (2019) indicates that students exposed to EE are considerably more inclined to pursue entrepreneurial careers compared to those who are not. Additionally, findings suggest that EE has a profound and measurable influence on individuals' perceptions, intentions, and behaviors concerning entrepreneurship (Kisubi et al., 2021). The significance of EE transcends just preparing undergraduate students with the entrepreneurial competencies they require to graduate as self-employed; it also enhances their employability in the job market (Wardana et al., 2020). More specifically, EE equips graduates with leadership, creativity, logical reasoning, and

problem-solving skills that are in demand by employers to boost productivity (Otache et al., 2019). Moreover, EE plays a vital role in helping young people cultivate entrepreneurial skills, attitudes, and behaviors, as well as fostering a positive outlook on entrepreneurship as a viable career option (Vodă et al., 2019). Furthermore, Wardana et al. (2020) assert that EE contributes to addressing the widespread issue of graduate unemployment faced by many countries today.

Entrepreneurial education can be categorized into three distinct types. The first category involves theoretical approaches to entrepreneurship, focusing on the creation, operation, and management of new ventures, which align with traditional educational techniques. Hoang et al. (2020) describe entrepreneurship theories as tools that aid students in acquiring business knowledge and skills while increasing their awareness of entrepreneurial practices. The second category emphasizes practical methods for initiating and managing business enterprises, encouraging learners to develop relevant skills and knowledge in entrepreneurship (Nowiński et al., 2020). These approaches are referred to by scholars as activity-based educational methodologies that promote a favorable attitude toward entrepreneurship among students (Duong, 2021). The third category pertains to training for aspiring entrepreneurs who have already launched their own businesses. Such educational programs are typically supplemented with knowledge on marketing, sales, strategy, or product and service development to ensure the sustainability and growth of new enterprises (Harmeling & Sarasvathy, 2013; Piperopoulos & Dimov, 2015).

Various studies across different educational levels, including high schools (Kusumojanto et al., 2021), higher education (Duong, 2021; Hoang et al., 2020), and primary and secondary schools (Ni & Ye, 2018), have investigated the connection between entrepreneurial education and entrepreneurial intention. According to Nowiński et al. (2020), students who receive entrepreneurial education are more likely to develop entrepreneurial intentions, as they are better equipped to engage in entrepreneurial activities due to their acquired knowledge and skills. Recent research suggests that entrepreneurship can be integrated into all academic disciplines (Duong, 2021; Maresch et al., 2016; Ratten et al., 2021). However, findings regarding the relationship between entrepreneurial intention and entrepreneurial education have been inconsistent (Adelaja, 2021; Biswas et al., 2021). Several studies (Hoang et al., 2020; Walter et al., 2016) indicate a significant and positive correlation between entrepreneurial education and the intention to engage

in entrepreneurial activities. Conversely, some scholars argue that there is inadequate evidence supporting this link (Duong, 2021; Iwu et al., 2020), while other research suggests that entrepreneurial education might even negatively affect an individual's desire to pursue entrepreneurship (Oosterbeek et al., 2010). Thus, current findings highlight the necessity for further research to comprehensively understand this relationship (Maheshwari, 2021).

Additionally, the connections between antecedent factors and entrepreneurial intentions may elucidate the contradictory findings of previous studies concerning the anticipated relationship between entrepreneurial education and entrepreneurship (Duong, 2021). In other words, two components of Shapero and Sokol's (1982) model of entrepreneurial events—perceived feasibility and perceived desirability—can be influenced by entrepreneurial education. Several previous studies have indicated that entrepreneurial education may enhance the attractiveness of starting a business (Hattab, 2014; Păunescu et al., 2018). Prathap and Sreelakshmi (2021) suggest that individuals may view entrepreneurship as more achievable following their participation in entrepreneurial education.

2.3 Theoretical framework

In the sections that follow, experiential learning theory and social cognitive career are scrutinised to find their contributions to the topic at hand.

2.3.1 Experiential Learning Theory

According to Kolb (1984), learning is a continuous process that creates knowledge by transforming experiences rather than a singular occurrence. This experiential learning theory remains influential, with contemporary research further refining its application (Morris, 2020; Passarelli et al., 2023). Figure 2.1 depicts the four-stage learning cycle that constitutes the experiential learning process, as outlined in recent literature (Demirel et al., 2022; Kolb & Kolb, 2017).

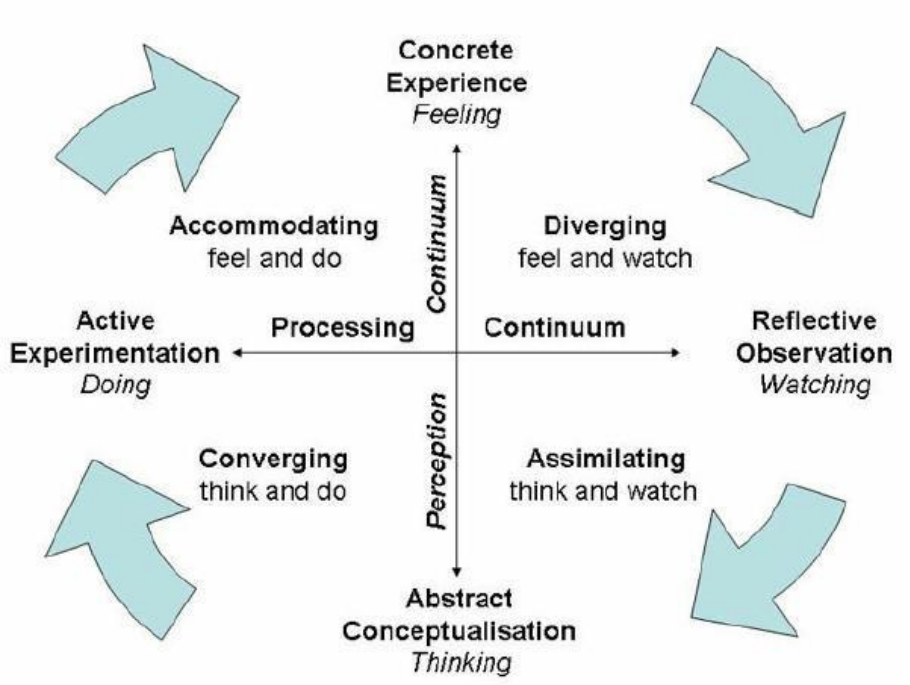

Figure 2. 1 :Kolb's experiential learning theory

(Adopted from Mcleod 2017)

The theories of experiential learning postulated by Kolb (1984) and Dewey (1938) will underpin this research study. The justification for selecting these theories lies in their robust grounding in experiential learning, which forms the foundation for teaching entrepreneurship (Morris, 2020; Neck et al., 2021). Kolb (1984) argued that learning is a process whereby knowledge is created through the transformation of experience. His experiential learning theory (ELT) outlines a four-stage cycle:

Concrete Experience (doing/having an experience, e.g., fieldwork),

Reflective Observation (reviewing/reflecting on the experience),

Abstract Conceptualization (forming theories or models from observations), and

Active Experimentation (applying learning in new contexts).

Kolb further identified four learning styles that describe how individuals learn more effectively (Kolb & Kolb, 2017; Demirel et al., 2022). Similarly, Dewey (1938) emphasized learning through experience, advocating for an iterative process of action, reflection, and application—a principle

that remains central to modern entrepreneurial education (Neck et al., 2018; Passarelli et al., 2023). **Assimilators,** who learn better when presented with sound logical theories to consider; **Convergers,** who learn better when provided with practical applications of concepts and theories; **Accommodators,** who learn better when provided with "hands-on experiences"; **Divergers,** who learn better when allowed to observe and collect a wide range of information. Dewey (1938), a key advocate for experiential learning, emphasizes that the teacher's role is to facilitate and guide the educational experience (Roberts, 2022). The educator should act as a collaborator in the learning journey, helping students to uncover meaning independently within their subject matter (Lackéus, 2020). Dewey further argues that learners achieve the most significant progress not by repetitively practicing standardized content, but through engaging in practical work, experimenting, and purposefully altering their findings (Neck et al., 2018). He maintained that the objective of education should focus on unlocking an individual's full potential and equipping them to apply their skills for the benefit of society, rather than merely acquiring a fixed set of competencies (Matlay, 2021).

ELT offers the reasoning behind why certain teaching methods, like simulations and live projects, should shape intent. It argues that intent develops through direct, concrete experiences and active experimentation, which makes this theory key for choosing suitable teaching methods. These methods help in examining and understanding their effects. Additionally, ELT states that assessment must connect with the experiential cycle to be effective. It highlights the importance of reflective observation. This aspect is crucial for showing that assessments which value reflection on real experiences differ significantly from theoretical exams, and they may have a greater effect on venture creation intent. Moreover, ELT asserts that content should support the entire experiential cycle. Content that focuses on practical knowledge and real-world challenges provides the basis for abstract conceptualization and directs active experimentation, which is vital for venture creation. ELT sees incubation centers as the ideal environment for experiential learning. They offer a structured setting for concrete experiences and ongoing active experimentation, like launching real ventures. This aligns with Dewey's principle of learning through doing. ELT is essential for framing incubators as a key part of experiential teaching that encourages venture creation intention. It also confirms that perceptions stem from real experiences during the learning process. At its heart, ELT revolves around creating knowledge through transforming experiences.

This theory supports using graduate perceptions as reliable data on how entrepreneurship education affected them.

2.3.2 Lent, Brown and Hackett's (1994) Social Cognitive Career Theory (SCCT).

This research was also influenced by the Social Cognitive Career Theory (SCCT) proposed by Lent, Brown, and Hackett (1994). SCCT is built upon Albert Bandura's (1986) general Social Cognitive Theory (Lent et al., 2020; Wendling et al., 2020). The constructivist approach has been integral to vocational psychology for many years (Kassean et al., 2023; Liguori & Winkler, 2021) and has shown its effectiveness in both educational and psychological settings, broadening Bandura's insights to encompass career development, interest formation, and performance. In comparison to traditional models such as Ajzen's (1991) Theory of Planned Behavior (TPB) and the Shapero-Krueger (1982) Model, SCCT represents the most extensive theoretical framework for examining entrepreneurship (Lent & Brown, 2020).

Ngigi et al. (2022) assert that SCCT elucidates the ways in which individuals cultivate career-related interests, make educational choices, and realize professional success. In a similar vein, Lent et al. (2020) highlight that SCCT emphasizes cognitive, self-regulatory, and motivational mechanisms that extend beyond fundamental learning, influencing career-related behaviors. Advocates of SCCT contend that for learners to thrive, they must have access to experiences, opportunities, and mentors that bolster self-efficacy (Alshahrani et al., 2021; Lent et al., 2020). The theory's core components are: Self-efficacy, Outcome expectations, and Goals/intentions (Lent et al., 2020).

These are influenced by environmental factors (e.g., educational experiences) and personal agency (Kassean et al., 2023; Lent et al., 2020). The primary components of the Social Cognitive Career Theory, a study that also provided guidance for the study, are depicted in the picture below.

Lent, Brown and Hackett's (1994) Social Cognitive Career Theory (SCCT).

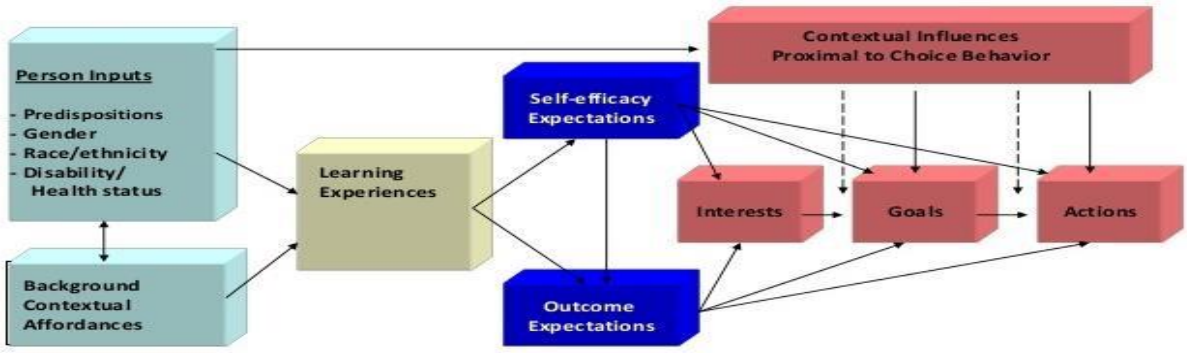

Figure 2.2 Social Cognitive Career Theory

Source: extracted from (Lent, Brown and Hackett, 2002)

Researchers have increasingly applied Social Cognitive Career Theory (SCCT) to entrepreneurial behavior in the past five years due to its capacity to integrate conflicting theories into a cohesive framework (Chhabra et al., 2023; Liguori et al., 2020). Fragoso et al. (2021) define self-efficacy as "an individual's belief in their capability to execute tasks successfully." Similarly, Kassean et al. (2015) characterize it as "dynamic self-perceptions of one's ability to perform tasks competently with minimal effort." Self-efficacy is the primary cognitive driver of entrepreneurial action—individuals with high self-efficacy are more likely to pursue ventures and persist despite challenges, while those with low self-efficacy avoid such activities (Alshahrani et al., 2021; Ngigi et al., 2022). According to Kassean et al. (2015), the following experiential methods enhance entrepreneurial self-efficacy:

• Practicing tasks through simulations,

• Interacting with role models and guest speakers,

• Receiving mentor feedback,

•Collaborative project work, and

• Exposure to entrepreneurial success stories.

Efficacy expectations (one's belief in achieving desired outcomes) are critical to career choice. Individuals pursue careers aligned with perceived skills (Lent et al., 2020). Students engaged in experiential entrepreneurship activities demonstrate stronger self-efficacy (Kassean et al., 2015; Liguori & Winkler, 2020). The evidence underscores that effective entrepreneurship education (EE) must cultivate students' self-efficacy (Malebana, 2014; Neneh, 2020). This study models EE in universities to foster entrepreneurial self-efficacy, grounded in Social Cognitive Career Theory (SCCT). SCCT posits that individuals hold outcome expectations—beliefs about the likely results of their actions (Lent et al., 2020). These include:

• External rewards (e.g., financial gains),

• Self-directed outcomes (e.g., personal satisfaction),

• Social consequences (e.g., peer approval) (Alshebami et al., 2021; Neneh, 2020).

Exposure to successful role models significantly shapes students' aspirations (Malebana, 2014). SCCT further emphasizes that environmental factors (economic conditions, parental/peer influences) directly impact career decisions (Lent et al., 2020). This study models EE in Zimbabwean universities to instill the SCCT building block: "If I do this, what will happen?" (outcome expectations) and "I can do this and succeed" (self-efficacy). SCCT outlines the psychological processes that build entrepreneurial self-efficacy and affect venture creation intent through teaching methods. It identifies sources of self-efficacy, the main driver of intent, as mastery experiences (practice), vicarious learning (role models), and social persuasion (feedback). SCCT explains the connection between assessment, self-efficacy, and outcome expectations. In SCCT and self-efficacy, formative and experiential assessments act as proof of mastery, reinforcing the link between evidence and ability. SCCT emphasizes that assessment is more than just evaluation. It highlights formative assessment as a powerful learning tool that shapes cognitive intent.

The content in SCCT discusses how self-efficacy and outcome expectations are influenced. Topics on feasibility, risks, and skills enhance self-efficacy, while potential rewards shape expectations. SCCT is more than a set of facts; it serves as a tool for influencing beliefs about capability and consequences. It considers incubators as a key environmental support factor. Incubators provide mastery experiences, vicarious learning through mentors and peers, social persuasion through

feedback, and resources. All of these factors directly influence self-efficacy and outcome expectations. SCCT is essential for explaining how incubators relate to self-efficacy. The inclusion of Social Cognitive Career Theory (SCCT) and Experiential Learning Theory (ELT) is justified by their ability to reveal how entrepreneurship education (EE) supports venture creation intent (VCI) at Chinhoyi University of Technology. SCCT offers the essential psychological framework for understanding the factors that influence VCI. It explains how mastery experiences, like practice ventures, vicarious learning, such as role models, and social persuasion, including feedback, build entrepreneurial self-efficacy, which drives intent. It also shows how formative assessment serves as real proof of ability, reinforcing expectations about outcomes like feasibility and rewards. At the same time, SCCT positions incubators as environments that strengthen self-efficacy by providing structured resources, mentorship, and peer examples. On the other hand, ELT supports the pedagogical design of EE. It validates hands-on methods, such as simulations and live projects, as key to VCI by viewing intent as a result of concrete experiences, reflective observation, and active experimentation. ELT also emphasizes that assessment should match the experiential cycle, using reflective evaluations to turn practice into insights that shape intent, while suggesting that incubators are ideal for "learning by doing," like launching real ventures. Together, these theories provide comprehensive perspectives: SCCT explains why EE affects intent through cognitive processes like self-efficacy and outcome expectations, while ELT shows how the delivery of EE, including experiential content, methods, and assessment, fosters transformative learning. Their overlap on incubators as crucial support systems connects psychological growth (SCCT) and practical teaching (ELT), ensuring the study effectively covers both cognitive foundations and teaching practices that shape VCI in resource-limited higher education settings.

2.4 Influence of EE Teaching Methods on Venture Creation Intent (VCI).

An Agricultural University in Costa Rica, known as EARTH, employs a unique method for entrepreneurship education (EE) in the Americas. This institution emphasizes a practical, hands-on approach where students engage extensively with farm work, gaining real-world experience from their first to fourth years (Camacho-Calvo et al., 2022). In a similar vein, students in the UK, USA, Malaysia, Indonesia, Croatia, and Poland also engage in EE activities through games and simulations (Guzairy et al., 2021; Swaramarinda et al., 2022).

This strategy aligns well with the Social Cognitive Career Theory (SCCT) proposed by Lent et al. (2020), which underpins this research. By participating in EE activities relevant to their future careers, students enhance their self-efficacy, validate their outcome expectations, and clarify their goals from early childhood through adulthood. Throughout their first three years, students from various countries work in groups of four to six to design and manage business projects. These practical ventures allow them to establish companies with financial support from the institution. In their final year, students take part in entrepreneurial project programs aimed at creating small and medium-sized enterprises. The SCCT framework supports the Costa Rican model, which cultivates students' skills and self-efficacy while identifying and developing their entrepreneurial intentions over time. Importantly, students' outcome expectations are evaluated while they are still in school.

The contemporary approach to EE in American higher education institutions (HEIs) marks a transition from traditional teacher-centered methods to a more transformative style. This new approach incorporates various teaching methods, such as videos, hands-on activities, business plan writing, computer simulations, role-playing, collaboration with entrepreneurs, and participation in entrepreneurial clubs (Akhmetshin et al., 2021; Tessema, 2020). Additionally, case studies and simulations are frequently utilized in American educational settings (Cumming & Zhan, 2022). This approach reinforces the SCCT framework by demonstrating that self-efficacy, outcome expectations, and goal-setting are significantly influenced by experiential learning. The objective of this research was to implement EE in a manner that nurtures students' intentions, thereby facilitating the creation of new ventures.

In the European context, the application of EE also prominently features case studies, simulations, and various hands-on strategies, alongside the involvement of businesspersons and entrepreneurs in teaching (Fiore et al., 2020; Secundo et al., 2021). A study by Mansoori et al. (2020) identified that effective EE in Europe relies on didactic methods and skill-building discovery techniques. Furthermore, experiential and action learning are emphasized to build confidence and risk-taking abilities among EE graduates, supported by an open learning environment. European and Asian governments actively promote programs that foster entrepreneurship culture (Fan et al., 2021; Rivera & Gozun, 2021). Additionally, competitive EE business plan contests with a focus on high technology are organized throughout Europe (Abushakra et al., 2021; Hernández-Sánchez et al.,

2021; Tipu, 2021). Research by Harima et al. (2021), Kuryan et al. (2021), and Teixeira and Pereira (2021) indicates that European universities host business parks and incubators, highlighting a growing trend in higher education to introduce students to entrepreneurship fundamentals (Bezzina, 2021; Klofsten et al., 2021). In Belgium, the implementation of EE revolves around key themes, such as the necessity for teachers to embody an entrepreneurial spirit and the aspiration to empower students to transform ideas into action (Government of Brussels, 2021; Vodă & Florea, 2019). Active methods are encouraged to stimulate students' creativity and originality.

The Costa Rican model reinforces the SCCT framework proposed by Lent et al. (2020), which suggests that entrepreneurial self-efficacy, outcome expectations, and intentions (goals) are shaped through social experiences in real-world contexts. Practical, experiential learning is essential for developing and honing entrepreneurial competencies and skills. Instruction should encompass both dedicated courses and integration into various subjects, focusing on both entrepreneurs and intrapreneurs, given that most students will apply their entrepreneurial skills in businesses or public sectors (Cojocaru & Chirila, 2021; Meyer & Hamilton, 2021; Oviawe et al., 2021; Udeozor, 2021). To help educators acquire the necessary entrepreneurial knowledge, skills, and attitudes, specific learning objectives, assessment strategies, and quality control measures have been established (Fulgence, 2021; Nafukho & Muyia, 2021). Educators in Europe receive training in both instructional techniques and entrepreneurship. Those exhibiting entrepreneurial characteristics serve as role models for their students, aligning with Lent et al.'s (2020) assertion that goals, intentions, and self-efficacy are socially constructed.

In various regions, EE instruction primarily occurs through lectures, readings, business plan development, class discussions, case studies, research projects, guest lectures, and field trips, as indicated in literature from Australia (Garbuio et al., 2021; Pardede, 2021), Qatar (Sirelkhatim & Gangi, 2022), Tanzania and Uganda (Abaho et al., 2022), and Ethiopia (Tessema, 2021). South Africa also employs traditional classroom methods, including reading, lectures, guest speakers, and workshops (Dzomonda & Fatoki, 2022; Ramchander, 2022; Rashid, 2021; Zegeye & Singh, 2022). Moreover, EE is recognized as a lifelong learning process comprising five stages: foundational, competency awareness, creative application, startup, and growth (Chimicheka, 2021; Isaacs et al., 2022).

Similar to nursing education, South Africa integrates work-based experiential learning to cultivate entrepreneurial skills (Ahmed & Ndedi, 2021; Halberstadt et al., 2022). Halberstadt et al. (2022) align with Lent et al.'s (2020) SCCT, emphasizing the importance of self-efficacy, developed through experiential learning, for career aspirations. In Kenyan HEIs, students engage in entrepreneurship through business incubators, which validate their career goals in EE (Kendi et al., 2022; Otuya et al., 2022). Incubators act as platforms for testing entrepreneurial intentions (Wonglimpiyarat, 2021). This study builds on Lent et al.'s (2020) SCCT, suggesting that EE simulations enhance self-efficacy and goal-setting abilities. The aim is to model EE teaching methodologies that optimize venture creation.

Another widely adopted framework for EE is Hynes's (1996) EE Process Approach. According to Odewale et al. (2019) and more recent studies (Lackéus, 2020; Nabi et al., 2021), this approach encompasses student inputs, instructional materials, content, and outcomes. Key student inputs include prior knowledge, motivation, personality, interests, autonomy, attitudes, parental influences, values, and work experience. The core content areas include definitions of entrepreneurship and intrapreneurship, innovation, product development, idea generation and feasibility, finance, regulations, people management, teamwork, marketing, and management, as supported by contemporary research (Bacigalupo et al., 2022; European Commission, 2021). Teaching encompasses didactic (reading and lecturing), skill-building (case studies, group discussions, presentations, problem-solving, simulations, teamwork, and projects), and discovery (brainstorming, personal goal-setting, career planning, and consulting) methods, which remain validated in recent literature (Mwasalwiba, 2010; Neck et al., 2021). The final teaching components are the attributes that students should demonstrate: personal (confidence and communication skills); knowledge (entrepreneurial initiative, self-employment, business management, marketing proficiency, analytical and decision-making abilities, and risk-taking); and career (broad knowledge and diverse career options). This study aims to develop a model that produces graduates capable of initiating ventures, in line with recent calls for more action-oriented entrepreneurship education (Hägg et al., 2020; Seikkula-Leino et al., 2021).
As noted by Dodd and Hynes (2012), the Hynes approach is considered the most prevalent EE framework and is primarily offered to fourth-year non-business students at European universities (Nabi et al., 2021). The program spans two semesters. During the first semester, students receive theoretical knowledge necessary for applying entrepreneurship, launching a business, and crafting

a proposal, which constitutes 25% of their evaluation (Lackéus, 2020). In the second semester, students apply their learning through hosting lectures, workshops, and public presentations of their business prototypes (European Commission, 2021). Faculty members also receive both oral and written presentations. This aligns well with the SCCT framework proposed by Lent et al. (1994, 2020), which informs this study. The theory suggests that the formation of self-efficacy and outcome expectancies significantly influences career choices (Obschonka et al., 2022). In this context, prototypes are instrumental in enhancing students' entrepreneurial self-efficacy and validating expected outcomes (Bacigalupo et al., 2022). The primary aim of this comprehensive quantitative analysis is to establish a model that promotes venture creation among graduates (Seikkula-Leino et al., 2021).

In addition to the EE strategy proposed by Hynes (1996), another popular model for implementing EE at higher institutions is the entrepreneurial intent approach by Schwarz et al. (2009), which is shown in Figure 2.3 below.

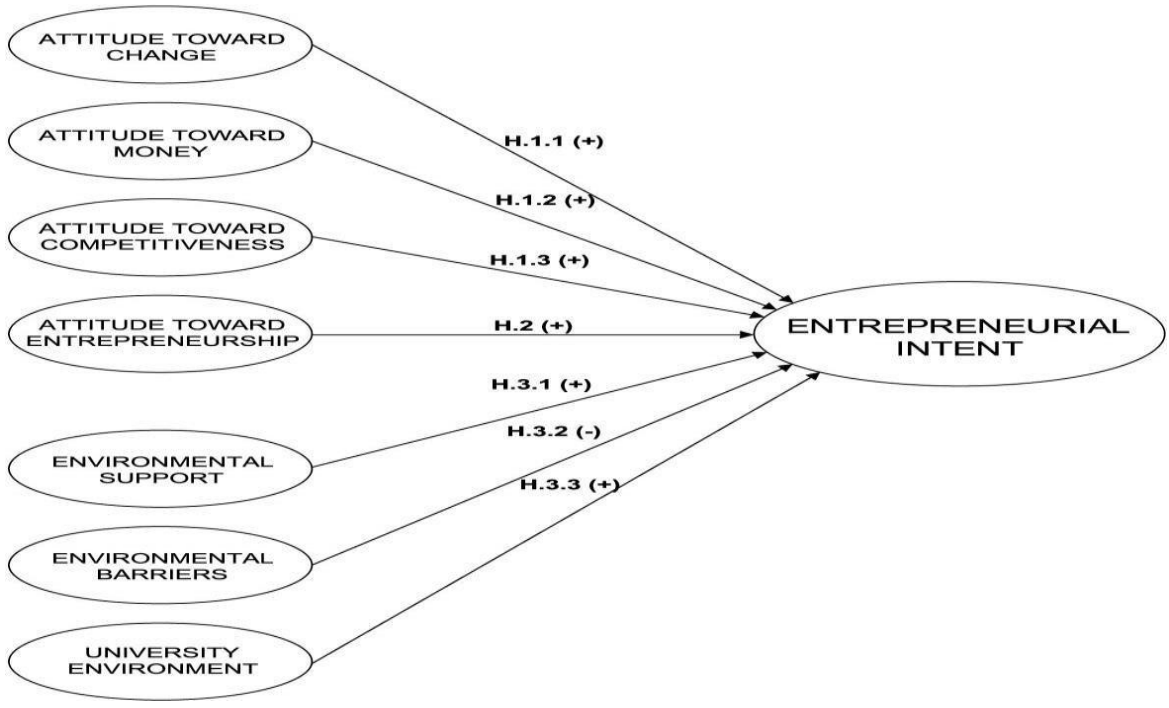

Figure 2.3 : Approach of entrepreneurial intent

Source: Schwarz, Wdowiak, Almer-Jarz, and Breitenecker (2009)

Austrian universities have been implementing the methodology developed by Schwarz, Wdowiak, Almer-Jarz, and Breitenecker since 2015, which was first introduced in 2009. This model, utilized in the Netherlands, Austria, and Finland, is largely based on Ajzen's (1991) planned behavior theory, as well as insights from Harms et al., (2021). It demonstrates a positive relationship between entrepreneurial behavior and entrepreneurial intention. Echoing Hynes (1996), the authors suggest that environmental factors and individual attitudes influence intentions, such as the desire to start a business. The methodology identifies three constructs that impact entrepreneurial intention: general attitudes, attitudes towards entrepreneurship, and environmental perceptions (Nasiru et al., 2022). According to this framework, it is essential to nurture students' attitudes regarding change, finances, competitiveness, and entrepreneurship. An examination of students' understanding of their environment, including challenges and support systems, is also crucial. A supportive university environment is vital for fostering students' entrepreneurial growth (Klofsten et al., 2022; Urbano et al., 2023). For example, in Austria, entrepreneurship education (EE) is regarded as a collaborative learning experience, with entrepreneurs often invited to share their insights at universities. Students across various disciplines participate in business courses, and incubators are available on campuses.

The present work draws on Lent et al.'s (2020) Social Cognitive Career Theory (SCCT), which supports this educational approach. This theory posits that individuals' career decisions are shaped by their self-efficacy beliefs, the necessary skills, and their surrounding environment (Xin et al., 2023). The current study builds on Lent et al.'s (2020) SCCT framework, highlighting the importance of fostering attitudes, intentions, social learning, and support in influencing career choices. Similarly, the 2021 model by Schwarz et al., emphasizes that a successful entrepreneurial career necessitates ongoing learning in entrepreneurship. Like Lent et al.'s (2020) SCCT, Schwarz et al.'s (2021) model underscores intention as a prerequisite for entrepreneurial action. After discussing the entrepreneurial intention framework proposed by Schwarz et al. (2009), illustrated in Figure 2.3, we will examine Heinonen's (2007) entrepreneurship-focused approach, depicted and analyzed in Figure 2.4 below, which represents another model employed by higher education institutions to implement entrepreneurship education.

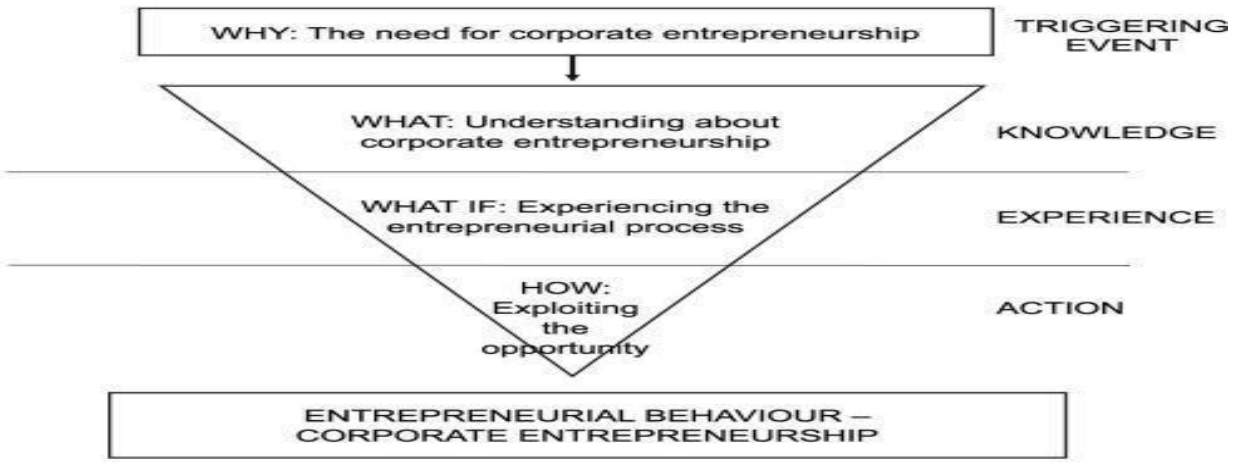

Figure 2.4 : Entrepreneurial directed approach

Source: Heinonen (2007)

Research conducted in Finland by Heinonen and Hytti (2018) and Acharya and Chandra (2022) indicates that the entrepreneurial-focused strategy primarily emphasizes entrepreneurship education (EE) at universities, while relegating entrepreneurship to the conventional lecture format. The entrepreneurial-directed approach posits that the essence of EE lies in the results achieved during and following the EE experience.

Heinonen and Hytti's (2018) entrepreneurial-directed approach aligns with Lent et al.'s (2021) Social Cognitive Career Theory (SCCT), which serves as the theoretical framework for the current study and asserts that outcome expectations play a vital role in influencing students' career choices (Ramirez et al., 2023). This model further suggests that enhancing learning requires the inclusion of individuals from diverse fields, such as business, politics, sociology, and engineering. Likewise, SCCT argues that social factors significantly affect both entrepreneurial ambitions and expected outcomes (Vodă and Florea, 2021; Lent et al., 2021). The objective of the present study was to design EE in a manner that effectively motivates university students in Zimbabwe to consider entrepreneurship as a career path.

