

Exploring the entrepreneurial intention of students in one Higher Education Institution (HEI)

AYANDA RACHEL KENYE-DUMA

A thesis submitted in partial fulfilment of the requirements for the degree of

MASTER OF BUSINESS ADMINISTRATION (MBA)

Rhodes Business School

RHODES UNIVERSITY

11 March 2022

ABSTRACT

This study was interpretive and qualitatively explored students' entrepreneurial intentions at Rhodes University. It was conducted to understand entrepreneurship among students. Understanding students' entrepreneurship is critical as entrepreneurship is touted as a reasonable response to alleviate the high unemployment in South Africa. The study explored how students became entrepreneurs (or how their entrepreneurship intentions were formed) and the factors that enhanced (enablers and barriers) and inhibited them. The significance of living with and after COVID-19, youth and graduate unemployment alleviation places entrepreneurship development by institutions of higher learning, governments and private sector in the centre of economic recovery. The establishment of the Entrepreneurship Development in Higher Education (EDHE) in 2016, highlights the commitment of the South African government, for Higher Education Institutions (HEI) to engage more in entrepreneurship and do more research to understand how students become entrepreneurs and unravel the challenges. Understanding students' entrepreneurship intentions can facilitate a supportive environment for students entrepreneurship. With “very little research about student entrepreneurship at this university” being the guiding research problem, the aim was to gain insight into the entrepreneurship intention of university students by exploring factors that influence students to become entrepreneurs.

The study employed Ajzen's Theory of Planned Behaviour to explore the entrepreneurial intentions of university students in terms of the underlying attitudes, subjective norms, and perceived behavioural control. The students who participated in the study fell into three categories of entrepreneurial intention: (i) Intending to start a business, (ii) starting a business, and (ii) those who were already operating a business. All the participants, irrespective of their stage of entrepreneurial intention, demonstrated a positive attitude and self-efficacy. All participants showed self-efficacy by identifying barriers and taking positive steps to overcome them. The main barriers were access to funding, capital, training, business opportunities with the university and lack of interaction with established entrepreneurs. The results demonstrated the close interplay of attitudes, social norms and perceived behavioural control in students' entrepreneurial intentions. Social recognition of entrepreneurship, social capital, education and role models contributed to positive attitudes, and social norms influenced students' entrepreneurial intentions. A supportive environment was found to be critical for nurturing entrepreneurship intentions. The study recommends a supportive climate cultivated by Rhodes

University to promote entrepreneurship. The supportive environment must include the elevation of entrepreneurship in prominent offices of the university, strengthening entrepreneurship societies and interactions with established entrepreneurs, and engagement with the private sector to contribute and promote entrepreneurship among students.

Key words: entrepreneurship; intention; students

DECLARATION

I, **Ayanda Rachel Kenye-Duma**, declare that this mini-dissertation is my work and that all other sources used or cited have been fully acknowledged and referenced. I submit this work as the partial fulfilment of the Master of Business Administration (MBA) degree at Rhodes University and has not been submitted for any degree examination at any other university in South Africa or anywhere else in the world.

Ayanda Rachel Kenye-Duma

Signature:

11 March 2022

ACKNOWLEDGEMENTS

The completion of my MBA thesis reflects a personal journey of pursuing a passion for small business development. It is a passion that I found very difficult to suppress despite the substantial personal cost to my family and me. It was an arduous journey that, I believe, I had to travel in preparation for the demanding tasks that lie ahead. The change experience in our country teaches us that “the more things change, the more they stay the same”, Alphonse Karr, 1849. Resistance to change presents itself in numerous ways. The progressive policies adopted by the democratic government to support small businesses have low levels of take-up. Many factors explain the reason for the low take-up. To find the answers is an arduous task, which I think, my MBA studies prepared me. I would therefore like to thank all my lecturers and classmates who made this journey bearable, challenging and fun.

Being a mother and committing to full-time studies proved extra-ordinarily demanding and was no mean feat. Through the support of my family, I managed to execute all tasks that my studies demanded and beyond. I, therefore, thank my husband, Monde, children – Mangaliso, Babalo, Lizo and Zuko.

I also want to give a vote of thanks to my mother, Mrs Tandiwe Kenye, whose support has been unquestionable. Special thanks also go to my supervisor, Associate Professor Tshidi Mohapeloa, for her excellent guidance and extreme patience with me and my work.

ACRONYMS

4IR	Fourth Industrial Revolution
COVID-19	Coronavirus 2019
EDHE	Entrepreneurial Development in Higher Education
GDP	Gross Domestic Product
ICT	Information and Communication Technologies
MBA	Master of Business Administration
OECD	Organisation for Economic Co-operation and Development
RUESC	Rhodes University Ethics Standards Committee
SBI	Small Business Institute
SMEs	Small and medium-sized enterprises
STATS-SA	Statistics South Africa
TTO	Technology Transfer Office
TRA	Theory of Reasoned Action
TPB	Theory of Planned Behaviour

