

**MAPPING THE FIELD OF ENTREPRENEURSHIP EDUCATION RESEARCH
AMONGST STUDENTS AT HIGHER EDUCATIONAL INSTITUTIONS IN SOUTH
AFRICA**

By

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DECLARATION:

In accordance with Rule G5.6.3, I hereby declare that the above-mentioned treatise/dissertation/thesis is my own work and that I have not previously been submitted to another University or for another qualification.



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ABSTRACT

This study was driven by the relentless lack of the adequate research and records mapping the field of entrepreneurship education (EE) amongst higher educational institutions (HEIs) in South Africa. As the result the primary objective is to map the field of past EE research conducted amongst HEIs in South Africa in terms of who the researchers are, what topics are under the study, the methods used to carry out such research and the contributions that have been made. Based on the findings in the present study specifically in chapter four which is the empirical results, evidence was shown that the field of entrepreneurship education amongst higher educational institutions in South Africa is still in its early days. The present study also shows that the outcomes of EE which were discussed in chapter 2.4 are rarely mentioned in the academic journals that was researched in chapter four.

Table of Contents

	Page
DECLARATION BY CANDIDATE	i
ACKNOWLEDGEMENTS	ii
ABSTRACT	iii
Table of Contents	iv
LIST OF FIGURES	vii
List of Tables	viii

CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

1. INTRODUCTION AND BACKGROUND	1
1.2 PROBLEM STATEMENT	2
1.3 RESEARCH OBJECTIVES	3
1.3.1 PRIMARY OBJECTIVE.....	3
1.3.2 SECONDARY OBJECTIVES.....	3
1.3.3 METHODOLOGICAL RESEARCH OBJECTIVES.....	3
1.4 DEFINITION OF KEY CONCEPTS	4
1.4.1 ENTREPRENEURSHIP EDUCATION.....	4
1.4.2 HIGHER EDUCATIONAL INSTITUTIONS.....	5
1.5 SIGNIFICANCE OF THE STUDY	5
1.6 STRUCTURE OF THE STUDY	5

CHAPTER TWO

LITERATURE REVIEW ON ENTREPRENEURSHIP EDUCATION

2.1 INTRODUCTION	7
2.2 DEFINING ENTREPRENEURSHIP EDUCATION	7
2.3 THE IMPORTANCE OF ENTREPRENEURSHIP EDUCATION	8
2.4 OUTCOMES OF EFFECTIVE ENTREPRENEURSHIP EDUCATION	9
2.4.1 ENTREPRENEURIAL MINDSET	9
2.4.2 ENTREPRENEURIAL INTENTION	10
2.4.3 SKILLS AND EXPERTISE	10
2.4.4 ENTREPRENEURIAL ALERTNESS	10

2.5	EVOLUTION OF THE FIELD OF ENTREPRENEURSHIP EDUCATION	11
2.6	EVOLUTION OF THE FIELD OF ENTREPRENEURSHIP EDUCATION AMONGST HIGHER EDUCATIONAL INSTITUTIONS.....	13
2.7	SUMMARY AND CONCLUSION.....	15

CHAPTER 3
RESEARCH DESIGN AND METHODOLOGY

3.1	INTRODUCTION	16
3.2	RESEARCH PHILOSOPHY/ PARADIGM	16
3.3	APPROACH TO THEORY DEVELOPMENT	17
3.4	METHODOLOGICAL CHOICES	17
3.5	RESEARCH STRATEGY	18
3.6	TIME HORIZON.....	18
3.7	TECHNIQUES AND PROCEDURES	19
3.7.1	Data collection	19
3.7.2	Data analysis	19
3.8	TRUSTWORTHINESS.....	20
3.9	ETHICAL CONSIDERATIONS.....	20

CHAPTER 4
**EMPIRICAL RESULTS: ENTREPRENEURSHIP EDUCATION RESEARCH IN SOUTH
AFRICA**

4.1	INTRODUCTION	21
4.2	ACADEMIC INSTITUTIONS, AUTHORS, AND YEAR OF PUBLICATION..	21
4.2	ACADEMIC JOURNALS USED FOR PUBLICATION AND TITLE OF PUBLICATION	23
4.3	CITATIONS	24
4.4	RESEARCH GAPS IDENTIFIED IN THE PUBLISHED JOURNALS.....	26
4.5	SUMMARY AND CONCLUSION	28

CHAPTER 5
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1	INTRODUCTION	29
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5.2 OVERVIEW OF THE STUDY29

5.3 RECOMMENDATIONS31

**5.4 LIMITATIONS OF THE STUDY AND SUBSEQUENT RECCOMENDATIONS
FOR FUTURE RESEARCH32**

5.5 FINAL CONCLUSION33

LIST OF SOURCES34

APPENDIX 1: PREVIOUS ENTREPRENEURSHIP EDUCATION RESEARCH39

APPENDIX 2 : THE LEARNING PROCESS FRAMEWORK.....46

APPENDIX 3: CLEARANCE FORM47

INSTRUCTIONS.....47

APPENDIX 4: TURNITIN SIMILARITY REPORT50

LIST OF FIGURES

	Page
Figure 4. 1: Visual representation of the number of journals of EE that come from a specific institution.	23

List of Tables

	Page
Table 4.1: Academic institution, author(s) where and year in which article on EE in HEIs in South Africa was published.....	22
Table 4. 2: Academic journals that have published EE among HEIs research in South Africa	24
Table 4. 3: Number of citations used in each of the ten academic journals.....	25
Table 4. 4: Research gaps identified.....	26

CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

1. INTRODUCTION AND BACKGROUND

In the third quarter of 2021, the unemployment rate in South Africa (SA) reached a new record high of 34.9%, increasing by 0.5% compared to the second quarter of 2021 (Geza, Ngidi, Slotow & Mabhaudhi, 2022:1). The proportion of men that are employed compared to women is higher, meaning more women are unemployed than men (Geza et al., 2022:1). The unemployment rate among women was 37.3% in the third quarter of 2021 compared to men which was 32.9% among men. One of the reasons for such a high unemployment rate in South Africa, is because of the consequences of apartheid in South Africa, where rural areas was disadvantaged to economic development and were also heavily isolated from economic growth benefits and opportunities. In addition, (Marganingsih and Pelipa (2023:70) states that there is a lack of a solid human resources development plan which contributes to the high youth and graduate unemployment in South Africa. South Africa had a youth unemployment rate of 66.5% in 2021, which is one of the worst unemployment rates in the world. As a result, young people in South Africa often move from rural areas to big cities, because of the potential of being employed in the urban areas (Geza et al., 2022:1).

One of the solutions to the high unemployment rate in South Africa, especially amongst the youth, is entrepreneurship and starting their own businesses (Marganingsih & Pelipa, 2023:70). With entrepreneurship and the youth starting their own businesses, this would result in resolving part of the unemployment crises by creating jobs and also would be assisting the government in reducing unemployment by creating jobs (Marganingsih & Pelipa, 2023:70). Entrepreneurship is an agent that produces change through innovation by starting a business or businesses and resulting in economic development (Castillo, 2023:3). Marganingsih and Pelipa (2023:70) state that entrepreneurship is the ability to manage something that exists in oneself to be able to mature as a person and be more optimal so that an individual can improve their standard of living in the future.

Legislators have taken entrepreneurial skills as a priority with the belief that entrepreneurship education will be able to help to give graduates and the youth the required entrepreneurial skills to be able to have a successful entrepreneurial journey (Olutuase, Brijlal & Yan, 2023:264). According to Boldereanu, Ionescu, Bercu, Bedrule-Grigoruță and Boldureanu (2020:2), entrepreneurship education (EE) has a positive impact on people's entrepreneurial skills, the ability for people to be able to do things the right way and the rise of positive attitude towards entrepreneurship. EE is a discipline that encourages self-reliance, promotes self-employment among society and enhances innovative ideas (Iwu, Opute, Eresia-Eke, Robertson, Olumide & Olayemi, 2021:5). EE can be defined as all activities provided in a curriculum aimed at stimulating entrepreneurship mindset, attitude and skills as well as covering a variety of factors such as idea generation, growth and innovation (Nyello, Kalufya, Rengua, Nsolezi & Ngirwa, 2015:37).

In order to develop the essential business skills and remove emotional and societal inhibitions, it is necessary to increase the effectiveness of entrepreneurship modules (Chhabra, Dana, Malik & Chaudhary, 2021:1155). South African Higher Institutions (HEIs) must develop a learning environment to encourage a youthful talent pool to pursue entrepreneurship. (Chhabra et al., 2021:1155). HEIs in South Africa must create a great group of talent which would thrive in entrepreneurship. There needs to be the development of entrepreneurship education within South Africa that will eventually have a positive outcome on the economy of the country and the standard of living of the society in South Africa will improve (Nieuwenhuizen, 2016:528).

1.2 PROBLEM STATEMENT

Even though there has been previous research conducted on EE globally and in South Africa, there is still limited research that have done a review on past research on EE conducted amongst HEIs in South Africa. There is a shortage of educational contributions by HEIs in South Africa resulting in delaying the growth of first-generation entrepreneurs (Chhabra et al., 2021:1155). There is an urgency for the youth in South Africa to be educated and trained in the field of entrepreneurship (Chimucheka, 2014:405). EE is an

important contributor to the growth of entrepreneurial culture in developing countries. EE can play an important role in changing the youth and graduates view towards self-employment and gaining the required skills to run a business (Chimucheka, 2014:405).