Research has shown that EE was introduced in the United States through a framework known as the Entrepreneurship Business Planning Education Approach. This model has fostered a generation of highly innovative entrepreneurs and has significantly transformed the social and economic landscape in both the U.S. and globally (Kuratko et al., 2020). However, it is important

to note that generalizations cannot be drawn from this semi-systematic literature, as the study employed a rigid quantitative research methodology.

Heinonen and Hytti's (2018) entrepreneurial-directed strategy, illustrated in Figure 2.4 above, is recognized as one of the frameworks for adopting EE in higher education institutions (HEIs). Another model, Honig and Samuelsson's (2022) Entrepreneurship Business Planning Education Approach, depicted in Figure 2.5 below, is credited with the successful implementation of EE in both the United States and Europe.

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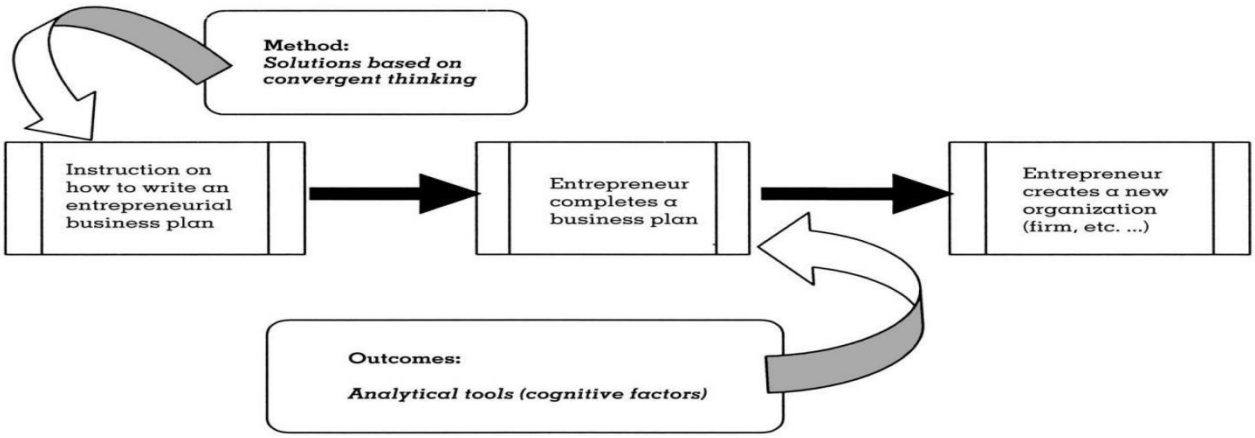

Figure 2.5 : Entrepreneurship Business Planning Education Approach in America and Europe.

Source: (Honig and Martin, 2014)

In an effort to enhance the entrepreneurial skills of university students, numerous American and European institutions offer co-curricular activities centered around the Entrepreneurship Business Planning Education Approach. Activities such as student groups and speaker series provide exposure to entrepreneurs. More immersive learning experiences, including business plan competitions and internships based on the framework proposed by Honig and Samuelsson (2022), exemplify hands-on educational strategies (Akhmetshin et al., 2023; Fayolle & Gailly, 2020; Honig, 2004; Pittaway et al., 2021). The model by Honig and Samuelsson (2022) strongly emphasizes anticipated outcomes, which are considered essential for pursuing a career in entrepreneurship according to Lent et al.'s (1994) Social Cognitive Career Theory (SCCT).

In European literature, this concept is termed enterprise education (EE), with variations in implementation methods across different countries (Hytti & O'Gorman, 2004; Lynch et al., 2021). Teaching entrepreneurship in Europe employs a diverse array of techniques, including computer-based business simulations, case studies, seminars, group discussions, and project-based learning (Akhmetshin et al., 2023). Additionally, mentoring is prevalent in many European universities, where faculty, industry experts, and entrepreneurs offer guidance on business initiation and management (Reichert, 2022).

Individual and group study visits are also frequently undertaken by university students in Europe, providing them with insights into the professional environment and fostering connections with local and sometimes international businesses or entrepreneurs (Morselli, 2022; Wang & Chugh, 2014). As part of their academic requirements, European students are often expected to establish real enterprises or companies while studying and to complete a work term in actual business environments in Europe or abroad. To further engage students, European universities regularly organize business simulation games and competitions, enhancing interest and participation in EE (Zulfiqar et al., 2022). This exposure to practical scenarios aligns with Lent et al.'s (1994) SCCT, which underpins the current research. The theory posits that individuals can cultivate their outcome expectations through action and social learning, which are vital for selecting entrepreneurship as a career path.

In China, EE is implemented as described by Bell (2023) and Zhou (2012): after defining and conceptualizing entrepreneurship, courses typically cover essential business-starting skills, including idea generation, market research, securing funding, and managing company operations. Guo (2023) and Zhou and Xu (2012) highlight that internships and venture incubators play a crucial role in nurturing an innovative culture in China (Akanle et al., 2022). Internships and incubators facilitate social learning (Dhochak et al., 2022; Zreen et al., 2021), supporting the SCCT framework of Lent et al. (1994) central to this study. The theory suggests that as students develop the knowledge and skills necessary to accomplish tasks, their self-efficacy increases. Enhanced self-efficacy through internships and incubators enables the realization of outcome expectations. Fiore et al. (2022) echoed similar sentiments, advocating for an action-oriented teaching approach

that promotes experiential learning, problem-solving skills, project-based learning, creativity, and peer assessment.

In Kenya, higher education institutions are mandated to establish on-campus business centers where students must complete a 154-hour entrepreneurship course and develop a comprehensive business plan to graduate (Njoroge & Radebe, 2022). Research by Nafukho and Muyia (2019) indicates that Kenyan educational institutions employ Ashmore's (1987) Lifelong Learning Approach to Entrepreneurship, which encompasses five stages. The initial three stages concentrate on education and college. The first phase is aimed at early purpose setting, followed by the second stage focused on instilling management skills. Business education courses such as economics, commerce, marketing, accounting, and management are taught by secondary school educators. The third stage, offered through vocational and technical schools, aims to provide a thorough understanding of what it takes to be a successful entrepreneur. Students are required to identify a business opportunity aligned with their skills and submit a necessary business plan before graduation. The fourth and fifth stages emphasize the development of entrepreneurial ventures, providing support to business owners in launching and sustaining profitable enterprises. The Kenyan government and NGOs assist EE graduates with funding, mentorship, strategic direction, and workshops that connect them with successful entrepreneurs. A systematic review by Otuya et al. (2021) found that EE in Kenya is effective due to its practical application, requiring students to launch successful businesses before completing their degrees. Students gain access to real businesses and insights from successful entrepreneurs (Zegeye & Singh, 2022), with site visits enhancing their learning experience (Njoroge, 2022). This exposure fosters self-efficacy and validates their outcome expectations, aligning with the SCCT of Lent et al. (1994) that informs this study. The Social Cognitive Career Theory emphasizes the role of experiential education in cultivating self-efficacy in Kenya. Additionally, group discussions and case studies enrich EE sessions. Given that literature review findings cannot be generalized on their own, a more comprehensive quantitative study is recommended.

Studies indicate that the EE methodologies in Namibia and South Africa are similar and can be expressed as ($E/P = a + bM\ [(cE/S \times dB/S)]$) (Ramchander, 2023; Zegeye & Singh, 2022). This formula suggests that motivation (M), entrepreneurial skills (E/S), and business acumen (B/S)

interact to yield entrepreneurial performance (E/P) in a linear manner. The constants a, b, c, and d diverge from the premise that all individuals possess some level of talent, albeit not necessarily to the requisite degree. Consequently, for educational initiatives to enhance entrepreneurial success, they must address all three dimensions mentioned. Although the majority of EE content in Namibia and South Africa is traditional, incorporating elements like mini-enterprise creation, apprenticeships, and simulations is vital (April & Kadhila, 2023; Hytti & O'Gorman, 2004). Engaging in apprenticeship programs promotes self-efficacy and clear outcome expectations. This approach aligns with Lent et al.'s (1994) SCCT, which underscores the importance of self-efficacy development through social and experiential learning—an essential factor in career decision-making.

The various strategies for entrepreneurship education discussed above are believed to influence the effectiveness of EE implementation in higher education institutions (HEIs). One critical aspect that may impact the success of EE at HEIs is the assessment of EE, which will be addressed in the following section.

2.5 Influence of EE Assessment Methods on Venture Creation Intent.

The effectiveness of entrepreneurial processes is evaluated through various metrics. Warhuus and Blenker (2017) point out that certain evaluation methods are not suitable for assessing entrepreneurship education (EE). Similarly, Purzer et al. (2015) found that traditional assessment tools lack the necessary features for a robust evaluation of EE. Evaluating the outcomes of Entrepreneurship Education should include both tangible and intangible elements, such as the development of products, prototypes, and skills (Lee et al., 2021; Nabi et al., 2021). Moreover, the effectiveness of EE should be assessed both during and after educational sessions, considering factors like personal skills, behaviors, career outcomes, knowledge, mindset, and connections to education and future prospects (Klofsten et al., 2020; Moberg et al., 2014). Additionally, an effective evaluation of EE should focus on students' self-efficacy, utilizing either the 18-item McGee entrepreneurial self-efficacy (ESE) scale or the Likert scale developed by Schwarzer and Jerusalem in 1995, or a combination of both (Santos & Liguori, 2023; Vanevenhoven & Liguori,

2022). Overall, it is essential to assess student attitudes, subjective norms, and perceived control regarding entrepreneurship to gauge the effectiveness of EE (Malebana, 2022; Sánchez, 2013).

Traditional assessment methods that have proven effective in evaluating these attributes post-EE experience include business plan development, presentations, project proposals, collaborative assignments, written examinations, simulations, and case studies (Ibidunni et al., 2021). Through case studies, students engage with real-world business scenarios, allowing them to explore corporate successes and potential operational challenges, thereby enhancing their understanding of business management processes.

Research conducted in the UK by Wenninger (2021) identified challenges in assessing entrepreneurial behaviors, qualities, and capabilities due to the absence of a comprehensive contemporary assessment system that allows for comparable coding and weighting of behaviors, as well as a lack of standardized recognition codes. Evaluating entrepreneurship education is complex, as skills such as proactivity, creativity, and accountability for decisions are not easily measured through traditional tests and methods. Success in exams does not encompass all the skills an entrepreneur requires (Moberg et al., 2014). The existing literature indicates that several research questions remain unresolved, which supports the need for the present investigation.

2.6 Influence of EE Content on Venture Creation Intent.

Different countries exhibit varied structures for their entrepreneurship education (EE) content, and many have yet to fully integrate these structures into the curricula of their higher education institutions (Karimi et al., 2010; Saputro et al., 2020; Sommarström et al., 2020). In Europe, some higher education institutions have introduced new EE curricula that primarily emphasize business skills (Henry, 2020; Hernández et al., 2015; Sánchez et al., 2019). Although socially responsible entrepreneurship is occasionally incorporated and supported through business plan and start-up competitions, the majority of Italy's EE curriculum tends to focus on family businesses, strategic business practices, innovation, technology, science, gender issues, and minority participation (Della Holpe, 2020). Certain European nations provide modules that instruct students on how to establish, manage, and grow businesses, such as enterprise development and new venture creation (Fejes et al., 2019; Ndou et al., 2018).

In a similar manner, the EE content in China (Liu et al., 2020), Malaysia (Shah et al., 2020), and Nigeria (Chukwurah & Atah, 2019; Olutuase et al., 2020) includes topics like start-up strategies, business planning, and small business management. These subjects align well with Social Cognitive Career Theory (SCCT), as they foster practical engagement among students. Such hands-on experiences may aid in developing entrepreneurial intentions, enhancing self-efficacy, and influencing anticipated outcomes. In addition to covering a broad range of business administration topics akin to management education, some of the leading universities in these countries offer EE courses specifically designed for business plan development, addressing subjects such as negotiation, leadership, new product development, creative thinking, venture capital sourcing, idea protection, entrepreneurial personality growth, the challenges of entrepreneurial ventures, and the pursuit of entrepreneurship as a career path, along with exposure to technological advancements (Fayolle, 2018; Kuratko, 2005; Liguori & Winkler, 2020).

Moreover, Honig and Martin (2014) observed that while the use of technology has significantly increased and is being promoted, traditional business plan preparation continues to be prevalent in the United States. The development of a business plan remains a central and defining feature of EE courses, similar to trends observed in the USA (Cui et al., 2021; Mukesh et al., 2023; Wahidmurni et al., 2022). The EE content in Asian institutions often mirrors that of conventional business studies. Likewise, university-level EE courses in Europe are predominantly business-centric, with business plan creation being the most common pedagogical approach for teaching and evaluating EE (Sarooghi et al., 2023). Topics covered in EE courses in the UK include business plan formulation, business life cycles, management, entrepreneurship and innovation, team development, finance, accounting, taxation, law, and marketing (Linton & Klinton, 2022). Consequently, the aim of the current study was to adopt and disseminate relevant and suitable EE content to foster venture creation.

Research conducted in Sweden indicates a growing popularity of entrepreneurship programs at business schools, with university curricula categorized into two main areas: one dedicated to students' personal growth and the other focused on the knowledge and skills necessary for developing a business from opportunity recognition to the final stages of harvesting (Fejes et al., 2019). Similarly, while EE is structured to promote self-employment throughout Asia—

particularly in China and Malaysia—most courses tend to be short-term and targeted at vocational education and training (Barnard et al., 2019; Harashchenko et al., 2019). For instance, students in China may take up to three years off from their studies to engage in entrepreneurial activities (Zhang et al., 2003). This exposure enables them to acquire essential skills, thereby enhancing their self-efficacy. Such experiences can bolster students' confidence and belief in their capacity to launch, manage, and grow a business.

Literature from Kenya (Ngigi et al., 2020) and Rwanda (Blimpo & Pugatch, 2019) indicates that EE is mandated in higher education institutions, with the majority of the curriculum comprising technical disciplines and entrepreneurial modules. Similarly, EE is required in higher education institutions in Zimbabwe (Ndofirepi & Rambe, 2019) and South Africa (Chimucheka, 2014; Forcher-Mayr & Mahlknecht, 2020). This includes modules on business management, vocational subjects, and entrepreneurial concepts such as opportunity recognition and business plan development. In Nigeria, however, many higher education institution courses are short-term and specifically designed for vocational education and training (Bakar et al., 2014; Chukwurah & Atah, 2019; Okolie et al., 2020). There is a strong belief that skills significantly influence professional decision-making. Students' confidence in launching and growing businesses may be shaped by their vocational, technical, and business competencies. Following the discussion of EE content, the subsequent section will address the impact of incubation centers.

2.7 Influence of Incubation Centres (IC) On Venture Creation Intent.

Based on the fundamental functions of a traditional incubator, its primary role can be likened to that of a waiting room, providing an appropriate environment and services that foster growth and development. This perspective is supported by various scholars who have outlined the evolving roles of incubation centers. Research conducted by Lesáková (2020) indicates that the primary function of incubation centers (IC) is to expedite the growth of businesses through a range of support resources associated with the incubator. Burnett (n.d.) notes that the initial incubators established in the 1960s provided discounted services, such as flexible workspace, to early-stage companies and small to medium-sized enterprises (SMEs). In response to globalization, the functions of incubation centers have adapted to meet some of the demands of the 21st century,

which now include access to networking opportunities, professional services, mentoring, and entrepreneurship training, often available at little or no cost (World Bank, 2022). A study conducted in South Africa (Lose et al., 2022) found that incubation centers play a crucial role in supporting struggling businesses by offering a range of services, including affordable office space, equipment, product development assistance, business planning, legal advice, networking opportunities, training, and property services.

With the emergence of diverse models for nurturing new ventures, it has become increasingly important for universities to develop customized training and support programs tailored to the needs of their start-ups, innovators, and entrepreneurs. Choto et al. (2022) assert that the primary objective of incubators is to promote the creation and growth of entrepreneurial ventures. Entrepreneurs depend on business incubators for various resources and services (AlMubaraki & Busler, 2022; Hutabarat et al., 2021). Consequently, incubation centers can be best described as a supportive environment for start-ups and SMEs. These incubators typically welcome entrepreneurs for a specified duration until they reach their targeted revenue or sales goals. Identifying a nascent organization that will experience significant growth can be challenging without a nurturing environment. Only a small fraction of the start-ups funded by incubators achieve success. Success may manifest in several ways, such as selling the business to another company (trade sale), developing the start-up into a self-sustaining entity, or even initiating a potentially lucrative initial public offering (IPO) on the stock market. The earnings from the preferred exit strategy are used to assess the incubator's profitability, which is then distributed to shareholders according to a predetermined allocation scheme. Thus, the success of incubation is influenced by various competitive factors, with the business model being a critical determinant.

2.7.1 Physical infrastructure services

Most start-up companies need physical infrastructure, yet many struggles to afford it due to the significant investment required, making location a considerable challenge for new ventures. Business incubators assist entrepreneurs by offering cost-effective and adaptable workspaces, along with shared office services and equipment. The term "affordable" typically indicates rents below the market rate, while "flexible" denotes the capacity to adjust the workspace size according to business requirements. Additionally, rent can often be paid in installments over time. These

incubators also provide various building-related services, including meeting rooms, cafeterias, security, and other amenities.

Research indicates that the physical infrastructure services offered by business incubation centers positively influence new enterprises. By supplying these resources, they help lower initial operating costs and afford entrepreneurs more time to concentrate on research and development. Moreover, these services not only provide a synergistic cost advantage but also enhance the visibility, credibility, and legitimacy of incubated companies through the use of the incubation center's address and positive referrals. Furthermore, it has been observed that business incubators help decrease early-stage operational costs, foster the growth of new businesses, and establish the credibility of the incubators themselves. Consequently, it can be concluded that business incubators are crucial in fostering entrepreneurship by providing essential physical infrastructure.

2.7.2 Business assistance services

Product development, legal affairs, technical support, human resources, networking, marketing, and finance represent just a few domains in which assistance for businesses is available. Prior studies have explored this topic (Klofsten et al., 2023; Hellmann and Puri, 2021; Allen and Rahman, 2021; Hansen et al., 2022). Research indicates that management difficulties, insufficient funding, limited access to business networks, and a deficit in entrepreneurial skills adversely affect the survival rates of new ventures. This is where incubation centers play a vital role, offering various support services to address the challenges faced by startups. Such services help entrepreneurs secure financing, expand their knowledge resources, reduce operational time and expenses, capitalize on opportunities, shorten development cycles, and access essential resources crucial for their survival and success.

2.7.3 Management guidance and consulting services

Support in developing business strategies, offering business advice, conducting feasibility studies, and generating entrepreneurial ideas exemplify management consulting services. Entrepreneurs often need not just financial resources, equipment, and physical space but also, in many situations, require guidance, support, and information, as indicated by research (Sullivan, 2020; Hackett & Diltz, 2022). To secure funding and ensure a consistent financial flow, startups must have a well-structured business strategy. Business guidance is crucial at every stage of a company's lifecycle for quicker resolution of challenges, and mentorship enhances both managerial skills and self-

assurance. Business incubation centers enhance the value of incubators by delivering services such as business plan development, mentorship, management consulting, and advisory support (Deakins et al., 2021; Robson & Bennett, 2022; Delmar & Shane, 2023).

2.7.4 Enabling environment services

The phrase "enabling environment" describes a collaborative atmosphere established and sustained by business incubators, which helps start-up companies minimize operational expenses and accelerate the development of viable products and services. Such an environment fosters the rapid establishment of new businesses while concurrently lowering the likelihood of failure. Regular assessments of incubate satisfaction with incubator services are conducted, and any issues are promptly resolved. Research by Davidsson and Honig (2021) and McAdams et al. (2022) indicates that business incubation centers offer spaces and opportunities for incubates to collaborate and create synergy. This context promotes the sharing of resources, knowledge, and experiences, thereby minimizing feelings of isolation and facilitating mutual learning during the start-up journey. The significance of aligning the requirements of incubators with the services they provide has been emphasized. Findings from Klofsten et al. (2023) reveal that business incubators have established an environment conducive to mutual learning among tenant enterprises.

A consensus among researchers highlights that incubators deliver essential support, services, and infrastructure to help innovative businesses initiate and expand more efficiently. While the original incubators from the 1960s primarily aimed at offering cost-effective solutions for SMEs and early-stage companies, new strategies for assisting start-ups and innovators have since emerged (Burnett, 2022). Typically, these start-up incubators provide complimentary or subsidized office space, mentorship, professional services, networking opportunities, funding, events, and entrepreneurial training (World Bank, 2022). Universities are encouraged to develop tailored training and support programs that meet the specific needs of their start-ups, innovators, and entrepreneurs, employing various methods to cultivate new businesses.

2.7.9 Services that ensure growth in start-ups to grow

The recent literature on incubation has highlighted the importance of providing corporate support to enhance fundamental administrative tasks. Numerous researchers have detailed the different types of services and assistance that incubators offer to their tenants (Bollingtoft & Ulhøi, 2021; Chan & Lau, 2022). Commonly cited business support services include entrepreneurial training

and guidance for firm growth, along with assistance related to standard business issues such as accounting, legal services, marketing, and financial support (Lalkaka, 2021). Particularly concerning are those services focused on business expansion and entrepreneurial development, such as mentoring and education in business planning, leadership, marketing, and sales.

According to Bhabra-Remedios and Cornelius (2022), the success of incubator participants is influenced not just by the types of services offered, but also by the manner in which these services are delivered. Business support strategies vary based on factors such as the frequency of interactions (the amount of time allocated to monitoring and assisting incubates), the comprehensiveness of the support (the extent to which assistance encompasses both operational and strategic elements alongside administrative aid), and overall quality, as noted by Hackett and Dilts (2021). Rice (2022) takes a more comprehensive approach by categorizing counselling into three types: (1) Reactive and episodic counselling initiated by the entrepreneur, which is focused on addressing specific crises or challenges and is usually of limited duration; (2) Proactive and episodic counselling initiated by the incubator, where managers informally engage with entrepreneurs for ad hoc support; and (3) Continuous and proactive counselling initiated by the incubator, involving ongoing oversight and "intense-aggressive" intervention by incubator staff.

The initiator of the counselling (either the entrepreneur or incubator personnel) and the level of support (intensity or consistency) distinguish these types. Ultimately, both dimensions reflect the incubator's perceived role in the incubation process. Incubators can be assessed based on whether they see themselves as managers of the incubation process or as external facilitators primarily allowing incubates to steer their own development. At one end of the spectrum, termed forceful involvement, incubator staff exert significant authority over the incubation process, sometimes providing complete management teams, as noted by Leleux (2022), emphasizing that this approach is far from a simple game.

Positive outcomes such as improved survival rates and enhanced job growth have been recognized (Rothaermel & Thursby, 2022). Incubates that engage with their incubators tend to learn more effectively, while incubators that select candidates with a balanced criterion set experience lower failure rates. It is important to note that although job creation is a common metric used to assess incubation effectiveness, it is not universally viewed as a significant measure of business success. The focus on job creation can conflict with advice from investors, who underscore the necessity

for investee companies to manage expenses carefully, often leading to delayed hiring decisions (Dee et al., 2022).

2.8 Perceptions on The Influence of EE On Venture Creation Intent.

Numerous countries worldwide are implementing various entrepreneurship programs aimed at enhancing creativity and innovation among their populations. It is anticipated that individuals who complete these programs will be better equipped to secure self-employment as a result of these initiatives. However, perspectives on the impact of entrepreneurship education on the initiation of new ventures differ.

2.8.1 Positive impact

Certain experts argue that entrepreneurship education fosters innovation and the establishment of new businesses on a global scale (Hussain et al., 2023; Arensburg et al., 2022; Efe, 2021; Undiyaundeye & Otu, 2022; Nabi & Liñán, 2020). This form of education enables individuals to acquire essential skills for managing small and medium enterprises (Ilyas et al., 2022). Efe (2021) notes that numerous countries have embraced entrepreneurial education as a strategy for promoting self-sufficiency through diverse programs focused on national development, venture creation, and poverty alleviation. Both Nabi and Liñán (2020) and Ilyas et al. (2022) assert that entrepreneurship education equips students with the skills, motivation, and awareness necessary to successfully launch businesses.

Hussain et al. (2023) emphasize that entrepreneurship education inspires students to innovate and embark on their own ventures, consequently leading to the emergence of new businesses by these individuals. Initiatives at the higher education level will increase students' understanding of entrepreneurship as a viable career path, thereby expanding the pool of potential entrepreneurs. Rengiah (2022) agrees, highlighting that entrepreneurship education fosters creativity and innovation within universities. Additionally, Arensburg et al. (2022) indicate that it alters students' perspectives. Hussain et al. (2023) further suggest that module-based entrepreneurship education correlates with entrepreneurial intentions, as it instructs students on identifying new business opportunities that encourage innovation and technology.

In Hong Kong, entrepreneurship education is pivotal for the development of small businesses (Matlay & Farashah, 2022; Cheung, 2021). While entrepreneurship is broadly recognized as a key

contributor to small business growth in China (Shi et al., 2023; Li & Matlay, 2021), Japan (Kawai et al., 2022; Falk & Alberti, 2021), and other nations, national economic strategies for small business enhancement and promotion are implemented through entrepreneurship education. Similarly, in Nigeria, entrepreneurship education is perceived as a concept that cultivates self-sufficiency, facilitates a change in mindset, nurtures a culture of productivity, and mitigates rural-to-urban migration (Peter et al., 2022). According to Olutuase et al. (2022) and Chimucheka (2021), this education is believed to equip young graduates in South Africa with valuable training and support for launching careers in small and medium-sized enterprises.

Globally, many countries recognize entrepreneurship education as a significant asset for students, as it provides practical education that allows them to create their own jobs rather than merely searching for employment (Liu et al., 2023; Jabarullah & Hussain, 2022; Otache, 2022; Liñán & Kokkalis, 2021). Amire et al. (2021), Boldureanu et al. (2022), and Bakar et al. (2021) contend that this education offers students a unique and advantageous perspective on business. Likewise, it is believed that entrepreneurship education can adequately prepare recent graduates in Malaysia to be innovative and resourceful in identifying new business opportunities that drive economic growth (Rahim et al., 2022). Pruett et al. (2023) indicate that entrepreneurship education provides Turkish graduates with essential training in risk management and solutions for poverty alleviation, fostering entrepreneurs with the necessary attitudes and skills to accelerate economic development. Raae and Walmsley (2022) report that students in Denmark have a favorable view of entrepreneurship and regard it as a viable career option.

According to a General Entrepreneurship Monitoring Report (GEM) (Mallett and Wapshott, 2022), governments worldwide, including in the UK, are investing substantial resources to promote entrepreneurship as a means of reducing unemployment. In the United States, entrepreneurship drives innovation, skill development, and job creation, thereby stimulating economic growth (Zahra & Wright, 2021; Bakar et al., 2021; Lekoko & Rankhumise, 2022). Similarly, in Spain, entrepreneurship education plays a crucial role in enhancing societal well-being by identifying, evaluating, and leveraging business opportunities, which in turn improves industrial process efficiency (Barba-Sánchez & Atienza Sahuquillo, 2022; Gargouri and Naatus, 2022; Saraiva & Gabriel, 2021).

2.8.2 Negative impact

Despite its significance as a modern educational facet associated with fostering creativity and generating employment, some researchers contend that entrepreneurship education does not contribute to the growth of ventures or innovation (Undiyaundeye & Otu, 2022; Fatoki, 2021). This assertion is supported by findings from Arensburg et al. (2022), Fenton (2022), and Njeje (2022). Fenton (2022) posits that the belief in entrepreneurship education boosting the number of graduate entrepreneurs is unrealistic, as the pathways to self-employment for graduates are seldom straightforward. Njeje (2022) indicates that a significant proportion of students bypass entrepreneurship courses, implying that such education does not positively influence entrepreneurial aspirations. Arensburg et al. (2022) further note that available evidence fails to substantiate claims that entrepreneurship education leads to improved employment rates and economic growth.

Meta-analytical research (Ikebuaku & Dinbabo, 2022; Ghina et al., 2022; Jotia & Sithole, 2021; Munishi, 2021) reveals that entrepreneurship education is often perceived negatively in various countries and is considered ineffective. There is a declining interest in pursuing entrepreneurial careers in Scotland (Fosu & Boateng, 2022) and the Netherlands (Zhang et al., 2022), as well as across Europe (Stephan et al., 2022; Oosterbeek et al., 2021; Aidis, 2021). With fewer than half of the students completing entrepreneurship education programs feeling ready to start a business immediately, the influence of such education on their entrepreneurial intentions is minimal, and engagement in these programs does not significantly affect their business-starting ambitions. Kearney (2022) argues that instilling entrepreneurial skills and business acumen in Swedish individuals is an undertaking that exceeds the capabilities of any academic business institution.

2.8.3 Mixed views

Regarding how entrepreneurship education influences the creation of new businesses, there are differing views (Frimpong, 2022; Fenton, 2022; Nabi & Liñán, 2020; Fatoki, 2021; Garwe, 2022). Fenton (2022) thinks that higher education institutions should support entrepreneurship education since it can help students become more self-sufficient. However, he also believes that students are not well equipped for this kind of education. Similar ideas are expressed by Li (2022), who claims that entrepreneurial modules do not appropriately focus the development of imaginative capacities. Arensburg et al. (2022) acknowledge that entrepreneurship education

encourages creativity and changes students' perspectives, but they also believe that the claims that it can result in increased employment and rates of economic growth are not well supported by the available data.

According to Zainuddin and Rejab (2021), cited by Ooi and Nasiru (2022), entrepreneurship education promotes the intention to work for oneself and increases entrepreneurial self-efficiency. According to Kuttim et al. (2022), there is evidence that students who receive instruction in entrepreneurship are better able to pursue their entrepreneurial goals. However, the results are far from definitive.

2.9 Empirical Review

Kautonen et al. (2020) conducted a research study titled "The Impact of Entrepreneurship Education on Students' Entrepreneurial Intentions." Utilizing a survey methodology, they gathered information from 400 university students participating in entrepreneurship courses across multiple institutions in Finland. The results indicated a notable positive relationship between entrepreneurship education and students' aspirations to launch businesses, highlighting the importance of practical assignments and networking as influential elements. The study was anchored in the Theory of Planned Behavior (TPB), which suggests that personal intentions are shaped by attitudes, subjective norms, and perceived behavioral control.

Nabi et al. (2021) examined "Entrepreneurship Education and the Entrepreneurial Intent of Undergraduate Students." This research employed a mixed-methods strategy, combining quantitative surveys with 250 respondents alongside qualitative interviews involving 20 undergraduate students from UK universities. The findings showed that exposure to entrepreneurship education significantly bolstered students' entrepreneurial self-efficacy and their intent to start a business. The study was framed by the Self-Determination Theory (SDT), which emphasizes intrinsic motivation as a crucial element in fostering entrepreneurial intentions.

Ma and Wang (2022) explored "Assessing the Role of Entrepreneurship Education in Fostering Entrepreneurial Intentions among Students." This investigation applied a quantitative approach, distributing a structured questionnaire to 300 students at a university in China. The results revealed that entrepreneurship education positively impacted students' intentions to engage in entrepreneurial activities, with a strong focus on innovative thinking and problem-solving abilities.

The research utilized the Social Cognitive Theory (SCT) to frame its findings, emphasizing the significance of observational learning and self-efficacy.

Fatoki (2020) studied "Entrepreneurial Education and Its Impact on the Entrepreneurial Intentions of University Students: Evidence from South Africa." Using a quantitative survey design, the research collected data from 250 students across various universities in South Africa. The analysis indicated that entrepreneurship education significantly enhanced students' intentions, particularly when experiential learning elements were included. The study was contextualized within the Entrepreneurial Event Model (EEM), which underscores the importance of environmental factors in shaping entrepreneurial intentions.

Indarti and Lestari (2021) investigated "The Influence of Entrepreneurship Education on Students' Entrepreneurial Intent: Evidence from Indonesia." This research adopted a cross-sectional survey methodology, collecting data from 150 students at Indonesian universities. The findings showed a strong positive effect of entrepreneurship education on entrepreneurial intentions, particularly through practical engagement and collaborations with local businesses. The theoretical framework was based on the TPB, emphasizing the impact of attitudes and perceived control on intentions.

Valerio and Rojas (2019) conducted a mixed-methods study titled "Assessing the Impact of Entrepreneurship Education on Entrepreneurial Intentions in Latin America." By combining surveys from 200 respondents and focus groups across several universities in Colombia and Brazil, the study concluded that entrepreneurship education significantly enhances entrepreneurial intent, particularly when integrated with community involvement. The research utilized the Entrepreneurial Intentions Model (EIM) to examine the relationship between education and intent.

Ojo and Ojo (2021) explored "The Role of Entrepreneurship Education in Developing Entrepreneurial Intentions among University Students in Nigeria." Utilizing a survey research design, data were collected from 300 students across various Nigerian universities. The results revealed a positive relationship between entrepreneurship education and intentions, with peer support and practical experiences being significant influences. The theoretical framework was anchored in the TPB, focusing on the factors that shape entrepreneurial intentions.