Contents

ABSTRACT	i
DECLARATION	ii
ACKNOWLEDGEMENTS	1
ACRONYMS	2
Figures	7
Tables	7
CHAPTER 1: INTRODUCTION TO THE STUDY	8
CONTEXT AND BACKGROUND	8
1.1. Introduction	8
1.2. South African economy and youth unemployment	9
1.2.1. Levels of entrepreneurship in South Africa	9
1.2.2. Entrepreneurship and employment	10
1.2.3. South Africa's Youth Unemployment Crises	11
1.2.3.1. Levels of youth unemployment	11
1.2.3.2. Unemployment among graduates	11
1.2.4. The impact of the COVID-19 pandemic on unemployment	12
1.3. Research problem	13
1.4. Aim of the study	13
1.5. Chapter outline	14
1.6. Conclusion	14
CHAPTER 2: LITERATURE REVIEW	15
2.1. Introduction	15
2.1.1. What is entrepreneurship?	16
2.1.2. What is entrepreneurial intention?	17
2.1.3. Understanding entrepreneurship and intention	18
2.1.4. The Ajzen Theory of Planned Behaviour	19
2.2. The contribution of entrepreneurship to education	19
2.2.1. Entrepreneurial education in South Africa	20
2.2.2. Enablers and determinants of entrepreneurial intention?	21
2.2.2.1. Entrepreneurship education and training	21
2.2.2.2. The entrepreneurial ecosystem within the institution	22
2.2.2.3. Supportive environment	23
2.2.2.4. Entrepreneurial self-efficacy	23
2.2.2.5. Entrepreneurial intention and gender	24
2.3. Barriers to entrepreneurial intentions	24
2.4. Theoretical framework	25
2.4.1. Critique of the TPB Model	27

2.4.2.	Previous studies conducted on students using TPB	28
2.5.	Stimulating entrepreneurial intent at universities	29
2.5	Proposed Conceptual framework	30
2.6	Conclusion	33
CHAPTER 3: METHODOLOGY		34
3.1.	Introduction	34
3.2.	Research Methodology	34
3.2.1.	Method of choosing participants (Sampling)	34
3.2.2.	Data collection methods	35
3.2.2.1.	Interview guide	35
3.2.2.2.	Online interviews	35
3.2.2.3.	WhatsApp interviews	36
3.2.2.4.	Interview Guide Focus Areas	36
3.2.2.5.	36	
3.2.3.	37	
3.2.4.	38	
3.2.5.	38	
3.2.6.	39	
CHAPTER 4: RESEARCH FINDINGS		40
4.1.	Introduction	40
4.1.1.	General description of the participants	40
4.1.2.	Distribution by Age, Faculty and Level of Study	43
4.2.	Findings	44
4.3.	Thematic areas and interpretations of findings	57
4.3.1.	Attitudes towards entrepreneurship intention	59
4.3.1.1.	Stage in entrepreneurial intention	59
4.3.1.2.	Reasons behind intending or starting a business: Enablers	60
4.3.1.3.	Identifying barriers and challenges: Anticipating and planning for barriers	61
4.3.1.4.	Planning to overcome barriers and challenges: Taking positive steps to prepare for entrepreneurship intention	61
4.3.1.5.	Passion-driven intrinsic motivation	62
4.3.1.6.	Observing self-sustaining practices	63
4.3.2.	Perceived behavioural control or self-efficacy	64
4.3.2.1.	Self-efficacy	64
4.3.2.2.	Influence of current environment (university)	64
4.3.2.2.1.	Nurturing entrepreneurship at university	64
4.3.2.2.2.	The role of the Technology Transfer Office (TTO)	65
4.3.2.3.	Identifying business opportunities in the current environment	67

4.3.2.4.	Educational influence	67
4.3.3.	Social norms	68
4.3.3.1.	Attitude of friends and peers towards entrepreneurship intention	69
4.3.3.2.	The attitude of family members towards entrepreneurship intention	70
4.3.3.3.	Influence of role models on entrepreneurship intention	71
4.3.3.4.	Commitment and attachment to entrepreneurship	71
4.3.3.5.	Suggested areas to support student entrepreneurship	72
4.4.	Conclusion	72
CHAPTER 5: DISCUSSION		74
5.1.	Introduction	74
5.2.	Barriers and enablers of entrepreneurial intention	75
5.3.	Determinants of entrepreneurial intention	75
5.4.	Attitude towards the entrepreneurial intention	76
5.5.	Factors influencing the entrepreneurial attitude	77
i)	Social capital	77
ii)	The attitude of family members	78
iii)	Attitude of friends and peers	79
iv)	Influence of role models	79
v)	Psychological capital or personality traits	80
vi)	Passion (driven by personality traits)	80
vii)	Anticipating and planning for barriers	81
viii)	Overcoming the challenges	81
5.6.	Social norms	82
5.7.	The supportive environment	83
5.7.1.	Education influence and entrepreneurial education	83
5.7.2.	Influence of the Technology Transfer Office	84
5.7.3.	Perceived business opportunities in the university environment	84
5.8.	Perceived behavioural control or self-efficacy	85
5.9.	Revisiting the conceptual model	85
5.10.	Conclusion	86
CHAPTER 6: CONCLUSION AND RECOMMENDATIONS		87
6.1.	Introduction	87
6.2.	Conclusion	87
6.3.	Recommendations	91
6.3.1.	Creating an enabling environment for student entrepreneurs by the university (Rhodes)	91
6.3.2.	Elevating prominent offices for student entrepreneurial activity	91
6.3.3.	Student societies	91
6.3.4.	Contribution of Private Sector	92

6.4. Limitations of the study	93
6.5. Future research	93
6.6. Conclusion	94
ANNEXURES	95
REFERENCES	102

Figures

<i>Figure 1: Ajzen (1991) Theory of planned behaviour</i>	27
Figure 2: The conceptual framework for achieving entrepreneurial intention at universities	31
Figure 3: The data capturing process from the interviews.	37
Figure 4: Age distribution of participants	43
Figure 5: Distribution by Faculty	43
Figure 6: Qualification of the participant	43
Figure 7: Stage of entrepreneurial intention	59
Figure 8: A revised conceptual model	86