1.3 RESEARCH OBJECTIVES

The section to follow will present the primary, secondary and methodological research objectives of the study.

1.3.1 PRIMARY OBJECTIVE

The primary objective of this study is to map the field of past entrepreneurship education (EE) research conducted amongst HEIs in South Africa.

1.3.2 SECONDARY OBJECTIVES

In order to achieve to the primary objective, the following secondary objectives have been formulated:

- SO¹: To identify the authors, institutions and year in which EE research globally and in South Africa amongst students at HEIs were conducted.
- SO²: To determine what topics of EE are being investigated, the methods used to carry out such research and the impact it has made in the field of EE research.
- SO³: To determine what are the outcomes of EE being investigated in a HEIs context.
- SO⁴: To identify gaps in current research on EE research in HEIs in South Africa and future research topics to be investigating addressing these research gaps.

1.3.3 METHODOLOGICAL RESEARCH OBJECTIVES

In order to achieve the above-mentioned primary and secondary objectives, the following methodological objectives have been identified:

- MO¹: To undertake a theoretical investigation into the nature and importance of entrepreneurship education in general and in South African HEIs in particular, as well as the evolution of the field of EE in general and amongst HEIs in South Africa in particular.
- MO²: To undertake desk research to collect past research articles published on on EE amongst students at HEIs in South Africa and to conduct a narrative literature review to provides a comprehensive summary of existing literature on the topic.
- MO³: To conduct descriptive and a thematic analysis to analyse the publications making up the study's data set so as to achieve the objectives of the study.
- MO⁴: To provide conclusions and propose practical recommendations to researchers and entrepreneurship educators on research gaps to be addressed concerning EE research amongst students at South African HEIs.

1.3.4 RESEARCH QUESTIONS

- RQ¹: Who are the authors and institutions undertaking EE research globally and in South Africa amongst students studying at HEIs?
- RQ²: What are the topics of EE are being investigated, the methods used to carry out such research and the impact it has made in the field of EE research?
- RQ³: What are the outcomes of EE being investigated in a HEIs context globally and in South Africa?
- RQ⁴: What are the current gaps in research on EE research in HEIs in South Africa and future research topics to be investigating addressing these research gaps?

1.4 DEFINITION OF KEY CONCEPTS

1.4.1 ENTREPRENEURSHIP EDUCATION

EE is defined as the process of giving the students good knowledge and skills for generating ideas and also carrying those ideas forth (Grivokostopoulou, Kostas & Perikos, 2019:3).

1.4.2 HIGHER EDUCATIONAL INSTITUTIONS

Higher educational institutions refer to tertiary learning and training institutions and activities that include traditional activities and institutions with faculties of arts, humanities and science and more specialised universities with faculties of agriculture, engineering, science and technology (Alemu, 2018:211).

1.5 SIGNIFICANCE OF THE STUDY

The focus of the study is on mapping the field of EE research conducted amongst HEIs in South Africa. Despite the importance of EE in HEIs globally and in South Africa, most past EE research has been conducted in the Western world and in Asia, with limited research that have been conducted on EE amongst HEIs in South Africa. There is a shortage of educational contributions by HEIs in South Africa resulting in delaying the growth of first-generation entrepreneurs (Chhabra et al., 2021:1155).

1.6 STRUCTURE OF THE STUDY

Chapter one gives the introduction, background and problem statement of the study. Thereafter the primary, secondary and methodological objectives are highlighted, and the research questions posed. The chapter then discuss the key concepts of the study, the study's significance and the structure of the study.

Chapter two addresses the nature and importance of EE by first defining it, as well as referring to its importance. Secondly, the effective outcomes of EE is discussed. The third section of the literature review will provide an overview of the evolution of the field of EE in general, followed by highlighting the evolution of the field of EE among HEIs. The last

part of the literature review will provide a theoretical framework of EE applicable to the current study.

Chapter three will commence with the discussion of the research philosophy/paradigm and approach to theory development, followed by methodological choices, research strategy and time horizon. Additionally, there will also be techniques and procedures, trustworthiness and ethical considerations that will be explained in detail in chapter three.

Chapter four will begin with the introduction, followed by academic institution, country where research was conducted and type of publication. Additionally, there will be the discussion of academic journals used for publications, the growth of EE in South Africa, dimensions of EE investigated, outcomes of EE and keywords identified in study abstracts.

Chapter five will commence with the introduction followed by the overview of the study and recommendations. Additionally there will also be a discussion of the limitation of the study, recommendation for future research and the final conclusion.

CHAPTER TWO

LITERATURE REVIEW ON ENTREPRENEURSHIP EDUCATION

2.1 INTRODUCTION

In Chapter one the introduction, background and objectives of this study were discussed. As the primary objective of this study is to map the field of past EE research conducted amongst HEIs in South Africa, chapter two represents the theoretical background of this research. This chapter also give effect to the first methodological objective by undertaking a theoretical investigation into the nature and importance of entrepreneurship education in general and in South African HEIs in particular, the evolution of the field of EE in general and amongst HEIs in particular.

Chapter two commences by discussing the nature and importance of EE by first defining it, as well as referring to its importance. Secondly, the effective outcomes of EE is discussed. The third section of the literature review will provide an overview of the evolution of the field of EE in general, followed by highlighting the evolution of the field of EE among HEIs. The last part of the literature review will provide a theoretical framework of EE applicable to the current study.

2.2 DEFINING ENTREPRENEURSHIP EDUCATION

Entrepreneurship has many different features with various different type of meanings. Entrepreneurship originates from the French word 'entreprende' which means a coordinator of musical and other types of entertainment. This word was originally born in the 16th century (Guatum & Kumar, 2015:22). In the 19th and 20th century various different scholars like Adam Smith and Alfred Marshall further expanded Richard Cotillions contribution by adding leadership and pairing entrepreneurship with organizations while keeping the important risk taking and profit which was established by Richard Cotilion (Guatum & Kumar, 2015:22).

EE developed in the late 20th century when different schools of thought on

entrepreneurship started conflicting with each other when reviewing and criticising each other's school of thought about entrepreneurship (Guatum & Kumar, 2015:22). This led to EE having multifaceted meanings(Guatum & Kumar, 2015:22) .For instance, Ripolles and Blesa (2023) define EE as any educational involvement to help students to prepare for their entrepreneurial profession, while Abdullahi, Khalid, Ahmed, Ahmed and Gumawa (2021:41) describe EE as a way for teaching or educating people on how to establish, participate in and run businesses to be able to boost the economy in the area which they operate. For the purpose of this study. EE is defined is the process of giving the students good knowledge and skills for generating ideas and also carrying those ideas fort (Grivokostopoulou, Kovas & Perikos, 2019:3).

Entrepreneurial education is a very difficult measure that impacts various levels of education, specifically inside HEIs (Bikse, Riemere & Rivza, 2013:72). The theoretical framework of EE has been developed with the sole mindset of the modern characteristics of EE. According to Bikse, Riemere and Rivza (2013:72) the focus of the framework is the learning process that is in the inner circle which comprises of namely: learning goals and objectives, the curriculum, teaching methods, teaching aids, teaching organisation forms, learning results and assessments. While the outer circle comprises of parents, employers, education policy makers, education board, universities, Teacher trainers and school administration. The inner circle of the EE theoretical framework affects the EE program and its quality externally, however on the other hand the outer circle is involved heavily in the process of executing EE internally. See the learning process framework in Appendix 2.

2.3 THE IMPORTANCE OF ENTREPRENEURSHIP EDUCATION

EE is supported globally to be able to develop young upcoming entrepreneurs (Saadat, Aliakbari, Majd & Bell, 2021). EE plays an important part in transmitting entrepreneurial skills and expertise from the source (teacher) to the inheritor (student) to be able to enhance one's frame of mind, habits and ability to be able to manage a business or to create and practically implement methods of working in a business environment with the objective to make substantial profit (Maraningsih & Pelipa, 2023:72). EE also aims to

ensure that the entrepreneurial creativity (EC) is strongly built up through theoretical and practical learning (Ediagbonya, 2022:95). A student or young person with a strengthened EC start an entrepreneurial project in a form of establishing a unique business venture. EE also gives the students the experience and knowledge that is crucial to conditioning the students' skills, behaviour and attitudes through a quality education and training programme (Chhabra, Dana, Malik & Chaudhary, 2021).

The importance of EE in South Africa is for students to be able to gather the necessary skills and learning to improve the economy of South Africa and address the economic challenges especially the low economic growth and the high unemployment rate (Chimucheka, 2014:405). Additionally, EE can be instilled to be a passion of a student and to be learned just like a discipline to create a sustainable continuous generation cycle of South African entrepreneurs (Chimucheka, 2014:405).

2.4 OUTCOMES OF EFFECTIVE ENTREPRENEURSHIP EDUCATION

There are four main positive outcomes of effective entrepreneurship education, namely: entrepreneurial mindset (EM), entrepreneurial intention (EI), skills and expertise, and entrepreneurial alertness (EA). These effective positive outcome will be discussed in the following sections.

2.4.1 ENTREPRENEURIAL MINDSET

Achieving the desired outcomes of entrepreneurial activities comes from the entrepreneurial mindset (Saadat et al., 2015). Entrepreneurial mindset (EM) is defined the that of human thinking towards entrepreneurial events and outcomes. Kurakto et al. (2020) realised that there are three different facets of EM, namely cognitive, emotional and behavioural. EM may be recognised in terms of thoughts, feelings and actions in the entrepreneurship process (Cui & Bell 2022:8). Entrepreneurial mindset is strengthened through the foundation of being educated and is effective when an individual uses it during their entrepreneurial journey (Saadat et al., 2015).