Maritz and Visser (2021) researched "Entrepreneurship Education and Its Impact on Entrepreneurial Intentions Among Zimbabwean University Students." Employing a quantitative survey approach, they collected data from 220 students at the University of Zimbabwe. The findings indicated a positive effect of entrepreneurship education on intentions, particularly emphasizing experiential learning and mentorship. The study was framed within the SCT, highlighting the role of self-efficacy and observational learning.

Muposhi and Ndlovu (2021) examined "Factors Influencing Entrepreneurial Intent Among Students in Zimbabwe." This mixed-methods research gathered quantitative data from surveys of 150 students at Chinhoyi University of Technology, complemented by qualitative interviews. The results indicated that entrepreneurship education significantly influenced intentions, stressing the importance of peer networks and mentorship. The theoretical framework was based on the TPB, providing insights into how attitudes and social norms affect intentions.

Nyoni and Ndlovu (2020) investigated "The Effect of Entrepreneurship Education on Intentions to Start a Business in Zimbabwe." Using a quantitative survey method, the research collected data from 180 students at various universities in Zimbabwe. The study found a strong positive correlation between entrepreneurship education and students' intentions to start ventures, grounded in the EIM, which emphasizes the role of educational experiences in shaping entrepreneurial intent.

Chinyamurindi (2021) studied "The Role of Entrepreneurship Education in Developing Entrepreneurial Intent Among Zimbabwean Youth." This qualitative research involved focus group discussions with 50 participants from Zimbabwean universities, revealing that entrepreneurship education significantly enhances intent, with confidence and support networks identified as critical factors. The study was guided by the SCT, emphasizing the importance of self-efficacy in entrepreneurship.

Mavengere (2022) conducted a longitudinal study titled "Evaluating the Impact of Entrepreneurship Training on Business Intentions Among University Students in Zimbabwe." This research followed 100 students over two years at the National University of Science and Technology. The results indicated significant increases in entrepreneurial intentions following

participation in training programs that included business simulations, framed within the TPB to assess how attitudes and perceived control influence intentions over time.

Mavhunga and Ndlovu (2021) explored "Assessing the Impact of Entrepreneurship Education on Students' Intentions to Start Businesses in Zimbabwe." The study utilized a quantitative approach with a sample of 250 students. The findings suggested that entrepreneurship education positively influenced intentions, particularly through experiential learning opportunities. The theoretical framework was based on the EEM, focusing on how environmental factors affect entrepreneurial intent.

Banya and Nyamwanza (2021) conducted a study on "Entrepreneurship Education and Its Role in Fostering Entrepreneurial Intentions Among Zimbabwean Students." Utilizing a mixed-methods approach, the research involved surveys and interviews with 200 students. Results indicated a strong correlation between entrepreneurship education and increased entrepreneurial intent, emphasizing the significance of practical experiences, guided by the TPB.

Chikoko and Mavhunga (2022) examined "The Influence of Entrepreneurship Education on Students' Entrepreneurial Intent in Zimbabwean Higher Education." The quantitative survey method was used to gather data from 300 students. The findings confirmed that entrepreneurship education significantly enhanced students' intent to start businesses, driven by practical engagement, framed within the SCT.

Mupinga and Banga (2022) investigated "Barriers to Entrepreneurship among University Students in Zimbabwe." This qualitative study involved interviews with 30 students, revealing that while entrepreneurship education fostered intent, challenges such as funding and market knowledge remained significant obstacles. The study utilized the EIM to analyze how these barriers impact entrepreneurial intentions.

Chivandi and Mungai (2021) studied "The Impact of Entrepreneurial Mindset Development on Students' Intentions to Start Businesses in Zimbabwe." Using a survey of 200 students, the research found that cultivating an entrepreneurial mindset through education significantly enhanced students' intentions to engage in entrepreneurship, guided by the SCT.

Vusimuzi and Chikwira (2021) explored "The Role of University Support in Promoting Entrepreneurial Intentions Among Zimbabwean Students." This mixed-methods study involved

surveys and interviews with 150 students. The findings indicated that university support systems positively influenced entrepreneurial intent, framed within the TPB.

Mabhena and Chikoko (2022) examined "The Relationship Between Entrepreneurship Education and Entrepreneurial Intentions Among African Students: A Zimbabwean Perspective." This quantitative study employed a survey method with 250 respondents. The results demonstrated a significant positive correlation between education and entrepreneurial intentions, grounded in the EIM.

Mhlanga and Muvandi (2021) conducted research on "Entrepreneurship Education and Students' Intentions to Start Businesses: Evidence from Zimbabwe." Using a quantitative survey design, data were collected from 180 students. The results indicated that practical learning experiences were crucial in enhancing entrepreneurial intent, framed within the TPB.

Katiyo and Juma (2023) investigated "The Effect of Entrepreneurship Curriculum on Students' Intentions to Start Ventures in Zimbabwe." The research employed a qualitative approach with focus groups comprising 60 students. Findings underscored that the relevance of the curriculum and practical applications significantly influenced entrepreneurial intentions, guided by the SCT.

Takaendesa and Mavhunga (2023) explored "Perceived Barriers to Entrepreneurship Among Students in Zimbabwe." This qualitative study included interviews with 40 students, revealing that despite strong intentions shaped by education, barriers such as access to capital and market entry hindered entrepreneurial endeavors. This research utilized the EIM to frame the analysis of these barriers.

Nyoni and Ndlovu (2022) examined "The Role of Collaborative Learning in Enhancing Entrepreneurial Intentions in Zimbabwe." This study utilized a mixed-methods approach, collecting data from 200 students. The results indicated that collaborative learning experiences significantly improved students' entrepreneurial intent, framed within the TPB.

Chikoko and Mhlanga (2021) studied "Entrepreneurship Education and Career Intentions Among Zimbabwean Students." Using a survey method, the study involved 250 respondents. Findings revealed a significant link between entrepreneurship education and students' career intentions, emphasizing the importance of practical exposure, guided by the SCT.

Muposhi and Chinyamurindi (2023) explored "The Influence of Entrepreneurship Education on Innovation Intentions Among University Students in Zimbabwe." The study employed a quantitative research design with a sample of 300 students. The results indicated that education significantly enhanced innovation intentions, driven by practical project experiences, framed within the EIM.

2.10 Research Gap for The Study.

While the reviewed literature points to the extensive effort towards measuring and ascertaining the quality and outcome of what universities do in EE as noticed earlier, the concentration of the studies is in the context of developed countries, with relatively limited studies in developing countries like Zimbabwe (Maheshwari et al., 2022; Yatu, et al., 2017)

When determining the effectiveness of entrepreneurship education, primarily within the Zimbabwean context, the literature review did not demonstrate a clear standpoint of consensus on how effective the current system is, and what aspects of entrepreneurship education should be assessed to determine its effectiveness. However, several studies have made suggestions for more research in different aspects that improve the curriculum, pedagogy and develop the required entrepreneurial attitudes and intention of students (Onuma, 2016; Amuda et al., 2019; Bischoff et al., 2018).

Though literature has reviewed that a lot of studies have been done in relation to EE and its relation to VC I, there has been a shortage of literature in regards to the Zimbabwean context that relates to either business incubation or university-based incubators. Although most university-based incubators around the world are quite successful in regards to the success rate and SME growth, this can however not be said about the universities in Zimbabwe or in developing countries though there is also no available literature to prove it. Available literature discusses the critical issues for improving the performance of university incubators.

2.11 Conceptual Framework

A conceptual framework is a structure that the researcher believes best explains the natural progression of the subject under investigation (Camp, 2001). The conceptual framework presented below serves as the thesis' dashboard. It demonstrates the relationship between the variables.

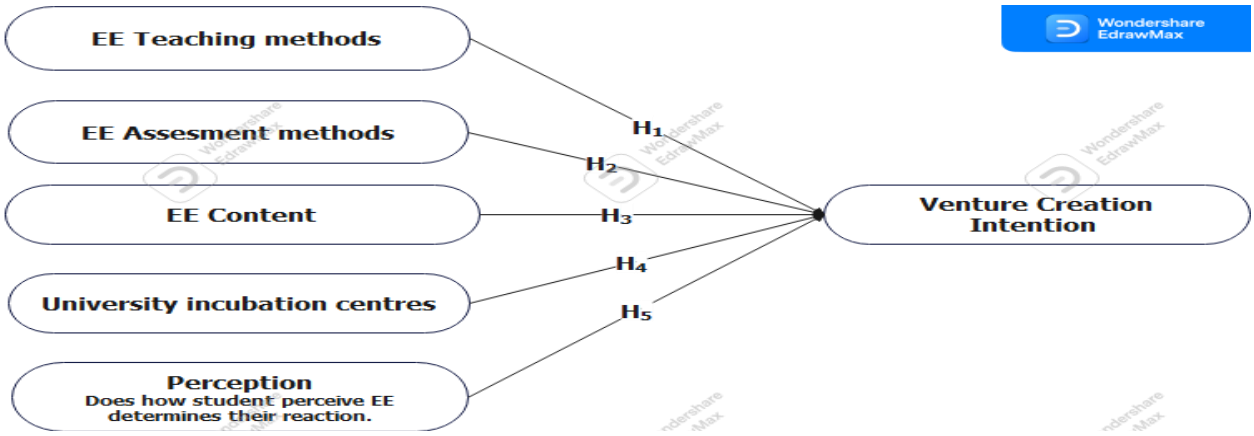

Figure 2.6 : Conceptual Framework

Source: Author 2025

2.11.1 Hypothesis

H1: Entrepreneurship education teaching methods positively influences venture creation.

Most authors categorize teaching methods into two groups, which are termed "traditional methods" (comprising normal lectures) and "innovative methods" (which are more action-based), also known as "passive methods" and "active methods", respectively (Lackéus, 2020). Compared with passive methods, active methods, according to Morris et al. (2021), are those that require the instructor to facilitate learning, not to control, and apply methods that enable students' self-discovery. Pittaway et al. (2020) explain that instructors rely on lecture-based methods because they can be easily accomplished and require less investment. Other methods used, but not as common as the previous group, include: business/computer or game simulations, video and filming, role models or guest speakers, business plan creation, and project work. Also used are games and competitions, setting up real small business ventures, workshops, presentations, and study visits (Secundo et al., 2021; Lyons & Zhang, 2021). The methods of teaching EE are expected to influence the development of VCI in EE students (Nabi et al., 2021; Santos et al., 2023).

H2: Entrepreneurship education assessment methods positively influence venture creation.

Assessment is an essential motivational factor in students' learning in University courses, which should be closely aligned with the intended learning outcomes of the course or programme (Morris

et al., 2021). Rooted in the need to assess students' progress (formative assessment) and performance (summative assessment) as the foundation to provide certified qualifications, student assessment is a key concern for students themselves, educators, as well as society and business (Pittaway et al., 2020). Assessment of learning in HE including EE serves three major purposes (Lackéus, 2020). First, the educator gets to know if learning goals have been achieved. Second, students receive feedback about their own learning. Third, students receive a mark and accreditation for benchmarking purposes. Current scientific insights for sustainable assessment in Universities strengthens the importance of assessment in an even broader sense. They emphasize that assessment should be designed in a way to encourage continued learning and that students need to be taught how to make an informed judgment about their own capabilities to prepare them for the world after university (Boud & Dawson, 2021). The evaluation of Entrepreneurship Education outcomes has to encompass both concrete and abstract aspects, such as the creation of products, prototypes, drawings, and abilities (Maritz et al., 2021). Furthermore, the effectiveness of EE should be evaluated both during and after sessions using intangibles like personal skills, behaviors, career outcomes, knowledge, mindset, and connectedness to education and the future (Nabi et al., 2021).

H3: Entrepreneurship education content positively influences venture creation.

EE content include the traditional business studies one, where the development of a business plan is identified as being the most important and common course feature of EE (Nabi et al., 2021). According to Lyons & Zhang, 2021, EE courses teach business plan development, business life cycle, business management, entrepreneurship and innovation, team building, finance, accounting, tax, law, and marketing. Also, EE curriculum content focuses mainly on family business, business strategy, innovation, technology, science, gender and minority while in some cases socially responsible entrepreneurship is part of the curriculum and is supported by business plan and start-up phase competitions (Maritz et al., 2021). Starting, managing, and growing businesses helps students to be hands-on. The real-life experience may help in inculcating entrepreneurship intentions, self-efficacy and confirm expected outcomes (Lackéus, 2020).

H4: University incubation centres positively influence venture creation.

Basing on the common functions of a mere incubator, the major role of an incubator can be seen to that of a waiting room that offers the adequate environment and services that nature and offer

opportunities to grow and mature (Hausberg & Korreck, 2021). From the research carried out by Al-Mubaraki and Busler, 2020, the major roles of incubation centres (IC) is to fast-track the growth of firms through different support resources that belong to the incubator. Through the effects of globalisation, the role of incubation centre to some extent has evolved to match some of the 21st century demands that include the need for desk space networking, access to professional services, mentoring and entrepreneurship training often for free or at a cheaper cost (Secundo et al., 2021). Incubation centres (Battaglia et al., 2022) play an important role in assisting struggling businesses by providing a variety of services such as affordable space, office equipment, product development and business planning, legal counselling, business networking, training and property and so on.

H5: Students' perceptions towards entrepreneurship education positively influence venture creation intention.

Some authorities view entrepreneurship education as having a positive impact on creativity and venture creation across the globe (Bae et al., 2021). Small to medium business skills can be acquired by promoting entrepreneurship education (Nabi et al., 2021). As mentioned by Santos et al., 2021, 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 et al. (2021) and Lackéus (2020) rightly argued that entrepreneurship education helps learners acquire the essential skills, awareness and motivation which are at central to lucrative venture creation.

2.12 Chapter Summary

This chapter reviewed related literature about EE. Literature on pedagogy, content, assessment methods and perceptions were investigated. Most of these studies were either systematic literature review or purely qualitative. The generalization of the findings from these studies becomes an issue. The study adopted a mixed approach to objectively assess EE at CUT at a larger scale. Having the reviewed the related literature of the current study, the next chapter discusses research methodology followed in this study.

CHAPTER 3

3.0 RESEARCH METHODOLOGY

3.1 Introduction

This chapter 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.

3.2 Research Philosophy

The pragmatic research philosophy was used in this investigation. The research question, according to this philosophy, is the most essential predictor of the research philosophy used in the study (Morgan, 2023). The model which this study sought to develop represents a practical approach to resolve the problem relating to the efficient operation of EE and the enhancement of its performance in promoting venture creation in Zimbabwe. Pragmatism provided that practical approach and for that reason, it was considered the most suitable research philosophy. Pragmatism, by its very nature, takes a practical approach to data collection and interpretation, combining various views. A pragmatist views research as beginning with a research problem and ending with practical solutions that inform future practice. The pragmatism philosophy is based on a problem-solving mindset. It is concerned with the consequences of one's actions. This is accomplished by using mixed-methods research, which incorporates both qualitative and quantitative assumptions. Thus, pragmatism created a nice compromise between both the deductive (positivism) and inductive (interpretivism) research approaches in this study. In contrast to the deductive and inductive methodologies, the pragmatic worldview is a liberal worldview with a blended methodology that includes the quantitative and qualitative research methods to subscribe the evidence. Unlike positivism and interpretivism, it allows the researcher to choose the optimal

methodology for carrying out the investigation. In the end, the study benefits from more reliable results.

According to Creswell and Plano Clark (2023), pragmatism enables the study to look at the subject either from both perspectives in terms of the effect of social actors, and then use these perspectives to construct a practical research strategy. This is true in mixed methodologies study, in which researchers use a combination of quantitative and qualitative assumptions to conduct their research. In fact, Pragmatism, according to Fetters (2022), has been recognized as the foundation of mixed methodologies research, and it can be used to provide superior results depending on the nature of the research. What operates at the moment is truth, according to the pragmatic research philosophy (Biddle, 2021). It is not based on a distinction between reality outside and reality inside the mind, as positivists and interpretivists claim. Pragmatists, also, presume that in an external world as well as an internal one (Biddle, 2021).

This means that pragmatism offers a more complete and thorough solution to problems than other research philosophies. It tends to borrow from positivism, interpretivism, critical realism and post-modernism. Pragmatists agree that research takes place in a variety of contexts, including social, historical, political, and other. Mixed methods research can take on a postmodern bent, with a theoretical perspective that reflects social justice and political goals. Unlike positivism and interpretivism, pragmatism allows researchers to make their own decisions (Creswell & Plano Clark, 2023). Researchers are thus free to select the study methodologies, strategies, and procedures that best suit their needs and objectives. This gives the study greater vigor and rigor, which improves research outcomes and, in this case, the quality of the strategies, particularly the model that the study aimed to develop.

3.3 Research Approach

This study adopted the mixed research methodology. The mixed methodology was considered the best approach for the study because qualitative research as well as quantitative research alone were insufficient to fully understand the research problem. The core argument of mixed methods research is that combining qualitative and quantitative approaches yields a more comprehensive understanding of study challenges than either strategy alone (Fetters, 2022; Creswell & Plano Clark, 2023). The mixed methodology helps to understand the topic area in greater depth (Creswell & Guetterman, 2023). It contributes to increased trust in study findings by providing more

evidence while mitigating the drawbacks of employing a single technique (Harrison et al., 2020). Harrison et al. (2020) went on to say that while mixed technique research is time consuming in general, it can help to address broader concerns and provide insights that could otherwise be overlooked. Molina-Azorin and Fetters (2022) agree, stating that while all techniques have flaws, these flaws can be reduced through mixed methodology research, which combines diverse methodologies to deliver better answers to our research objectives.

According to the literature, all of the components of EE would not be incorporated as a result of the employment of qualitative and quantitative research approaches individually. As a result, researchers have discovered that they need to apply a mix of structured and unstructured approaches (Creswell & Guetterman, 2023). EE research is increasingly combining quantitative and qualitative methodologies, despite the fact that there appears to be little theoretical basis for doing so (Nabi et al., 2022). Creswell & Plano Clark (2023), on the other hand, underlined the benefits of mixed approach in terms of enhancing confidence in study outcomes.

A combination of structured and semi-structured response forms was employed in this investigation. This was done to reduce interviewer bias, improve the clarity of responses, and give respondents a greater range of options (Palinkas et al., 2023). Quantitative data from students was collected and qualitative data was collected from lecturers.

Generally, the study tried to balance the amount of quantitative and qualitative data. Unlike quantitative research, which uses arithmetical data to access knowledge about the world, qualitative research tries to get to the core of what actually happened to research participants, what caused them to make the decisions they did, and how those decisions came to take the shape they did (Bitektine et al., 2022). Understanding the participants' decision-making process was important to the study because these decisions suggest the strategies required for venture creation to take place. This was greatly facilitated by the qualitative approach which, by its nature, is used to enhance understanding of EE assessments methods, content and teaching methods involved in implementation and functions as well as to develop theories that describe these experiences (Creswell & Guetterman, 2023).

As a means of comprehending human beings' unique, dynamic, and comprehensive character, the qualitative paradigm ranks higher than the quantitative one (Bitektine et al., 2022). However, the qualitative paradigm is inappropriate with regards to hypotheses testing (Hammond & Wellington,

2023). Therefore, the quantitative paradigm was applied in hypotheses testing and in developing an EE model for VC in HEIs. The two approaches were equally important in this study and this justifies the adoption of the mixed methodology. The mixed methodology is consistent with and supported by the pragmatism research philosophy which was used in this study. The mixed methodology uses pragmatic assumptions (Creswell & Plano Clark, 2023). Fetters (2022) emphasized this, claiming that mixed methodology is a product of the pragmatic worldview, which blends qualitative and quantitative methodologies at different stages of the research process. This proposes the compatibility of pragmatism and the mixed methodology, both of which informed this study. Having discussed the research approach, the next subsection, discusses the research design, which is mixed in nature, is deliberated in relation to the research problem, of this study.

3.4 Research Design

A cross-sectional survey approach was used in the study since it enables the utilisation of sizable samples. It was decided to survey EE students and lecturers. Furthermore, cross sectional design enables the collection of a significant amount of data in a brief length of time. By using a cross-sectional survey design, relationships based on the study's assumptions can be measured (Creswell & Guetterman, 2023; Wang, 2023). In this study, the researcher aimed to examine how different EE variables are influencing venture creation intent because the cross-sectional survey design entails monitoring a phenomenon at a point in time.

There is no time ordering to the variables because they are collected more or less simultaneously, making it possible to just look at connections between variables when utilising the cross-sectional survey methodology. This fits with the primary quantitative nature of the data that was gathered for this study. Additionally, surveys are the best method for gathering data since they allow for the collection of information from a large number of respondents, which enables more thorough analysis and the production of more significant results (Ponto, 2023). Furthermore, the cross-sectional design is both cost- and time-efficient, making it possible to finish this research project on schedule.

This was in line with the research's goal of gathering qualitative data from university EE lecturers and quantitative data from students. These two groups were mutually exclusive, making data

collecting and analysis more independent. After then, the results would be compared to see if they corroborated or contradicted one other. The findings would be utilized to improve EE, which boosts venture creation. The researcher believed that the embedded design would be the most effective way to do this. It allows to operate within both positivist and interpretivist views while also addressing the overall research issue far more efficiently and effectively than the other mixed methods designs (Fetters, 2022). The exploratory sequential mixed methods strategy was inadequate since it could have entailed gathering qualitative data from EE lecturers first, then following up or expanding on that database with a second round of quantitative data collection and analysis.

3.5 Population for the Study

The target population for this study comprised of 2350 CUT final year students from all schools and 40 CUT lecturers respectively. The EE lecturers and students were used in this study because they were the direct implementers and consumers respectively. EE lecturers were also selected because they are specialist and possesses special knowledge about EE. Participants from HEIs as represented by CUT gave the required information about EE in Zimbabwe. The population of the study was heterogeneous as it included students and lecturers from different age groups, gender, different faculties, experiences. Etikan (2021) explained that a logical population choice has to be made if conclusions are to be generalised across the entire population. The population for study comprised of level 4.2 students and is abridged as indicated in table 3.1.

3.5.1 Population for students and lecturers, 2024

Faculty	Number of students	Percentage contribution.	Number of lecturers
School of Agricultural Sciences	289	12.28	-
School of art and design	158	6.73	-
School of engineering sciences and technology Sciences and Technology	481	20.47	-
School of Entrepreneurship and Business Sciences	1072	45.61	40
School of health sciences and technology and Technology	55	2.33	-
School of hospitality and tourism	158	6.73	-
School of natural sciences and mathematic	34	1.46	-

School of wildlife and environmental science Sciences	103	4.39	-
Total	**2350**	100	40

Table 3.1: CUT Entrepreneurship education students, 2024

(Source: Chinhoyi University of Technology (CUT) records 2024)

Having discussed the population surveyed, the next section discusses the sample sampling procedure employed in this study.

3.6 Sample and Sampling Procedure

A sample is simply a subset of the population which must be representative of the population.

3.6.1.1 Sampling procedure for students.

3.6.1.1.1 Stratified sampling.

Stratified random sampling was utilized by dividing the population into distinct subgroups based on the stratification variable of faculty (school) of study. This approach ensures that each subgroup, or stratum, is mutually exclusive, meaning that each participant belongs to only one stratum (Smith, 2020). To determine the sample stratum size, a simple random method was employed making sure it was proportional to the population size of each stratum. This means that the number of samples taken from each stratum reflects its size in the overall population, which enhances the representativeness of the sample (Johnson & Lee, 2019). After calculating the appropriate sample sizes for each stratum, the samples from all stratum were combined to form the overall stratified sample. This method allows for a more accurate analysis of the different experiences or outcomes associated with each faculty, as it captures the diversity within the population more effectively than simple random sampling alone (Thompson, 2021).

3.6.1.2 Sample size for students

Yamane's (1967) sample size calculator was used to calculate the sample for this study, following which a sample of 342 participants was selected out of the total population of 2350. The sample was selected at 5% margin of error, which is, the accuracy required for any approximations made from a given sample as shown in Table 3.2.

3.6.1.2.1 CUT Entrepreneurship education graduates, 2024

	Graduates			
Faculty	**Sample Students**		**Total**	**Percentage of Contribution to the Total (%)**
	Male	**Female**		
School of Agricultural Sciences	22	20	42	12.28
School of art and design	10	13	23	6.73
School of engineering sciences and technology Sciences and Technology	55	15	70	20.47
School of Entrepreneurship and Business Sciences	71	85	156	45.61
School of health sciences and technology and Technology	3	5	8	2.33
School of hospitality and tourism	5	18	23	6.73
School of natural sciences and mathematic	3	2	5	1.46
School of wildlife ecology and environmental science Sciences	8	7	15	4.39
Grand Total	**177**	**165**	**342**	**100**

Table 3.2: CUT Entrepreneurship education graduates, 2024

(Source: Chinhoyi University of Technology (CUT) student records 2024)

3.6.2.1 Sampling procedure for lecturers

Purposive selection of population was viewed as appropriate for the study to gather data from lecturers with five years of teaching experience within the field of entrepreneurship at universities. Five years is a reasonable number of years for an academic to gain some degree of mastery and expertise worth sharing. Purposive selection is a procedure for building a list of participants viewed as appropriate for the study that is underway (Palinkas et al., 2023; Etikan, 2021) and was used to select lecturers. Entrepreneurship Education lecturers were a special population in the current study. Having discussed sample and sampling procedure, the next section discusses the sample size.

3.6.2.2 Sample size for EE lecturers

With regards to the number of lecturers who participated, an interview guide was administered until a saturation point was reached. The concept of data saturation, as defined by Fusch et al. (2023), refers to the point at which no new information or themes emerge from data collection, thereby providing sufficient depth to the qualitative findings. Obtaining 9 interviewees enabled the

research to delve deeply into specific issues, facilitating rich, qualitative insights that complement the quantitative data. The interviews offered qualitative insights into the specific EE components. Those lecturers not exposed to EE were excluded. Having discussed sample size, the next section discusses instrumentation.

3.7 Sampling Adequacy

To ensure the adequacy of the sample size for Exploratory Factor Analysis (EFA), several advanced statistical techniques and criteria were employed. These methodologies are critical for validating the factor structure and ensuring the robustness of the study's results.

3.7.1 Kaiser-Meyer-Olkin (KMO) Measure of sampling adequacy

The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy quantifies the proportion of variance in the variables that might be common variance. The KMO statistic is a value between 0 and 1 that assesses the suitability of the data for factor analysis. A KMO value above 0.60 is considered adequate for factor analysis, indicating that the data are likely to yield reliable factors (Kyriazos, 2023). Values closer to 1.0 suggest that the data are highly suitable for factor analysis due to high communalities and strong inter-correlations among variables. In contrast, KMO values below 0.50 are indicative of a sample that is potentially inadequate for factor analysis, as this may imply that the variables are not sufficiently interrelated, necessitating data reduction or augmentation (Tabachnick et al., 2022). The KMO test is essential for determining the extent to which variables are correlated and if they can be grouped into factors.

3.7.2 Bartlett’s Test of sphericity

Bartlett’s Test of Sphericity evaluates whether the correlation matrix is significantly different from an identity matrix. The null hypothesis posits that the correlation matrix is an identity matrix, implying that variables are uncorrelated and thus unsuitable for factor analysis. A significant result from Bartlett’s Test ($p < 0.05$) indicates that the correlation matrix is not an identity matrix, meaning that the variables are sufficiently correlated to proceed with factor analysis (Kyriazos, 2023). This test ensures that the data structure supports the extraction of underlying factors and that the relationships between variables are strong enough to reveal meaningful patterns.

3.7.3 Sample size adequacy

The adequacy of the sample size is further examined by considering the ratio of participants to variables. According to methodological guidelines, a ratio of at least five to ten participants per variable is recommended to achieve reliable and generalizable results from factor analysis (Watkins, 2021). This ratio helps to mitigate issues of overfitting and ensures that the factor structure identified is stable and replicable. A larger sample size relative to the number of variables enhances the robustness of factor extraction and increases the likelihood of obtaining reliable and interpretable results.

3.8 Sources of Data

3.8.1 Peer-reviewed academic journals

Peer-reviewed academic journals represent an essential repository for empirical research and theoretical frameworks pertinent to the exploration of EE. Scholarly articles, including investigations into impact of EE on entrepreneurship intention, contribute substantial empirical evidence supporting the premise that EE serves as a pivotal mechanism for venture creation. This corpus of literature facilitates a rigorous academic discourse that interrogates the multifaceted interactions between EE and its consequent effects VCI, thereby enriching the understanding of education's role (Zhang et al., 2021).

3.8.2 Government publications

Government publications and reports from regulatory bodies constitute another critical data source for research on EE. These documents often encompass white papers and strategic frameworks that explore the role of EE in bolstering venture creation. For instance, reports from the Global Entrepreneurship Monitor.

3.8.3 Scholarly books

Scholarly books that focus on EE provide comprehensive analyses and theoretical frameworks that are pivotal for understanding its implications on VCI. Through in-depth explorations, these texts contribute to the academic literature by framing EE not merely as a tool for employability but as a potential catalyst for systemic change within the economy. The theoretical paradigms introduced in these volumes can serve as foundational constructs for empirical investigations, guiding researchers in their inquiries into the socio-economic effects of EE. Engaging with this literature allows scholars to cultivate a nuanced understanding of the complexities inherent in

implementation of EE, thereby informing their research methodologies and analytical frameworks.

3.9 Primary Data Collection

Primary data collection through structured surveys targeting students who are direct consumers is essential for acquiring first-hand insights. This quantitative approach facilitates the assessment of perceptions regarding EE in enhancing effectiveness. By utilizing Likert-scale questions, researchers can quantitatively analyse the data to identify trends, correlations, and areas necessitating further investigation. The standardized nature of surveys ensures that responses are uniform, facilitating comparative analyses across diverse demographics. Additionally, the confidentiality assured to participants encourages candid feedback, which can lead to a more nuanced understanding of EE.

3.10 Instruments for Data Gathering

The current study adopted a questionnaire and interview guide as data collection tools (see appendix 1). In the current study, employing a questionnaire was appropriate because it was: convenient, effective, cheap on both time and money, economical, easy to administer, analyse, arrange for, not time consuming to the respondents and was an efficient way of collecting data from a large population (Taherdoost, 2021; Kyriazos, 2023). The study handled a large amount of data; hence the use of questionnaire was desirable.

Objective questions in the questionnaire were used to reduce bias (Podsakoff et al., 2023). The absence of physical presence of the researcher increases anonymity and genuine responses from respondents can be increased. To get accurate and sensitive information in this study, respondents did not identify themselves. For this study, because of time constraints the researcher used research assistant to administer the questionnaires. The questionnaire instrument has some shortfalls such as not giving the researcher the chance to probe into the opinions and feelings of the respondents (Kyriazos, 2023) What the respondents give as the answers to questions becomes final.

The current study used closed - ended questions because they were easy to administer, coding was simpler and quicker, data analysis was simpler, attitudes were easier to compare, and no extended writing from the respondents was compulsorily required, hence this saved time for the respondents (Taherdoost, 2021). According to Creswell and Guetterman (2023), closed questionnaire items are best for a big group of respondents, and when many questions are to be answered. The sample for

the current study was big and many questions were asked, hence the closed questions. Open-ended questions can be rich in getting in-depth responses from participants, but they are subjective and remain too taxing to administer, data analysis is difficult, and they are time - consuming and have the potential to de-motivate respondents (Braun et al., 2022).

The questionnaire was designed to collect data from EE students and the items were scored on a 5-point Likert-Scale. According to Kyriazos (2023) a scale allows the researcher to administer the questionnaire more accurately and economically to a large sample. Likert scale provides flexibility because the descriptors on the scale can vary to fit the nature of the statements. Taherdoost (2021) pointed out that a four- or five-point scale is mostly used. A five-point scale was used in the study. The questionnaires comprised of five distinct sections, namely section A: Biographical data; Section B: This comprised items that sought to determine the influence of teaching methods on venture creation intention; Section B: Items in this section elicited how content of EE affect venture creation intent in Zimbabwe's universities; Section C: The section aimed to establish how perceptions towards EE affects venture creation and Section D: Items in this section elicited the influence of university incubation centres on venture creation intent in Zimbabwe's universities.

The questions were constructed basing on literature related to the study. The questionnaire was designed to collect information from students in Zimbabwe at CUT. The questions were constructed basing on literature related to the study. Some examples of such items are given in 3.3 following table.