Tables

Table 1: Scholarly contributions to the definition of entrepreneurship	16
<i>Table 2: Entrepreneurship variables and how they fit into the TPB model – created by the author, adapted from Ajzen’s Model for Planned Behaviour</i>	27
Table 3: Structure of the interview guide	36
Table 4: Phases of the thematic analysis, adapted from Braun & Clarke (2006)	38
Table 5: Participants' profile	41
Table 6: Description of the participants	42
Table 7: Summary of responses to Attitudes theme	44
Table 8: Summary of responses to Behavioural Control theme	45
Table 9: Summary of responses to Social Norms theme	46
Table 10: Verbatims of responses to Attitudes theme	47
Table 11: Verbatims of responses to Behavioural Control theme	49
Table 12: Verbatims of responses to Social Norms theme	50
Table 13: Thematic areas of analysis	59

CHAPTER 1: INTRODUCTION TO THE STUDY

CONTEXT AND BACKGROUND

1.1. Introduction

Worldwide, countries realized the significance of entrepreneurship in changing their macro-economic outlook by stimulating growth and self-employment. One does not need to think far and hard to understand this approach. The Silicon Valley in California was born out of entrepreneurship by young tech whiz kids, taking advantage of globalization (Audretsch, 2021). Today companies like Microsoft, Walt Disney, Apple, etc., are multi-billion industries employing thousands of people worldwide.

The global phenomenon of entrepreneurship suggests that entrepreneurship stimulates macro-economic growth, employment, and wealth creation (Carree and Thurik, 2010a). It also gives individuals and groups the power to realize their potential and self-actualization. Entrepreneurship promotes youth unemployment and job creation. It is through this study where entrepreneurship intention for students at Rhodes University is explored. Entrepreneurial intention research contributes to understanding people's decisions, how those decisions are made, such that evidence-based support systems can be implemented (Fayolle and Liñán, 2014).

In this chapter, the author introduces the reader to the context and background of the study. The context of this study is within the entrepreneurship but the focus is on entrepreneurial intention for students at a higher education institution (HEI). An HEI (also known as tertiary institution) that wants to promote entrepreneurship focus on the entrepreneurial intention of students to assess how it adds to the understanding of enablers, barriers of entrepreneurship and assist in designing better entrepreneurship education initiatives (Fayolle and Liñán, 2014). There has been a growing trend to promote entrepreneurship at tertiary institutions, realising that employment is still a huge challenge in developing economies.

1.2. South African economy and youth unemployment

To foreground this research study, understanding the health of the South African economy is essential. High levels of unemployment characterize the South African economy. The unemployment rate has stood no less than 20% since the advent of democracy - more than 27 years ago (Leibbrandt et al., 2010). The economic growth of the early 2000s did very little to address the situation, as the change was represented in economic output and not supported by new jobs created within the economy.

The jobless growth was interrupted by the global recession of 2008 – 2009, which worsened the unemployment situation in South Africa. The fragile state of the macroeconomy undermined the recovery from the recession. The public finances were deteriorating as measured by increasing public debt. The credit rating agencies downgraded South Africa's investment status, thus increasing the cost of borrowing. Entrepreneurship underperformed, as represented by the limited activity of start-ups and in the small enterprise sector, etc. As such, the unemployment situation progressively worsened in South Africa. Currently, the unemployment rate is at an all-time high of 34.4%, whilst the expanded definition of unemployment puts it at 44.4% (STATS-SA, 2021a). Youth are at the receiving end of the unemployment predicament in the country.

1.2.1. Levels of entrepreneurship in South Africa

According to the OECD (2020) report, South Africa continues to have a low early-stage entrepreneurial activity. Thus, entrepreneurship is low compared to other emerging economies, especially youth (Fatoki and Chindoga, 2011; Fatoki, 2010). The low entrepreneurial activity and high unemployment situation present an opportunity for South Africans and the government to exploit. The problem is ripe to harness to create self-employment and job creation.

The high unemployment in the youth cohort translates to wasted potential in individuals and the country (Bernstein, 2015; Webb, 2021). At the peak of their productive years, young South Africans find themselves in the streets. According to Altbeker and Bernstein, the unemployment of young people drives poverty, sustains political instability, inequality, and perpetuates social dysfunction. The high unemployment destroys dignity and human capital investments (Bernstein, 2015). The economic inactivity drives youth into the margins of society (Franzén and Kassman, 2005). This situation is what many believe drives the high

crime rate in South Africa, as it feeds social unrest and thus political instability. Removing barriers to entrepreneurship and improving the quality and equity of education in South Africa are among the urgent priorities recommended by the OECD (2020) for 2021 and beyond.

1.2.2. Entrepreneurship and employment

Entrepreneurship is recognized globally as a vehicle for income generation, wealth and employment creation, economic growth, and bridging the economic inequality gap (Carree and Thurik, 2010b; Malebana, 2014). Entrepreneurship is an age-old phenomenon whereby an entrepreneur, conscious of the needs in their environment, envisions and develops creative, new and better innovations to meet those needs (Minniti, 2010). By doing the latter, the entrepreneur creates economic activity by mobilizing and deploying financial and human resources to transform processes that produce goods and services required by and sold to society.

Many countries have cultivated a culture of entrepreneurship as a vital driver of the success of SMEs (OECD, 2017). In South Africa, reports indicate that SMEs contribute 28% to national employment (SBI, 2018). By the second quarter of 2021, this figure declined to 10% since the effects of Covid-19, compared to 30% in other upper-middle-income economies like Turkey, Mexico, and Brazil. South Africa lags its peers in entrepreneurship and thus fails to realise its potential in the job creation and economic growth that entrepreneurship could provide. There is, therefore, an opportunity for the cultivation of entrepreneurship culture, mainly among the unemployed youth, who can invent themselves as job-creators to break the cycle of underdevelopment and poverty (Decker et al., 2014).