2.4.2 ENTREPRENEURIAL INTENTION

Shah, Amjed and Jaboob (2020:13) state that there's a positive correlation between EE and Entrepreneurship intention (EI). They highlight that EE courses have a positive impact to establish a new business at a certain point in their life. Magasi (2022:374) believes EE is crucial to fostering the enthusiasm and passion of launching a new entrepreneurial venture.

Shah et al. (2020:13) believe that the two most common practices used to analyse EI in literature is the entrepreneurial event theory (EET) and the theory of planned behaviour (TPB). According to Shah et al. (2020:13), the EET model views of one's own desirability, feasibility (capabilities), and desire to act on opportunities all have an impact on one's intents to start a business. As opposed to the TPB model, which bases behavioural intentions on three important antecedents: perceived behavioural control (PBC) or perceived self-efficacy, personal attitude (PA), personal norms (PN) or social norms (Shah et al., 2020:13).

2.4.3 SKILLS AND EXPERTISE

Students have a great potential to be successful entrepreneurs through the skill and knowledge that are taught through EE (Othman & Othman, 2019:2412). Magasi (2022:375) additionally claims that the problem-solving skills and the ability to be able to identify business opportunities come from the EE course provided in HEI.

2.4.4 ENTREPRENEURIAL ALERTNESS

By studying entrepreneurial alertness (EA) as part of EE, can help speed up management decisions and improve the ability to identify entrepreneurial opportunities within a individuals entrepreneurship career (Saadat et al., 2021). Entrepreneurial alertness, according to Kirzner (1979); Saadat et al., (2021) is the ability to focus attention on missed possibilities without actively looking for them. Because it enables business owners to be aware of changes, possibilities, and unseen events. Kirzner (1979); Saadat et al., (2021)

believe that entrepreneurial alertness has the ability to enhance the value of the company. According to Saadat et al. (2021) alertness is valuable when starting a business because it is able to assist entrepreneurs to be conscious of any changes, opportunities, and unexpected circumstances.

2.5 EVOLUTION OF THE FIELD OF ENTREPRENEURSHIP EDUCATION

Kuratko (2005:581) states that the realistic time in which entrepreneurship education became a force in business schools is in the early 1970s. In 1971 the University of Southern Carolina launched their first Masters of Business Administration (MBA) that concentrated specifically on entrepreneurship (Kuratko, 2005:581). After 1972 the field of EE began to take root and grow. By the early 1980s, over 300 universities reported the teaching courses in entrepreneurship and small businesses (Kuratko, 2005:581). In the 1990s that number grew exponentially to 1050 schools that were involved in EE (Kuratko, 2005:581).

Zeithaml and Rice (1987) researched some of the evolving universities involved in entrepreneurship EE in the United States of America (USA). They accepted that education entrepreneurship covered the whole curriculum of business administration and as such the course business administration was the closest approach to the original concept of business management and entrepreneurial education that was available in universities during that time (Zeithaml & Rice, 1987).

In 1991 Robinson and Hayes (1991) conducted a survey with universities that hold a capacity of 10000 student minimum to research the extent of the growth in EE. Robinson and Hayes (1991) believed that EE had come a long way in the past 20 year. However, they identified a weak point when researching the field of EE and realised that there was a lack of depth in the programs offered then in the 1990's. Solomon and Fernald in 1991 did research on the trends in small business management and entrepreneurship in the United States with the purpose of the paper to report results of three surveys on the development of courses, academic programs, seminars, and workshops of small business management and entrepreneurship. The respondents were second year college students

from HEIs In the U.S. The review found that survey results showed the remarkable shift of the number of colleges and universities or HEIs that are offering small business management and entrepreneurship courses to students.

In the early to mid-2000s, the number of EE courses in the USA increased significantly, with over 2200 courses taught in 1,600 schools, 277 endowed positions, 44 academic publications, and mainstream business management journals focusing on EE. With 75% of assets accumulating since 1987, the discipline of EE has collected wealth totalling over \$440 million. Solomon, Duffy and Tarabishy's (2002) analysis highlights the growing market interest in EE driving change in education. In 2003 Katz wrote a review of 'The chronology and intellectual trajectory of American EE 1876-1999' that was published at Sain Louis University. Katz (2003) found that the field of EE in the United States has reached its maturity rate and the field is likely to increase exponentially outside globally.

From 2010 onwards EE focused more on the impact that it has on entrepreneurial mindset, behaviour and attitudes. More recently Cui and Bell (2020) focussed on how EE affects the mindset, behaviour and attitudes of students and the positive correlation between EE and mindset, behaviour and attitudes. Sreenivasan and Suresh (2023:65) state there is a growth in the number of journals annually, focusing on EE by emphasising the growth of journals and the access from 2002 until 2022 amounting to 2185 journals. Today in the year 2023 there are articles by the likes of Toth-Pajor, Bedo and Csapi (2023) that focus on the digitalisation of EE and entrepreneurial capacity building as the Covid 19 outbreak escalated digitalisation of EE.

In summary, the earlier topics on EE in general focussed on the growth of EE courses globally and the market growth of EE, while newer topics focus on the EE regarding entrepreneurial mindset and behaviours of students, as well as the digitalization of EE. In the following section the evolution of the field of EE amongst HEIs will be discussed.

2.6 EVOLUTION OF THE FIELD OF ENTREPRENEURSHIP EDUCATION AMONGST HIGHER EDUCATIONAL INSTITUTIONS

Appendix 1 shows a total of 20 review studies of general EE and EE at HEIs globally from 2006 to 2023. From Appendix1 it can be seen that 13 reviews of the EE in HEIs studies were conducted in Asia which is the highest of all continents researched. Additionally, Europe accounted for four reviews on EE in HEIs studies. Australia and Africa have the lowest review of studies of one and two respectively for EE in HEIs.

The first research on EE in HEIs was conducted by Gurol and Atson (2006) on entrepreneurial characteristics amongst university students. The study was conducted on a sample of undergraduate senior students in business administration from two universities, namely Yildiz Technical University and Akdeniz University in Turkey. The purpose of this research was to explore the entrepreneurship profile of Turkish university students and to make an evaluation of their entrepreneurship orientation by comparing them with non-entrepreneurially inclined students (Gurol & Atson, 2006:26). According to the results, all entrepreneurial attributes are shown to be higher in students who are entrepreneurially inclined than in students who are not, with the exception of self-confidence and ambiguity tolerance (Gurol & Atson, 2006:26). This research was followed up in 2009 by Petridou, Sarri and Kyrgidou that researched entrepreneurship education in higher educational institutions and specifically the influence of gender on it. Their academic journal titled "entrepreneurial education in higher educational institutions: the gender dimension" focused on the entrepreneurial programs provided by Greek HEIs to 1639 students studying in a variety of scientific fields at Technical Educational Institution of Thessaloniki (TEITh) and Aristotle University of Thessaloniki (AUITh). Following an analysis of the programs, it became clear that there was gender-specific differences in participation rates, attitudes toward entrepreneurship education, and views of the necessary abilities. The study found that male enrolment rates are higher than female enrolment rates. Furthermore, in terms of attitudes toward participation in entrepreneurial educational programs, women show a larger interest in learning, developing skills, competing for jobs, and networking with local businesses than men do to a much higher degree.

Salamzadeh, Azmi and Kirby (2013) conducted research on the purpose of studying awareness, intention and the contextual aspects among higher education students at the University of Tehran for the purpose of finding social entrepreneurship education in Iran. Salamzadeh et al. (2013:29) found out that students the majority of student who are pursuing entrepreneurship and non-entrepreneur students intend on being self-employed by creating their own new businesses.

Yusof, Mohamad, Lim, Yusof and Soon's (2015) research on an analysis of the elements that impact a graduate's choice to be an entrepreneur (Yusof et al., 2015:874) revealed that the majority of the University of Utara graduates surveyed wanted to pursue the career of being an entrepreneur.

Wardana, Narmadity, Wibowo, Mahendra, Wibowo, Harwida and Rohman (2020:1) investigated the relationship between student entrepreneurial education and entrepreneurial mindset (EM), as well as recognising how attitude and self-efficacy interact with EE . The respondents were students from several universities in Malang of East Java, Indonesia. The study found EE can influence student's entrepreneurial self-efficacy, entrepreneurial attitude (EA) and entrepreneurial mindset. Entrepreneurial self-efficacy positively impacts entrepreneurial attitude, while EA positively impacts EM (Wardana et al., 2020:5). Additionally, EA plays a crucial part in how both EE and entrepreneurial self-efficacy connect with students EM (Wardana et al., 2020:6).

In a more recent study, Chabbra et al. (2021) investigated the purpose of evaluating the elements of entrepreneurship education and training (EET) in India. The respondents comprised of the university teachers involved in teaching entrepreneurship courses in HEIs at Faridabad and Gurgaon. The majority of respondents cited the curricula's current rigidity and attendance tracking as barriers to effective EET. The study also found that incremental pedagogical efficiency, flexible evaluation systems, entrepreneurial experience of the faculty, extended support holistic mentoring and experiential learning as vital elements of a successful EET regime for students in HEIs (Chabbra et al., 2021). Syed, Singh and Spicer (2023:158) conducted research on the evolution of

entrepreneurial HEI research and supplying the structural elements that define it. This was done by measuring the number of articles of research on entrepreneurial HEIs in different countries. Syed et al. (2023:165) found that the United State led research on entrepreneurial HEIs, which was then followed by the United Kingdom and other European nations.