3.10.1 Questionnaire Constructs, Items, Codes, and Sources of Items

const	Item Code	Statements	Item source
EE Content	EC001	Introduction to entrepreneurship	Saputro, Mahfud, Mulyani, and Nurtanto (2020)
	EC002	Business Planning	Mukesh, Pillai, and Mamman (2019)
	EC003	Market research	Henry (2020)
	EC004	Financial management	Fayolle (2018)
	EC005	Business Legal Environment	Liguori and Winkler (2020)
	EC006	Marketing strategies	Sarooghi, Sunny, Hornsby, and Fernhaber (2019)
	EC007	Innovation and creativity	Kuratko (2005)
	EC008	Networking and relationship building	Della Holpe (2020)
	EC009	Operations management	Linton and Klinton (2019)
	EC010	People Management	Ndofirepi and Rambe (2019)
EE Teaching Methods	EC011	Lecture based teaching	Akhmetshin, Mueller, Yumashev, Kozachek, Prikhodko, and Safonova (2019); Garbuio et al. (2018)
	EC012	Experiential learning	Camacho-Calvo, García-Fallas, Bolli-Kemper, Maldonado-Mariscal, and VargasPorras (2019)
	EC013	Problem based learning	Dodd and Hynes (2012); Lent et al. (1994)
	EC014	Guest speaker and mentorship	Akhmetshin, Romanov, Zakieva, Zhminko, Aleshko, and Makarov (2019)
	EC015	Simulations	Guzairy et al. (2018); Swaramarinda (2018)
EE Assessment Methods	EC021	Examinations	Moberg, Vestergaard, Fayolle, Redford, Cooney, Singer, and Filip (2014)
	EC022	Projects	Ibidunni (2017)
	EC023	Exhibitions	Ibidunni (2017)
	EC024	Business plan	Ibidunni (2017)
	EC025	Business start up	Moberg, Vestergaard, Fayolle, Redford, Cooney, Singer, and Filip (2014)
EE Perception	EC075	EE is important.	Nabi and Linan (2019)
	EC076	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.	Liñán et al. (2020)
	EC077	New and old ventures need EE literate personnel.	Ilyas et al. (2021)
	EC078	Sustainable venture creation is an outcome of entrepreneurship education.	Kawai et al. (2020)
	EC079	A strong focus on entrepreneurship education promotes innovations.	Hussain et al. (2021)

Incubation Centre	IC001	The incubation and innovation hub assist entrepreneurs in networking with partners.	Lose et al. (2016)
	IC002	The incubation and innovation hub facilitate access to finance, venture capital, and guarantees.	InfoDev (2009)
	IC003	The incubation and innovation hub help entrepreneurs to develop competitive and viable ideas.	AlMubaraki and Busler (2010)
	IC004	The incubation and innovation hub help entrepreneurs to develop prototypes.	Hutabarat and Pandin (2014)
	IC005	The incubation and innovation hubs help entrepreneurs to establish and manage businesses.	Choto (2015)
Const	**Item Code**	**Statements**	**Item Source**
Intention	E001	I have the desire to be an entrepreneur.	Kuckertz et al. (2020)
	E002	My professional goal is to become an entrepreneur.	Eger et al. (2021)
	E003	I am determined to start a business in the future.	Liñán et al. (2021)
	E004	I intend to make every effort to manage my own business.	Moriano et al. (2019)
	E005	I am serious about starting my own business.	Thurik et al. (2020)

Table 3.5 : Questionnaire Constructs, Items, Codes, and Sources of Items

3.11.1 Validity

Validity is the extent to which the instrument measures what it claims to measure (Kyriazos, 2023). Similarly, in Taherdoost (2021) validity is defined as the accuracy of an instrument in measuring the anticipated construct within a research. In fact, if the research instrument is measuring what it is supposed to measure, then it considered valid. In other words, validity is all about credibility, believability, and genuineness of the research. In the current study, validity was assured through careful sampling, using appropriate instruments, and exposing data to suitable statistical tools. Validity of the questionnaire was established through the justification of each question in relation to the research objectives of the study. The three categories of validity namely, content, construct and criterion were satisfied by the questionnaire. To achieve face validity the questions were linked with the objectives of the study and some justification was also given. On content validity, the researcher made sure that the items and the questions in the instrument covered all issues to be

measured fully. In the current study, content validity was achieved by making sure that each aspect was adequately represented in the questions or items. The researcher, EE experts and the supervisor judged the validity of the research instrument as being of a satisfactory level. Having discussed how validity of the instrument was ensured in the current study, the following section discusses how reliability of the instrument was ensured in the study.

3.11.2 Reliability

Reliability refers to the stability of consistency, dependability, accuracy, and precision of a measure or score of an instrument (Taherdoost, 2021; Kyriazos, 2023). Reliability refers to repeatability and accuracy of the data collection instrument such that the same results should be obtained if the research is repeated, and different researchers must come out with similar findings. In the current study, to ensure reliability, the questionnaire was pre-tested through the pilot study. This ensured that all relevant issues were included, order was correct, ambiguous items identified and then eliminated, and pre-codes corrected. This assisted the researcher to make any necessary amendments to the questionnaire.

Cronbach's coefficient alpha was used to test for consistency. Cronbach's coefficient alpha is an index of consistency with which all the items on the scale measure whatever the scale is measuring (Tabachnick et al., 2022).

3.11.3 Reliability statistics for questionnaire

Variable	No. of Items	Cronbach's Alpha
Intention	5	0.846
Perceptions	5	0.939
EE Teaching Methods	5	0.938
EE Content	10	0.968
Incubation Centre	5	0.942
EE Assessment methods	5	0.943

Table 3.6: Reliability statistics

The above Cronbach's Alpha (Table 3.6) shows that the questionnaire for students had an acceptable internal consistency. It was very reliable, hence could be used for study. Having discussed how reliability of the instrument was ensured in the current study, the following section discusses credibility of interview guide.

3.12 Interview Guide

While the self-completion questionnaire did not require the researcher to ask the respondent questions at least on a direct basis, and the sequence of questions could not be varied, the interviews required the respondents to be interrogated by the researcher and the sequence of questions could be varied. A semi-structured interview is one in which the interviewer has a set of questions that are in the basic form of an interview guide but can vary the order in which the questions are asked (Fetters, 2022). This form of interview is used to figure out what's going on, to gain fresh insights, to identify broad patterns, and to better comprehend the link between factors (Creswell & Guetterman, 2023). It employs a mix of open-ended and closed-ended questions, and hence adheres to the mixed technique study design. The researcher discovered that several of the important respondents engaged were short on time, therefore direct contact with the research assistant was deemed the best method for eliciting responses from some of them. As a result, when participants are likely to be hesitant to complete a study instrument such as a questionnaire, a semi-structured interview has been proven to be appropriate (Braun & Clarke, 2022). The interview was beneficial in that it allowed the researcher to clarify any issues that were unclear. This was helpful to the study in terms of introducing the interview requirements to the participants. The majority of the targeted people took part in the study as a result of this strategy. During the semi-structured interview, data was collected using an interview guide (schedule). The interview guide was chosen because it’s the best instrument for gathering qualitative data, particularly from semi-structured interviews (Creswell et al., 2023; Nowell et al., 2023). A schedule (interview guide) was used. In an unstructured or semi-structured interview, it refers to a short list of memory cues for topics to be covered (Fetters, 2022). The structure of the interview, the nature of the research, and the study's goals and objectives all influence the construction of the interview guide (Palinkas et al., 2023). According to Taherdoost (2021), it should include a list of categories that are relevant to the study and on which the interview questions are eventually based. Closed inquiries, which require a 'yes' or 'no' response from the interviewee, are often ineffective at obtaining relevant information. As a result, we were able to prevent them. 'Tell me what happened' or 'How did you feel when?' are examples of descriptive inquiries that urge interviewees to talk and elaborate on their stories. They were used to achieve the same in this study. Unlike a structured interview, the interviewer can vary the way the questions are phrased in a semi-structured interview. This aids in the collection of data that the participant might not have provided otherwise. This contributed to the enrichment of the

data collected and the ultimate research output in this study. Furthermore, if specific questions appear unsuitable for a particular respondent, the interviewer has the right to give clarifications and eliminating them. This is consistent with the ethical norms of research and aids in maintaining a positive connection between the interviewer and the interviewee.

3.12.1 Credibility of the interview guide

Under reliability of the interview guide, the researcher looked for internal consistency which entailed seeking expert opinion on content validity and construct (language) validity. Validity during interviewing was enhanced by using interview techniques which establish rapport and trust with the respondents. To achieve this, the researcher made the respondent feel at ease enough that they could give accurate and true responses without fear of repercussions. In this regard, the researcher made certain that the goal of each interview was mentioned in advance, and that the source of the responses was kept completely discreet. Because the interviews were semi-structured, there was a basic direction and flow to each one, while the interviewer normally has some leeway to ask follow-up questions in reaction to noteworthy responses. In contrast to an unstructured interview, the presence of standardization helps to improve the credibility and dependability of the data acquired during interviews. Having discussed interview credibility, the following section discussed pilot study.

3.13 Pilot study

A pilot study is the first step of the entire research project that is often a smaller-sized study assisting in planning, modification, and validation of the feasibility of the main study (Eldridge et al., 2021; Nowell et al., 2023). In other words, a pilot study is normally small in comparison with the main study and provides only limited information. A good research strategy requires careful planning, and a pilot study should often be a part of this strategy.

A pilot study improves the quality and efficiency of the main study (Eldridge et al., 2021). The pilot study was conducted because it was a critical element of the survey. In the current survey, the pilot study resulted in the improvement of the questionnaires and interview guide. The pilot study : a) eliminated items that were ambiguous; b) established possible problems in administering the questionnaire; c) tested data collection instruments; d) established the feasibility of the study; e) helped the researcher to attend to any logical and procedural difficulties of the study; and f)

assisted in carrying-out a preliminary data analysis and g) ensured that the data collected answered the research questions (Hammond et al., 2023; Eldridge et al., 2021).

A pilot study can reveal deficiencies in the design of a proposed study, and this can then be addressed before time and resources are expended on the main study. The results of the pilot study were used to fine tune the data collection instrument (Nowell et al., 2023; Palinkas et al., 2023), in this case the questionnaire. Respondents gave suggestions for improvement on the questionnaire by evaluating and reporting on the clarity of instructions, as well as the ambiguity and relevance of items. The psychometric characteristics (reliability and validity) of instruments were established. Cronbach alpha was used to test for reliability for the questionnaire.

3.13.1 Sample- pilot study

The sample of the pilot study consisted of thirty (30) level 4.2 CUT students. The research gatekeeper's consent was sought. Convenient and purposeful sampling was done. In this study, the respondents who were conveniently close to the researcher and who were involved with EE at CUT took part in the pilot study. The respondents were given chance to make objective comments and modifications on the questionnaires. This enabled the production of a better final questionnaire for the final study.

3.13.2 Data collection procedure- pilot study

The researcher distributed and collected the questionnaires in person after the permission was granted. The participants were guided on what to do by the instructions given in the letter of introduction. The researcher was there to clarify issues where needed. Participants were able to complete the questionnaires within 10-20 minutes as stipulated. The questionnaires were cleaned for ambiguities and spelling errors identified.

3.13.2.1 Pilot Interview exercise

A pilot study is one of the means through which the content validity of research instruments (Interview and interview questions) is tested. According to Creswell and Guetterman (2023), a pilot study provides a researcher with a platform for testing a data collection instrument before it is perfected and adopted for final administration to the target audience.

In developing the interview questions that would help in obtaining the necessary information for answering the research question in this study; a pilot interview was thought to be appropriate in

order to sharpen the researcher's interview skills and also to identify and refine the specific questions that would be asked in the main interview, and also the most effective order in which the questioning will follow. The pilot establishes the efficiency of the interview schedule (Nowell et al., 2023). The pilot interview was conducted with recruited participants who volunteered to take part in the exercise. The sample for the pilot exercise comprised of selected EE lecturers. The criterion for selecting the pilot sample was based on the researcher's judgment of who has a good knowledge of the area being researched and would potentially give constructive feedback to improve the actual data collection process. The rationale for the pilot study was to elicit practical feedback on the interview questions in terms of clarity of instructions, language construction, the framing of questions, the time it took for one interview with each participant and to ascertain if privacy is sufficiently respected (Creswell et al., 2023). Generally, the process was to help lessen 'data collection' inaccuracy and errors generated because of inadequate interviewing techniques (Fetters, 2022). Hence, there was less risk of an error being encountered or generated during the main study. The interview had seven main questions covering objectives of the study and a series of prompts. Having discussed the pilot study, the following section discusses data collection procedure of the main study.

3.14 Main study: Data collection procedure

3.14.1 Questionnaire administration

The questionnaires, an improved version of those used in the pilot study were distributed by the researcher both in person and electronically to EE students. The researcher explained verbally, where necessary, the purpose of the research to respondents. 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 2024 CUT students in their final year. Upon completion of the questionnaires, respondents returned them to the researcher. 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 Creswell et al (2023). This questionnaire was totally standardised with the questions phrased exactly in the same way for all respondents.

3.14.2 Analysis of quantitative data

Data before being cleaned, the data was first collected on a template and was edited before it was analysed. During editing, questionnaires which were not completed were excluded as such questionnaires were not useable hence they were discarded. Data was checked for duplicates, that is, data which was captured twice. There was also need to check for and correct errors in entering data. For example, 5 could be posted in error as 55. On demographic data and interval-scaled (Likert scale) data, descriptive analysis was used. Raw data was transformed into a form that was easy to grasp and analyse using frequency table analysis and proportion % analysis. The perceptions (attitudes) and future intentions of the sampled students were therefore analysed and profiled using descriptive statistics. Quantitative data analysis is pivotal in understanding the empirical relationships between EE and VCI. This research employs several statistical methods, including descriptive statistics and correlation analysis, to analyze the survey data collected from stakeholders.

Descriptive Statistics provided an initial overview of the data by summarizing key characteristics. Measures of central tendency, such as means, alongside measures of dispersion like standard deviations, offered insights into the general trends within the dataset. Descriptive statistics helped in understanding the distribution of responses regarding EE on influencing VCI.

Correlation Analysis examined the strength and direction of relationships between different EE components and VCI. Using Pearson's correlation coefficients, this analysis quantified how variables such as EE content, EE teaching methods are correlated with VCI. For instance, a high positive correlation between EE content and VCI suggests that robust EE content is associated with high levels of VCI.

3.14.3 The interview process and procedure

From the different types of interviews, a face to face was selected. Nine (9) interviews in total were conducted with the participants. in the interview process, the researcher asked the participants a series of open-ended questions, and the participants responded in their own words. Prompts and probes were brought in during the course of the interview to catalyse and encourage participants to open up and expand more on their answers and to provide more details on the topic or the issue being discussed. While most of the respondents were comfortable with the face to face interview,

the duration for each interview varied. On average, each interview lasts about 35 minutes, with a few of them going slightly above 45 minutes.

During the interview process, the participants were asked a series of open-ended questions, and the participants responded using their own words. Prompts and probes were utilised at the course of the interview, as suggested by Braun et al (2022). This prompt, catalyses and encourages participants to open up, to expand upon their answers and provide more details on the topics and the issue being discussed.

Data saturation is a common term used in qualitative research, to mean a situation where there is a recurrent emergence of the certain same variables or themes in a data collection process (Fusch et al., 2023). It has been asserted that failure to reach data saturation could have a negative impact on the validity of one's research (Hennink et al., 2023). In this study, we define data saturation as the point at which there is enough information to replicate the study or when the ability to obtain additional new information has been stretched and attained; then the data collection process is upheld and ended. This position is in tandem with the research outcome of Fusch et al. (2023) on reporting and justifying the number of interview participants in organization and workplace research.

3.14.4 Analysis of qualitative data

Qualitative data analysis complements the quantitative findings by providing a nuanced understanding of EE and effects. This research employs thematic analysis to analyse interview data from lecturers. Thematic analysis involves several stages to identify and interpret patterns within qualitative data. Initially, the data was transcribed and reviewed to become familiar with the content. Subsequently, initial codes were generated to categorize significant segments of text. These codes were then organized into themes that reflect overarching patterns and insights. Themes were reviewed and refined to ensure they accurately capture the data's essence and contribute to the research questions.

3.14.5 Integration of quantitative and qualitative data

Combining quantitative and qualitative data enhances the overall analysis by providing a more comprehensive view of the research topic. Quantitative analysis offers empirical evidence of relationships and effects, while qualitative analysis adds contextual depth and explores the

underlying reasons behind these relationships. For instance, while quantitative data might show a significant correlation between EE content and VCI, qualitative data can reveal how lecturers perceive EE content influence on VCI.

3.15 Ethical consideration

The following ethical issues were considered:

3.15.1 Permission

The researcher should seek and secure the approval of research participants prior to conducting the study (Tracy, 2019). Permission to collect data from relevant stakeholders such as management of participating institutions was sought. Ethical clearance from the university where the researcher was studying (CUT) was obtained before commencement of the study.

3.15.2 Informed consent

Informed consent is when respondents in a research voluntarily participate in the research and they are informed about the purpose of the research, procedures to be followed, dangers associated with taking part in the research if any, advantages and disadvantages, if any, of participating in the research and credentials of the researcher need to be communicated to the participants (Resnik, 2023; WMA, 2023). Participants in the research ought to choose to or not to participate and should be given the right to withdraw from participating at any given time, without any penalty (Iphofen, 2023). In the current research, participants were informed and encouraged to participate, and they gave informed consent to take part in the research. A letter of consent was issued to participants for them to sign.

3.15.3 Confidentiality

Confidentiality is when participants are protected in such a way that their individual identities are not linked to the information they provided, and are never divulged in public (Resnik, 2023; WMA, 2023). In this research confidentiality was observed. The information provided was used in the study only and was privy only to the researcher. It was treated with the privacy it deserved.

3.15.4 Harm to participants

Researchers should not expose participants to any harm in their searches be it may physical or psychological (Iphofen, 2023). Harm to respondents includes but is not limited to abuse, invasion of privacy, embarrassment, emotional stress, irritation, anger, or negative labeling, that may damage one's personal dignity (Resnik, 2023). In this study, respondents were not exposed to any harm. The researcher respected the rights, needs, desires and values of the participants. Their privacy, confidentiality and anonymity were strictly maintained to prevent any harm.

3.15.5 Anonymity

Anonymity is key to build trust (Iphofen, 2023). Anonymity is all about not being able to link research information provided with the participants (Resnik, 2023). Similarly, a researcher is ethically responsible when they can respect the right to anonymity of the participants (WMA, 2023). Anonymity is when a researcher cannot link a given response with any respondent. In the current study, respondents did not identify themselves by name (Iphofen, 2023). They remained anonymous. Participants' names or identities were not used or written in the data collection instruments. Instead, serial numbers were used. The participants were informed that their privacy was protected.

3.16 Chapter summary

The chapter discussed the research methodology of the current study. Research paradigm as well as the research design were discussed. Population and sampling, instruments for data collection and procedures, reliability and validity, pilot study, data analysis, and ethical considerations were discussed. Having discussed the research methodology followed in the current study, the next chapter addresses data analysis and discussion of the findings.

CHAPTER 4

RESULTS AND DISCUSSION

4.1 Introduction

The study aimed to model Entrepreneurship education in Zimbabwe HEIs. The research methodology was presented in Chapter 3. The current chapter presents the data generated from the empirical study carried out. The quantitative data and qualitative data were presented in accordance with the research objectives that guided the study. Quantitative data for each research objective was presented in tabular form and a description of the data follows below each table. After presentation of quantitative data, qualitative data was presented.

4.2 Response rate

This section will display the response rate of the people who took part in the study.

4.2.1 Response rate.

	Participants Involved	Participants Responded	Response Rate
EE Students	342	300	**88%**
Total	**342**	**300**	

Table 4.1: Response rate.

Table 4.2.1 presents data from a total of 351 participants who took part in the study, utilizing questionnaires. 300 questionnaires were completed and returned, leading to an overall response rate of 88%. The researcher concluded that the 88% response rate was exceptional, reinforcing the reliability of the research findings. Consequently, the researcher proceeded to analyze the results of the study.

4.3. Demographic characteristics of respondents

The demographics in this study were age, gender and faculty of study of learners.

4.3.1 Age of respondents

Age Group	Frequency	Percent	Valid Percent	Cumulative Percent
21-25	250	83.3	83.3	83.3
26-30	31	10.3	10.3	94.0
31-35	12	4.0	4.0	98.0

36 years +	6	2.0	2.0	100.0
Total Age	**300**	**100.0**	**100.0**	**100.0**

Table 4.2: Age of respondents

Source: Research data 2024.

The survey results show that a substantial majority of participants, specifically 83.3%, belong to the 21-25 age category, suggesting a pronounced inclination towards younger individuals engaged in undergraduate studies. In contrast, only 10.3% of respondents are in the 26-30 age range. This disparity points to a notable decline in engagement from older demographics, likely indicating that many are no longer enrolled in university. The predominant representation of younger respondents highlights that the survey mainly reflects the viewpoints of those nearing the completion of their undergraduate degrees. This information can be valuable for gaining insights into the contemporary educational landscape and the challenges encountered by students.

4.3.2. Faculty of study

Faculty	Frequency	Percent	Valid Percent	Cumulative Percent
School of agricultural sciences	34	11.3	11.3	11.3
School of art and design	20	6.7	6.7	18.0
School of engineering sciences and technology	61	20.3	20.3	38.3
School of entrepreneurship and business sciences	140	46.7	46.7	85.0
School of health sciences and technology	6	2.0	2.0	87.0
School of hospitality and tourism	20	6.7	6.7	93.7
School of natural sciences and mathematics	5	1.7	1.7	95.3
School of wildlife ecology and environmental science	14	4.7	4.7	100.0
Total Faculty	**300**	**100.0**	**100.0**	**100.0**

Table 4.3: Faculty of study

Source: Research data 2024.

The distribution of faculty members reveals a notable predominance of participants from the School of Entrepreneurship and Business Sciences, accounting for 46.7% of the total sample. This is succeeded by the School of Engineering Sciences and Technology at 20.3% and Agricultural Science at 11.3%. The substantial presence of students from the School of Entrepreneurship and Business Sciences could potentially bias the findings towards entrepreneurial intentions and perceptions, as these individuals are more likely to have encountered relevant content and experiences that cultivate an entrepreneurial mindset. Conversely, other faculties such as the School of Health Sciences and Technology and the School of Hospitality and Tourism have lesser representation, which may limit the ability to make overarching conclusions about those fields.

4.4 Influence of EE teaching methods on venture creation intention

This section will show information pertaining to EE teaching methods.

4.4.1 Sampling adequacy for the influence of EE teaching methods on venture creation

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**.900**
Bartlett's Test of Sphericity	Approx. Chi-Square	1269.171
	Df	10
	Sig.	.000

Table 4.4.1: Sampling adequacy for the influence of EE teaching methods on venture creation

The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, along with the results from Bartlett's Test of Sphericity, demonstrates that the dataset is suitable for factor analysis. The KMO value stands at 0.900, reflecting a strong level of sampling adequacy. Additionally, Bartlett's Test yields a chi-square statistic of 1269.171 with 10 degrees of freedom and a significance level of 0.000. This indicates that the data does not conform to an identity matrix, suggesting there are notable correlations among the variables. Consequently, this allows us to proceed with factor analysis on the dataset provided.

4.4.2 Communalities for the influence of EE teaching methods on VCI

	Initial	Extraction
Experiential learning	1.000	.802
Lecture based teaching	1.000	.827
Exhibitons	1.000	.802
Guest speaker and mentorship	1.000	.804
simulations	1.000	.778

Extraction Method: Principal Component Analysis.

Table 4.4.2: Communalities for the influence of EE teaching methods on VCI

All variables displayed a communalities value of 1.000, indicating that they were completely represented. The communalities derived from Principal Component Analysis are as follows: Lecture-based teaching (0.827), Experiential learning (0.802), Exhibitions (0.802), Guest speaker and mentorship (0.804), and Simulations (0.778). These figures reflect the degree of variance each variable account for within the factors; notably, the experiential learning variable has the highest extraction value, signifying its strongest correlation with the identified factors.

4.4.3 Total variance for the influence of EE teaching methods on VCI

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.013	80.264	80.264	4.013	80.264	80.264
2	.308	6.155	86.419			
3	.265	5.309	91.728			
4	.231	4.612	96.339			
5	.183	3.661	100.000			

Extraction Method: Principal Component Analysis.

Table 4.4.3 : Total variance for the influence of EE teaching methods on VCI

The Total Variance table presents details regarding eigenvalues and the percentage of total variance attributed to each component in the factor analysis. It indicates that the initial eigenvalue for the first component is 4.013, which corresponds to a variance of 80.264%, thus representing g the majority of variability among the variables. At this stage, carriers classified under General cumulatively account for 80.264%. The eigenvalue for the second component is 0.308, which contributes an additional 6.155% to the variance. The subsequent three components account for 5.309%, 4.612%, and 3.661%, respectively.

4.4.4. Components matrix for the influence of EE teaching methods on VCI

	Component
	1
Lecture based teaching	.896
Experiential learning	.909
Exhibitons	.895
Guest speaker and mentorship	.897
Simulations	.882
Extraction Method: Principal Component Analysis.	
a. 1 components extracted.	

Table 4.4.4: Components matrix for the influence of EE teaching methods on VCI

The Component Matrix illustrates the degree to which each variable relates to the newly derived single component obtained via Principal Component Analysis. The high loadings for all variables indicate a strong association with the underlying latent variable. Specifically, the loading values are as follows: Lecture-based teaching (0.896), Experiential learning (0.909), Exhibitions (0.895), Guest speaker and mentorship (0.897), and Simulations (0.882). Each of these values exceeds 0.80, demonstrating a significant correlation between each variable and the extracted component, suggesting that a single factor accounts for a substantial amount of variance within the dataset.

4.4.5 The influence of EE teaching methods on venture creation intent descriptive analysis.

	N	Minimum	Maximum	Mean	Std. Deviation
Lecture based teaching	300	1	5	2.97	1.389
Experiential learning	300	1	5	2.98	1.472
Exhibitons	300	1	5	2.93	1.424
Guest speaker and mentorship	300	1	5	2.98	1.408
simulations	300	1	5	2.91	1.402
Valid N (listwise)	300				

Table 4.4.5: Descriptive analysis of influence of EE teaching methods on VCI

In entrepreneurship education, teaching methods employed are rated at a moderate scale of effectiveness. The means hover about 2.9, indicating that the participants see these methods as sort of effective but not very effective. This underscores a significant variability in perceptions, as evidenced by the standard deviations, where while some respondents perceive these methods as beneficial, others might not be on the same page in terms of this view. More detailed analysis

could be needed to investigate the underlying factors contributing to these perceptions and to find ways to improve the teaching methods of EE

4.4.6 The influence of EE teaching methods on venture creation intent: Faculty based analysis

faculty		EC011	EC012	EC013	EC014	EC015
School of Agricultural Sciences	N	34	34	34	34	34
	Min	1	1	1	1	1
	Max	5	5	5	5	5
	Mean	2.71	2.68	2.59	2.53	2.35
	Std. Dev	1.360	1.451	1.373	1.440	1.125
School of Art and Design	N	20	20	20	20	20
	Min	1	1	1	1	1
	Max	5	5	5	5	
	Mean	2.65	2.75	2.75	2.70	3.05
	Std. Dev	1.565	1.482	1.446	1.174	1.572
School of Engineering Sciences and Technology	N	61	61	61	61	61
	Min	1	1	1	1	1
	Max	5	5	5	5	5
	Mean	3.10	3.07	3.15	3.16	3.16
	Std. Dev	1.411	1.559	1.424	1.428	1.529
School of entrepreneurship and business sciences	N	140	140	140	140	140
	Min	1	1	1	1	1
	Max	5	5	5	5	5
	Mean	3.04	3.00	2.95	2.95	2.92
	Std. Dev	1.375	1.469	1.456	1.401	1.378
School of Health Sciences and Technology	N	6	6	6	6	6
	Min	1	1	1	1	1
	Max	5	5	5	5	5
	Mean	2.67	3.17	2.67	3.17	3.00
	Std. Dev	1.366	1.472	1.633	1.329	1.095

School of hospitality and tourism	**N**	**20**	**20**	**20**	**20**	**20**
	Min	1	1	1	1	1
	Max	5	5	5	5	5
	Mean	3.35	3.60	3.40	3.75	3.25
	Std. Dev	1.424	1.095	1.314	1.372	1.482
School of natural sciences and mathematics	N	5	5	5	5	5
	Min	1	1	1	1	1
	Max	5	5	5	5	5
	Mean	2.60	2.80	2.80	3.00	3.00
	Std. Dev	1.517	1.304	1.304	1.414	.707
School of wildlife and environmental sciences	N	14	14	14	14	14
	Min	1	1	1	1	1
	Max	5	5	5	5	5
	Mean	2.57	2.57	2.29	2.71	2.36
	Std. Dev	1.158	1.651	1.139	1.437	1.336

Table 4.4.6: Descriptive analysis based on faculty for the influence of EE teaching methods on VCI

Key

Item Code	statements
EC011	Lecture based teaching
EC012	Experiential learning
EC013	Problem based learning
EC014	Guest speaker and mentorship
EC015	Simulations

The average ratings for teaching methods among faculty are relatively low, falling below 3, which suggests that these methods are perceived as moderately effective. The School of Hospitality and Tourism achieved the highest average score for guest speakers and mentorship at 3.75. Additionally, this school also recorded the top mean score for experiential learning at 3.60, reflecting a stronger preference for this method. Notably, the standard deviations indicate considerable variation in opinions among respondents. For example, the School of Art and Design had a standard deviation of 1.565 for lecture-based teaching, highlighting the disparity between the lecturer's expectations and the actual experience. Conversely, the School of Wildlife reported

the lowest overall mean scores, with exhibitions at 2.29 and simulations at 2.36, suggesting that these teaching methods are less favored within this group.

4.4.7 Influence of EE teaching methods on venture creation intent model fit

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.588	.346	.334	.75499	.346	31.046	5	294	.000

a. Predictors: (Constant), simulations, Lecture based teaching, Guest speaker and mentorship, Exhibitons, Experiential learning

Table 4.4.7: Influence of EE teaching methods on venture creation intent model fit

The teaching methods model demonstrates a moderate correlation with entrepreneurial intention ($R = 0.588$) and accounts for nearly one-third of the variance ($R^2 = 0.346$). The stability of this model is reflected in an adjusted R^2 of 0.334, while a standard error of 0.75499 indicates an adequate fit. The F Change statistic reveals that the combination of predictors—such as simulations, lecture-based instruction, guest speakers, mentorship, exhibitions, and experiential learning—significantly enhances the model ($F = 31.046$, $p < 0.000$). These results underscore the importance of these teaching approaches in improving entrepreneurship education, implying that further enhancements in any of these instructional methods could lead to even better outcomes.

4.4.8 Influence of EE teaching methods on venture creation component matrix

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.852	.111		16.676	.000
	Experiential learning	.378	.059	.568	6.438	.000
	Lecture based teaching	.037	.058	.059	.640	.523
	Exhibitons	-.056	.056	-.086	-.994	.321
	Guest speaker and mentorship	.119	.057	.181	2.105	.036
	simulations	-.107	.055	-.163	-1.958	.051

a. Dependent Variable: Intention

Table 4.4.8 : Influence of EE teaching methods on venture creation component matrix

Experiential learning emerged as the only key and positive predictor of intention (β = 0.568, p < 0.001). In contrast, lecture-based teaching showed a negligible effect (β = 0.059, p = 0.523). The association with guest speaker/mentorship was modestly positive (β = 0.181, p = 0.036), while simulations exhibited a nearly significant negative trend (β = -0.163, p = 0.051). Grouping by exhibitions (β = -0.086, p = 0.321) yielded inconclusive results. This suggests that experiential methods and mentorship have a favorable influence on intention, whereas traditional lectures and simulations appear to hinder it.

4.4.9 Influence of EE teaching methods on venture creation intent ANOVA

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	88.482	5	17.696	31.046	.000[b]
	Residual	167.583	294	.570		
	Total	256.065	299			

a. Dependent Variable: Intention

b. Predictors: (Constant), simulations, Lecture based teaching, Guest speaker and mentorship, Exhibitons, Experiential learning

Table 4.4.9: ***Influence of EE teaching methods on venture creation intent ANOVA***

The ANOVA summary results demonstrate that the teaching methods model is a significant predictor of entrepreneurial intention, as shown by a regression sum of squares of 88.482 and an F statistic of 31.046 (p < 0.000). The residual sum of squares is 167.583, leading to a total sum of squares of 256.065. These results validate the effectiveness of the predictors—simulations, lecture-based instruction, guest speakers and mentorship, exhibitions, and experiential learning—on influencing entrepreneurial intentions.

4.4. 10 Influence of EE teaching methods on VCI qualitative responses.

Findings from lecturers identified startups, projects, mentorship, simulations and internships as essential teaching methods.

Lecturer 1:

To improve venture creation through entrepreneurship education, it is essential to encourage project-based learning that addresses community challenges. For example, students could engage in initiatives focused on providing affordable solar energy solutions for rural areas. This hands-

on approach not only enhances learning but also fosters innovation that positively influences society.

Lecturer 8:

Collaborating with faculties in business and social sciences can enrich our curriculum. By working together, as engineers, we can equip students with a well-rounded understanding of how engineering solutions can meet social demands, such as access to clean water and affordable housing. This strategy prepares them to establish enterprises that are both socially responsible and sustainable.

Lecturer 3:

Furthermore, it is vital to have accomplished Zimbabwean entrepreneurs share their experiences. This not only motivates students but also provides insight into the realities of starting and managing a business in Zimbabwe. Organizing innovation challenges that require students to present their ideas to local investors can also encourage an entrepreneurial mindset.