With this in mind, entrepreneurship is often advanced as a solution to promote and alleviate the rising unemployment in developing countries (Carree and Thurik, 2010; Rogerson, 2008). Therefore, it is a common belief that promoting entrepreneurship is a logical step towards addressing the challenge of unemployment by supporting innovative people that could create jobs and contribute to economic development (Malebana, 2014; OECD, 2017). The latter conclusions are drawn from the knowledge that small and medium-sized enterprises (SMEs) are drivers of socio-economic development and thus the economy worldwide (Karadağ, 2016; Kongolo, 2010; Ndiaye et al., 2018; Zafar and Mustafa, 2017). It is estimated SMEs contribute between 50% - 60% of employment in high-income economies and up to 40% or more of a country's gross domestic product (GDP) (Ndiaye et al., 2018; Zafar and Mustafa, 2017). The

realisation of the potential of entrepreneurship and SMEs as essential cogs in driving a country's GDP sustains the hope that this sector could reduce unemployment.

1.2.3. South Africa's Youth Unemployment Crises

1.2.3.1. Levels of youth unemployment

The Quarterly Labour Survey demonstrate that the unemployment rate for the youth cohort of 15-24 year-olds is staggeringly high at 64.4%. Of this cohort, only 8.1% get absorbed into the economy (STATS-SA, 2021b). Furthermore, unemployment in the youth cohort of 25–34 year-olds is above the national average and stands at 42.9%, with an absorption rate of 40.8% (STATS-SA, 2021b). Such high unemployment rates among youth emphasize cultivating entrepreneurship skills to ensure self-employment and employment creation for youth. Therefore, conducting studies to understand student entrepreneurship better is essential in touting entrepreneurship as a *panacea* for unemployment.

1.2.3.2. Unemployment among graduates

The issue of unemployment among graduates is a paradox because of the skills mismatch and the heterogeneity in the institutions that offer higher education and learning. The skills mismatch happens when graduates from higher learning institutions do not necessarily get jobs that align with their education and take any position available. Furthermore, heterogeneity affects the quality of qualification and, in the long term, undermines the fidelity of graduate qualification and their employability (van Broekhuizen, 2016).

According to STATS-SA (2021), the current graduate unemployment rate is 11.0% and is thus 23.4% lower than the national unemployment rate (34.4%). The lack of absorption of all graduates in the economy may be attributed to reported declining labour market benefits of higher education in South Africa observed since the early 2000s (van Broekhuizen, 2016). However, van Broekhuizen (2016) argues that the employment rate of graduates can hardly be called high because it is way below that of the national average for unemployment. However, given that this number has been increasing and the economy stagnant for years, self-employment opportunities provide the biggest hope of job creation and busting unemployment among youth.

1.2.4. The impact of the COVID-19 pandemic on unemployment

The unemployment rate increased by 1.7 percentage points from quarter 3 to quarter 4 of 2020 (STATS-SA, 2021b). Covid 19 exacerbated this as many businesses closed, resulting in massive loss of jobs, whilst others work away from the offices. Through Covid-19 pandemic there was a drop in economic activities in sectors such as mining and industries and a complete halt of others such as entertainment, travelling and tourism (OECD, 2021). The latter situation led to the loss of income due to reduced economic activity, lay-offs of jobs, and job losses as enterprises closed, thus further devastating the labour market. No wonder then the country's unemployment rate reached an all-time high recently.

The Covid-19 pandemic exposed some long-standing structural weaknesses within the South African economy. It has also created an opportunity for South Africa to address such weaknesses and put the economy on a growth trajectory that encompasses inclusivity and resilience. According to the World Bank (2021), post-recovery of the world economy after the Covid-19 will be faster in the developed economies and uneven in the developing economies. The expectation is that the recovery will be even slower in Africa than in other emerging economies (Gondwe, 2020). The lack of support for entrepreneurship in South Africa will also play a critical role in the economy's recovery.

Opportunities for Information and Communication Technologies (ICT) have strengthened during the pandemic where young people's affinity to ICT brewed innovative environment for entrepreneurship. An inclination towards or pushed by circumstances to explore self-employment. It is worth noting that the COVID-19 pandemic created opportunities to use technology and ICT to retain economic activities that do not depend on face-to-face interactions. It also made organizations start thinking innovatively about using technology to execute their strategies and work remotely. The pandemic cultivated a rethink of the work environment and led to the adoption of blended ways of working – working remotely, juggling work and home demands, and rotating work schedules to keep a lower number of people at work (Carnevale and Hatak, 2020). The lockdowns to contain the spread of the coronavirus also contributed to reduced environmental pollution (Aman, Salman and Yunus, 2020; Arora, Bhaukhandi and Mishra, 2020). The increased use of ICTs, which are very amenable to youth interests, meant that economic opportunities existed for young people to try out ICT ideas to support distance learning, trading, work, etc. Those opportunities are only meaningful if the concerned youth are skilled in these technologies and are inclined towards entrepreneurship.