2.7 SUMMARY AND CONCLUSION

With the evolution of EE in general and in HEIs which was explained in the literature review above, this shows that there is a great number of studies of entrepreneurial education within higher educational institutions specifically Asia and Europe. The evolution of the field of EE in general started in the United States of America, with the first journal traced in this study being in the USA then spreading to other countries. The literature review also shows there are few articles of EE in general and HEIs in Africa.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

Chapter two represented the theoretical background while chapter three represents the research design of this the present study. This chapter gives effect to the third methodological objective of this study by determining the research methodology best suited for addressing the identified research problem and objectives.

Chapter three will commence with the discussion of the research philosophy/paradigm and approach to theory development, followed by methodological choices, research strategy and time horizon. Additionally, there will also be techniques and procedures, trustworthiness and ethical considerations that will be explained in detail in chapter three.

The research framework of Saunders, Lewis and Thornhill (2019:128), also known as the “research onion”, will be used to explain the research design and methodology chosen in the current study. The stages or layers from the outside of the research onion to the central point are (i) research philosophies, (ii) approaches to theory development, (iii) methodological choices, (iv) research strategies, (v) time horizons, and (vi) data collection and analysis techniques and procedures (Saunders et al., 2019:130).

3.2 RESEARCH PHILOSOPHY/ PARADIGM

Saunders et al. (2019:130) state that a system of assumptions and beliefs about the growth of knowledge is referred to as research philosophy. Saunders et al. (2019:130) believes that the way to explore and comprehend research philosophy, a researcher must develop the capability for reflexiveness or the ability to critically evaluate one’s own thinking and action. According to Saunders et al. (2019:144) there are five main research philosophies namely: positivism, critical realism, interpretivism, postmodernism and pragmatism.

Based on the fact that the purpose of this study is to conduct research on mapping the field of entrepreneurial education research amongst students at higher educational institutions in South Africa, interpretivism is believed to be the most suitable research methodology for the current study. Saunders et al. (2019:148) state that interpretivism stresses that human beings are different from physical experiences because they create meanings. Saunders et al. (2019:148) believes that interpretivism provides new, precise understanding and interpretations of social settings and situations therefore making it the best fit for the present study.

3.3 APPROACH TO THEORY DEVELOPMENT

Saunders et al. (2019:152) believes there are three possible approaches to theory of development namely: deductive, inductive and abductive approach. According to Saunders et al. (2019:152) the deductive theory approach is when researcher obtains theory from academic literatures.

Based on the current study on mapping the field of entrepreneurial education research amongst students at higher educational institutions in South Africa by means of examining comprehensive literature reviews, using the deductive approach is believed to be the most suitable approach to theory development in this study.

3.4 METHODOLOGICAL CHOICES

Saunders et al. (2019:178) elaborates that there are three methodological research choices when conducting research namely mono, multi and mixed method. Saunders et al. (2019:130) states that the methodological choice is the researcher's discretion when deciding on which research design between qualitative, quantitative, or mixed method is most appropriate for their study.

Based on the current study on the analysis of the field of past entrepreneurial education research conducted amongst students at higher educational institutions globally and in South Africa, the mono, qualitative research methodological choice is the most favourable

methodological fit for the present study.

3.5 RESEARCH STRATEGY

Saunders et al. (2019:189) defines a research strategy as a plan that researchers will use when answering questions pertaining to research. Saunders et al. (2019:189) further explains that the research strategy of a certain study provides a connection between the selected study of philosophy and the methods picked for the collection of data and studies. Saunders et al. (2019:190) mentions strategies of a research study which can be used in a study, namely: experiments, surveys, archival and documentary research, case study, ethnography, action research, grounded theory and narrative review.

For the purpose of this study, a narrative review is the best fit for the current study. Narrative review is the collection and research of accessible literature on a particular topic of interest (Gregory and Dennis, 2018:893). Contingent on the fact that the primary objective of the current study on the mapping of the field of entrepreneurial education research amongst students at higher educational institutions in South Africa, which would require the researcher to collect and research accessible literature on entrepreneurial education research amongst students at higher educational institutions in South Africa, the narrative review strategy is shown to be the best match for the current study.

3.6 TIME HORIZON

According to Saunders et al. (2019:212) when conducting a study, the researcher their research should be a single snapshot that is taken at present time or a series of snapshots that give a picture of how proceedings in the field of research develop over a period of time. The single snapshot is known as the cross-sectional study, while the series of snapshots method is known to be a longitudinal study.

Contingent on the fact that the current study strives to map of the field of entrepreneurial education research amongst students at higher educational institutions in South Africa at

the present time in a single snapshot, the cross-sectional time horizon method will be best fit for the current study.

3.7 TECHNIQUES AND PROCEDURES

The last layer of the research framework consists of the techniques and procedures. The research will engage and enable the collection and analysis of data, which will be discussed below.

3.7.1 Data collection

The desk research strategy is shown as the best match for the current study when the researcher looks to identify the most appropriate literature on the specific topic area through searching for keywords on electronic databases (Gregory & Dennis, 2018:893). Martins, Cunha and Serra (2018:2) state that secondary data is defined as the study and analysis of data collected by other researchers. Contingent on the fact that the current study strives to map of the field of entrepreneurial education (EE) research amongst students at higher educational institutions (HEIs) in South Africa, the secondary data will be collected using desktop research that is conducted on Google scholar. The researcher will conduct research on the field of EE at HEIs in South Africa to ensure that EE is properly and fully mapped. The researcher will look to identify the most appropriate literature on the field of EE at HEIs in South Africa through searching for keywords on electronic databases.

3.7.2 Data analysis

The data analysis phase will need the researcher to obtain appropriate literature on the field of EE at HEIs in South Africa from the data collection stage, with the purpose of developing a comprehensive narrative literature review table that would form a summary of EE in HEIs in Africa and South Africa. The literature review table will comprise of the mapping of EE, with factors such as the authors of the article, the purpose of the study,

the year of publications, the country in which the research was conducted, citations of academic journals researched and the outcomes of EE.

3.8 TRUSTWORTHINESS

Adler (2022:600) states that the measure of trustworthiness' is evaluated through these criteria's namely: credibility, transferability, dependability and confirmability. Based on the fact that the current study strives to map the field of entrepreneurial education research amongst students at higher educational institutions in South Africa, the articles and research obtained on the current study should be able to show credibility through using credible authors with reliable articles. The researcher of the present study should also be able to present a trustworthy, adequate and credible articles about the mapping of the field of entrepreneurial education research amongst students at higher educational institutions in South Africa.

3.9 ETHICAL CONSIDERATIONS

Bystrov and Petryna (2021:53) refers to ethics as systems of principles that serve as a guide and assist in judging what is right or wrong when analysing human acts. The authors of the articles mentioned above are the only parties that are able to be impacted in the current study. Based on the above discussion of the ethical considerations for the present /study , the purpose is to ensure that the articles and literature sources that are used in the mapping of the field of entrepreneurial education research amongst students at higher educational institutions are correctly represented without causing and reputational harm to the authors of the articles used in this study and that the articles and authors are properly recognized for their work. Additionally, the Nelson Mandela University regulations require that the researcher applies for and obtain an ethical clearance from the institutions ethics clearance committee before commencing with the research work. This is to ensure the present study meets the ethical standard of the Nelson Mandela University.

CHAPTER 4

EMPIRICAL RESULTS: ENTREPRENEURSHIP EDUCATION RESEARCH IN SOUTH AFRICA

4.1 INTRODUCTION

Chapter three represented the research design and methodology, while chapter four represents the empirical results of this present study. This chapter gives effect to the fourth methodological objective of this study by empirically analysing the publications making up the study's data set to achieve the objectives of the study.

Chapter four commences by describing the academic institutions, authors and year of publication where previous entrepreneurship education research in South Africa were conducted, followed by a discussion of academic journals used for publications and title of publications. Furthermore, the citations of the academic journals, research gaps identified in published journals and the summary and conclusion will be discussed.

4.2 ACADEMIC INSTITUTIONS, AUTHORS, AND YEAR OF PUBLICATION

The aim of this particular section is to acknowledge the academic institutions who have investigated entrepreneurial education in South Africa and in which year the article was published. A summary of academic institution, authors and year of publication is illustrated in Table 4.1 below.