These teaching strategies offer students practical experience, essential skills, and real-world applications, thereby preparing them to successfully launch and expand their ventures. By implementing these approaches, entrepreneurship education programs can foster the intention to create ventures and cultivate crucial skills in students.

4.4.11 Integrating qualitative and quantitative results

The findings indicate that educators in entrepreneurship education place significant emphasis on interdisciplinary connections and project-based learning to equip business students for ventures that contribute to social stability. Lecturer 1 highlights the significance of undertaking projects that address local issues, such as the availability of affordable solar energy. Lecturer 8 advocates for collaboration with both business and social science departments to enhance the curriculum. All lecturers unanimously agreed on the value of involving successful entrepreneurs and organizing innovation challenges to provide students with practical, real-world experience. However, the perceptions regarding the effectiveness of these approaches were moderately positive, with average scores around 2.9 and notable variability across different faculties. For instance, the School of Hospitality and Tourism reported high effectiveness in mentorship and guest speaker initiatives, scoring 3.75 and 3.60, respectively, while the School of Wildlife and Environmental Sciences recorded lower effectiveness in exhibitions and simulations, with scores of 2.29 and 2.36. The teaching methods model explains the highest variance (34.6%) in the dependent variable

(entrepreneurial intention), yielding a moderate correlation (R = 0.588). Thus, while these teaching strategies are impactful, their effectiveness is not uniformly acknowledged. The F Change statistic is significant (31.046, p < 0.000), suggesting that the predictors collectively enhance the model. This study advocates for a broader research agenda to explore factors influencing these perceptions and to enhance the effectiveness of entrepreneurship and business education across all disciplines.

4.5 Influence of Entrepreneurship Education Assessment Methods On VCI.

4.5.1 Sampling adequacy for the Influence of EE assessment methods on VCI.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**.911**
Bartlett's Test of Sphericity	Approx. Chi-Square	1329.984
	Df	10
	Sig.	.000

Table 4.5.1: Sampling adequacy for the Influence of EE assessment methods on VCI.

The KMO and Bartlett's Test results confirm the data's suitability for factor analysis. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is 0.911, indicating an excellent level of sampling adequacy. Meanwhile, Bartlett's Test of Sphericity reveals an approximate chi-square value of 1329.984, with 10 degrees of freedom and a significance level of 0.000. This strong evidence suggests that the correlation matrix is not an identity matrix, implying that all variables are interrelated. Together, these findings affirm that factor analysis can be appropriately performed on the data.

4.5.2 Communalities for the influence of EE assessment methods on VCI

Communalities

	Initial	Extraction
Examinations	1.000	.795
Projects	1.000	.815
exhibitions	1.000	.805
Business plan	1.000	.834
Business start up	1.000	.827

Extraction Method: Principal Component Analysis.

Table 4.5.2: Communalities for the influence of EE assessment methods on VCI

Table 4.5.2 illustrates the proportion of total variance (data variance) associated with each variable in relation to the common factors identified through Principal Component Analysis. The overall communality reaches 1.000 when considering all variables. The communalities following

extraction for each variable are as follows: Examinations (0.795), Projects (0.815), Exhibitions (0.805), Business Plan (0.834), and Business Start-Up (0.827). These extraction values suggest that a significant portion of the variance for each variable is accounted for by the underlying factors, with the Business Plan exhibiting the highest communality, signifying a robust connection with the extracted factor.

4.5.3 Total variance for the influence of EE assessment methods on VCI

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.075	81.505	81.505	4.075	81.505	81.505
2	.266	5.312	86.816			
3	.248	4.956	91.772			
4	.223	4.453	96.226			
5	.189	3.774	100.000			

Extraction Method: Principal Component Analysis.

Table 4.5.3: Total variance for the influence of EE assessment methods on VCI

As illustrated in the Total Variance Explained table, the first component has an eigenvalue of 4.075, which accounts for 81.505% of the overall variance, indicating its substantial importance within the dataset. In contrast, the second component contributes significantly less, explaining only 0.266 (5.312%) of the variance. This is followed by the third component at 4.956%, the fourth at 4.453%, and the fifth at 3.774%. This pattern emphasizes that the primary component is the principal driver of variation in the data.

4.5.4 Component matrix for the influence for the influence of EE assessment methods on VCI

Component Matrix[a]	
	Component
	1
Examinations	.891
Projects	.903
exhibitions	.897
Business plan	.913
Business start up	.909

Extraction Method: Principal Component Analysis.

Table 4.5.4: Component matrix for the influence for the influence of EE assessment methods on VCI

The Component Matrix presents the factor loadings for five variables derived from Principal Component Analysis, revealing that all loadings demonstrate robust relationships with the fundamental component. These findings emphasize the important roles each variable play in the overall construct under examination.

4.5.5. The influence of EE assessment methods on VCI descriptive analysis.

	N	Minimum	Maximum	Mean	Std. Deviation
Examinations	300	1	5	2.78	1.382
Projects	300	1	5	2.72	1.435
Exhibitions	300	1	5	2.77	1.367
Business plan	300	1	5	2.84	1.422
Business start up	300	1	5	2.78	1.402
Valid N (listwise)	300				

Table 4.5.5: Descriptive statistics for the influence of EE assessment methods on VCI.

According to the assessment methods, the means ranged from 2.72 to 2.84, suggesting that participants perceive these methods as somewhat effective, albeit not overwhelmingly so. The Business Plan assessment received the highest mean score of 2.84, indicating a more positive perception among students regarding this type of assessment. The standard deviations of the various assessment methods reveal a moderate variability in responses, with values between 1.367 and 1.435. This suggests a generally shared view within many groups about the effectiveness of these person-centered techniques, but also highlights a notable divergence in opinions. Conversely, Projects received the lowest mean score of 2.72, implying that participants do not regard this method as particularly effective compared to others. This outcome may indicate a need for further enhancement of how projects are integrated into the curriculum.

4.5.6 The influence of EE assessment methods on venture creation intent: Faculty based analysis

faculty		EC021	EC022	EC023	EC024	EC025
school of agricultural sciences	N	34	34	34	34	34
	Min	1	1	1	1	1
	Max	5	5	5	5	5
	Mean	2.76	2.82	2.79	2.91	2.82
	Std. Dev	1.458	1.487	1.473	1.379	1.507
school of art and design	N	20	20	20	20	20
	Min	1	1	1	1	1
	Max	5	5	5	5	5
	Mean	2.65	2.45	2.50	2.50	2.35
	Std. Dev	1.089	1.468	1.235	1.539	1.348
school of engineering sciences and technology	N	61	61	61	61	61
	Min	1	1	1	1	1
	Max	5	5	5	5	5
	Mean	2.74	2.67	2.89	2.98	2.79
	Std. Dev	1.389	1.411	1.330	1.408	1.485
School of entrepreneurship and business sciences	N	140	140	140	140	140
	Min	1	1	1	1	1
	Max	5	5	5	5	5
	Mean	2.69	2.63	2.64	2.74	2.66
	Std. Dev	1.363	1.426	1.353	1.442	1.381

school of health sciences and technology	N	6	6	6	6	6
	Min	4	4	2	4	3
	Max	5	5	5	5	5
	Mean	4.50	4.67	4.17	4.50	4.33
	Std. Dev	0.548	0.516	1.329	0.548	0.816
school of hospitality and tourism	N	20	20	20	20	20
	Min	1	1	1	1	2
	Max	5	5	5	5	5
	Mean	3.30	2.95	3.00	2.90	3.25
	Std. Dev	1.490	1.395	1.338	1.334	1.164
school of *natural sciences*	N	5	5	5	5	5
	Min	1	1	1	1	1
	Max	5	5	5	5	4
	Mean	2.20	2.80	2.60	2.60	2.40
	Std. Dev	1.789	1.643	1.817	1.817	1.140
school of *wildlife*	N	14	14	14	14	14
	Min	1	1	1	1	1
	Max	5	5	5	5	5
	Mean	2.86	2.86	3.07	2.79	3.21
	Std. Dev	1.292	1.351	1.328	1.188	1.188

Table 4.5.6: Descriptive statistics of faculties for the influence of EE assessment methods on VCI

Key

Item Code	statements
EC021	Examinations
EC022	Projects
EC023	Exhibitions
EC024	Business plan
EC025	Business start up

Mean scores for the assessment methods exhibited considerable differences across faculties. The highest overall scores were recorded for projects (4.67) and examinations (4.50) in the School of Health Sciences and Technology, indicating a strong positive assessment of these methods. In contrast, faculties such as Art and Natural Sciences received the lowest scores, particularly concerning projects and business startup evaluations. The standard deviations for the various assessment methods indicate a significant range in the level of agreement among respondents. Notably, the variability was lower for projects, with a standard deviation of 0.516, pointing to a more uniform perception of effectiveness in this area compared to other faculties. Conversely, the School of Natural Sciences displayed high variability, especially in examinations, which had a standard deviation of 1.789, reflecting a wide array of opinions. Consistently, the School of Natural Sciences rated assessment methods lower, with mean scores around 2.20 for examinations and 2.40 for business startups. This data may highlight potential areas for enhancement in curriculum design and engagement strategies.

4.5.7 Influence of EE assessment methods on VCI model fit

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.148[a]	.022	.005	.92302	.022	1.312	5	294	.259

a. Predictors: (Constant), Business startup, Examinations, exhibitions, projects, Business plan

Table 4.5.7: Influence of EE assessment methods on VCI model fit

A summary of the assessment methods reveals a low correlation with entrepreneurial intention ($R = 0.148$), with only 2.2% of the variance accounted for ($R^2 = 0.022$). The adjusted R^2 value of 0.005 indicates limited explanatory strength regarding cedar variables when considering the number of predictors involved. The standard error of the estimate stands at 0.92302, signifying a poor model fit. The F change associated with business start-ups, examinations, exhibitions, projects, and business plans is 1.312 ($p = 0.259$; $p > 0.05$), showing no significant impact on entrepreneurial intentions.

4.5.8 Influence of EE assessment methods on VCI coefficient

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.918	.129		22.559	.000
	Business start up	.160	.069	.239	2.306	.022
	projects	.047	.070	.072	.664	.507
	exhibitions	-.042	.072	-.063	-.590	.556
	Business plan	-.092	.074	-.142	-1.249	.213
	Examinations	-.052	.074	-.079	-.707	.480

a. Dependent Variable: Intention

Table 4.5.8 1: Influence of EE Teaching methods on VCI coefficient

The regression analysis indicates that business start-up activities (β = 0.239, p = 0.022) stand out as the sole significant predictor of intention, demonstrating a positive correlation. In contrast, the other factors—projects (β = 0.072, p = 0.507), exhibitions (β = -0.063, p = 0.556), business plans (β = -0.142, p = 0.213), and examinations (β = -0.079, p = 0.480)—do not show significance. Intention, alongside information entrepreneurship and business initiation, presents various opportunities across different stages of business establishment. This implies that these elements influence intention in a manner that is connected to actual involvement in starting a business. Conversely, inaction, which includes only formal or preparatory measures like planning and exams, appears to have a minimal or non-significant impact within the proposed model.

4.5.9 Influence of EE assessment methods on VCI ANOVA

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	5.589	5	1.118	1.312	.259[b]
	Residual	250.477	294	.852		
	Total	256.065	299			

a. Dependent Variable: Intention

b. Predictors: (Constant), Business startup, Examinations, exhibitions, projects, Business plan

Table 4.5.9: Influence of EE assessment methods on VCI anova

The regression sum of squares for the assessment methods model amounts to 5.589, with 5 degrees of freedom, resulting in a mean square of 1.118. The F statistic is calculated to be 1.312, which is not significant with a p-value of 0.259. Additionally, the residual sum of squares is 250.477,

leading to a total sum of squares of 256.065. These findings suggest that factors such as business start-up, examinations, exhibitions, projects, and business planning do not serve as significant predictors of entrepreneurial intentions, indicating they have little to no meaningful effect on the assessment method applied in entrepreneurship.

4.5.10 Influence of EE assessment methods on VCI qualitative responses

Lecturers contended that conventional assessment techniques, including exams, assignments, and class tests, fail to effectively gauge entrepreneurial competencies. The following insights were provided by the lecturers:

Lecturer 1:

A business plan serves as a holistic approach to assess students' comprehension of concepts within the school of entrepreneurship and business sciences, their capacity for critical and strategic thinking, as well as their proficiency in formulating a business idea.

Lecturer 4:

Skill Development Assessment: Introduce assessments that evaluate the acquisition of vital entrepreneurial skills, including creativity, problem-solving, and project management. Such evaluations can be conducted through hands-on projects, simulations, and case studies that enable students to implement their knowledge in practical, real-world contexts.

Lecturer 9:

Peer Feedback and Collaboration: Foster peer evaluations and collaborative initiatives that allow students to provide critiques on each other's business ideas and plans. This practice can deepen their awareness of market demands and enhance their intentions for venture creation through constructive feedback.

In the realm of entrepreneurship education, assessments should focus on the appraisal of practical abilities rather than solely theoretical knowledge. This methodology acknowledges that venture creation is a hands-on, experiential domain requiring students to cultivate skills applicable in real-world situations.

4.5.11 Integration of quantitative and qualitative results.

Entrepreneurship education assessment methods are perceived as somewhat effective, with mean scores ranging from 2.72 for the New Product Development Plan to 2.84 for the Business Plan, indicating a slight favor for the latter. In contrast, significant disparities exist among the faculties; the School of Health Sciences and Technology achieved the highest satisfaction ratings for projects (4.67) and examinations (4.50). Conversely, the Natural Faculty consistently reported lower satisfaction levels, with examinations rated at 2.20 and business start-ups at 2.40. Most assessment methods, aside from a few exceptions, are viewed positively, but this does not correlate well (R = 0.148) with entrepreneurial intentions in the assessment methods model, suggesting minimal impact on fostering an entrepreneurial mindset. Lecturers commonly find that traditional assessments fail to accurately measure entrepreneurial competencies and advocate for substantial changes in graduate entrepreneurship courses, such as the integration of real-world projects or peer feedback. However, there remains a lack of consensus on the most effective assessment strategies. Overall, while there is a collective acknowledgment of the need for improvement, perceptions regarding the methods and their effectiveness vary significantly across faculties.

4.6 Influence of EE Content On VCI.

4.6.1 Sampling adequacy for the influence of entrepreneurship education content on VCI.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**.973**
Bartlett's Test of Sphericity	Approx. Chi-Square	3107.062
	Df	45
	Sig.	.000

Table 4.6.1: KMO and Bartlett's test for the adequacy of the influence of entrepreneurship education content on venture creation intent.

The KMO measure of sampling adequacy registered at 0.973, indicating a high level of sampling adequacy. This value implies that the variables related to EE content exhibit strong correlations, making them suitable for factor analysis. Additionally, Bartlett's Test of Sphericity produced an approximate chi-square value of 3107.062 with 45 degrees of freedom ($p < 0.000$). This significant finding confirms that the correlation matrix differs from the identity matrix, thereby reinforcing the rationale for performing factor analysis on this dataset.

4.6.2 Component matrix of the influence of EE content on VCI.

	Component
	1
Introduction to school of entrepreneurship and business sciences	.885
Business Plan Development	.883
Market research	.889
Financial management	.879
Business Legal Environment	.871
Marketing strategies	.883
Innovation and creativity	.883
Networking and relationship building	.875
Operations management	.867
People Management	.882
Extraction Method: Principal Component Analysis.	

Table 4.6.2: Component matrix of the influence of entrepreneurship education content on venture creation intent.

The Principal Component Analysis (PCA) revealed one primary component, as shown in the Component matrix Table 4.6.2. The loadings demonstrate a robust correlation among the variables and the underlying factor, with each loading surpassing 0.7, suggesting a substantial contribution to the component.

4.6.3 Communalities of the influence of EE content on VCI.

	Extraction
Introduction to school of entrepreneurship and business sciences	.783
Business Plan Development	.781
Market research	.789
Financial management	.773
Business Legal Environment	.758
Marketing strategies	.780
Innovation and creativity	.779
Networking and relationship building	.766
Operations management	.752
People Management	.778
Extraction Method: Principal Component Analysis.	

Table 4.6.3: Communalities of the influence of EE content on VCI.

The communalities for each variable, which represent the proportion of variance in each variable explained by the extracted factor, are presented in Table 4.6.3. These values indicate that a

substantial amount of variance in each variable is accounted for by the extracted component, further supporting the validity of the factor analysis.

4.6.4 Total variance for the influence of EE content on VCI.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.741	77.407	77.407	7.741	77.407	77.407
2	.312	3.118	80.524			
3	.305	3.054	83.578			
4	.283	2.832	86.410			
5	.279	2.787	89.198			
6	.248	2.479	91.677			
7	.236	2.358	94.035			
8	.217	2.169	96.203			
9	.200	2.001	98.204			
10	.180	1.796	100.000			

Extraction Method: Principal Component Analysis.

Table 4.6.4: ***Total variance explained on EE content influences VCI.***

The table presents a summary of the variance accounted for by the extracted component. The initial factor accounted for 77.407% of the total variance. This substantial percentage signifies a high level of explainability, suggesting a strong correlation between the extracted factor and the EE characteristic. Additional results from the KMO, Bartlett's Test, and PCA validate the appropriateness of the dataset for conducting factor analysis. This significant outcome reveals that all variables exhibit notable loadings exceeding 0.50, contributing to substantial communalities, which clearly demonstrate the interconnectedness of variables that are relevant for the foundational analysis of the EE content.

4.6.5 Descriptive statistics for the influence of EE content on VCI.

	N	Minimum	Maximum	Mean	Std. Deviation
Introduction to school of entrepreneurship and business sciences	300	1	5	2.95	1.435
Business Plan Development	300	1	5	3.00	1.413
Market research	300	1	5	3.06	1.440
Financial management	300	1	5	2.98	1.419
Business Legal Environment	300	1	5	3.01	1.418
Marketing strategies	300	1	5	2.98	1.415
Innovation and creativity	300	1	5	3.00	1.406
Networking and relationship building	300	1	5	2.98	1.356
Operations management	300	1	5	2.93	1.407
People Management	300	1	5	3.03	1.412
Valid N (listwise)	300				

Table 4.6.5: ***Descriptive statistics for the influence of EE content on VCI.***

The average scores for entrepreneurship education (EE) content typically fall between 2.93 and 3.06, indicating that participants regard the content as relatively significant for entrepreneurship education. Among the topics, Market Research received the highest average score of 3.06, highlighting its particular relevance in this context. Additionally, the standard deviations of the educational responses across the various content areas show some variability, generally hovering around 1.4, which reflects a moderate range of responses. For instance, the Introduction to Entrepreneurship has a standard deviation of 1.435, suggesting that opinions on its importance vary among participants. Conversely, the content areas of Operations Management (mean = 2.93) and Networking and Relationship Building (mean = 2.98) received lower evaluations, indicating that participants may not view these areas as critically important for the curriculum.

4.6.6 The influence of EE content on VCI: Faculty based analysis

		ITEM CODE									
Faculty		**EC01**	**EC02**	**EC03**	**EC04**	**EC05**	**EC06**	**EC07**	**EC08**	**EC09**	**EC010**
School of agricultural sciences	N	34	34	34	34	34	34	34	34	34	34
	Min	1	1	1	1	1	1	1	1	1	1
	Max	5	5	5	5	5	5	5	5	5	5
	Mean	2.94	3.06	2.82	2.76	2.85	2.85	2.76	2.85	2.76	3.06
	Std. Dev	1.516	1.496	1.507	1.327	1.438	1.329	1.372	1.282	1.437	1.391
School of art and design	N	20	20	20	20	20	20	20	20	20	20
	Min	1	1	1	1	1	1	1	1	1	1
	Max	5	5	5	5	5	5	5	5	5	5
	Mean	2.30	2.60	2.45	2.25	2.55	2.55	2.45	2.40	2.60	2.55
	Std. Dev	1.218	1.353	1.276	1.020	1.234	1.276	1.146	1.273	1.353	1.317
School of engineering sciences and technology	N	61	61	61	61	61	61	61	61	61	61
	Min	1	1	1	1	1	1	1	1	1	1
	Max	5	5	5	5	5	5	5	5	5	5
	Mean	2.77	2.82	2.93	2.95	2.89	2.85	3.02	3.00	2.80	2.97
	Std. Dev	1.407	1.385	1.340	1.431	1.473	1.470	1.408	1.366	1.400	1.291
School of entrepreneurship and business sciences	N	140	140	140	140	140	140	140	140	140	140
	Min	1	1	1	1	1	1	1	1	1	1
	Max	5	5	5	5	5	5	5	5	5	5
	Mean	3.10	3.09	3.20	3.16	3.16	3.11	3.09	3.06	3.06	3.15
	Std. Dev	1.461	1.429	1.465	1.442	1.390	1.445	1.447	1.382	1.443	1.483
School of health sciences and technology	N	6	6	6	6	6	6	6	6	6	6
	Min	1	1	1	1	1	1	1	1	1	1
	Max	5	5	5	5	5	5	5	5	5	5
	Mean	2.83	3.33	3.00	2.67	2.50	3.17	2.67	3.33	2.67	3.33
	Std. Dev	1.472	1.366	1.265	1.633	1.378	1.169	1.366	1.366	1.033	1.211
School of hospitality and tourism	N	20	20	20	20	20	20	20	20	20	20
	Min	1	1	1	1	1	1	1	1	1	1
	Max	5	5	5	5	5	5	5	5	5	5
	Mean	3.35	3.20	3.45	3.20	3.25	3.35	3.25	3.35	3.10	3.15

	Std. Dev	1.268	1.361	1.638	1.436	1.517	1.387	1.410	1.348	1.373	1.348
School of natural sciences and mathematics	N	5	5	5	5	5	5	5	5	5	5
	Min	1	1	1	1	1	1	1	1	1	1
	Max	5	5	5	5	5	5	5	5	5	5
	Mean	4.20	3.80	4.00	3.80	4.40	3.20	4.40	3.60	4.20	3.80
	Std. Dev	1.304	.837	.707	1.304	.894	.837	.548	1.342	.837	1.304
School of wildlife and environmental sciences	N	14	14	14	14	14	14	14	14	14	14
	Min	1	1	1	1	1	1	1	1	1	1
	Max	5	5	5	5	5	5	5	5	5	5
	Mean	2.29	2.64	2.71	2.36	2.50	2.50	2.79	2.36	2.50	2.07
	Std. Dev	1.139	1.499	1.383	1.393	1.345	1.506	1.369	1.151	1.225	1.269

Table 4.6.6: Descriptive statistics for the influence of EE content on VCI based on faculty.

Key

Item Code	statements
EC001	Introduction to entrepreneurship
EC002	Business Planning
EC003	Market research
EC004	Financial management
EC005	Business Legal Environment
EC006	Marketing strategies
EC007	Innovation and creativity
EC008	Networking and relationship building
EC009	Operations management
EC010	People Management

Mean scores across different content areas reveal notable differences among faculties. The school of natural sciences recorded the highest mean scores, particularly in Introduction to Entrepreneurship (4.20) and Innovation and Creativity (4.40), indicating a strong perceived significance of these subjects. Conversely, the school of wildlife and environmental sciences reported some of the lowest scores, particularly in Introduction to Entrepreneurship (2.29) and People Management (2.07). There is substantial variability in standard deviations among the

faculties. For instance, the mean score for Introduction to Entrepreneurship in the school of Agricultural Sciences was 2.94, accompanied by a standard deviation of 1.516, highlighting differing perceptions of its importance. In contrast, the school of natural sciences exhibited more uniformity across most content areas, suggesting that respondents from these departments held more definitive views on what constitutes best practices. The school of wildlife and environmental sciences consistently assigned low ratings to various content areas, especially in Financial Management (2.36) and People Management (2.07), indicating potential opportunities for program improvement.

4.6.7 Influence of EE content on VCI model fit

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.696[a]	.485	.467	.67560	.485	27.201	10	289	.000

a. Predictors: (Constant), People Management, Marketing strategies, Operations management, Business Legal Environment, Networking and relationship building, Innovation and creativity, Introduction to school of entrepreneurship and business sciences, Financial management, Business Plan Development, Market research

Table 4.6.7: Influence of EE content on VCI model fit

The content predictors model demonstrates a robust association with entrepreneurial intention ($R = 0.696$), accounting for 48.5% of the variance ($R^2 = 0.485$). The adjusted R^2 of 0.467 reflects stability, while a standard error of 0.67560 indicates a satisfactory fit. The model is statistically significant (F change = 27.201, $p < 0.000$), validating that the predictors, which encompass different facets of business education, significantly influence entrepreneurial intentions.

4.6.8 Influence of EE content on VCI coefficients

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.554	.102		15.176	.000
	Introduction to entrepreneurship	.333	.053	.516	6.242	.000
	Business Plan Development	.066	.054	.101	1.220	.223
	Market research	.010	.053	.015	.181	.856
	Financial management	-.036	.053	-.055	-.671	.503
	Business Legal Environment	-.049	.051	-.075	-.947	.344
	Marketing strategies	.003	.054	.005	.059	.953
	Innovation and creativity	.097	.055	.147	1.766	.079
	Networking and relationship building	.035	.055	.052	.650	.516
	Operations management	-.011	.051	-.016	-.211	.833
	People Management	.026	.054	.039	.480	.632

a. Dependent Variable: Intention

Table 4.6.8: ***Influence of EE content on VCI coefficients***

From the analysis, it is evident that the introduction to entrepreneurship stands out as the sole significant predictor of intention ($\beta = 0.516$, $p < 0.001$). There exists a positive correlation with innovation and creativity ($\beta = 0.147$, $p = 0.079$), whereas financial management, the business legal environment, and operations management show a negative association at minimal levels ($p > 0.05$). Other factors, including marketing strategies, networking, and people management, do not demonstrate significance ($p > 0.05$). These findings highlight the critical role of foundational entrepreneurship education in influencing intention, while offering limited support for the relevance of other curricular components.

4.6.9 Influence of EE content on VCI ANOVA

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	124.155	10	12.415	27.201	.000[b]
	Residual	131.911	289	.456		
	Total	256.065	299			

a. Dependent Variable: Intention

b. Predictors: (Constant), People Management, Marketing strategies, Operations management, Business Legal Environment, Networking and relationship building, Innovation and creativity, Introduction to school of entrepreneurship and business sciences, Financial management, Business Plan Development, Market research

Table 4.6.9: Influence of EE Teaching methods on VCI ANOVA

The content predictors ANOVA results indicate a regression sum of squares 124.155 with 10 df (mean square 12.415). F statistic = 27.201, $p < 0.000$ Consequently, the total sum of squares is 256.065 with a residual sum of squares of 131.911. The implication to this is that all the predictors as a whole present a strong influence on the intention to engage in entrepreneurial activity.

4.6.10 Influence of EE content on venture creation qualitative findings.

Lecturers emphasized the significance of integrating modern subjects such as innovation and creativity, business simulations, collaboration, networking, and social entrepreneurship into the curriculum. Below are some key points from their feedback:

Innovation and Creativity: Courses designed to nurture innovative thinking and creativity are essential. Such content equips students with the skills necessary to conceive and assess new business ideas that fulfill market demands.

Business Planning: It is crucial for students to learn how to develop effective business plans, which encompass market analysis, competitive strategy, and operational planning. This foundational knowledge enables them to clearly express their business vision and strategy.

Financial Literacy: A solid grasp of financial principles, including budgeting, funding avenues, and financial management, is vital for students to make well-informed decisions regarding their ventures and maintain their operations.

Marketing and Sales: Instruction in marketing strategies, customer relationship management, and sales techniques is important. Students must acquire the skills to effectively reach and engage their target audiences.

Legal and Regulatory Environment: Understanding the legal facets of launching and operating a business, such as contracts, intellectual property rights, and adherence to local regulations, is imperative for successfully navigating the entrepreneurial landscape.

Technology Commercialization: Particularly in tech-centric settings, courses that focus on transforming innovative ideas into commercially viable products are crucial. This includes insights into market dynamics, product development, and strategies for scaling.

Project Management: Proficiency in project management enables students to efficiently allocate resources, time, and tasks to meet their business objectives, especially in resource-constrained environments.

Networking and Relationship Building: Educating students on how to cultivate and utilize professional networks can significantly enhance their capacity to find mentors, partners, and funding opportunities, all of which are vital for entrepreneurial success.

Sustainability and Social Entrepreneurship: Grasping the principles of sustainability and the creation of social value can direct students towards developing businesses that have a positive impact on their communities.

Universities should ensure that their curriculum includes content that mirrors current industry trends. Incorporating relevant and contemporary material is crucial for adequately preparing students for the swiftly evolving entrepreneurial landscape.

4.6.11 Integration of quantitative and qualitative responses

Entrepreneurship education (EE) content received an average score ranging from 2.93 to 3.06, reflecting a general consensus on its significance, particularly emphasizing Market Research, which scored 3.06. Both quantitative and qualitative findings suggest that improvements are necessary in the curriculum, especially in financial management (2.36) and people management (2.07), which received lower evaluations from the School of Wildlife and Environmental Sciences. The content predictors model demonstrates a strong correlation ($R = 0.696$) with entrepreneurial

intention, corroborating qualitative insights from lecturers regarding essential skills like financial literacy and marketing. However, there is a notable disparity in perceptions across different faculties; for instance, the School of Natural Sciences rated the introduction to entrepreneurship significantly higher (4.20) compared to the School of Wildlife and Environmental Sciences, which rated it much lower (2.29). Additionally, while quantitative data suggest that networking is regarded as less valuable than many other resources (2.98), qualitative responses emphasize its critical role, with both techno-entrepreneurs and clients identifying professional networking as vital for entrepreneurial success. Overall, although there is agreement across both data types regarding the necessity for relevant EE content, varying perceptions highlight existing gaps that require attention.

4.7 The Influence of University Incubation Centres On Venture Creation Intent.

4.7.1 KMO and Bartlett's Test for the influence of university incubation centres on VCI.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**.912**
Bartlett's Test of Sphericity	Approx. Chi-Square	1320.147
	Df	10
	Sig.	.000

Table 4.7.1: KMO and Bartlett's Test for the influence of university incubation centres on VCI.

The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy along with Bartlett's Test of Sphericity was implemented to evaluate the appropriateness of the data for factor analysis. The KMO value obtained was 0.912, which indicates a favorable level of sampling adequacy. Values exceeding 0.90 on the KMO scale are regarded as excellent, demonstrating that the variables associated with the incubation and innovation hub exhibit a strong correlation suitable for factor analysis. Regarding Bartlett's Test of Sphericity, the approximate Chi-Square value was 1320.147, with 10 degrees of freedom (df), and $p < 0.000$. This result provides robust evidence that the correlation matrix deviates from an identity matrix, implying that the variables are sufficiently correlated to justify conducting a factor analysis.

4.7.2. Component matrix for the influence of university incubation centres on VCI.

	Component
	1
The incubation and innovation hub assist entrepreneurs in networking with partners	.910
The incubation and innovation hub facilitate access to finance, venture capital, and guarantee	.903
The incubation and innovation hub help entrepreneurs to develop competitive and viable ideas	.914
The incubation and innovation help entrepreneurs to develop prototypes	.896
The incubation and innovation hubs help entrepreneurs to establish and manage business	.886
Extraction Method: Principal Component Analysis.	

***Table 4.7.2:* Component matrix for the influence of university incubation centres on VCI.**

The Principal Component Analysis (PCA) identified a single component, as shown in the Component Matrix table 4.7.2. These loadings indicate strong relationships between the variables and the underlying factor, with all loadings exceeding 0.7, signifying their substantial contribution to the component.

4.7.3 Proportion of variance explained for the influence of university incubation centres on venture creation intent.

	Extraction
The incubation and innovation hub assist entrepreneurs in networking with partners	.827
The incubation and innovation hub facilitate access to finance, venture capital, and guarantee	.816
The incubation and innovation hub help entrepreneurs to develop competitive and viable ideas	.835
The incubation and innovation help entrepreneurs to develop prototypes	.803
The incubation and innovation hubs help entrepreneurs to establish and manage business	.785
Extraction Method: Principal Component Analysis.	

***Table 4.7.3:* Communalities for the influence of university incubation centres on VCI.**

The communalities, which represent the proportion of variance in each variable explained by the extracted factor, are presented in table 4.7.3. These values indicate that a significant amount of variance in each variable is accounted for by the extracted component, further validating the factor analysis.

4.7.4 Total variance for the influence of university incubation centres on VCI.

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.066	81.312	81.312	4.066	81.312	81.312
2	.284	5.675	86.986			
3	.241	4.822	91.808			
4	.212	4.241	96.049			
5	.198	3.951	100.000			

Extraction Method: Principal Component Analysis.

Table 4.7.4: Total variance for the influence of university incubation centres on VCI

Table 4.6.4 illustrates the variance accounted for through Principal Component Analysis (PCA), highlighting the influence of university incubation centers on the intention to create ventures. The primary component alone accounts for an impressive 81.312% of the total variance, signifying its significant role. In contrast, the second component contributes a mere 5.675%, bringing the cumulative total to 86.986%. The third, fourth, and fifth components add to this percentage, albeit with lesser amounts, culminating in a complete 100% variance explained by all five components. This analysis indicates that the first component is crucial in elucidating the key factors driving entrepreneurial intentions among students linked to university incubation centers.