1.3. Research problem

There has been notable entrepreneurial activity at Rhodes University, where students provide evidence of entrepreneurial activities. These include; (i) a team of four Rhodes University PhD students winning the Hult Prize Challenge for their electronic and electrical waste management system, (ii) a Rhodes University student winning the Innovative Idea of the Year at the National Entrepreneurship Interschool Challenge, (iii) a team of three Rhodes University students winning the 2021 ICT (Information and Communications Technology) Hackathon that sought for 4IR (The Fourth Industrial Revolution) solutions to the problems of the Eastern Cape, and (iv) the vigorous activities of the various entrepreneurship societies at Rhodes University. Thus it can be acknowledged that these entrepreneurial activities reflect tertiary education students who are ambitious to alleviating unemployment through understanding entrepreneurship as a potential solution.

However, we still need to study and understand more, the entrepreneurship intention within this youth cohort what motivates them to engage and consider entrepreneurship. This research study with university students adds value to studies that inform policies, entrepreneurship education and entrepreneurship development programmes.

There is, however, very little research about student entrepreneurship at this university. If South Africa is to reposition entrepreneurship as a vehicle to post-Covid-19 economic recovery, particularly for the youth, then student entrepreneurship should be studied. We need to understand what motivate students to be entrepreneurs. Once those factors are understood, the university can support an environment that nurtures entrepreneurship.

1.4. Aim of the study

This research study was undertaken to gain insight into the entrepreneurship intention of university students by exploring factors that influence students to become entrepreneurs. The Ajzen Theory of Planned Behavior was used to analyze factors such as attitudes towards entrepreneurship, education, social norms, environmental factors etc, for their influence on entrepreneurial intention among students.

This study aimed to explore student entrepreneurship in the context of youth cohort (18-34 years old), to gain insight into university students' entrepreneurial intention and to explore factors that enhance and inhibit students from becoming entrepreneurs. To achieve this aim the research study was broken into two main research objectives:

- To examine how university students become entrepreneurs, and
- To identify the enablers and barriers of entrepreneurial activities among students

This study looked at university students who represented youthful vitality, energy, and ambition in the pursuance of entrepreneurship. It focused on investigating students' entrepreneurial intention to understand what motivated them to pursue entrepreneurship. It sought to establish what environmental factors, such as family members, education, and peers, were responsible for adopting entrepreneurship. The following sections deal with some aspects that contextualize and foreground the study.

1.5. Chapter outline

This chapter outlined the introduction, context and background information to the study. It is followed by the literature review in chapter 2 and the research methodology in chapter 3. The research findings are presented in chapter 4 followed by a discussion in chapter 5. Chapter 6 concludes the study and provides recommendations.

1.6. Conclusion

This chapter gave background to the research study and the context under which it was undertaken. The chapter draws the reader's attention to the importance of understanding entrepreneurial intention among students, demonstrating how entrepreneurship could be leveraged to solve the vast unemployment among youth in South Africa. The chapter also highlights the high unemployment rate among youth. Given that entrepreneurship is an integral part of economic growth in developed and developing economies, Chapter 1 highlights its potential for job creation in South Africa and the role played by education.

The next chapter, Chapter 2, reviews literature that set the boundaries of what is known, still to be known and areas still worth pursuing for a better understanding of entrepreneurship.

CHAPTER 2: LITERATURE REVIEW

2.1. Introduction

In this chapter, the author reviews the literature on entrepreneurial intention. The literature is examined to understand what the current research trends are. The chapter discusses key concepts and factors that enable (enablers) and prevent (barriers) entrepreneurship and intention. The importance of understanding the entrepreneurial decision-making process through research is highlighted by Fayolle and Liñán (2014). The authors state that “great potential exists for entrepreneurial intention to contribute to a better understanding of the entrepreneurial decision-making process at the personal level, particularly considering mental prototypes or cognitive scripts in people's minds” (p.665). The literature examines personal, socio-cultural, and environmental factors that diminish or enhance entrepreneurial intention.

It can be acknowledged that there is a general agreement confirming that entrepreneurship is critical for economic growth (Agetue, 2017; Coulibaly, Erbao and Metuge Mekongcho, 2018; Khan, 2018; Stel, Carree and Thurik, 2005) and gets triggered when individuals and organizations start to innovate (Ribeiro-Soriano, 2017), leading to small business enterprises contributing to job creation and reducing unemployment (Kongolo, 2010). Meaning unemployment offers entrepreneurs and other risk-takers an opportunity to innovate and solve an existing problem of unemployment in the end, create job opportunities. Coulibaly, Erbao and Metuge Mekongcho (2018); Agetue (2017); Khan (2018); Stel, Carree and Thurik (2005), making enterprises or SMEs vehicles of employment and inclusive economic growth.

Entrepreneurship is when business-minded individuals identify opportunities in the economy and set up their enterprises to exploit such opportunities. They identify opportunities such as lack, shortage or a gap in the supply of goods and services, which if utilized, could bring financial reward. As they organize these enterprises, they create opportunities for others, through which, they get a chance to participate in the economy.

In this chapter the researcher elaborate more on what literature on how one become an entrepreneur, what drives or influences individuals to take up entrepreneurship, factors that nurture or inhibit entrepreneurship as some of the questions to pave the way for a better understanding of entrepreneurial intention.

2.1.1. What is entrepreneurship?

The definition of entrepreneurship has evolved with the contributions of the various scholars to the subject, each adding essential elements to the lens through which entrepreneurship can be viewed and thus defined.