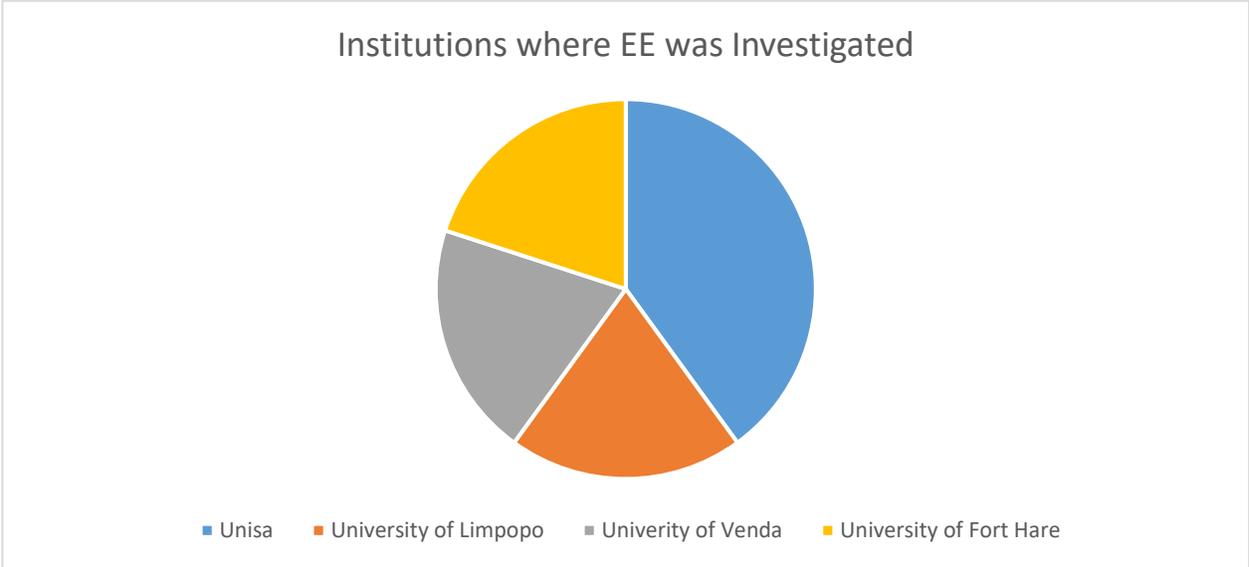
Table 4.1: Academic institution, author(s) where and year in which article on EE in HEIs in South Africa was published

Author(s)	Academic institution who conducted the research	Date published
Radipere, S.	Unisa	2012
Fatoki, W.	University of Limpopo	2014
Chimucheka, T.	University of Fort Hare	2014
Amadi-Echendu, A.P., Phillips, M., Chodokufa, K. & Visser, T.	Unisa	2016
Musetsho, T.R. & Lethoko, M.X.	University of Venda	2017

Source: Researcher's own construction

Table 4.1 illustrates that the five publications on EE amongst students at HEIs in South Africa was conducted amongst four institutions, namely the University of South Africa (Unisa) which published two articles, followed by the University of Limpopo, Venda and Fort Hare all having published one article each. Figure 4.1 illustrates which South Africa's academic institutions contributed the most in the field of EE amongst HEIs in South Africa.

Figure 4.1: Visual representation of the number of journals of EE that come from a specific institution



Source: Researcher’s own construction

4.2 ACADEMIC JOURNALS USED FOR PUBLICATION AND TITLE OF PUBLICATION

The purpose of this section is to identify the academic journals in which EE among HEIs research in South Africa have been published, as well as the title of the publication, which is illustrated in Table 4.2 below.

Table 4.2: Academic journals that have published EE among HEIs research in South Africa

Journal name	Topic	Accreditation
Mediterranean Journal of Social Science	The entrepreneurial intention of undergraduate students in South Africa: the influences of entrepreneurship education and previous work experience	ISSN
The Independent Journal of Teaching and Learning	An evaluative study on the effect of entrepreneurial education curriculum on students at the University of Venda, South Africa	ISSN
African Journal of Business Management	South African university entrepreneurship education	ISSN
International Review of Research in Open and Distributed Learning	Entrepreneurial education in a Tertiary context: a perspective of the University of South Africa	ISSN
Mediterranean Journal of Social Science	Entrepreneurship education in South Africa	ISSN

Source: Researcher’s own construction

As viewed in Table 4.2 above, EE research among HEIs in South Africa, have been published in five separate academic journals. Only one journal is African and the other journals are International.

4.3 CITATIONS

The five articles that are reviewed below, the highest academic journal that is cited is titled ‘The Entrepreneurial Intention of Undergraduate Students in South Africa: The Influences of Entrepreneurship Education and Previous Work Experience’ and Entrepreneurship Education in South Africa with 119 citations both published in 2014. Followed by ‘South

African university entrepreneurship education’ with 48 citations published in 2012. The third highest was ‘Entrepreneurial Education in a Tertiary Context: A Perspective of the University of South Africa’ which was published in 2016 with 37 citations.

Table 4.3 Number of citations used in each of the ten academic journals

Date	Author(s)	Topic	Journal Name	Citations
2012	Radipere, S.	South African university entrepreneurship education	African Journal of Business Management	48
2014	Chimucheka, T.	Entrepreneurship education in South Africa	Mediterranean Journal of Social Sciences	119
2014	Fatoki, W.	The entrepreneurial intention of undergraduate students in South Africa: the influences of entrepreneurship education and previous work experience	Mediterranean Journal of Social Science	119
2016	Amadi-Echendu, A.P. Phillips, M., Chodokufa, K. & and Visser, T.	Entrepreneurial education in a tertiary Context: a perspective of the University of South Africa	International Review of Research in Open and Distributed Learning	37
2017	Musetsho, T.R. & Lethoko, M.X.	An evaluative study on the effect of entrepreneurial education curriculum on students at the University of Venda, South Africa	The Independent Journal of Teaching and Learning	15

Source: Researchers own construction

The average of the citations for the eight academic journals are 65.63. The academic journal with the highest citation which is 119 was by Chimucheka and Fatoki at the University of Fort Hare and Limpopo respectively. Then the second highest citation was

by Radipere with 48 citations at the University of South Africa (UNISA). Followed by Amadi-Echendu, Phillip, Chodokufa and Visser with 37 citations at UNISA. The lowest was 15 citations by Musetsho and Lethoko from the University of Venda,

4.4 RESEARCH GAPS IDENTIFIED IN THE PUBLISHED JOURNALS

In the table below there are research gaps identified, with the date, author and topic of the academic journals. The five academic journals in the table below are from various higher educational institutions in South Africa.

Table 4.3: Research gaps identified

Date	Author(s)	Topic	Research gaps
2012	Radipere, S.	South African university entrepreneurship education	Findings from these authors show that existing entrepreneurship programs do not address social and economic problems
2014	Fatoki, O.	The entrepreneurial intention of undergraduate students in South Africa: The influences of entrepreneurship education and previous work experience	The lack of understanding the factors that affect the intentions to start-up a business in the future
2014	Chimucheka, T.	Entrepreneurship education in South Africa	Although entrepreneurship education ranks high on policy agendas in many countries, little research is available to assess its impact in South Africa.

2016	Amadi-Echendu, A.P. Phillips, M., Chodokufa, K. & and Visser, T.	Entrepreneurial education in a tertiary context: A perspective of the university of South Africa	There is a gap between the perceived desirability of entrepreneurship amongst students and actual self-employment and start-up rates amongst graduates.
2017	Musetsho, T.R. & Lethoko, M.X.	An evaluative study on the effect of entrepreneurial education curriculum on students at the University of Venda, South Africa	Despite all the institutional and other conducive developments, South Africa's total entrepreneurial activity (TEA), as revealed in the Global Entrepreneurship Monitor (GEM) 2013 report that South Africa is at the lowest percentage level when compared with other Sub-Saharan African countries.

In summary of Table 4.4 above, Radipere (2012) published an article with the research gap which shows that entrepreneurship programs do not address social and economic problems. While the research gap of the journal written by Fatoki (2014) is about the lack of understanding the factors that affect the intentions to start-up a business in the future. Furthermore, Chimucheka (2014) published an article with a research gap which identified that although entrepreneurship education ranks high on policy agendas in many countries, little research is available to assess its impact in South Africa.

Amadi-Echendu et al. (2016) published an academic journal with the research gap that shows a gap between the perceived desirability of entrepreneurship amongst students and actual self-employment and start-up rates amongst graduates. The article published by Musetsho and Lethoko (2017) identified a research gap that despite all the institutional

and other conducive developments, South Africa's total entrepreneurial activity (TEA), as revealed in the Global Entrepreneurship Monitor (GEM) 2013 report that South Africa is at the lowest percentage level with other Sub-Saharan African countries.

4.5 SUMMARY AND CONCLUSION

The academic institutions where previous entrepreneurship education research in South Africa took place was discussed, followed by the discussion of academic journals used for publications and title of publication was discussed. Furthermore, the citations of the academic journals and research gaps identified in published journals was discussed. This section of the present study showed that there is a small number of academic journals on the mapping of the field of EE among HEIs in South Africa.

CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

Chapter five is the final chapter of the current study and provides a brief overview of the whole study specifically a brief overview on the research conducted, the main empirical results, the recommendations, limitations and future research opportunities in the field of entrepreneurial education in higher educational institutions.

The overview of the study will commence by giving a brief summary of the introduction and the background of the current study followed by the discussions of the literature review that was undertaken in the current study. Subsequently there will be a brief summary of research matrix and research design, followed by the discussion of the main empirical findings of this study. The chapter will conclude by making recommendations that can be made based on the findings of the study, the current studies limitations and the future research opportunities that occur from the limitation of the present study.

5.2 OVERVIEW OF THE STUDY

Chapter one of the present study provided an introduction of the study. The chapter began with the introduction and background of the study, followed by the problem statement of the current study which was distinguished as the following: even though there has been previous research conducted on EE globally and in South Africa, there is still limited research that have done a review on past research on EE conducted amongst HEIs in South Africa. Based on the above problem statement a set of objectives were framed, which constitutes of the primary objectives, secondary objectives, methodological objectives and research questions for the present study. Chapter one concluded with the scope of the study, significance of study and structure of the study.