4.7.5 Descriptive statistics for the influence of university incubation centres on VCI.

	N	Min	Max	Mean	Std. Dev
The incubation and innovation hub assist entrepreneurs in networking with partners	300	1	5	2.99	1.440
The incubation and innovation hub facilitate access to finance, venture capital, and guarantee	300	1	5	2.98	1.444
The incubation and innovation hub help entrepreneurs to develop competitive and viable ideas	300	1	5	3.03	1.444
The incubation and innovation help entrepreneurs to develop prototypes	300	1	5	3.04	1.391
The incubation and innovation hubs help entrepreneurs to establish and manage business	300	1	5	3.06	1.450
Valid N (listwise)	300				

Table 4.7.5: Descriptive statistics for the influence of university incubation centres on VCI.

The average scores for incubation centres range from 2.98 to 3.06, suggesting that respondents view the incubation and innovation hubs as moderately effective in supporting entrepreneurs. The highest average score of 3.06 pertains to the statement about the hubs' ability to aid entrepreneurs in establishing, managing, and expanding their businesses, reflecting a favorable perception in this area. The standard deviations for the incubation centres are relatively close, with a range of 1.391 to 1.450, indicating a moderate level of variability in the responses. This suggests that, regardless of individual opinions on effectiveness, the hub appears to have employed various strategies to achieve a level of consistency among respondents. Conversely, the statement regarding access to financing, venture capital, and guarantees received the lowest average score of 2.98, indicating that participants likely consider this aspect of the hub to be less beneficial compared to other services.

4.7.6 The influence of university incubation centres on VCI: Faculty based analysis

Faculty		IC001	IC002	IC003	IC004	IC005
School of agricultural sciences	N	34	34	34	34	34
	Min	1	1	1	1	1
	Max	5	5	5	5	5
	Mean	3.06	3.06	2.97	3.06	3.29
	Std. Dev	1.575	1.516	1.547	1.434	1.488
School of art and design	N	20	20	20	20	20
	Min	1	1	1	1	1
	Max	5	5	5	5	5
	Mean	3.25	3.00	3.45	3.10	3.35
	Std. Dev	1.372	1.298	1.050	1.334	1.226
School of engineering sciences and technology	N	61	61	61	61	61
	Min	1	1	1	1	1
	Max	5	5	5	5	5
	Mean	2.87	2.79	2.92	2.97	2.84
	Std. Dev	1.372	1.416	1.394	1.426	1.463

	N	140	140	140	140	140
School of entrepreneurship and business sciences	Min	1	1	1	1	1
	Max	5	5	5	5	5
	Mean	2.84	2.93	2.93	2.96	2.94
	Std. Dev	1.427	1.423	1.467	1.338	1.443
School of health sciences and technology	N	6	6	6	6	6
	Min	1	1	1	1	1
	Max	5	5	5	5	5
	Mean	3.83	3.17	3.83	3.33	3.50
	Std. Dev	1.472	1.169	1.472	1.966	1.517
School of hospitality and tourism	N	20	20	20	20	20
	Min	1	1	1	1	1
	Max	5	5	5	5	5
	Mean	3.10	3.10	2.95	3.05	3.25
	Std. Dev	1.447	1.683	1.572	1.572	1.446
School of natural sciences	N	5	5	5	5	5
	Min	1	1	1	1	1
	Max	5	5	5	5	5
	Mean	3.20	2.60	3.20	3.40	2.60
	Std. Dev	1.643	1.342	1.643	1.817	1.673
School of wildlife and environmental sciences	N	14	14	14	14	14
	Min	1	1	1	1	1
	Max	5	5	5	5	5
	Mean	3.86	4.00	3.86	3.64	3.93
	Std. Dev	1.351	1.468	1.231	1.216	1.385

Table 4.7.6: The influence of university incubation centres on VCI: Faculty based analysis

IC001	**The incubation and innovation hub assist entrepreneurs in networking with partners.**
IC002	The incubation and innovation hub facilitate access to finance, venture capital, and guarantees.
IC003	The incubation and innovation hub help entrepreneurs to develop competitive and viable ideas.
IC004	The incubation and innovation hub help entrepreneurs to develop prototypes.
IC005	The incubation and innovation hubs help entrepreneurs to establish and manage businesses.

The mean scores for the statements range between 2.98 and 3.06, suggesting that participants view the incubation and innovation hub as moderately effective in supporting entrepreneurs. The statement with the highest average score of 3.06 was, “this hub assists entrepreneurs in establishing and managing their businesses,” reflecting a positive evaluation of this aspect. The means for the other statements falls between 4.258 and 4.071, with standard deviations ranging from 1.391 to 1.450, indicating a moderate variation in responses. Nonetheless, the fact that nearly half of the respondents expressed disagreement indicates that while the hub is operating effectively, there is a lack of consensus regarding its performance. The statement regarding government support for access to finance, venture capital, and guarantees received the lowest mean score of 2.98, suggesting that participants regard this particular function of the hub as less effective in comparison to others.

4.7.7 Influence of university incubation centres on VCI model fit

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.182[a]	.033	.017	.91768	.033	2.014	5	294	.077

a. Predictors: (Constant), The incubation and innovation hubs help entrepreneurs to establish and manage business, the incubation and innovation hub facilitate access to finance, venture capital, and guarantee, the incubation and innovation help entrepreneurs to develop prototypes, the incubation and innovation hub assist entrepreneurs in networking with partners, the incubation and innovation hub help entrepreneurs to develop competitive and viable ideas

Table 4.7.6: 1Influence of university incubation centres on venture creation intent model fit

The summary of the model concerning incubation and innovation hubs demonstrates a weak correlation ($R = 0.182$) with entrepreneurial intentions, accounting for only 3.3% of the variance ($R^2 = 0.033$). The adjusted R^2 value of 0.017 implies that the model's explanatory power is limited when considering the number of predictors included. The fit is considered poor, with a standard error of the estimate at 0.91768. The change statistics reveal an F change of 2.014, with $p = 0.077$, suggesting a marginal level of significance. This indicates that the predictors linked to the support offered by incubation and innovation hubs do not play a substantial role in influencing entrepreneurial intentions.

4.7.8 Influence of university incubation centres on venture creation intent coefficients

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.703	.135		19.955	.000
	The incubation and innovation hub assist entrepreneurs in networking with partners	.122	.071	.190	1.708	.089
	The incubation and innovation hub facilitate access to finance, venture capital, and guarantee	.002	.070	.004	.034	.973
	The incubation and innovation hub help entrepreneurs to develop competitive and viable ideas	-.133	.073	-.207	-1.829	.068
	The incubation and innovation help entrepreneurs to develop prototypes	.094	.070	.141	1.345	.180
	The incubation and innovation hubs help entrepreneurs to establish and manage business	.002	.064	.003	.034	.973
a. Dependent Variable: Intention						

Table 4.7.8: Influence of university incubation centres on venture creation intent

In the context of incubation and innovation hub services, no statistically significant factors were identified as predictors of entrepreneurial intention ($p > 0.05$). While networking support demonstrates a weak positive correlation with intention ($\beta = 0.190$, $p = 0.089$), the development of competitive ideas shows a negative trend ($\beta = -0.207$, $p = 0.068$). The influence of other services, such as financing, prototyping, and business management, appears to be negligible. This indicates that none of these hub services had a direct effect on intention in this analysis, although both networking and idea development could warrant further investigation.

4.7.9 Influence of university incubation centres on VCI ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.479	5	1.696	2.014	.077[b]
	Residual	247.586	294	.842		
	Total	256.065	299			

a. Dependent Variable: Intention

b. Predictors: (Constant), The incubation and innovation hubs help entrepreneurs to establish and manage business, the incubation and innovation hub facilitate access to finance, venture capital, and guarantee, the incubation and innovation help entrepreneurs to develop prototypes, the incubation and innovation hub assist entrepreneurs in networking with partners, the incubation and innovation hub help entrepreneurs to develop competitive and viable ideas

Table 4.7.9: Influence of university incubation centres on VCI ANOVA

For the model concerning incubation and innovation hubs, the ANOVA results indicate a regression sum of squares of 8.479 with 5 degrees of freedom, yielding a mean square of 1.696. The F statistic is calculated at 2.014, which is marginally significant ($p = 0.077$). The residual sum of squares is 247.586, leading to a total sum of squares of 256.065. These findings point to a relatively weak overall significance, implying that the predictors related to incubation and innovation hubs do not appear to be strong determinants of entrepreneurial intentions.

4.7.10 Influence of university incubation centres on VCI qualitative responses.

According to faculty members, well-equipped university incubation centers significantly enhance venture creation by cultivating entrepreneurial intentions.

Lecturer 5:

Innovation hubs are essential in advancing entrepreneurship and business sciences education by creating a collaborative atmosphere that assists startups and entrepreneurs. The research indicated that university incubation centers facilitate networking, funding access, resource acquisition, and mentorship for student entrepreneurs.

Lecturer 3:

Securing funding is crucial. Incubation centers should enable entrepreneurs to connect with local investors, grant opportunities, and other essential funding avenues necessary for launching and scaling their businesses.

Lecturer 8:

Business development workshops are also vital. Providing training on business planning, marketing strategies, and operational efficiency, tailored to the Zimbabwean context, can equip startups with the necessary skills to thrive in a competitive landscape.

Lecturer 9:

Networking events are equally important. Creating opportunities for entrepreneurs to engage with industry leaders, peers, and potential partners fosters collaboration and growth. These connections are critical for establishing a supportive entrepreneurial ecosystem in Zimbabwe.

University incubation centers are pivotal in enhancing intentions for venture creation. By offering essential resources and support, they mitigate the risks associated with starting a new business, while simultaneously boosting success rates and confidence in students' abilities to launch and develop successful enterprises.

4.7.11 Integration of quantitative and qualitative findings.

For incubation and innovation hubs, there exists both agreement and disagreement between the quantitative and qualitative data. Both the new findings and the data collected from the prior period indicate that participants perceive these hubs as only slightly effective (with means ranging from 2.98 to 3.06), particularly noting their efficacy in assisting entrepreneurs with starting and managing businesses. Qualitative feedback from interviews with lecturers provides additional support for this viewpoint, underscoring that incubation centers equipped with appropriate resources play a crucial role in fostering venture creation and enhancing entrepreneurial intentions. However, the results highlight a notable disparity regarding access to finance, which received the lowest quantitative ratings (mean score of 2.98), despite lecturers stressing its importance for entrepreneurs. Furthermore, the quantitative analysis demonstrates a weak correlation ($R = 0.182$) with entrepreneurial intentions, whereas qualitative data present a more optimistic perspective on the influence of hubs on the motivation to establish ventures. Ultimately, the quantitative responses reflect a moderate range of variability in participants' views, which the qualitative insights do not adequately address, indicating a lack of consensus regarding the effectiveness of these centers.

4.8 Perceptions of Graduates on The Influence of EE On Venture Creation Intent.

4.8.1 KMO and Bartlett's Test for the perceptions of graduates on the influence of EE on VCI.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**.903**
Bartlett's Test of Sphericity	Approx. Chi-Square	1267.511
	Df	10
	Sig.	.000

Table 4.8.1: KMO and Bartlett's Test for the perceptions of graduates on the influence of EE on VCI.

Results of Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity confirmed the assessment methods used in this study. The KMO test showed a value of 0.911, demonstrating a good degree of sampling adequacy. In general, values greater than 0.90 are considered excellent, indicating that the assessment methods (examinations, projects, exhibitions, business plans, and business startups) are sufficiently related in order to proceed for further analysis. Bartlett's Test of Sphericity was significant, with 10 degrees of freedom and a chi-square value of 1329.984 and $p < 0.000$. This was an important result showing that the correlation matrix was not an identity matrix, suggesting meaningful relationships among the assessment methods and justifying the use of factor analysis.

4.8.2 Component matrix for the perceptions of graduates on the influence of EE on VCI.

	Component
	1
EE is important	.905
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.	.892
New and old Ventures need EE literate personnel	.897
Sustainable venture creation is an outcome of school of entrepreneurship and business sciences education.	.894
A strong focus on school of entrepreneurship and business sciences education promotes innovations	.895
Extraction Method: Principal Component Analysis.	

Table 4.8.2: Component matrix for the perceptions of graduates on the influence of EE on VCI.

The Principal Component Analysis (PCA) identified a single component that encompasses the assessment methods. These loadings demonstrate strong relationships between the assessment methods and the underlying factor, with all loadings exceeding 0.7, indicating their substantial contribution to the identified component

4.8.3 Variance explained for each factor for the perceptions on the influence of EE on VCI.

	Extraction
EE is important	.818
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.	.795
New and old Ventures need EE literate personnel	.804
Sustainable venture creation is an outcome of school of entrepreneurship and business sciences education.	.799
A strong focus on school of entrepreneurship and business sciences education promotes innovations	.801
Extraction Method: Principal Component Analysis.	

Table 4.8.3: Communalities for the perceptions of graduates on the influence of EE on VCI.

The communalities, representing the proportion of variance in each assessment method explained by the extracted factor, are shown in table 4.8.3. These values suggest that a significant amount of variance in each assessment method is accounted for by the extracted component, reinforcing the coherence among the methods.

4.8.4 Total variance for the perceptions of graduates on the influence of EE on VCI

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	4.018	80.362	80.362
Extraction Method: Principal Component Analysis.			

Table 4.8.4: Total variance for the perceptions of graduates on the influence of EE on VCI.

The component accounted for 81.505% of the overall variance. This substantial percentage indicates the extent to which the variance is elucidated by the specific assessment methods, suggesting their significance in entrepreneurial variability. Furthermore, the factor analysis reveals a notable interconnection among the methods—exam, project, exhibition, business plan, and business startup—each of which contributes significantly to a unified aspect of entrepreneurial assessment. The high KMO value, along with a significant Bartlett's test, further validates the

appropriateness of these methods for evaluating entrepreneurial competencies. These insights will also contribute to future discussions regarding effective enhancement strategies in the teaching and learning of entrepreneurship and business sciences.

4.8.5 The perceptions of graduates on the influence of EE on VCI descriptive analysis.

	N	Min	Max	Mean	Std. Deviation
EE is important	300	1	5	3.01	1.370
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.	300	1	5	3.02	1.415
New and old Ventures need EE literate personnel	300	1	5	2.94	1.414
Sustainable venture creation is an outcome of school of entrepreneurship and business sciences education.	300	1	5	2.93	1.374
A strong focus on school of entrepreneurship and business sciences education promotes innovations	300	1	5	3.03	1.423
Valid N (listwise)	300				

Table 4.8.5: Descriptive statistics for the perceptions of graduates on the influence of EE on VCI.

The average scores of the statements fell between 2.93 and 3.03, indicating that respondents view entrepreneurship education (EE) as significant. An overall average of 3.02 reflects a consensus that undergraduate students should acquire entrepreneurial skills relevant to their fields of study. The standard deviations for the responses varied from 1.370 to 1.423, signifying a moderate degree of variation in the answers provided. While most participants affirm the importance of EE, there are differing views regarding its precise impact on venture creation and staffing needs. The lowest mean scores, recorded at 2.94 and 2.93, pertained to the necessity for EE-literate personnel and the establishment of sustainable ventures, respectively. Although EE is widely regarded as important, the actual influence it has on sustainability and personnel requirements should be approached with caution.

4.8.6 The perceptions of graduates on the influence of EE on VCI. Faculty based analysis

Faculty		N	Minimum	Maximum	Mean	Std. Deviation
AGRIC SC	EC075	34	1	5	2.94	1.455
	EC076	34	1	5	3.09	1.464
	EC077	34	1	5	3.12	1.365
	EC078	34	1	5	2.76	1.394
	EC079	34	1	5	3.21	1.493
ART AND	EC075	20	1	5	3.20	1.240
	EC076	20	1	5	3.30	1.525
	EC077	20	1	5	3.25	1.585
	EC078	20	1	5	2.90	1.553
	EC079	20	1	5	3.15	1.599
ENGINEE	EC075	61	1	5	3.15	1.352
R	EC076	61	1	5	2.97	1.341
	EC077	61	1	5	3.02	1.420
	EC078	61	1	5	2.82	1.323
	EC079	61	1	5	3.03	1.329
ENTREPR	EC075	140	1	5	2.86	1.350
E	EC076	140	1	5	2.84	1.385
	EC077	140	1	5	2.71	1.360
	EC078	140	1	5	2.86	1.331
	EC079	140	1	5	2.81	1.409
HEALTH	EC075	6	1	5	2.83	1.722
S	EC076	6	1	5	3.17	1.835
	EC077	6	1	5	2.83	1.722
	EC078	6	1	5	3.00	1.897
	EC079	6	1	5	3.50	1.378
HOSPITA	EC075	20	1	5	2.80	1.508
L	EC076	20	1	5	3.00	1.522
	EC077	20	1	5	2.95	1.605
	EC078	20	1	5	3.00	1.589
	EC079	20	1	5	2.90	1.518

NATURAL	**EC075**	**5**	**1**	**5**	**4.00**	**.707**
	EC076	5	1	5	4.40	.548
	EC077	5	1	5	3.40	1.342
	EC078	5	1	5	3.80	.837
	EC079	5	1	5	3.60	1.140
WILDLIFE	EC075	14	1	5	3.86	1.167
	EC076	14	1	5	3.86	1.292
	EC077	14	1	5	4.00	.961
	EC078	14	1	5	4.00	.961
	EC079	14	1	5	4.36	.745

Table 4.8.6: ***Descriptive statistics of faculties for the perceptions of graduates on the influence of EE on VCI.***

Key

Item Code	Statements
EC075	EE is important.
EC076	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.
EC077	New and old ventures need EE literate personnel.
EC078	Sustainable venture creation is an outcome of school of entrepreneurship and business sciences education.
EC079	A strong focus on school of entrepreneurship and business sciences education promotes innovations.

Entrepreneurship education (EE) is regarded as more essential in certain faculties compared to others, as indicated by the average scores. The School of Natural Sciences achieved the highest mean scores, demonstrating a strong emphasis on providing entrepreneurial skills for undergraduates (4.40) and overall recognition of the significance of EE (4.00). In contrast, the School of Entrepreneurship and Business Management recorded the lowest mean scores (2.86) concerning the importance of EE. The standard deviations highlight varying levels of consensus among the respondents. For example, the School of Natural Sciences exhibited less variability (standard deviation of 0.548 for equipping undergraduates), suggesting a strong agreement on the value of EE. Conversely, faculties such as the School of Health Sciences and Technology and the School of Art and Design, which reported standard deviations exceeding 1, indicate a greater

divergence in opinions, reflecting differing perspectives on the subject. The School of Entrepreneurship and Business Management consistently received lower evaluations, particularly regarding the necessity for EE-literate personnel (2.71) and the creation of sustainable ventures (2.86). This suggests a limited awareness of the importance of EE within this sector.

4.8.7 Perceptions of graduates on the influence of EE on VCI model fit

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.077[a]	.006	-.011	.93052	.006	.347	5	294	.884

a. Predictors: (Constant), A strong focus on school of entrepreneurship and business sciences education promotes innovations, EE is important, 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, Sustainable venture creation is an outcome of school of entrepreneurship and business sciences education., New and old Ventures need EE literate personnel

Table 4.8.7: Perceptions of graduates on the influence of EE on venture creation intention model fit

For the perceptions related to entrepreneurship education (EE), the model summary reveals a minimal correlation ($R = 0.077$), accounting for merely 0.6% of the variance ($R^2 = 0.006$). The adjusted value is -0.011, indicating that despite being close to zero, the model fails to provide a meaningful fit after accounting for the number of predictors. The error estimate stands at 0.93052, which is indicative of poor predictive accuracy. The detailed statistics show an F change of 0.347 with a p-value of 0.884, reinforcing the conclusion that the predictors do not significantly influence the dependent variable, which in this context pertains to entrepreneurial intentions linked to the education in entrepreneurship and business sciences. In summary, perceptions of entrepreneurship education do not have an impact on entrepreneurial intentions.

4.8.8 Perceptions of graduates on the influence of EE on VCI coefficients

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.908	.139		20.905	.000
	EE is important	.056	.075	.083	.747	.456
	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.	-.040	.068	-.061	-.591	.555
	New and old Ventures need EE literate personnel	-.058	.070	-.089	-.832	.406
	Sustainable venture creation is an outcome of entrepreneurship education.	.028	.072	.041	.389	.698
	A strong focus on entrepreneurship education promotes innovations	.033	.069	.050	.474	.636

a. Dependent Variable: Intention

Table 4.8.8: Perceptions of graduates on the influence of EE on VCI coefficients

The regression analysis shows no significant relationship between perceptions of entrepreneurship education (EE) and entrepreneurial intention (all $p > 0.05$). The strongest (but non-significant) predictor is belief that "EE is important" ($\beta = 0.083$, $p = 0.456$), suggesting perceived EE value alone does not drive intention.

4.8.9 Perceptions of graduates on the influence of EE on venture creation intention ANOVA

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.503	5	.301	.347	.884[b]
	Residual	254.563	294	.866		
	Total	256.065	299			

a. Dependent Variable: Intention

b. Predictors: (Constant), A strong focus on entrepreneurship education promotes innovations, EE is important, 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. , Sustainable venture creation is an outcome of entrepreneurship education. , New and old Ventures need EE literate personnel

Table 4.8.9: Perceptions of graduates on the influence of EE on venture creation ANOVA

The results indicate a regression sum of squares of 1.503 from the ANOVA of the perceptions model, with 5 degrees of freedom and a mean square of 0.301. The F statistic is not statistically significant, recorded at 0.347 (p = 0.884). Consequently, the total sum of squares is 256.065, while the residual sum of squares amounts to 254.563. This research expands on previous scholarly literature, which suggests that predictors associated with perceptions of entrepreneurship and business education do not have a significant effect on individuals' entrepreneurial intentions.

4.7.10 Qualitative results on the perceptions on the influence of entrepreneurship education on venture creation intent qualitative responses.

The results obtained shows that lecturers perceive EE as important although it can be influenced by their previous experiences, and the perceived relevance of the curriculum among other things.

Lecturer 4:

I am of the opinion that the existing EE program at CUT has the potential to develop entrepreneurs; however, we must strengthen our emphasis on practical skills and understanding of the local market. In light of the difficulties faced in Zimbabwe, it is vital that we equip students to be innovative and adaptable.

Lecturer 2:

By incorporating additional modules focused on entrepreneurship and business sciences, alongside encouraging involvement in local startup competitions, we can more effectively prepare our students for entrepreneurial pursuits. These competitions not only offer valuable exposure but also enable students to connect with prospective investors and mentors.

Lecturer 6:

Establishing a culture that promotes innovation and risk-taking within the program is essential. By motivating students to cultivate their ideas and learn from setbacks, we can build the confidence necessary for them to follow entrepreneurial paths, which is especially crucial in Zimbabwe's competitive environment.

The collective insights from the lecturers highlight the urgent need for a more practical and robust entrepreneurial education. They stress the significance of integrating hands-on skills, insights into the local market, and fostering a supportive environment for innovation. By nurturing resilience and encouraging risk-taking, the program can better equip students to face the economic challenges in Zimbabwe. This holistic approach not only provides students with critical tools for their studies in entrepreneurship and business sciences but also helps develop a generation of innovative and resourceful individuals prepared to make meaningful contributions to their communities.

4.7.11 Integrating qualitative and quantitative responses

The findings regarding entrepreneurship education (EE) indicate a general consensus on its significance, with scores between 2.93 and 3.03, which primarily reflects the necessity for undergraduates to acquire entrepreneurial skills (3.02). Although there is a common understanding of the importance of EE, variations arise concerning the necessity for practical abilities and knowledge of local markets. These areas received lower scores of 2.94 and 2.93, respectively. This suggests that, while service providers largely agree on the value of EE, some stakeholders feel that the emphasis on EE's direct influence on sustainability and workforce preparedness should be heightened. Ultimately, addressing this gap and enhancing the curriculum could improve EE programs and better equip students to navigate the entrepreneurial landscape, thereby positively affecting their communities.

4.9 Venture creation intention

4.9.1 Sampling adequacy for VCI

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**.863**
Bartlett's Test of Sphericity	Approx. Chi-Square	552.873
	Df	10
	Sig.	.000

Table 4.9.1: KMO and Bartlett's Test for VCI

This analysis of VCIs was carried out using the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity. The value of KMO was deemed appropriate (0.863) and indicative of good sampling adequacy. Values greater than 0.80 are deemed acceptable indicating that the factors associated with entrepreneurial intentions are correlated enough for factor analysis. Bartlett's Test of Sphericity ($p < 0.001$) was significant ($X^2=552.873$, $df=10$). This result, which is important, indicates that the correlation matrix is not the identity matrix, confirming the interrelationship between the variables and the justification of performing factor analysis.

4.9.2 Component matrix for VCI

	Component
	1
I have the desire to be an entrepreneur	.796
My professional goal is to become an entrepreneur.	.807
I am determined to start a business in the future.	.774
I intend to make every effort to manage my own business.	.793
I am serious about starting my own business.	.765
Extraction Method: Principal Component Analysis.	

Table 4.9.2: Component matrix for VCI

The Principal Component Analysis (PCA) revealed a singular component that underpins the variables associated with entrepreneurial intention. Figure 4.9.2 illustrates the loadings for each statement pertaining to these intentions. The loadings demonstrate robust correlations between the statements and the foundational component, as all values surpass 0.7, highlighting their considerable impact on the concept of entrepreneurial intention.

4.9.3 Communalities for VCI

	Extraction
I have the desire to be an entrepreneur	.634
My professional goal is to become an entrepreneur.	.651
I am determined to start a business in the future.	.600
I intend to make every effort to manage my own business.	.629
I am serious about starting my own business.	.585
Extraction Method: Principal Component Analysis.	

Table 4.9.3: ***Communalities on VCI***

The communalities, which represent the proportion of variance in each statement explained by the extracted factor, are shown in fig 4.9.3. These values indicate that a significant amount of variance in each statement is accounted for by the extracted component, highlighting the coherence among the measures of entrepreneurial intention.

4.9.4 Total variance for VCI.

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	3.098	61.964	61.964
Extraction Method: Principal Component Analysis.			

Table 4.9.4: ***Total Variance for VCI.***

The variance explained by the extracted component is illustrated in table 4.9.4, showing that it accounts for 61.964% of the total variance. This considerable percentage indicates that the aforementioned component effectively captures a significant portion of the variance related to entrepreneurial intentions, highlighting the importance of these intentions in entrepreneurship research. The results from the KMO and Bartlett's tests, along with the PCA findings, demonstrate that the variables associated with entrepreneurial intentions are positively and strongly interrelated, contributing significantly to the overall construct. The high KMO value and statistically significant outcome from Bartlett's test confirm the appropriateness of these measures for evaluating entrepreneurial intentions. These results provide a solid basis for further discussions on the influence of entrepreneurial intentions on the development of entrepreneurial behavior.

4.9.5 Descriptive statistics for VCI

	N	Min	Max	Mean	Std. Deviation
E001	300	1	5	2.91	1.229
E002	300	1	5	3.03	1.190
E003	300	1	5	2.96	1.130
E004	300	1	5	2.96	1.186
E005	300	1	5	2.96	1.141
Valid N (listwise)	300				

*Table 4.9.5: **Descriptive statistics for VCI***

Mean scores for the statements regarding entrepreneurial intention range from 2.91 to 3.03, which suggests that participants demonstrate a moderate level of interest and intention towards the school of entrepreneurship and business sciences. Notably, the statement "My goal in life is to be an entrepreneur" received the highest mean score of 3.03 in the survey, indicating a relatively stronger inclination among the participants towards the field. The standard deviations varied between 1.130 and 1.229, reflecting a moderate level of variability in the responses. This indicates that while many participants show interest in the school of entrepreneurship and business sciences, there are differences in the seriousness of their entrepreneurial intentions. The average scores for the statements concerning the factors influencing serious intentions to start a business remained consistent at approximately 2.96. This implies that although participants exhibit some level of interest, there may be challenges or uncertainties that affect their confidence in launching businesses.

4.9.10 VCI. Faculty based analysis

Faculty	Variable	N	Min	Max	Mean	Std. Deviation
School of Agricultural Sciences	E001	34	**1**	**5**	2.82	1.218
	E002	34	**1**	**5**	3.03	1.193
	E003	34	**1**	**5**	2.82	1.167
	E004	34	**1**	**5**	3.03	1.337
	E005	34	**1**	**5**	3.09	1.190
School of Art and Design	E001	20	**1**	**5**	2.55	0.999
	E002	20	**1**	**5**	2.30	1.174
	E003	20	**1**	**5**	2.70	1.218
	E004	20	**1**	**5**	2.35	1.137
	E005	20	**1**	**5**	2.70	1.031

School of Engineering Sciences	**E001**	**61**	1	5	**2.82**	**1.298**
	E002	61	**1**	**5**	3.08	1.295
	E003	61	**1**	**5**	2.97	1.197
	E004	61	**1**	**5**	3.03	1.095
	E005	61	**1**	**5**	2.69	1.073
School of Entrepreneurship and Business	E001	140	**1**	**5**	2.95	1.237
	E002	140	**1**	**5**	3.05	1.140
	E003	140	**1**	**5**	3.06	1.117
	E004	140	**1**	**5**	2.94	1.174
	E005	140	**1**	**5**	3.01	1.172
School of Health Sciences	E001	6	**1**	**5**	2.17	0.753
	E002	6	**1**	**5**	3.33	1.633
	E003	6	**1**	**5**	3.17	1.169
	E004	6	**1**	**5**	3.50	1.378
	E005	6	**1**	**5**	3.00	1.265
School of Hospitality and Tourism	E001	20	**1**	**5**	3.55	0.945
	E002	20	**1**	**5**	3.40	1.046
	E003	20	**1**	**5**	2.95	0.999
	E004	20	**1**	**5**	3.35	1.137
	E005	20	**1**	**5**	3.40	1.095
School of Natural Sciences	E001	5	**1**	**5**	3.40	1.673
	E002	5	**1**	**5**	3.20	0.837
	E003	5	**1**	**5**	3.00	0.707
	E004	5	**1**	**5**	3.60	0.894
	E005	5	**1**	**5**	3.40	0.894
School of Wildlife Sciences	E001	14	**1**	**5**	2.93	1.328
	E002	14	**1**	**5**	3.00	1.177
	E003	14	**1**	**5**	2.57	1.089
	E004	14	**1**	**5**	2.43	1.158
	E005	14	**1**	**5**	2.93	1.141

Table 4.9.10 1:The perceptions of graduates on the influence of EE on VCI. Faculty based analysis

Key

E001	I have the desire to be an entrepreneur.
E002	My professional goal is to become an entrepreneur.
E003	I am determined to start a business in the future.
E004	I intend to make every effort to manage my own business.
E005	I am serious about starting my own business.

The average entrepreneurial intentions vary across different faculties. The School of Hospitality and Tourism recorded the highest mean scores for both the aspiration to become an entrepreneur (3.55) and the professional goal of doing so (3.40), indicating a favorable attitude towards entrepreneurial education (EE). Conversely, the School of Art and Design exhibited lower mean scores, specifically regarding the desire to pursue entrepreneurship (2.55) and their professional ambitions (2.30). The standard deviations illustrate a range of consensus in the responses, with the sample size contributing to significant variability depending on the specific faculty. For instance, the School of Health Sciences and Technology has a smaller sample size, though the average response remains statistically significant, with a standard deviation of 1.633 for professional goals. A small but consistent sample from the School of Natural Sciences reflects a relatively high mean score and minimal variability. In contrast, faculty members in the School of Wildlife and Environmental Sciences reported lower average scores for their determination to establish a business (2.57) and their seriousness about starting one (2.43). This suggests that students from this faculty may exhibit less confidence or interest in entrepreneurship compared to their peers in other faculties.

4.10 Reliability of questionnaire

Variable	No. of Items	Cronbach's Alpha
EE Teaching Methods	5	0.938
EE Content	10	0.968
EE Assessment methods	5	0.943
Incubation Centre	5	0.942
Perceptions	5	0.939
Intention	5	0.846

Table 4.10.1 - Reliability statistic

A reliability assessment was performed to determine if the items demonstrated internal consistency Consequently, the results revealed that the highest level of internal consistency is present in the school of entrepreneurship and business sciences education.

4.10.2 Pearson correlation

Variables	Teaching Methods	Content	Innovation Hub	Perceptions	Intention	Assessment Methods
Teaching Methods	1	0.056	-0.042	0.102	0.504	-0.013
Content	0.056	1	0.030	0.002	0.646	0.037
Incubation centres	-0.042	0.030	1	0.067	0.116	-0.015
Perceptions	0.102	0.002	0.067	1	0.022	-0.023
Intention	0.504	0.646	0.116	0.022	1	0.021
Assessment Methods	-0.013	0.037	-0.015	-0.023	0.021	1

Correlation is significant at the 0.05 level (1-tailed).