Author	Knight 1921	Schumpeter (1934)	Hoselitz (1952)
Definition	Obtaining profits from taking risks under uncertain conditions	Organizing firms – developing new products and/or services, employing new types of raw materials (from new sources) and new production methods, exploring new markets and new forms of organizations	Coordinating productive resources, introducing innovations and providing capital, while managing uncertainty
Identifiers	Uncertainty, risk, profits	Innovation, change	Resources, capital, risk
Other elements	Opportunity, founder's choices, experience	Opportunity, vision, mindset, growth	Scarcity
Similarities with definitions developed by other scholars	<p>Purposefully initiating activities aimed at developing a profit-oriented business, Cole (1959)</p> <p>Taking moderate and calculated risks, McClelland (1961)</p> <p>Pursuing opportunity regardless of currently controlled resource, Stevenson, Roberts, & Grousbeck (1989); Barringer & Ireland (2006)</p> <p>Pursuing opportunity regardless of currently controlled resource, subject to the previous choices and industry-related experiences of the founders, Hart, Stevenson, & Dial (1995)</p>	<p>Creating new organizations, Gartner (1985)</p> <p>A field of business that explores how opportunities create something new, Shane & Venkataraman (2000)</p> <p>A dynamic process of vision, creation and change, Kuratko & Hodgetts (2004)</p> <p>A opportunity focused, innovative and growth-oriented mindset, often found in large corporations and socially responsible non-profit organizations, Allen (2006)</p>	<p>The making of decisions and judgments about the coordinating scarce resources, Casson (1982)</p>

Table 1: Scholarly contributions to the definition of entrepreneurship

Based on these contributions to the definition of entrepreneurship, entrepreneurship is defined as undertakings that identify, recognize and pursue an opportunity, calculating and accepting the related risks, to create value for a customer willing to pay more than the cost of delivering that value, thereby earning a profit for the entrepreneur. Such profit is an incentive for entrepreneurial activity (Howorth, Tempest and Coupland, 2005). Persistent entrepreneurial activity eventually builds wealth for the entrepreneur. The latter is according to the early entrepreneurship theory, as developed by Cantillon (*circa* 1730), an Irish French economist

(Hoselitz, 1951). Following how this researcher plans to use the concept, (Higgs, 1891) described how Cantillon viewed entrepreneurship as the vehicle to economic inclusion, allowing the scope of participation to be broadened to improve the levels of prosperity and success, growth and opportunity.

Defining entrepreneurship has been elusive over the years, and it is best understood from a conceptual perspective which allows analysis of its diverse nature (Leunbach, 2021; Packard, 2017). Some authors, i.e. Howorth, Tempest and Coupland, (2005) opined that an overarching theory of entrepreneurship and a body of theories is necessary to overcome this hurdle. The difficulty arises from the diversity in the schools of thought and theories that define entrepreneurship. For example, economic theory cites economic incentives as the motivator for entrepreneurial activity, which occurs when favourable economic conditions. On the other hand, the innovation theory defines entrepreneurship as introducing new products, methods and markets, etc., (Howorth, Tempest and Coupland, 2005). As a result of these disagreements, Packard (2017) proposes an interpretive approach to defining entrepreneurship. It is because it allows researchers to look at intentionality rather than causality. The latter is the approach adopted in this research study.

2.1.2. What is entrepreneurial intention?

As entrepreneurship is considered a crucial antidote to unemployment, it is vital to develop and cultivate entrepreneurial intention in students (Mahfud et al., 2020). Entrepreneurial intention is defined as the conscious state of mind that precedes entrepreneurial behaviours and actions like starting a new business and becoming an entrepreneur (Krueger, 1993; Ladd, Hind and Lawrence, 2019; Obschonka, Silbereisen and Schmitt-Rodermund, 2010). Bird & Jelinek (1988) define entrepreneurial intention as the state of mind determining an individual's actions and efforts toward self-employment. It is an intentional act – an intentional behaviour to achieve a set goal.

Entrepreneurial intention is in turn stimulated by existing skills/talent, entrepreneur, or environmental need, etc., (Liñán, Rodríguez-Cohard and Rueda-Cantuche, 2011). Entrepreneurial intention requires further nurturing to graduate to actual entrepreneurship. According to Ajzen (1991) Theory of Planned Behaviour, an individual's attitudes, subjective norms, and perceived behavioural control shape their behavioural intentions and behaviours (Kautonen, Gelderen and Tornikoski, 2013). Given this interpretive approach to entrepreneurial intention, it is worth looking at what the literature says about enablers and

barriers of entrepreneurial intention. Unpacking these determinants of entrepreneurial intention allows us to understand how individuals become entrepreneurs. For example, in a study on tourism opportunities conducted in Mtubatuba Local Municipality, Ezeudji and Ntshangase (2017) found out that 77% of the population wanted to start their own business in the future and 65% saw themselves as entrepreneurial individuals, and 87% of the youth agree that entrepreneurship could alleviate their plight. The latter is a positive outlook, and it is essential to understand the enablers and barriers to the entrepreneurial intention that prevent people from realising their intention.

2.1.3 Understanding entrepreneurship and intention

The concept of entrepreneurship entails the recognition of the behaviour to action the motivation to identify and utilize an opportunity to gainful make money out. The actor who becomes an entrepreneur recognizes, ceases or create that opportunity (Audretsch, 2012). Entrepreneurship is always preceded by entrepreneurial intention. It is therefore crucial that the researcher defines what entrepreneurial intention is. Intention refers to the mental state representing a commitment to acting in the future (Remeikiene, Startiene and Dumciuviene, 2013). It is, therefore, the factors that motivate behaviour (Badri and Hachicha, 2019) towards, for instance, engaging in entrepreneurship. That includes a determination and personal orientation to perform. Entrepreneurial intention is determined to start and successfully operate a business venture in entrepreneurship.