Chapter two provided a review of the literature review relevant to the current study. The chapter commenced with defining the entrepreneurship education, which were defined for the purpose of this study with the following standards: EE as a way for teaching or educating people on how to establish, participate in and run businesses to be able to boost the economy in the area which they operate, any educational involvement to help students to prepare for their entrepreneurial profession, as the process of giving the students good knowledge and skills for generating ideas and also carrying those ideas forth. Followed by the importance of entrepreneurship education which identifies the importance as students to be able to gather the necessary skills and learning to improve the economy of South Africa and address the economic challenges especially the low economic growth and the high unemployment rate. Furthermore, the outcomes of EE were identified as the following: entrepreneurial mindset, entrepreneurial alertness, skills and expertise and, entrepreneurial alertness. Additionally, the evolution of the entrepreneurship education in general was discussed followed by the evolution of entrepreneurial education in higher educational institutions which was traced from 2006 until 2023.

Chapter three described the research and methodology applied in this study. The study employed the interpretivism research philosophy, the deductive approach to theory development, mono method and quantitative methodological choice. The research strategy that was used was the narrative review. The desk strategy was used to gather data, while data was analysed by the means of mapping the field of entrepreneurial education in South Africa.

Chapter four presented the empirical results of the current study, the chapter commenced with an overview of the academic institution, author and year of publication in South Africa where entrepreneurship education was conducted. During the course of the current study, five research studies on entrepreneurship education were found in the form of academic journals between 2012 and 2017. Followed by identifying the academic journals in which EE among HEIs research in South Africa have been published which shows the different journal names for the three out of five academic journals, with two academic journals having the same journal names. Furthermore, the number of citations of the five academic journals was analyzed showing the descending order the comparison citations between

five academic journals. Additionally, the research gaps in the five different articles were identified and extensively discussed.

5.3 RECOMMENDATIONS

According to the finding in the present study, currently only five academic journals have been published in on the mapping of entrepreneurship education in South Africa. Based on the findings in the present study specifically in chapter four which is the empirical results, evidence was shown that the field of entrepreneurship education amongst higher educational institutions in South Africa is still in its early days. This is proven by Chimucheka (2014) with the research gap that was found in his article that although entrepreneurship education ranks high on policy agendas in many countries, little research is available to assess its impact in South Africa. The evolution of EE in HEIs globally in the present study showed in Chapter two (Section 2.7) that the first academic journal of EE in HEIs was published by Gurol and Atson (2006) compared to South Africa which in the present study the oldest academic journal of EE in HEIs in South Africa is by Radipere (2012) which is a six year gap. Chapter 4.2 showed a visual representation of the number of institutions where EE research was conducted in South Africa, with four institutions conducted EE research in South Africa compared to Asia which was discussed in chapter 2.7 which had 13 institutions that conducted EE research. Therefore, future research shows that more research should be conducted on EE in HEIs in South Africa.

The present study shows that the outcomes of EE which were discussed in chapter 2.4 are rarely mentioned in the academic journals that was researched in chapter four being only one academic journal by Fatoki (2014) that highlights the entrepreneurial intention outcome of EE discussed by Shah et al. (2020:13) which states that there's a positive correlation between EE and entrepreneurship intention (EI). This present study showed that future research should be conducted more on the outcomes of EE in South Africa.

5.4 LIMITATIONS OF THE STUDY AND SUBSEQUENT RECCOMENDATIONS FOR FUTURE RESEARCH

This present study made an attempt to provide a meaningful contribution about the knowledge of mapping EE amongst HEIs in South Africa. Throughout the whole development of the present study, numerous limitations have been recognized, these limitations will be discussed, and recommendations will be provided to as to how these limitations may be minimised or eliminated in future studies in the field of EE among HEIs in South Africa.

The most severe limitation of the present study comes from the research criteria for the studies to be included in the present study. In the present study, an academic article had to be published in English to be deemed eligible for review. With South Africa having diverse languages, it's possible that there are numerous languages in South Africa whereby academic work could have been conducted. For example, academic work could have been conducted in Isizulu or Afrikaans with valuable research for the present study. Due to the criteria of the present study being English, no other language is eligible for the present study, possibly resulting to numerous studies to be excluded. It is recommended that future studies attempt to collaborate with scholars who prefer to write academic work with their home language to properly map EE among HEIs in South Africa.

Another limitation is the selected data collection method. The present study executed desktop research specifically using Google and Google Scholar search engines. The search engines are extremely useful for a researcher to access valuable information and content throughout the present study; however, it was found that the two search engines were not entirely correct in their search results. When using two separate devices to search the same information, different results would be shown. The significance of the limitation is that all the studies that satisfy the criteria for the present study were not fully shown when conducting research for the present study. Based on this limitation, it is suggested for future researchers that seek to map EE among HEIs to utilise a larger variety of search engines and access additional databases to ensure that research in future doesn't suffer from the same limitations.

5.5 FINAL CONCLUSION

The present study achieved its primary objective of primary objective of this study is to map the field of past entrepreneurship education (EE) research conducted amongst HEIs in South Africa in terms on who the researchers are, what topics are under the study and the HEIs that conducted the EE research. Even though the findings of the present study might not be as accurate as explained in the previous section, which examined the limitations of the present study. It is hoped that the current study will be able to spark eagerness and discussions within the academic community and serve as a catalyst to make researchers provide more additional information that is more accurate about mapping the field of EE among HEIs in South Africa, to allow future researchers in the future to bring forth great ideas, instead of just validating well established findings.

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APPENDIX 1: PREVIOUS ENTREPRENEURSHIP EDUCATION RESEARCH

Author(s)	Topic	Purpose	JOURNAL NAME	Method	Main findings	Country and university or HEI
1. Nor Hafiza Othman and Norasmah Othman	A Systematic Review on Entrepreneurship Education in Higher Learning Institutions in Southeast Asia.	This paper aims to systematically review the outcome of entrepreneurship education (EE) in the higher learning education by reviewing the latest ten-year published records in Southeast Asian countries.	Universal Journal of Educational Research	Qualitative	the current study showed the existence of the EE research trend, especially in higher learning institutions	Universiti Kebangsaan Malaysia, Malaysia
2. Aryati Arfah, Mapparenta and Serlin Serang	The Influence of Entrepreneurship Education and Family Environment on Students' Interest in Entrepreneurship	aims to determine the influence of entrepreneurship education and family environment on the entrepreneurial motivation of students; the influence of entrepreneurship education, family environment, and entrepreneurial motivation on the students' interest; and the influence of entrepreneurship education and family environment on entrepreneurial interest in entrepreneurial motivation mediation.	Al-Ishlah: Jurnal Pendidikan	Quantitative	The findings indicate that there is a link between a person's level of entrepreneurship education and their level of entrepreneurship motivation.	Universitas Muslim Indonesia
3. Katherine Fulgence	Assessing the status of entrepreneurship education courses in higher learning institutions	The purpose of this paper is to assess the status of entrepreneurship courses offered in education schools. It provides recommendations for how to address the existing challenges by developing entrepreneurship initiatives in education schools.	Education + Training	Qualitative	The findings show that all education schools have an entrepreneurship module in the development studies course, which is mandatory for all students in first year	University of Dar es Salaam Tanzania
4. Smile Dzisi and Franklin Odoom	Entrepreneurship Education and Training in Higher Educational Institutions in Ghana	This study aims to evaluate entrepreneurship education and training in higher educational institutions in Ghana.	Entrepreneurship Education and Training in Higher Educational	Qualitative and Quantitative	The results confirm that the acquisition of entrepreneurship knowledge covers almost all the topics (45%) in the course syllabus, and 26% consist mainly of theoretical knowledge while 15% are on practical knowledge and skills.	Koforidua Technical University Ghana

5. Raihan Taqui Syed, Dharmendra Singh and David Spicer	Entrepreneurial higher education institutions: Development of the research and future directions	This study seeks to present an overview of the evolution of entrepreneurial HEI research and provide a description of the structures characterizing it.	Higher Education Quarterly	Qualitative	This study's findings and analysis suggest that authors from across the world have contributed to this field; however, their relational ties are not heterogeneous and significant impact is confined to few authors.	United States
6. Mohammed Sani Abdullahi, Nadeem Khalid, Umair Ahmed, Elsadig Musa Ahmed and Alhassan Musa Gumawa ¹	Effect of Entrepreneurship Education on Entrepreneurial Intention among University Students	The aim of this study is to investigate the effect of entrepreneurship education (EE) through attitude toward behaviour (ATB), subjective norm (SN) and perceived behavioural control (PBC) on Entrepreneurial intention (EI) among University students in Nigeria.	Journal of Technical Education and Training Vol.	Quantitative	In this research, the first hypothesis suggests that ATB has an effect on EI.	Universiti Utara Malaysia, Sintok, Malaysia
7. Olof Zaring, Ethan Gifford and Maureen McKelvey	Strategic choices in the design of entrepreneurship education: an explorative study of Swedish higher education institutions	This article proposes a taxonomy of entrepreneurship education, with the aim of enhancing our understanding of how higher education contributes to society.	STUDIES IN HIGHER EDUCATION	Qualitative	entrepreneurship education is widely available within the Swedish higher education system	University of Gothenburg, Sweden
8. Fatima Sirelkhatim and Yagoub Gangi	Entrepreneurship education: A systematic literature review of curricula contents and teaching methods.	The present paper aims to provide a detailed map of common and best practices in terms of curriculum content and methods of teaching entrepreneurship on the tertiary level, and to explore how they correlate with practices recommended by the entrepreneurial learning field of research, in order to contribute to extracting best practice.	Business & Management	Qualitative	The result of the reviewing process reveals that the curricula content and teaching methods vary depending on the programme's objectives from theoretical courses aiming to increase entrepreneurial awareness to practical-oriented ones that aim to produce graduates ready to start a business.	United Kingdom
9. Jan-Jan Soon, Norhafeza Yusof, Noorkartina Mohamad and Hock-Eam Lim	Estimating the effect of entrepreneur education on graduates' intention to be entrepreneurs	The purpose of this paper is to analyze the factors influencing a graduate's choice to be entrepreneur, particularly the effects of different entrepreneur education either formal or informal.	Education + Training	Quantitative	The findings showed that the majority of the respondents are consistent in terms of their intent to become entrepreneurs.	Universiti Utara Malaysia, Sintok, Malaysia