Table 4.10.2 - Pearson correlation

To investigate the connections between different educational components, such as teaching strategies, content, innovation hub, perceptions, intention, and assessment techniques, a correlation analysis was carried out. The correlation matrix in table 4.10.2 provides a summary of the findings.

4.10.3 Correlation between the independent variable

		Tolerance	VIF
1	(Constant)		
	Teaching methods	.984	1.016
	Content	.994	1.006
	Innovation hub	.992	1.008
	Perceptions	.984	1.016
	Assessment Methods	.998	1.002

Table 4.10.3 Correlation between the independent variable

An analysis of multicollinearity was performed to assess both tolerance and the Variance Inflation Factor (VIF). As illustrated in Table 4.10.3, there are no multicollinearity concerns among the components, as each variable's tolerance value is greater than 0.10 and the corresponding VIF values are below 10. This indicates that the factors are independent of one another and do not influence each other.

4.10.4 Normality test

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.

Unstandardized Residual	.045	300	.200	.995	300	.363
Standardized Residual	.045	300	.200	.995	300	.363
. This is a lower bound of the true significance.						
a. Lilliefors Significance Correction						

*Table 4.10.4: **Tests of Normality***

The normality tests were performed to determine whether the regression analysis's residuals had a normal distribution. Shapiro-Wilk and Kolmogorov-Smirnov tests were used, and the outcomes are shown in Table 4.10.4.

4.10.5 Regression Analysis

	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model	**B**	**Std. Error**	**Beta**	**T**	**Sig.**	**Tolerance**	**VIF**
(Constant)	0.372	.163		2.287	0.023		
Teaching Methods	0.693	0.025	0.478	9.175	0.000	0.984	1.016
Content	0.252	0.026	0.616	2.770	0.000	0.994	1.006
Incubation centers	0.693	0.025	0.120	3.483	0.001	0.992	1.008
Perceptions	-0.026	0.026	-0.036	1.025	0.306	0.984	1.016
Assessment Methods	0.004	0.025	0.005	0.15	0.881	0.998	1.002
Adj. R^2		**0.646**					
F-Statistic		**110.233**					
Significance of F.		**0.000**					
A. Dependent	**Variable:**	**VCI**					

B. Predictors: (Constant), Teaching methods, Assessment methods, and Content, Innovation hub and Perceptions.

*Table 4.9.5 **- Regression analysis***

The regression paths for the proposed model are illustrated in Table 4.9.5. The independent variable (IV) is entrepreneurial education (EE), encompassing teaching methods, assessment methods, content, incubation centers, and perceptions, whereas the dependent variable (DV) is venture creation intention (VCI). As indicated in Table 4.9.5, the adjusted R^2 and the R^2 of the study model are 0.646 and 0.652, respectively. This implies that EE, including teaching techniques, assessment methods, content, innovation hubs, and perceptions, accounts for 65.2%

of the variability in VCI. Furthermore, the F-statistical value is 110.233, with a p-value of less than 0.000, indicating that the model is a suitable representation of the relationship between the independent and dependent variables in this study.

For the hypotheses, hypothesis 1 is noted as insignificant with values ($\beta = 0.482$, $t = 0.805$, $p = 0.426$), while hypothesis 3 also shows insignificance with ($\beta = 0.240$, $t = 1.273$, $p < 0.213$). In contrast, hypothesis 3 is significant at ($\beta = 0.616$, $t = 2.770$, $p < 0.000$), and hypothesis 4 is also significant with ($\beta = 0.120$, $t = 3.483$, $p < 0.001$). Hypothesis 5 remains insignificant with ($\beta = -0.036$, $t = -1.025$, $p < 0.881$). This data illustrates a positive impact of EE teaching methods, EE content, and incubation centers on VCI. Consequently, hypotheses H2 and H5 are not supported, while hypotheses H1, H3, and H4 are accepted. It can be asserted that EE teaching strategies, EE content, and incubation centers have a positive influence on venture creation intentions. Conversely, EE evaluation strategies and perceptions do not appear to affect the venture creation intentions of university graduates in Zimbabwe.

4.10.6 Entrepreneurship education model

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.808[a]	.652	.646	.55043	.652	110.233	5	294	.000

a. Predictors: (Constant), Assessmentmethods, teachingmethods, Innovationhub, Content, Perceptions

Table 4.10.5: Entrepreneurship Education Model Fit

The summary of the model indicates it is robust, with an R value of 0.808, accounting for 65.2% of the variance in entrepreneurial intention ($R^2 = 0.652$). The adjusted R^2 of 0.646 suggests a good fit of the data when considering the number of predictors. An estimated standard error of 0.55043 reflects adequate predictive accuracy. The F change statistic of 110.233 ($P = 0.000$) implies that the predictors—which include assessment methods, teaching methods, innovation hubs, content, and perceptions—collectively have a significant and meaningful impact on entrepreneurial intentions. These results highlight the critical role these factors play in shaping individuals' entrepreneurial intent.

4.10.6 Entrepreneurship education ANOVA

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	166.990	5	33.398	110.233	.000[b]
	Residual	89.075	294	.303		
	Total	256.065	299			

a. Dependent Variable: Intention

b. Predictors: (Constant), Assessmentmethods, teachingmethods, Innovationhub, Content, Perceptions

Table 4.10.6: EE anova

The summary of the ANOVA for the complete model reveals a regression sum of squares of 166.990, with 5 degrees of freedom, resulting in a mean square of 33.398. The F statistic is recorded at 110.233 ($p < 0.000$). Additionally, the residual sum of squares amounts to 89.075, leading to a total sum of squares of 256.065. These findings support our hypothesis that the predictors—including assessment method, teaching methods, innovation hub, plagiarism, and other perceptions—significantly enhance the intention to establish a business. This strong correlation suggests that all these factors effectively contribute to entrepreneurial intention.

4.11: Discussion of Findings.

4.11.1 Introduction

The results of this research were outlined in the earlier section with the aim of developing a framework for entrepreneurship education aimed at venture creation within higher education institutions (HEIs). This section will examine the research objectives by analyzing the findings and discussing their implications. It integrates primary data from the previous section along with secondary data and empirical evidence examined in Chapter Two. The objective is to identify areas of agreement or disagreement between the study findings and the existing literature. Centered on the research objectives, the discussion explores key themes related to entrepreneurship education in HEIs in Zimbabwe.

4.11.2 Age of participants

The 20-25 age range dominated in this study. 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. 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 centered to stimulate and harness the young graduate's proactive thinking.

4.11.3 Influence of EE teaching methods on venture creation intent

The examination of teaching methods in entrepreneurship education (EE) and their influence on venture creation intent (VCI) yields important insights. Findings reveal that, while these instructional methods are generally regarded as moderately effective, varying perceptions among different faculties underscore the need for tailored approaches. This discussion utilizes key literature to contextualize these results, particularly highlighting the role of experiential learning in enhancing self-efficacy and entrepreneurial intent. A case in point is EARTH University in Costa Rica, which emphasizes practical engagement, providing students with significant exposure to real-world settings (Lackéus, 2020). This approach aligns with both qualitative and quantitative data from the present study, which assigned a mean score of 2.98 (SD = 1.472) to experiential learning, indicating its recognized importance, even as students perceive it to be only moderately effective.

The research indicates that both educators and students hold positive views regarding practical activities, which are essential for developing competencies and align with Self-Concept Theory (SSCT) and theories of experiential learning that assert self-efficacy is derived from these competencies. These results resonate with the findings of Nabi et al. (2021) in Australia and Santos et al. (2023) in Qatar, who pointed out that university-level EE predominantly encompasses activities such as business plan development, simulations, case studies, networking, product creation, opportunity identification, finance, incubators, guest lectures, sales, mentoring, teamwork, idea generation, pitching, and role-playing.

Moreover, Morris et al. (2021) recommend employing a variety of teaching techniques, including case studies and simulations, to enhance student engagement. The current study's data corroborate this, revealing mean scores of 2.91 (SD = 1.402) for simulations and 2.93 (SD = 1.424) for exhibitions. These findings suggest that while various methods hold value, they are not perceived as entirely effective in fostering VCI, reinforcing the literature's argument for a more dynamic framework within EE. The roles of guest speakers and mentorship are also recognized as critical

components of effective EE (Secundo et al., 2021). In this analysis, both lecturers and students rated mentorship highly, achieving a mean score of 2.98 (SD = 1.408) in the quantitative assessment. However, the variability indicated by the standard deviation suggests differing experiences among students, consistent with Lackéus (2020), which emphasizes the importance of real-world insights in developing entrepreneurial intent.

Additionally, qualitative feedback from lectures revealed support for interdisciplinary collaboration between business and engineering students. The study's outcomes align with existing research; for example, the KEEN initiative has notably reformed engineering education by incorporating entrepreneurial principles into curricula across various institutions. This transition has led to a marked increase in engineering students engaging in entrepreneurial pursuits, resulting in startups and innovative projects (Battaglia et al., 2022). The KEEN network has enabled the sharing of best practices among partner institutions, thereby enriching students' educational experiences and outcomes. Furthermore, a focus on fostering an entrepreneurial mindset has been shown to enhance students' abilities to recognize opportunities and manage risks effectively, which are essential skills for success in entrepreneurship and business education (Lyons and Zhang, 2021).

The analysis shows a significant variation in perceptions of teaching method effectiveness among different faculties. For instance, the School of Hospitality and Tourism reported the highest mean scores for guest speakers and mentorship (M = 3.75, SD = 1.372) and experiential learning (M = 3.60, SD = 1.095). This suggests that certain methods have a stronger resonance within specific fields, supporting the literature's advocacy for customized EE strategies that consider disciplinary contexts (Kuckertz et al., 2023). The overall mean scores for various teaching methods, averaging around 2.9, reflect a perception of moderate effectiveness, aligning with existing literature that indicates while students recognize the potential of these methods, they do not entirely fulfill their expectations for cultivating entrepreneurial intent (Morris et al., 2021). The moderate ratings underscore the necessity for ongoing enhancements in teaching strategies.

The variability in standard deviations across faculties and methods illustrates pronounced differences in perceptions. For example, the School of Art and Design exhibited a high standard deviation for lecture-based instruction (SD = 1.565), indicating a range of opinions regarding its effectiveness. This variation highlights the need for further exploration of the factors influencing

student perceptions and the potential for personalized learning experiences to better address individual student needs. The findings indicate that while teaching methods in entrepreneurship education are perceived as moderately effective, there exists considerable variability based on disciplinary context and personal experiences. The emphasis on experiential learning, mentorship, and diverse teaching strategies is consistent with theoretical frameworks identified in the literature. However, the moderate effectiveness ratings signal an urgent need for continuous adaptation and improvement of EE teaching methods to better assist students in their entrepreneurial pursuits. Future research should focus on identifying specific factors that shape these perceptions and exploring ways to tailor EE approaches to accommodate the diverse needs of students across different disciplines.

4.11.4 Influence of EE assessment methods on VCI

The analysis of how assessment methods in entrepreneurial education (EE) influence the intention to establish new ventures reveals both parallels and distinctions when juxtaposed with existing literature. The findings indicate that business plans achieved the highest average score (2.84) in a quantitative evaluation, a result that is further supported by qualitative insights. This aligns with earlier studies that emphasize the role of structured assessments in enhancing entrepreneurial skills (Nabi et al., 2021), showcasing a shared recognition of the significance of business plans in fostering positive perceptions of entrepreneurial education.

In the School of Health Sciences and Technology, the favorable view of assessment methods is particularly pronounced for projects (4.67) and examinations (4.50), echoing research that highlights the importance of experiential learning in EE (Lackéus, 2020). Both the current qualitative and quantitative results, along with previous studies, underscore the critical role of practical, hands-on assessments in developing entrepreneurial competencies. Additionally, the findings indicate that traditional assessment methods may inadequately capture essential entrepreneurial skills such as creativity and risk-taking (Liu et al., 2023). This observation aligns with current data from both quantitative and qualitative studies, which assigned lower effectiveness ratings to examinations, especially in the School of Natural Sciences. This points to a shared recognition of the limitations inherent in traditional assessment methods. While the School of Health Sciences and Technology reported significantly higher effectiveness ratings, disciplines such as Arts and Natural Sciences presented lower scores, particularly for projects (e.g.,

Arts = 2.45). This variation suggests that, despite literature often presenting a generalized perspective on assessment effectiveness, the current findings indicate a more nuanced situation shaped by disciplinary contexts. Previous research has often focused on broad patterns, failing to adequately address these contextual differences (Müller & Hutter, 2021).

The notable variability in responses from the School of Natural Sciences (standard deviation of 1.789) contrasts sharply with the more uniform perceptions found in the School of Health Sciences and Technology. This difference highlights a gap in the existing literature concerning the consistency of student perceptions across various academic settings. While earlier studies have concentrated on overall effectiveness, the present analysis reveals significant disparities in student attitudes and experiences that warrant further investigation (Battaglia et al., 2022). The findings underscore the urgent need for innovative assessment strategies tailored to specific faculties, particularly in areas where lower scores were noted. This contrasts with existing literature, which often advocates for traditional assessment methods without thoroughly exploring alternative approaches (Kuckertz et al., 2023). This discrepancy indicates a necessity to reevaluate how entrepreneurial education is assessed, especially in fields that may not benefit from conventional evaluation practices.

The discussion reveals notable agreements with prior research, especially concerning the effectiveness of business plans and the importance of practical engagement in EE. However, significant divergence is observed, particularly in the variability of perceptions across disciplines and the need for innovative assessment strategies. This situation prompts future research to explore these contextual differences and develop tailored assessment methods that better meet the diverse needs of students involved in entrepreneurship and business education.

4.11.5 Perceptions on the Influence of EE on VCI

The examination of graduates' views on the impact of Entrepreneurship Education (EE) on their intent to create ventures reveals significant insights into the differing levels of acknowledgment and consensus across various academic disciplines. The aggregate mean scores for the significance of EE range from 2.93 to 3.03, suggesting that participants generally perceive EE as moderately important. The assertion regarding the need to equip undergraduates with entrepreneurial skills achieved a mean score of 3.02, indicating widespread recognition of the relevance of EE across multiple fields (Nabi et al., 2021). Nonetheless, the moderate standard deviations (from 1.370 to

1.423) imply that while many participants concur on the importance of EE, opinions differ regarding its specific effects, particularly related to sustainable venture creation and the necessity for personnel proficient in EE.

In the analysis by faculty, the School of Natural Sciences distinguishes itself with notably higher mean scores, particularly regarding the preparation of undergraduates with entrepreneurial skills (4.40) and the overall significance of EE (4.00). This reflects a strong consensus within this faculty on the essential role of EE in cultivating skills that promote venture creation. The low standard deviation (0.548) further demonstrates a uniform agreement among respondents, underscoring a clear acknowledgment of the necessity for entrepreneurial skills in the current economy (Lyons and Zhang, 2021). Conversely, the School of Entrepreneurship and Business Management reported the lowest overall scores, with a mean of 2.86 for the importance of EE. This discrepancy raises concerns, as it indicates a potential disconnect between the faculty's focus and the broader significance of EE. The consistently lower ratings for the need for EE-literate personnel (2.71) and sustainable venture creation (2.86) suggest a lack of awareness of how EE can influence these vital areas (Müller & Hutter, 2021). This gap may signal a need for curriculum improvements or enhanced awareness initiatives to highlight the relevance of EE in entrepreneurial settings. Additionally, faculties such as the School of Health Sciences and Technology and the School of Arts exhibited greater variability in responses, reflecting a wider range of opinions on the efficacy and significance of EE. For instance, the School of Health Sciences and Technology reported a mean of 3.17 for the necessity of equipping undergraduates with entrepreneurial skills, but also showed a higher standard deviation, indicating that not all respondents agree on the importance of EE in their domain (Santos et al., 2023). This variability may mirror differing levels of exposure to entrepreneurial ideas within their educational programs, suggesting a potential area for curriculum improvement.

The results indicate that while there is a general recognition of the importance of EE across faculties, substantial differences exist in how this education is perceived and valued. The strong consensus within the School of Natural Sciences contrasts notably with the more skeptical perspectives in the School of Entrepreneurship and Business Sciences, suggesting that focused interventions may be needed to enhance the understanding and appreciation of EE in faculties where it is less recognized. Going forward, improving the integration of EE into academic

programs and emphasizing its relevance to various disciplines could promote greater alignment and support for venture creation intentions among graduates (Kuckertz et al., 2023).

4.11.6 Influence of University Incubation Centres on VCI

The examination of how university incubation centers affect the intention to create ventures provides significant insights into their perceived effectiveness. The statement pertaining to the facilitation of access to finance, venture capital, and guarantees received the lowest mean score of 2.98. This suggests that participants perceive this aspect of the hub as less effective compared to other functions. This finding from the quantitative analysis contradicts existing literature and qualitative studies that consistently recognize access to funding and resources as key advantages offered by incubation centers (Battaglia et al., 2022). The perception of reduced effectiveness in financial facilitation may indicate either a gap between the actual services provided by the incubation centers or a misunderstanding among participants about the financial support available.

The overall mean scores for the incubation centers ranged from 2.98 to 3.06, indicating that participants believe these hubs provide some assistance to entrepreneurs. Qualitative feedback from lecturers aligns with the quantitative findings, suggesting that the hubs are capable of supporting business initiation and management, with a highest mean score of 3.06. This aligns with recent literature that connects incubation centers with entrepreneurship and business development (Hausberg & Korreck, 2023). The standard deviations fell within a consistent range of 1.391 to 1.450, reflecting moderate variability in responses. While there seems to be a general consensus among participants regarding the efficacy of the incubation hubs, the level of approval varied among respondents. The literature indicates that perceptions of the effectiveness of incubation centers can vary significantly based on the type of support provided and the context in which it is delivered (Secundo et al., 2021).

Distinct differences in perceptions emerged from the faculty-based analysis. For instance, in the School of Health Sciences and Technology, several statements received high mean scores, particularly regarding networking (3.83) and the development of competitive ideas (3.83). This is in line with literature suggesting that interdisciplinary collaboration typically enhances entrepreneurial performance (Lyons & Zhang, 2021). Conversely, the School of Entrepreneurship rated the effectiveness of incubation hubs lower, particularly regarding networking (2.84) and financial facilitation (2.93). This discrepancy implies that students enrolled in entrepreneurship

and business sciences programs feel less supported by the incubation centers, highlighting an area for improvement. In the School of Agricultural Sciences, positive perceptions were noted, with a mean score of 3.29 for the statement regarding establishing and managing a business. This aligns with prior research indicating that agriculture-focused business incubators often serve as a catalyst for entrepreneurial initiatives, owing to their specialized support and resources (Kuckertz et al., 2023). In contrast, the mean scores for all statements were lower in the School of Engineering Sciences and Technology, particularly concerning financial facilitation (2.79). This may be attributed to the unique challenges faced by students in engineering when seeking the type of business support typically offered by incubation centers, where their technical skills may not align with the services provided (Müller & Hutter, 2021).

The findings suggest that university incubation centers are viewed as somewhat beneficial for supporting entrepreneurs, but perceptions vary significantly by faculty. Notable skepticism regarding technology is present among students in the School of Entrepreneurship and Business Sciences and the School of Engineering Sciences and Technology, in contrast to the more favorable views from the School of Health Sciences and Technology and the School of Agricultural Sciences. This misalignment underscores the necessity for universities to not only invest in incubation and acceleration services but also ensure these services are tailored to meet the needs of students across diverse disciplines, thereby maximizing the impact of these centers on venture creation intentions. Future research should explore these differences further to inform targeted interventions aimed at enhancing the effectiveness of incubation centers across all faculties.

4.11.7 Influence of EE content on VCI

Lecturers' qualitative research findings reveal that courses focused on innovation and creativity are essential for equipping students with the skills necessary to develop and evaluate new business concepts that align with market demands. These courses promote an entrepreneurial mindset, which is vital in today’s competitive environment, encouraging students to engage in critical and creative thinking. By participating in such lessons, students learn to take risks in identifying opportunities and devising solutions that, if executed successfully, can evolve into thriving ventures (Lackéus, 2020).

The qualitative results further suggest that business planning courses and programs play a crucial role in training students to become proficient business planners, incorporating aspects such as market analysis, competitive strategy, and operational planning. A well-defined vision and strategy are rooted in this foundational knowledge, which is critical for articulating effective strategies. Additionally, financial literacy is important, as it equips students to manage budgeting, explore funding options, and handle finances, enabling informed decision-making and sustained operation (Nabi et al., 2021). Furthermore, marketing and sales courses provide students with the necessary tools to build customer relationships and interact effectively with target markets, which are essential for achieving business success (Santos et al., 2023). Another significant element identified in the qualitative studies is the comprehension of the legal and regulatory framework as an integral part of entrepreneurial education. Students gain insights into navigating the complex terrain of contracts, intellectual property rights, and local regulations, which are crucial for establishing and running a business (Battaglia et al., 2022). In newly introduced courses on technology commercialization, students learn how to convert their ideas into commercially viable products within highly technology-oriented settings, focusing on market dynamics and scaling strategies—an essential competency as they move towards leading tech-focused organizations. Similarly, project management skills enable students to organize information and activities efficiently, particularly in resource-constrained scenarios (Lackéus, 2020). Courses emphasizing networking and relationship-building are vital as they assist students in establishing professional connections that can lead to mentorship, partnerships, and funding opportunities. Access to these relationships is critical for entrepreneurial success (Santos et al., 2023), as they provide essential resources and support systems. Finally, the outcomes also encompass an understanding of sustainability and social entrepreneurial education principles, motivating students to develop businesses that create social value and benefit their communities while adhering to market trends that increasingly prioritize corporate social responsibility (Nabi et al., 2021). The results offer valuable insights into participants' perceptions of various educational components, informed by a descriptive analysis of entrepreneurial education content's influence on venture creation intent. The mean scores for all items related to entrepreneurial education content range from 2.93 to 3.06, indicating that participants generally regard this content as moderately important. Notably, market research received the highest mean score (3.06), highlighting its significance in fostering entrepreneurial intentions. This aligns with recent literature that underscores the role of market

research in identifying business opportunities and understanding customer needs, which are crucial for the successful establishment of any venture (Kuckertz et al., 2023).

The standard deviations for the content areas, predominantly around 1.4, indicate a moderate variability in responses. The topic of introduction to entrepreneurship had a standard deviation of 1.431, suggesting a range of opinions regarding its significance. Such variability implies that while some participants find certain entrepreneurial education content areas essential, others may disagree, necessitating a more customized approach to entrepreneurial education that considers the diverse backgrounds and expectations of students (Müller & Hutter, 2021). When analyzing the data by faculty, significant differences in mean scores were observed. The highest means were recorded for introduction to entrepreneurship (4.20) and Innovation and Creativity (4.40), as reported by the School of Natural Sciences, indicating a stronger perception of importance in this domain. This suggests a heightened motivation for entrepreneurial careers and innovation within this faculty, consistent with research showing that individuals engaged in innovation and creative endeavors tend to exhibit greater entrepreneurial intentions (Lyons & Zhang, 2021). Conversely, the School of Wildlife and Environmental Sciences reported some of the lowest scores, particularly in Introduction to the School of Entrepreneurship and Business Sciences (2.29) and People Management (2.07). These low ratings imply a potential gap in the curriculum that may hinder the development of entrepreneurial skills for students in this faculty, indicating a need for curriculum enhancement in these areas (Kuckertz et al., 2023). For the School of Agricultural Sciences, the mean score for Introduction to Entrepreneurship was 2.94, with a standard deviation of 1.516, suggesting diverse opinions on its relevance. In contrast, the School of Natural Sciences exhibited relatively less variability across all content areas, with a clear majority consensus among respondents on the importance of the entrepreneurial education content. These differences highlight the necessity for any entrepreneurial education program to be tailored to the specific needs and perspectives of distinct student demographics (Müller & Hutter, 2021).

Ultimately, this analysis illustrates that while participants acknowledged the significance of all entrepreneurial education content areas, statistically significant differences in perceptions were associated with faculty. The findings suggest that educational institutions should customize their entrepreneurial education curricula to meet the specific needs and expectations of students, particularly concerning constructs that received lower ratings.

4.12 Discussion of hypotheses test results.

This section discusses hypothesis results for the study.

4.12.1 H1: Entrepreneurship education teaching methods positively influences venture creation.

The findings demonstrate a notable positive impact of educational methods on venture development ($B = 0.693$, $p < 0.001$). This aligns with Hypothesis 1, indicating that effective education in entrepreneurship education (EE) significantly boosts students' interest in establishing their own businesses. Recent research has yielded similar findings, revealing that effective teaching techniques in EE can markedly enhance students' entrepreneurial pursuits (Nabi et al., 2021). Part of this variance may be attributed to a potential rise in students' entrepreneurial behaviors and aspirations; a study by Lackéus in 2020 indicated that experiential learning techniques, such as business simulations and pitch contests, might affect these results. Furthermore, Morris et al. (2021) identified that enhanced venture creation can stem from EE programs that prioritize the development of students' entrepreneurial mindsets and competencies. The authors warn that successful teaching strategies can foster a growth mindset in students, which is crucial for entrepreneurial success. Additionally, research conducted by Santos et al (2023) suggests that EE programs integrating case studies and real-world examples may bolster students' entrepreneurial intentions and activities. According to the authors, this method can enhance students' confidence in launching their own ventures and provide them with a more comprehensive understanding of the entrepreneurial process. These study results are congruent with the growing body of literature in EE and reinforce our hypothesis that EE teaching methodologies have a favorable correlation with venture creation.

4.12.2 H2: EE assessment methods positively influence venture creation

The coefficient associated with Assessment Methods ($B = 0.004$, $p = 0.881$) was determined to be insignificant. As there was no observable effect on venture formation linked to the proposed assessment technique, H2 was dismissed. Despite previous research yielding mixed results, recent studies have begun to explore the influence of assessment methods in entrepreneurship education (EE). For example, Müller and Hutter (2021) highlighted that while evaluation methods may affect learning outcomes, they likely do not directly influence the ability to initiate or develop ventures. The authors argue that assessment should prioritize creativity and practical skills rather than solely

focusing on theoretical testing. Additionally, Kuckertz et al. pointed out that individuals who take an entrepreneurial approach to venture creation may not be adequately evaluated using traditional assessment methods, such as examinations and written tasks. While they warn that these methods alone may not foster increased venture development, they propose that more interactive assessment techniques, like project-based evaluations or peer reviews, could significantly improve learning in entrepreneurship.

4.12.3 H3: EE content positively influences venture creation

The results suggest that content has a strong positive effect on venture development ($B = 0.252$, $p < 0.001$). This strengthens H3, which asserts that strong and relevant content in EE helps form ventures greatly. Incorporating practical, real-world content into EE classes increases students' entrepreneurial aspirations and their likelihood of following through with venture formation (Lyons & Zhang, 2021). They contend that engagement with appropriate case studies, industry insights, and management tools will provide students with a better understanding of the realities that they will face in starting and running a business. Nabi et al. (2021) points out the necessity for EE to consider new themes such as innovation, sustainability, and digital social entrepreneurship. Incorporating real-world market trends and challenges in the teaching content not only increases student engagement but also prepares them to solve real entrepreneurial issues, ultimately enhancing their ability to establish new enterprises.

4.12.4 H4: University incubation centers indirectly support venture creation

Digging deeper, it can be inferred that the presence of beneficial structures, such as incubation centers, may enhance teaching strategies and content, thereby indirectly fostering venture creation. Recent research supports the notion that university incubation centers serve as significant environments for emerging entrepreneurs. A study conducted by Battaglia et al. (2022) indicates that these centers offer not only ideas, connections, and mentorship but also essential physical resources for launching new business initiatives. The authors emphasize that these facilities cultivate a conducive atmosphere for learning and experimentation. Additionally, Hausberg and Korreck (2023) further demonstrate how incubation centers effectively connect theoretical knowledge with practical application. Often, these centers provide concrete evidence that can advance entrepreneurial education and enrich both pedagogical methods and materials used in academic programs.

4.12.5 H5: Perceptions positively influence Venture Creation Intention

Regression analysis indicates a lack of significant correlation (B = -0.026, p = 0.306). Consequently, H5 is dismissed. This outcome is noteworthy as it contradicts the prevalent belief that favorable attitudes toward entrepreneurship education (EE) invariably lead to increased aspirations to pursue entrepreneurship. For example, while positive perceptions of EE are substantial, they do not necessarily align with intentions to engage in entrepreneurial activities (Nabi et al., 2021). The authors suggest that the factors they have identified may hold greater influence in shaping students' ambitions to initiate businesses and projects compared to those highlighted in other studies. Furthermore, Kuckertz et al. (2023) contend that the effectiveness of instructional resources and teaching methods is just as vital for the success of entrepreneurship and business education as students' perceptions are.

4.13 Chapter Summary

The results of the empirical study were detailed, analyzed, and discussed in Chapter 4. These findings are examined in relation to the sub-objectives outlined in Chapter 1, Section 1.3. It was concluded that both EE lecturers and students hold a favorable view of the experiential teaching method, believing it effectively supports new venture creation efforts. The curriculum should include business-related content, which is thought to significantly impact venture creation. Conversely, participants expressed concerns regarding the teaching and assessment methods for EE students, a sentiment echoed by both EE students and lecturers who noted that traditional approaches have diminished effectiveness. Additionally, one concern raised was that factors outside of EE might also influence venture creation. The discussions connected to theories that served as moderate guides for the current study. Regression analysis indicated that essential components of EE, such as teaching methods, content, and incubation centers, have a positive effect. However, it appears that the manner of assessment and students' perceptions of their language learning do not significantly influence these outcomes. The model's adjusted $R^2 = 0.646$, indicating a good overall fit and suggesting that these factors account for a considerable portion of the variance in students' intentions to initiate new ventures. We will now begin our description of the data analysis, presentation, and discussion of the findings from this empirical research. The following chapter will conclude and summarize the research findings while offering recommendations.

CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The aim of the present study was to model EE for venture creation in HEIs. The previous chapter discussed results of the current study's findings. This chapter presents the summary of the findings, conclusions, and recommendations for the improvement of EE in HEIs. This chapter also presents a proposed model for EE in HEIs. The chapter concludes by suggesting areas for further research and giving final comments.

5.2 Summary of the findings

The summary of the findings in the current study are presented according to the research objectives as presented in chapter 1

5.2.1 To examine the influence of entrepreneurship education teaching methods on venture creation intent.

The findings from the present study indicated that both EE lecturers and students at CUT regarded practical teaching methods in entrepreneurship education as beneficial. Practical entrepreneurship was positively perceived as a means to foster business initiatives, enhance job creation, provide employees with employment options, and support self-employment. Effective teaching strategies that promote venture creation include methods such as problem-based learning, guest lectures, simulations, and experiential learning. Conversely, traditional teaching methods, like lectures, were deemed less effective in motivating graduate students in Zimbabwe to launch new enterprises. Additionally, it was observed that the majority of EE students possessed a strong sense of self-efficacy regarding business formation, as they believed that practical approaches endowed them with essential business skills necessary for taking calculated risks, recognizing opportunities, and boosting their self-efficacy.

5.2.2 To determine the influence of entrepreneurship education assessment methods on venture creation intent.

The results of the current study indicate that assessments in entrepreneurship education (EE) have a limited effect on fostering a strong entrepreneurial drive among graduates from Higher Education Institutions (HEIs). Traditional evaluation methods tend to emphasize theoretical knowledge rather than practical experience, which may restrict students' abilities to translate their learning into real-world business contexts. For instance, examinations predominantly reward academic understanding and memorization, rather than the students' skills in developing and executing business ideas, resulting in a deficiency in practical entrepreneurial skills. The findings suggest that EE assessments should focus on real-world business situations and projects that reflect actual entrepreneurial activities, such as launching businesses, participating in business plan competitions, engaging in field projects, and undertaking internships.

This strategy aims to ensure that the assessment methods used in EE programs are better aligned with the needs of the local economy, thereby equipping graduates to make meaningful contributions to sustainable development, which includes promoting economic growth and creating jobs that will directly benefit the nation.

5.2.3 To establish the influence of entrepreneurship education content on venture creation intent.

The study found that the content of the entrepreneurship education has a significant impact on the university students' intentions to create venture based on several important criteria. In the first place, the teaching of practical skills such as marketing techniques, business planning, and financial literacy are often included in the curriculum and provide students with the knowledge and skill set necessary to open their own business. Practical experience, both via simulations and real-world projects, increases student interest in launching enterprises, which in turn enhances their confidence in their entrepreneurial abilities. As well case studies and successful business role models inside the curriculum, could cause exposure to students potentially to inspire. Because learning about the experiences of entrepreneurs who successfully founded businesses may entice students to follow the same path, will help nudge a mindset focused on creativity and risk-taking. Moreover, entrepreneurship education often stresses the need for critical thinking and problem-solving skills. The content allows students to inspire themselves to explore and thinker about real-

world events and problems and identify opportunities of building a venture around them, which drives their entrepreneurial motivation. Networking opportunities—seminars, guest lectures, and mentorship—expose students to resources and contacts in the industry that can be invaluable for starting a firm. Such experiences might help solidify plans to pursue entrepreneurial ambitions. The general educational climate influence students' entrepreneurship attitude. When the content nurtures a culture of creativity, resilience, and self-efficacy, students are more inclined towards cultivating a positive entrepreneurial mindset thereby enhancing their intention to create ventures.