For this study, the entrepreneurial intention of university students was explored to gain a broad understanding of entrepreneurship in this sector. In other words, the study sought to understand the motivations that led to the students taking up entrepreneurship as a gainful or gainful economic activity. It is, therefore, essential to define and understand the concept of entrepreneurship, its theory, and its application in this exploratory study.

2.1.4 The Ajzen Theory of Planned Behaviour

Ajzen's theory of planned behaviour (Ajzen, 1991) is a general model used widely to analyse and explain intentions toward entrepreneurship. It used to predict an individual's intention for specific behaviour such as the intention to start a business. It is a model used to analyse individual's intention, orientation, determination, and commitment to initiate, start, and operate business ventures. Ajzen (1991) argued that the intention of planned behaviour is affected by three factors: (a) Attitude towards the behaviour of entrepreneurship, (b) Subjective norms, which are beliefs held by the entrepreneur about the approval or disapproval of behaviour by people that matter most (it may be friends, family peers or community members), as well as (c) Perceived behavioural control, which is their perception of how capable they are to engage in their intended entrepreneurial activity.

Over the years, the Ajzen Theory of Planned Behaviour (TPB) has been used to evaluate entrepreneurial intention. The theory has become a gold standard of entrepreneurial intention studies because of its relevance and application to predicting behaviour. Other models that have been developed are often adapted (Krueger and Brazeal, 1994) from the TPB.

2.2. The contribution of entrepreneurship to education

Many countries that realized and recognized the importance of entrepreneurship in creating jobs and economic growth are implementing strategies to encourage entrepreneurship in institutions of higher learning. Entrepreneurship in economies hinges on the innovation-job creation-economic growth nexus. In other words, the realization that individuals and organizations use knowledge and skills to innovate can lead to job creation and sustainable enterprises, ultimately leading to economic growth and more job opportunities.

Education - both entrepreneurial and non-entrepreneurial or informal- plays an important role in influencing entrepreneurial intention. In this research study, the influence of entrepreneurial and non-entrepreneurial education was evident, and the effect of socio-cultural factors (For example, interactions with family members who are entrepreneurs). However, in a study with Romanian engineering students, Herman (2019) found no strong link between their intention and entrepreneurial education. Herman (2019) suggested it pointed to the effectiveness of the programme they were offered, and thus still recognising the importance of education in this regard.

Entrepreneurial education has been a critical part of stimulating entrepreneurial intention in students in developing economies. Badri and Hachicha (2019), in a study conducted with

Tunisian university students, demonstrated a strong link between socio-cultural background and educational profile of students intending to take up entrepreneurship. In other words, those who were or were likely to be entrepreneurship were primarily influenced by their social circles and their exposure to entrepreneurship at school.

Furthermore, it has been suggested that governments must provide enough support for entrepreneurial ecosystems. In a study conducted with Saudi Arabian students, Elnadi and Gheith (2021) found that the perception of ecosystem factors influences students' entrepreneurial intention. In turn, this negatively affected their self-efficacy or self-belief to overcome the barriers to achieving their goals. The more positive the perception, the higher the self-efficacy and entrepreneurial intention. In this research study, it is evident that students perceived the entrepreneurial ecosystem negatively as the current government programmes supporting entrepreneurship were not easy to access.

Various authors (Badri and Hachicha, 2019; Elnadi and Gheith, 2021; Herman, 2019a) agree that multiple factors, such as entrepreneurial education, informal education (learning interactions with friends and family members who are in business) and personal traits (e.g., the natural inclination to risk-taking) impact on entrepreneurial intention. The need for independence and achieving personal goals such as wealth was essential for students to pursue entrepreneurship (Badri and Hachicha, 2019; Barba-Sánchez and Atienza-Sahuquillo, 2018).

Considering all these factors, it is worth realizing that entrepreneurship has been established as a good strategy for job creation. It can be encouraged formally through entrepreneurial education and informal by creating platforms for those in business already to interact with students. Supporting mechanisms for entrepreneurship must be in place to nurture entrepreneurs' self-efficacy. With all these things in place, entrepreneurs can establish and sustain enterprises that create employment for others.

2.2.1. Entrepreneurial education in South Africa

As a result of the high unemployment among youth, South Africa is shifting towards embracing and promoting entrepreneurship within its universities (Ncanywa, 2019). The latter is demonstrated by establishing the Entrepreneurship Development in Higher Education (EDHE) in 2016. Promoting entrepreneurship in institutions of higher learning provides a valuable opportunity for higher education students. It helps them buy into entrepreneurship as a credible and desirable option, not only for post-graduation pursuit, but which can also be explored during the study period, in the safe, creative, and supportive spaces of their higher education

institutions. Within a South African education system that has traditionally promoted and supported professional careers, the promise of student entrepreneurship tackling youth and graduate unemployment and established support structures can still be considered worthwhile.

Entrepreneurship in higher education promises to transform the country's entrepreneurship landscape. The landscape comprises informal survivalist enterprises due to South Africa's past discriminative laws. These are characterized by inadequate education and skills, are cash-based with little or no access to financial and credit facilities, inefficient transport services, underinvestment in infrastructure, and segmented labour and consumer markets that create artificial internal barriers to trade (Bosma and Kelley, 2019). Among the poor, such entrepreneurial activity becomes a source of survival. Entrepreneurship promises to add innovation, a high knowledge and skill base to the national entrepreneurship landscape.