10. Meghna Chhabra,Leo-Paul Dana,Sahil Malik and Narendra Singh Chaudhary	Entrepreneurship education and training in Indian higher education institutions:a suggested framework	The study aims to evaluate the components of entrepreneurship education and training (EET) in India. The paper proposes a framework for an effective EET regime for amalgamating entrepreneurship education as fundamental to mainstream higher education in India.	Entrepreneur education and training	Qualitative	The study identified five broad meaning units or themes, that is,incremental, pedagogical,efficiency and flexible evaluation systems entrepreneurial experience of the faculty, extended support,holistic mentoring and experiential learning as components of an effective EET regime.	Manav Rachna International Institute of Research and Studies, Faridabad, India
11. Dedi Purwana and Usep Suhud	Entrepreneurship Education and Taking/Receiving & Giving (TRG) Motivations on Entrepreneurial Intention: Do Vocational School Students Need an Entrepreneurial Motivator?	This study aims to investigate the impact of motivation and entrepreneurship education on entrepreneurial intention	International Journal of Applied Business and Economic Research	Qualitative and Quantitative	This study carried out findings and innovations: the impact of entrepreneurship education on taking/receiving and giving motivations, taking/receiving motivation on giving motivation, and giving motivation on entrepreneurial intention.	Universitas Negeri Jakarta, Indonesia.
12. Gabriela Boldureanu,Alina Măriuca Ionescu, Ana-Maria Bercu,Maria Viorica Bedrule-Grigoruț,ă and Daniel Boldureanu	Entrepreneurship Education through Successful Entrepreneurial Models in Higher Education Institutions	This study aims (i) to identify characteristics viewed by students as being specific to a successful entrepreneur, (ii) to establish the influence of exposure to successful entrepreneurial role models (chosen by students) during entrepreneurship education classes on student entrepreneurial intentions, and (iii) to assess how such exposure influences the attitudes of students towards entrepreneurship.	Sustainability	Quantitative	The study provides evidence that entrepreneurship education based on successful entrepreneurial role models may positively influence the entrepreneurial attitudes and intentions of students and could lead to higher orientation of student perception towards social benefits of entrepreneurship (new jobs) compared to financial ones (high income).	Alexandru Ioan Cuza University of Iasi Romania
13. Agustian Zen, Ratih Kusumastuti, Diksi Metris, Silvy Sondari Gadzali and Abu Muna Almaududi Ausat	Implications of Entrepreneurship Education as a Field of Study for Advancing Research and Practice	The study explores how the implications of entrepreneurship education as a field of study for the advancement of research and practice.	Journal on Education	Qualitative	The results of this study show that entrepreneurship education into a study programme does not only teach students futuristic thinking, but real action.	Universitas Pahlawan Tuanku Tambusai,Indonesia

14. Eka R. Nofrida, Slamet PH, Lantip D. Prasojo and Fitri N. Mahmudah	The Development of an Instrument to Measure the College Student Entrepreneurship Skills	This study aims to (1) produce an instrument for measuring college student entrepreneurial skills; (2) describe the quality of the measurement instrument for college students' entrepreneurial skills; (3) describe the practicality of the measurement instrument for college students' entrepreneurial skills.	Pegem Journal of Education and Instruction	Qualitative	The results showed that (1) the college student's entrepreneurial skills measurement instrument has five aspects, namely technopreneur, ecopreneur, sociopreneur, edupreneur, and entrepreneur management that will be developed; (2) the quality of the instrument was tested well by using two approaches, namely content and construct validity.	Yogyakarta State University Indonesia
15. Aidin Salamzadeh, Mohammad Ali Azimi and David A. Kirby	Social entrepreneurship education in higher education: insights from a developing country	The purpose of this research is to investigate awareness, intentions/support, and the contextual elements among higher education students in the University of Tehran (UT) in order to find the gap(s) in social entrepreneurship education in Iran.	Int. J. Entrepreneurship and Small Business	Qualitative and Quantitative	Findings show a significant rate of intention towards and awareness of the concept among respondents, but a lack of sufficient attention to contextual elements and adequate support.	Iran, University of Tehran
16. Chacha Magasi	The influence of entrepreneurship education on entrepreneurial intentions: Perception of higher business education graduates	The purpose of this study is to explore the antecedents of entrepreneurial intentions among the Tanzanian Higher Business Education graduates.	International Journal of Research in Business	Qualitative	The findings task entrepreneurship educators, role models, close groups, professional supporters and the government to concurrently foster the combinations of entrepreneurship education and other factors which were revealed to have the highest predictive power on entrepreneurial intention in the process of nurturing and psychologically developing the students' entrepreneurial careers of self-reliance and self-employment.	College of Business Education, Dodoma, Tanzania

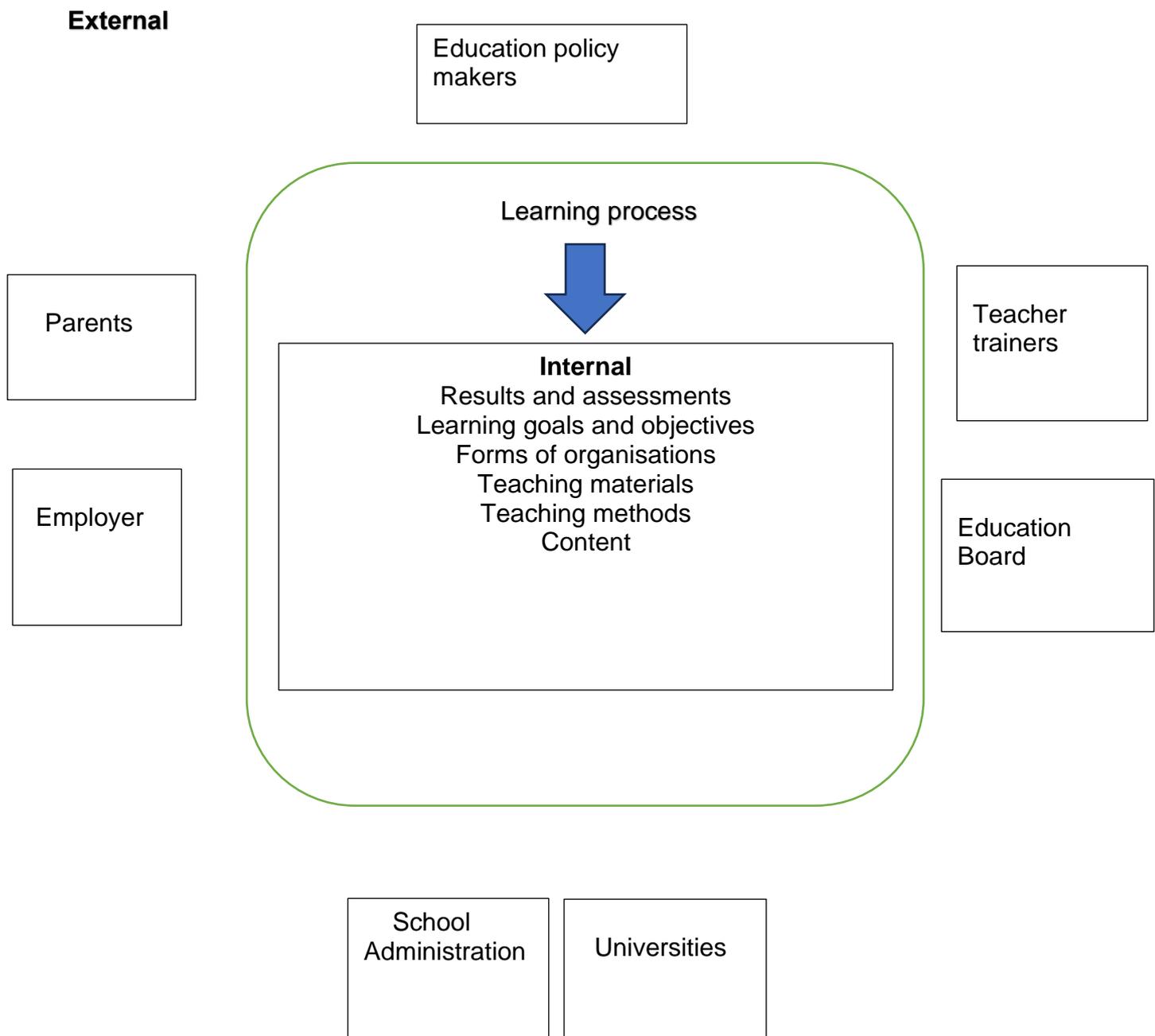
17. Eleonora Fiore , Giuliano Sansone and Emilio Paolucci	Entrepreneurship Education in a Multidisciplinary Environment: Evidence from an Entrepreneurship Programme Held in Turin	This study has carried out an exploratory single case study on an entrepreneurial programme in a multidisciplinary environment, that is, the Contamination Lab of Turin (CLabTo)	Admin science	Qualitative	The results show the importance of creating teams with different competencies, cognitive and decision-making skills. It show that the students' overall perception of their abilities to work in a multidisciplinary team, their entrepreneurial skills and entrepreneurial intentions increased slightly	Politecnico di Torino,Turin Italy
18. (Manish Kumar Gautam and Dr. Sunil Kumar Singh	ENTREPRENEURSHIP EDUCATION: CONCEPT, CHARACTERISTICS AND IMPLICATIONS FOR TEACHER EDUCATION	The article also tries to facilitate an understanding about 'entrepreneurial teacher and training institution' and emphasizes the active role of teacher as a 'facilitator'. For this new role teachers have to be ready initially by going through rigours of teacher training and by continuing professional development	SPIJE	Qualitative	Teachers need the professional competencies to be able to guide student through the learning process rather than, as in traditional method, communicating knowledge and information mainly through 'chalk and talk'	Central University of Bihar
19. Wardana, Narmadity, Wibowo, Mahendra, Wibowo, Harwida & Rohman	The impact of entrepreneurship education and students' entrepreneurial mindset: the mediating role of attitude and self-efficacy	investigated the relationship between student entrepreneurial education and entrepreneurial mindset(EM), as well as recognising how attitude and self-efficacy interact.	Heliyon	Qualitative	The study found EE can influence students entrepreneurial self-efficacy, entrepreneurial attitude (EA) and entrepreneurial mindset. Entrepreneurial self-efficacy positively impacts entrepreneurial attitude, while EA positively impacts EM. Additionally, EA plays a crucial part in how both EE and entrepreneurial self-efficacy connect with students EM .	universities in Malang of East Java ,Indonesia