5.2.4 To assess the influence of university incubation centres on venture creation intent.

The roles of incubation and innovation hubs are fundamentally vital for fostering innovation and entrepreneurship. According to the survey, university innovation hubs facilitate networking opportunities with various stakeholders, referred to as "cross-pollination," and create environments where business owners can connect with mentors, industry experts, and potential collaborators. Through networking, entrepreneurs are able to cultivate significant relationships that enhance business opportunities, encourage knowledge exchange, and generate new concepts and collaborative initiatives.

Another essential aspect is the access to venture capital and funding. Innovation hubs typically maintain connections with investors, venture capitalists, and funding organizations, which is why they frequently organize pitch events aimed at helping entrepreneurs secure financial backing. When perceived risks associated with businesses are minimized for investors, it becomes easier for them to engage, prompting hubs to offer certain assurances or assistance that helps attract capital. Moreover, innovation hubs often provide resources for conducting market research, enabling entrepreneurs to gain insights into their target markets and the competitive landscape. The availability of facilities and resources also bolsters prototype development. These hubs equip entrepreneurs with the necessary tools to create and test prototypes, allowing for iterative testing that helps refine products based on feedback, thereby increasing the likelihood of market success. In addition, innovation centers promote the establishment and management of businesses. They frequently offer templates for operational frameworks, marketing strategies, and business plans. Furthermore, training programs on legal compliance, financial literacy, and effective management practices are available, all of which are essential for successfully running a profitable enterprise.

Overall, innovation hubs are integral to the entrepreneurial ecosystem by supplying vital resources, support, and a collaborative atmosphere. They significantly enhance the likelihood of success by assisting business owners throughout the lifecycle of their ventures, particularly during the initial stages of idea development. These centers nurture connections, provide access to funding, and facilitate skill development, all contributing to a dynamic and innovative entrepreneurial landscape.

5.2.5 To determine the perceptions of graduates on the influence of entrepreneurship education on venture creation intent.

One concern is that students might not be sufficiently equipped for the realities of starting and managing a business. Numerous programs tend to prioritize theoretical concepts over practical, real-world experiences. As a result, graduates may possess knowledge that lacks applicability in actual business settings, leaving them ill-prepared to tackle the challenges of entrepreneurship. Furthermore, the emphasis on entrepreneurship may compel students to follow this path, even when it does not align with their personal aspirations or strengths. This expectation can lead to anxiety and feelings of inadequacy, particularly for those who might prefer more traditional career paths. Since entrepreneurship is not suitable for every student, compelling them into this role could negatively impact their self-esteem and job satisfaction.

Moreover, the discourse surrounding entrepreneurship often overlooks the significant failure rates associated with new ventures while highlighting success stories. Many students might harbor unrealistic expectations when embarking on their entrepreneurial journeys, believing that success is easily attainable. This can result in a lack of resilience and disillusionment when faced with the harsh realities of failure or obstacles. Lastly, promoting entrepreneurship education might divert resources and time from other essential subjects. A strong focus on entrepreneurial skills might come at the expense of critical, technical, or creative thinking abilities, all of which are equally vital in today’s job market. Consequently, students may receive a less comprehensive education.

In summary, while entrepreneurship education can enhance students' innovation and provide valuable skills, it also presents several drawbacks. It is essential to thoughtfully consider these aspects—ranging from the risk of inadequate preparation and unrealistic expectations to issues of accessibility and ethical implications—to ensure that entrepreneurship education serves all

students effectively and responsibly. The subsequent section will conclude the study by summarizing its findings.

5.3. Conclusions

The researcher concludes basing on the research objectives as well as the hypothesis that underpinned this study

5.3.1 To examine the influence of entrepreneurship education teaching methods on venture creation intent.

The data reviewed that EE teaching methods are important in cultivating venture creation skills that promote self-efficacy among students. This can be alluded to the fact that they are the key components that can transfers skills, knowledge to kick start the venture process as well as being impactful.

5.3.2 To determine the influence of entrepreneurship education assessment methods on venture creation intent.

The study also concludes that assessment methods should focus mainly on practical skill of starting skills.

5.3.3 To establish the influence of entrepreneurship education content on venture creation intent.

The research concludes that what people learnt is very important because it is what they grab during their study period and should to have to apply in real life. Content relevant to business startup and to the demands of industry should be taught in institutions of higher education.

5.3.4 To assess the influence of university incubation centres on venture creation intent.

The study outlined the importance of university incubation centers on promoting venture creation. The results indicated that university incubation centres provide crucial services and support such as financial resources helpful when starting ventures.

5.3.5 To determine the perceptions of graduates on the influence of entrepreneurship education on venture creation intent.

The research concludes university students have a negative perception towards EE. EE should be implemented in a way perceived relevant by university students.

5.4 Conclusion basing on hypothesis

5.4.1 Hypothesis 1. Entrepreneurship education teaching methods positively influences venture creation.

The results of this study conclude that there is a positive relationship between EE teaching methods and venture creation intention. Therefore, it can be concluded that there exists a relationship between the two variables.

5.4 .2 Hypothesis 2. Entrepreneurship education assessment methods positively influence venture creation.

The research also concludes that there is no association between entrepreneurship education assessment methods and venture creation intention.

5.4 .3 Hypothesis 3. Entrepreneurship education content positively influence venture creation.

Basing on the study, the results concludes that there is a positive relationship between entrepreneurship education content and venture creation intention.

5.4 .4 Hypothesis 4. University incubation centres positively influence venture creation.

There is a positive relationship between university incubation centres and venture creation intention.

5.4.5 Hypothesis 5. Students perceptions towards entrepreneurship education positively influences venture creation intention.

The research also concludes that there is no association between perceptions towards entrepreneurship education and venture creation intention.

5.5 Recommendations

Based on the findings of the current study, several recommendations for action will be made. The recommendations correspond to some extent to the best practices in the field of EE as defined and applied by EE researchers world-wide. The following are the recommendations for policy and practice.

5.5.1 Content

The current study recommends the teaching of entrepreneurship, Business Planning, Market research, Financial management, Business Legal Environment, Marketing strategies, Innovation and creativity, Networking and relationship building, Operations management, People Management.

5.5.2 Teaching methods

According to the current study, EE ought to be practical and experienced. According to the instructors in this survey, EE should be facilitated at HEIs by fully qualified and accredited EE lecturers. Since the current study indicated that experiential approaches are excellent ways of encouraging venture creation among students at HEIs, the following strategies should be used: business start-ups, mentorship programs, apprenticeships, exhibitions, and guest lectures.

5.5.3 Assessment Methods

According to the literature and the current study's findings, EE should be evaluated using actual business start-ups, projects, simulated ventures, business plans, exhibition reports, and team reports. Overly theoretical EE assessments, such as those that solely concentrate on exams, are less useful for evaluating EE in HEI. Students' ability to manage a real firm should also be evaluated. Forming a business does not usually follow from business planning. According to the professors in the current study, a change from classroom-based assignments and tests to practical evaluations is advised.

5.5.4 Innovation Hubs

According to the current study, it might be very advantageous and significant to create and let students to use innovation hubs at higher education institutions. Because these centers offer a nurturing atmosphere for encouraging academics and students to be creative, innovative, and entrepreneurial. According to the respondents, these centers are essential for promoting innovation. They allow students and faculty to experiment with new ideas, push the limits of knowledge and creativity, and explore new concepts by offering a supportive environment, resources, and mentorship. This encourages an innovative culture within the organization, which results in ground-breaking findings and improvements. Additionally, it is suggested that incubation and innovation hubs play a crucial role in encouraging entrepreneurship by providing advice on market research, company planning, and funding opportunities, enabling researchers and

students to turn their creative ideas into successful startup businesses. This promotes economic growth, job creation, and societal influence in addition to developing an entrepreneurial mindset. Having discussed the recommendation of the study, the following section discusses a model for effective implementation of EE in HEIs.

5.6 An EE Model for Venture Creation in Higher Education Institutions.

The researcher, is proposing an EE model (Fig 5.1) for venture development among students in HEIs in order to demonstrate the adoption of the suggestions made in the preceding section. Participant contributions and relevant literature from the current study are used to inform the model. It is the immediate outcome of formulating theory through the data-first technique (inductive reasoning). The model will make it possible to develop pertinent rules and regulations that could aid in ensuring that EE is implemented in HEIs.

5.6.1 EE Model for Venture Creation in Higher Education Institutions.

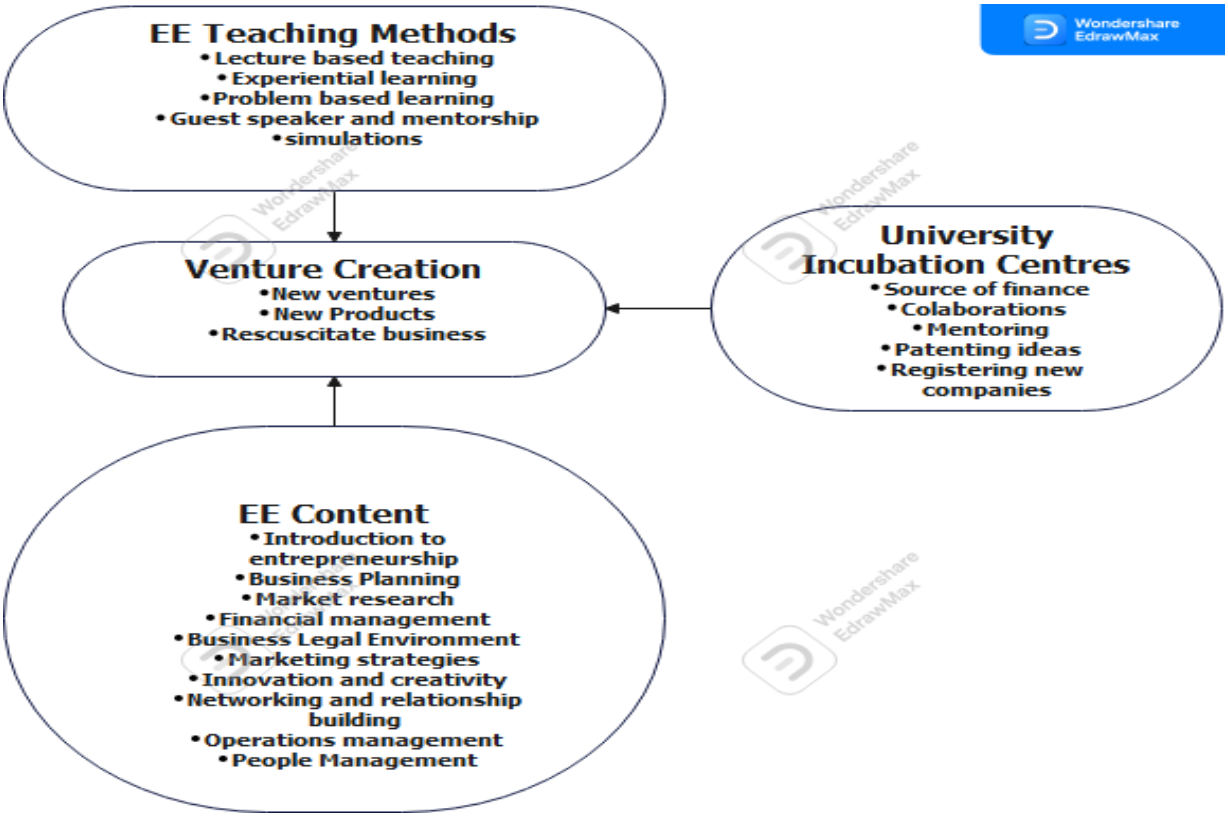

Figure 5.1: A proposed model for venture creation in Higher Education Institutions

Source: The Researcher (2025)

Variables in the suggested model are interdependent, none of them should be considered separately. Together, these tactics must be used for EE at Zimbabwe's HEIs to be successful. The foundation for a successful EE deployment in Zimbabwean higher education institutions will be the recommended tactics. The EE teaching strategies, EE content, and Innovation Hubs are essential components of the approach.

5.6.1.1 **Component 1: Content**

To build a solid entrepreneurial foundation, the approach suggests teaching essential but fundamental business skills. Business management, accounting and finance, marketing research and tactics, operations management, people management, project management, business plan development, networking, and relationship building are just a few examples of the business skills. Students' EE effectiveness can be increased by teaching them psychological traits like risk-taking, creativity, and innovativeness once they have a good grasp of business skills. EE graduates may benefit from this by developing self-efficacy and an entrepreneurial spirit. A learning experience is considered effective if and only if it may assist students in developing positive self-efficacy and entrepreneurial ambitions, according to the SSCT theory.

5.6.1.2 Component 2: Teaching Methods

According to the suggested paradigm, experiential learning—in which students participate in real business start-ups while still in college—should be the foundation of EE. Establishing business incubators and exposing students to laboratory work where patents, copyrights, and trademarks are produced and then registered appropriately could increase the effectiveness of school of entrepreneurship and business sciences education. Students studying school of entrepreneurship and business sciences education should graduate from college with a registered company and a ready-to-sell product or services. Students' self-efficacy, which SCCT views as essential for profession choice, can be increased through experiential learning. According to the concept, business mentorship and apprenticeship programs ought to be integrated into EE education in order for EE to be successful at HEIs. Students studying EE may be exposed to real-world business situations as a result. Guest lectures from captains of industry and local entrepreneurs should also be incorporated. Site visits, Case studies and simulations are ideal for EE. Social Cognitive Career Theory, states that vicarious learning creates self-efficacy towards a career and confirms outcome

expectations of that career which may ultimately result into career intention or choice, in this case being an entrepreneur.

5.6.1.3 Component 3: Innovation Hubs

University-level school of entrepreneurship and business sciences education must be systematic and should encourage innovation, experiential learning, and discovery learning. In the model illustrated in figure 5.1, students from various disciplines specialize in their programs while working to find people from other disciplines who share their interests in order to collaborate and launch their ventures. Once a project of interest has been agreed upon, business students will assess its potential commercial viability. Project members will then register their venture with the incubation center for mentorship and other transactional benefits. Business students will then create a business plan in collaboration with other members, while technical members, including experts in school of engineering sciences and technology, art, School of hospitality and tourism, and agriculture, will work on the prototype. After that, the administrators of the incubation center will help students register their business. Under the CUT umbrella, the university's division of innovations and technology transfer will also help students sell their prototype. Then comes the implementation. Students would be able to work anywhere in the nation or even abroad. The incubation center and other staff are managed by a Board of Directors, and their salaries are derived from the small fees that are collected for some services. Their main responsibilities include connecting incubators with business and keeping students up to date on the newest technological advancements as well as societal and industrial demands and expectations. Among other things, the center will provide free mentorship, networks, and advice on commercializing prototypes.

5.6.2 Outcome: EE Model for Venture Creation in HEIs

The skills expected out of the model are that students are enrolled into EE Higher Education programme, form start-ups, register them, and run them while still in university and consequently roll-out into the corporate world as business owners at graduation. When these objectives are achieved then, EE can be said to be effective.

Having discussed and recommended a model for EE at Higher Education Institutions, the next section presents the contribution of the present study to knowledge around School of entrepreneurship and business sciences Education.

5.7 Contribution of The Study

The current study is the first in-depth study to model EE for venture creation in HEIs. The study contributed significantly to the EE body of knowledge by generating empirical evidence on teaching methods, assessment methods, content and innovation hubs that encourage venture creation in HEIs from the perspectives of EE students and EE lecturers in HEIs.

The body of knowledge on an EE model for venture creation in public HEIs is enriched and will go a very long way in assisting and supporting all EE stakeholders such as students, parents, industry, university management, policy makers, the government and community at large to develop strategies for an effective EE at HEIs. Further studies on the present topic and related areas may use this study as a springboard for further research. The proposed EE model for promoting EE for venture creation can be adapted for use in HEIs.

The following sections presents the recommendations of the present study for future research.

5.9 Recommendations for Further Study

The current study was confined to Chinhoyi in Mashonaland West Province of Zimbabwe. A more comprehensive study executed nationally in both Private HEIs and public HEIs would establish more insights into modelling EE. This could create a solid base for enacting the proposed EE policy and legislation on EE provision. The study did not include perceptions from parents, the industry, and the community at large as participants for EE in the collection of data. The study recommends their inclusion for further research come out with an EE model for venture creation in HEIs.

The involvement of the above-mentioned stakeholders in the education of university students has countless benefits. The closer, the stakeholder is to the education of the child, for example the parent, the greater the child's development and educational achievement. Parents are the primary providers for the environment, resources, and encouragement for a student to take up a career path. The study recommends that future empirical studies should investigate strategies that can be used to popularize EE among stakeholders, most importantly the parents.

5.10 Chapter Summary

An EE model for venture creation in HEIs was effectively proposed by the current study. Students and lecturers involved in school of entrepreneurship and business sciences education at HEIs

provide insightful information for examining the variables affecting EE. A survey of related literature was part of this empirical investigation, and the SPSS analysis tool was used to analyze the primarily quantitative data. According to the results of the current study, EE was thought to offer Zimbabwe a number of advantages. According to the study, venture creation at HEIs could be encouraged through practical teaching approaches. Additionally, EE content has a good impact on venture creation. In addition, students negatively perceived EE in HEIs. Furthermore, the study concluded that innovation hubs should be fused into EE to promote venture creation.

EE was seen as the answer to Zimbabwe's overall economic and social issues, as well as the lack of enterprise formation. The claimed advantages of a strong EE provision are numerous and include, but are not restricted to, the creation of jobs, self-employment, the elimination of poverty, the establishment of new businesses, and the sustainable management of both new and current enterprises.

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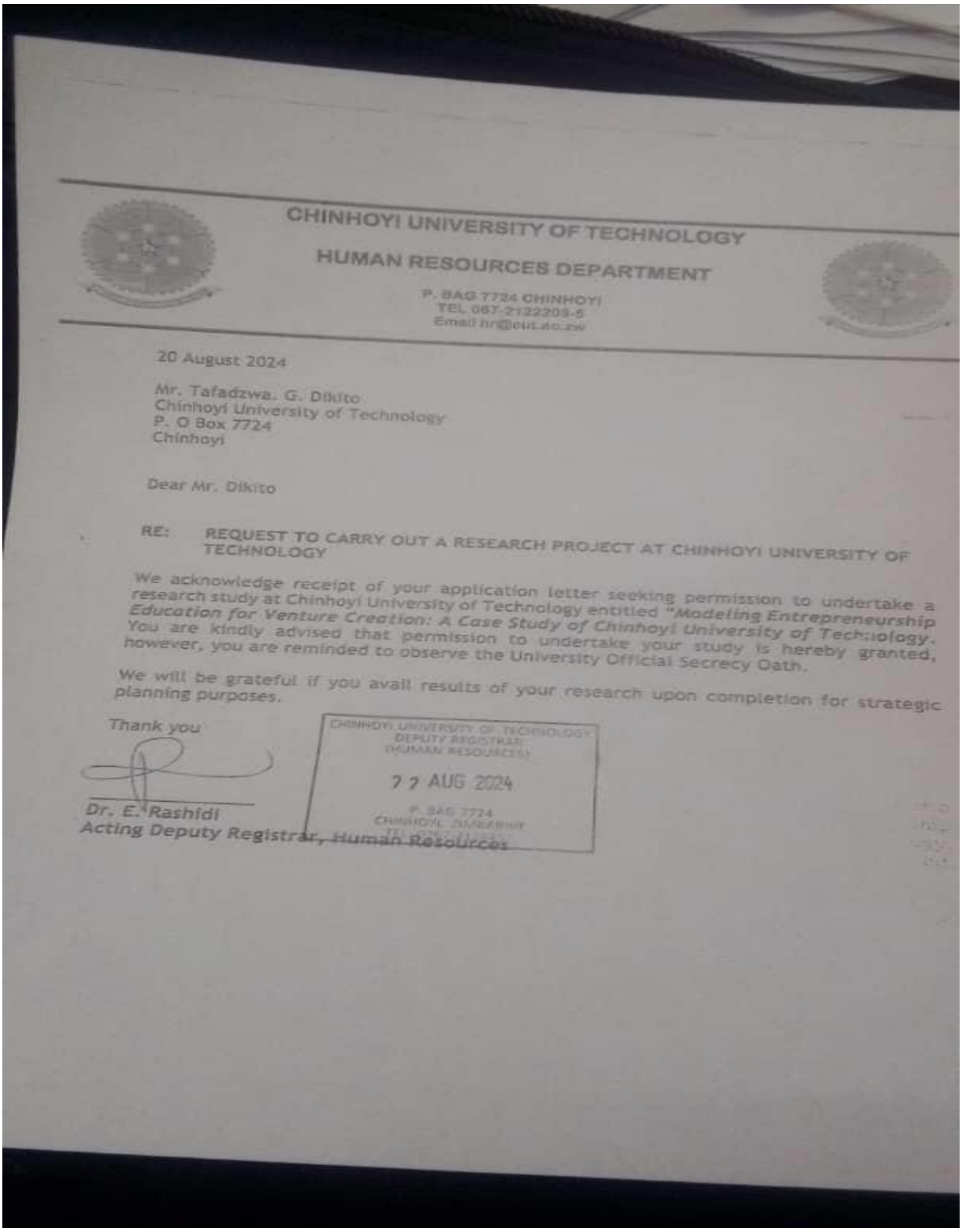
APPENDICES

APPENDIX 1: PERMISSION LETTER TO COLLECT DATA



CHINHOYI UNIVERSITY OF TECHNOLOGY

HUMAN RESOURCES DEPARTMENT

P. BAG 7724 CHINHOYI
TEL 067-2122203-5
Email hr@chut.ac.zw

20 August 2024

Mr. Tafadzwa. G. Dikito
Chinhoyi University of Technology
P. O Box 7724
Chinhoyi

Dear Mr. Dikito

RE: REQUEST TO CARRY OUT A RESEARCH PROJECT AT CHINHOYI UNIVERSITY OF TECHNOLOGY

We acknowledge receipt of your application letter seeking permission to undertake a research study at Chinhoyi University of Technology entitled *"Modeling Entrepreneurship Education for Venture Creation: A Case Study of Chinhoyi University of Technology.* You are kindly advised that permission to undertake your study is hereby granted, however, you are reminded to observe the University Official Secrecy Oath.

We will be grateful if you avail results of your research upon completion for strategic planning purposes.

Thank you

Dr. E. Rashidi
Acting Deputy Registrar, Human Resources

CHINHOYI UNIVERSITY OF TECHNOLOGY
DEPUTY REGISTRAR
(HUMAN RESOURCES)
22 AUG 2024
P. BAG 7724
CHINHOYI ZIMBABWE

APPENDIX 2: INTRODUCTORY LETTER TO CONDUCT RESEARCH

APPENDIX 3: STUDENT QUESTIONNAIRE

STUDENTS QUESTIONNAIRE

Title of questionnaire: Students questionnaire

Dear respondent

This questionnaire forms part of my master's research entitled: **Modeling School of entrepreneurship and business sciences Education for Venture Creation IN HEIs: A Case Study of Chinhoyi University of Technology**. You have been selected by a random sampling strategy from the population of 2000 students at Chinhoyi university who are exposed to School of entrepreneurship and business sciences Education). Hence, I invite you to take part in this survey.

The aim of this study is to model School of entrepreneurship and business sciences Education in Zimbabwe. The findings of the study may benefit Zimbabwe and the world at large with regards to promoting venture creation through school of entrepreneurship and business sciences education.

You are kindly requested to complete this survey questionnaire, comprising five sections (A-E) as honestly and frankly as possible and according to your personal views and experience. No foreseeable risks are associated with the completion of the questionnaire which is for research purposes only. The questionnaire will take approximately 10 minutes to complete.

You are not required to indicate your name and your anonymity will be ensured; however, indication of your age, gender, occupation position etcetera will contribute to a more comprehensive analysis. All information obtained from this questionnaire will be used for research purposes only and will remain confidential. Your participation in this survey is voluntary and you have the right to omit any question if so desired, or to withdraw from answering this survey without

penalty at any stage. After the completion of the study, results will be published as per Chinhoyi of Technology (CUT) regulations.

Permission to undertake this survey has been granted by the Chinhoyi University of Technology. If you have any research-related enquiries, they can be addressed directly to me or my supervisor. My contact details are: **0778095700** e-mail: **dikitotafadzwa@gmail.com** and my supervisor can be reached at +**2630774358385**, e-mail: **dchavunduka@gmail.com**.

By completing the questionnaire, you imply that you have agreed to participate in this research. Please return the completed questionnaire to Dikito Tafadzwa before end of the week.

Thank you

SECTION A: BIOGRAPHICAL INFORMATION **Serial Number**

Please fill in the blank spaces or tick (√) the appropriate box

Age range

21-25 years	
26-30 years	
31-35 years	
36 years +	

Gender:

Male	Female

Faculty/ school

Level

Fourth year 2nd semester	

SECTION B

TICK THE APPROPRIATE BOX FOR YOUR ANSWER.

EE CONTENT

Using **1 = Strongly Disagree, 2 = Disagree, 3 =Neutral and 4 =Agree and 5= 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.

B. The following School of entrepreneurship and business sciences Education (EE) content is important in influencing venture creation. May you indicate your level of agreement with each of the following by ticking the appropriate box.

	Very important	important	neutral	Not so important	unnecessary
Introduction to school of entrepreneurship and business sciences					
Business Planning					
Market research					
Financial management					
Business Legal Environment					
Marketing strategies					
Innovation and creativity					
Networking and relationship building					
Operations management					
People Management					

SECTION C. INFLUENCE OF EE TEACHING METHODS ON VENTURE CREATION

Using **1 = Strongly Disagree, 2 = Disagree, 3 =Neutral and 4 =Agree and 5= Strongly Agree** may you indicate your level of agreement with each of the following opinion statements by ticking the appropriate box.

C. The following School of entrepreneurship and business sciences Education (EE) teaching methods are important in influencing venture creation. May you indicate your level of agreement with each of the following teaching methods by ticking the appropriate box.

	Very important	important	neutral	Not so important	unnecessary
Lecture based teaching					
Experiential learning					
Problem based learning					
Guest speaker and mentorship					
simulations					

SECTION D. INFLUENCE OF EE ASSESSMENT METHODS ON VENTURE CREATION.

Using **1 = Strongly Disagree, 2 = Disagree, 3 =Neutral and 4 =Agree and 5= Strongly Agree** may you indicate your level of agreement with each of the following opinion statements by ticking the appropriate box.

D. The following School of entrepreneurship and business sciences Education (EE) assessment methods are important in influencing venture creation. May you indicate your level of agreement with each of the following assessment methods by ticking the appropriate box.

	Very important	important	neutral	Not so important	unnecessary
Examinations					
Projects					
Exhibitions					
Business plan					
Business start up					

SECTION E: PERCEPTIONS ON THE INFLUENCE OF SCHOOL OF ENTREPRENEURSHIP AND BUSINESS SCIENCES EDUCATION ON VENTURE CREATION.

Using **1 = Strongly Disagree, 2 = Disagree, 3=Neutral ,4= Agree and 5 = Strongly Agree** may you indicate your level of agreement with each of the following opinion statements by ticking the appropriate box.

	SA	A	N	D	SD
EE is important	5	4	3	2	1
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.					
New and old Ventures need EE literate personnel					
Sustainable venture creation is an outcome of school of entrepreneurship and business sciences education.					
A strong focus on school of entrepreneurship and business sciences education promotes innovations					

SECTION F: INFLUENCE OF UNIVERSITY INCUBATION CENTRES ON VENTURE CREATION.

Using **1 = Strongly Disagree, 2 = Disagree, 3=Neutral ,4= Agree and 5 = Strongly Agree** may you indicate your level of agreement with each of the following opinion statements by ticking the appropriate box.

	SA	A	N	D	SD
The incubation and innovation hub assist entrepreneurs in networking with partners					
The incubation and innovation hub facilitate access to finance, venture capital, and guarantee					
The incubation and innovation hub help entrepreneurs to develop competitive and viable ideas					
The incubation and innovation help entrepreneurs to develop prototypes					
The incubation and innovation hubs help entrepreneurs to establish and manage business					

SECTION G: VENTURE CREATION INTENTION

	SA	A	N	D	SD
I have the desire to be an entrepreneur					
My professional goal is to become an entrepreneur. **.**					
I am determined to start a business in the future.					
I intend to make every effort to manage my own business.					
I am serious about starting my own business.					

APPENDIX 4: INTERVIEW GUIDE

Thank you for your participation.

Interview guide

What is it like being an EE lecturer at cut?

……

……

……

What EE courses do you regard essential?

……

……

……

How can EE be taught to improve venture creation?

……

……

……

Do you think the current EE programme can groom entrepreneurs?

……

……

……

How can the EE be made effective in developing entrepreneurs?

……

……

Would you say the incubation centres has been successful in promoting venture creation?

……

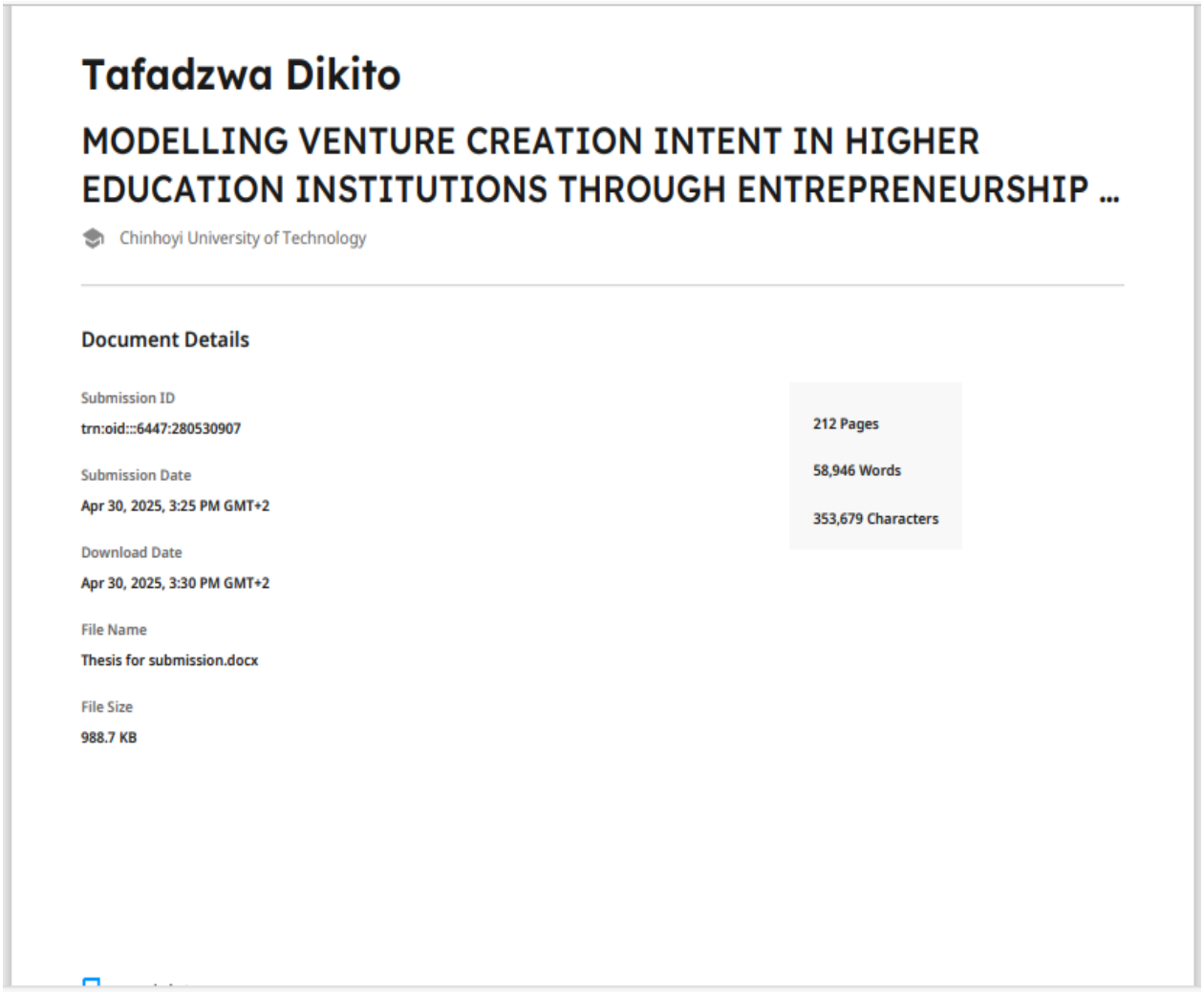
……

What support should incubation centres provide to improve venture creation?

……

……

APPENDIX 5: TURNITIN REPORT



Tafadzwa Dikito

MODELLING VENTURE CREATION INTENT IN HIGHER EDUCATION INSTITUTIONS THROUGH ENTREPRENEURSHIP ...

Chinhoyi University of Technology

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