20. Mesri Welhelmina Nisriani Manafe , Muammar Revnu Ohara ,Silvy Sondari Gadzali , Muhammad Ade Kurnia Harahap and Abu Muna Almaududi Ausat	Exploring the Relationship Between Entrepreneurial Mindsets and Business Success: Implications for Entrepreneurship Education	The purpose of this paper is to explore the relationship between entrepreneurial mindset and business success and to discuss the implications for entrepreneurship education	Journal on Education	Qualitative	This study shows that there is a positive relationship between entrepreneurial mindset and business success	Universitas Kristen Artha Wacana,Indonesia
21. Melia Astiana,Maya Malinda,Anny Nurbasari and	Entrepreneurship Education Increases Entrepreneurial Intention Among Undergraduate Students	This study aimed to examine the role of entrepreneurship education in increasing entrepreneurial intention among business students	European Journal of Educational Research	Qualitative and Quantitative	The key impact of this research is revealed perceived desirability and feasibility, the propensity to act and entrepreneurship education give positive entrepreneurial intention among undergraduate students	Universitas Kristen Maranatha, INDONESIA
22. Vanessa Ratten	Coronavirus (Covid-19) and the entrepreneurship education community	– Covid-19 (coronavirus) has significantly affected education communities particularly in terms of the massive shift towards online learning. This has meant a quick transformation of the curriculum and learning styles to a digital platform. Despite the dramatic change, there is a lack of understanding about what this means particularly for the community of entrepreneurship educators in the higher education sector that rely on practical and immersive training for learning requirements.	Entrepreneurship education community	Qualitative	The paper finds that managing the Covid-19 crisis is difficult for entrepreneurship educations due to the need for practical and real life examples. This means the use of augmented reality and artificial intelligence is needed to simulate the real environment. This will enable a more community orientated approach to the study and practice of entrepreneurship.	La Trobe University, Melbourne, Australia
23. Ákos Tóth-Pajor , Zsolt Bedő2 and Vivien Csapi	Digitalization in entrepreneurship education and its effect on entrepreneurial capacity building	This paper introduces this unique platform solution and utilizes online opportunities for skill and attitude assessment.	Cogent Business & Management	Qualitative	Research found that members of the online incubation platform had significantly lower self-esteem than the other constructs at the time of their registration to the platform.	Published by Informa UK Limited, trading as Taylor & Francis Group.United Kingdom

24. Yonca Gurol and Nuray Atsan	TEntrepreneurial characteristicsamongst university students	The purpose of this research is to explore the entrepreneurship profile of Turkishuniversity students and to make an evaluation for their entrepreneurship orientation by comparingthem with non-entrepreneurially inclined students.	Education and Training	Qualitative	The results of the t-tests showed that, except for tolerance for ambiguity and self-confidence,all entrepreneurial traits are found to be higher in entrepreneurially inclined students, compared toentrepreneurially non-inclined students	Yıldız Technical University and Akdeniz University.
25. Petridou, Sarri and Kyrgidou	Entrepreneurship education in higher educational institutions: the gender dimension	This papers focus is on the entrepreneurial programs provided by Greek HEIs to 1639 students studying in a variety of scientific fields at Technical Educational Institution of Thessaloniki (TEIth) and Aristotle University of Thessaloniki (AUTH).	Entrepreneurship education in HEIs	Qualitative	The study found that male enrolment rates are higher than female enrolment rates. Furthermore, in terms of attitudes toward participation in entrepreneurial educational programs, women show a larger interest in learning, developing skills, competing for jobs, and networking with local businesses than men do to a much higher degree	Technical Educational Institution of Thessaloniki (TEIth) and Aristotle University of Thessaloniki (AUTH). ,Greece

APPENDIX 2 : THE LEARNING PROCESS FRAMEWORK

The learning process framework(Bikse, Riemere & Rivza, 2013:72).



APPENDIX 3: CLEARANCE FORM



FACULTY OF BUSINESS AND ECONOMIC SCIENCES

ETHICAL CONSIDERATIONS FOR ADVANCED DIPLOMA/HONOURS/POSTGRADUATE DIPLOMA FOR NON-PUBLICATION PURPOSES

INSTRUCTIONS

- This form must be completed by student with the relevant explanation by and support of the supervisor and the student.
- It must be signed off by the student, supervisor and HoD.
- Submit the completed form to Ms Lindie van Rensburg lindie.vanrensburg@mandela.ac.za.
- Please ensure that the research methodology section from the proposal is attached to this form.

Please note that by following this ethics route, the study will NOT be allocated an ethics clearance number.

SECTION A – STUDENT ACKNOWLEDGMENT

In completing this form I, Kabelo Molobi(name and surname), acknowledge that my research project is for academic qualification purposes only. As such, the research report or any sections thereof may not be published in any publication, including an accredited journal.

I further acknowledge that my research project will be a desktop study and will only make use of publicly available documents or secondary data. No human subjects/ participants/ respondents will be involved in the study.

I understand that secondary data in this instance refers to data that was collected and processed by someone else for some other purpose but is now being used by the researcher for another reason (Tripathy, 2013). Research utilizing secondary data that both exists and has been collected in a public, academic database, for example Google Scholar, is considered desktop research and generally does not require full ethical approval (Creswell & Poth 2017).

SECTION B – STUDENT AND RESEARCH PROJECT DETAILS

Student name & surname	Kabelo Molobi
Student number	217157858

Study title	Mapping the field of entrepreneurship education research amongst students at South African Higher Educational Institutions.
Year of registration	2023
Qualification	BCOM HONOURS IN BUSINESS MANAGEMENT
Department	Business Management Department
Supervisor	Prof Venter

SECTION C – ETHICS CRITERIA

In completing my research project, I hereby acknowledge that I have read and understand the following important considerations as they apply to my study. I indicate this by placing a tick next to each statement.

I acknowledge that my study is based on the analysis of secondary data and that the following conditions apply:

1.	There are no human subjects/participants/respondents in my study and as such there will be no collection and use of data from human subjects/participants/respondents though administering/distributing any questionnaire/survey or by holding any form of interview.	✓
2.	As there are no human subjects/participants/respondents in my study, it does not pose any risk of harm, embarrassment or offence, however slight or temporary, to any human participant, third parties or communities at large.	✓
3.	As there are no human subjects/participants/respondents in my study, it will not utilise human subjects defined as 'vulnerable' in terms of age, physical characteristics and/or disease status.	✓
4.	The secondary data that will be utilised in this study does not require the consent of any institutional or government authority established to protect vulnerable people.	✓
5.	The secondary data that will be utilised for this study does not require access to data from any existing, stored repository (e.g. school, institutional or university records) that can be linked to human subjects.	✓

It is acknowledged that both supervisor and student have given the study the necessary research ethical consideration and confirm that full ethics approval is not required.



SUPERVISOR(S) Prof E Venter



HEAD OF DEPARTMENT



Molobi KK STUDENT

DATE

16 May 2023

DATE

17 May 2023

DATE

16 May 2023

APPENDIX 4: TURNITIN SIMILARITY REPORT

Treatise ?

Match Overview

19%

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1	Submitted to Nelson M... Student Paper	9%	>
2	busman.mandela.ac.za Internet Source	4%	>
3	vital.seals.ac.za:8080 Internet Source	2%	>
4	onlinelibrary.wiley.com Internet Source	1%	>
5	www.researchgate.net Internet Source	1%	>
6	www.mdpi.com Internet Source	1%	>

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