2.2.2. Enablers and determinants of entrepreneurial intention?

The determinants of entrepreneurial intention are described as those factors that enable an individual to achieve entrepreneurial intentions. They are factors that either motivate action towards realising the intention or diminish it. The literature reveals that enablers of entrepreneurial intention vary in their influence. They may directly or indirectly influence the entrepreneurial intention or serve as a mediating effect. They fall into broad personality traits, psychological, behavioural and socio-cultural factors (Adekiya and Ibrahim, 2016; Fragoso, Rocha-Junior and Xavier, 2020; Krueger and Brazeal, 1994; Krueger and Kickul, 2006). All these determinants are classified under TPB's three conceptual deterministic factors of (i) the attitude towards the behaviour (of starting a business), (ii) perceived social rule [the influence of the social environment (approval or disapproval of starting a business, for example, by family, friends)] and (3) perceived behavioural control which relates to self-efficacy. Self-efficacy is how the individual believes obstacles can be overcome to start the business. In the following paragraphs, they are grouped and briefly discussed.

2.2.2.1. Entrepreneurship education and training

Among the enablers of entrepreneurial intention are entrepreneurship education and training. It is noteworthy that scholars have found that education and training do not directly influence the intention (Adekiya and Ibrahim, 2016; Fragoso, Rocha-Junior and Xavier, 2020). According to Mahendra et al. (2017), entrepreneurial education is crucial to mediate entrepreneurial motivation and attitude. If, for example, an entrepreneurial course has highly motivated a student, it is highly that an entrepreneurial intention will be developed. The course

facilitates the development of entrepreneurship character in the student and familiarizes the student with the contextual environment of entrepreneurship. The significance of entrepreneurial education means it must continue to receive attention and be researched by institution of higher learning (Nicolaidis, 2011). It means that education and training strengthen or support self-efficacy. Herman (2019b) suggested that, since entrepreneurship education does not directly influence entrepreneurial intention, more effort should be put into the effectiveness of those programmes.

Governments in developing economies such as South Asia, Latin America and Africa, are now mandating entrepreneurial education to counter soaring unemployment (Adekiya and Ibrahim, 2016). To curb the problem of unemployment and promote self-employment, some governments such as in Indonesia and Germany are introducing a combination of entrepreneurial education with management skills training to students from families with entrepreneurship backgrounds (Badri and Hachicha, 2019). An example of such a country is Germany, which ranks first among all high income GEM countries on family legacy entrepreneurship according to the 2020/21 Global Entrepreneurship Monitor report, GEM. (2021).

South Africa embraces and promotes entrepreneurship within its universities (Ncanywa, 2019). In response to increasing self-employment, the Entrepreneurship Development in Higher Education (EDHE) was established in 2016. The objective of EDHE is to develop the entrepreneurial capacity of students, academics and leaders, and encourage economic activity by students during and after their tertiary education (Ncanywa, 2019). The EDHE has become central in organising and hosting various activities, events, and competitions every year, collaborating with international organizations, to uplift the level of entrepreneurship in South African higher education institutions (Oni and Mavuyangwa, 2019). In other words, entrepreneurship education and training can be used to strengthen an individual's inclination towards entrepreneurship by improving their skills and thus their confidence and feelings of efficacy to making meaningful entrepreneurial pursuits.

2.2.2.2.The entrepreneurial ecosystem within the institution

Another important determinant is the vibrance of the entrepreneurial ecosystem within the institutional environment. (Díaz-Casero et al., 2012), as it influences the perceptions of how desirable and feasible entrepreneurship can be. It is a community of entrepreneurs and entrepreneurial support facilities, programmes and systems, interacting in a way that stimulates

entrepreneurial culture within the environment, Audretsch, D.B., (2017). It affects the social and cultural environment and shapes individuals' behaviour and decisions. Humans are social and cultural beings influenced by those around them (Farouk, Ikram and Sami, 2014). Overall, entrepreneurship has a positive image in society (Díaz-Casero et al., 2012), especially in developed countries and those middle-income countries that have identified its potential to lift them off the economic rut. These are social norms – values and beliefs integral to TPB. There are positive perceptions of entrepreneurship as a prestigious activity, and individuals will likely embark on it.

2.2.2.3. Supportive environment

A supportive environment includes government financing and incentive schemes, private investment in entrepreneurship and entrepreneurship education by established business and general business support (Nicolaidis, 2011). This makes up a broader environment which should enable the existence of the various entrepreneurial ecosystems (as discussed in the previous paragraph) to thrive. Perceptions about how supportive this environment is can be directly or indirectly linked to entrepreneurial intention (Elnadi and Gheith, 2021).

Some of the challenges for entrepreneurship are structural and create a constraining environment for those who want to start small and medium enterprises, which is regarded as the hotbed of entrepreneurship. These constraints are identified by the OECD (2017) as the burden created by red tape (bureaucracy), lack of coordination and evaluation at a policy level, quality of education system and the lack of work experience. Herrington *et al.* (2017) argue that the conditions under which entrepreneurship occurs are critical, such as government and institutional policies and programmes supporting entrepreneurship. According to the OECD 2020 report, the challenges are said to be reflected in the gaps in the entrepreneurial skills of South Africans (Webb, 2021; De Lannoy et al., 2020). Perhaps this scenario explains the low entrepreneurship in the country. Some of these challenges, compounded by a lack of a supportive environment, discourage and prevent some entrepreneurs (De Lannoy et al., 2020). In other words, these factors may mediate self-efficacy and lead to diminished self-efficacy for those who are not psychologically well-prepared for the challenge (Fragoso et al, 2020).

2.2.2.4. Entrepreneurial self-efficacy

Entrepreneurial self-efficacy includes the beliefs about one's ability to act on the intention to start a business based on self-confidence, skills, personality etc, (Bandura, 2000). It is a set of beliefs that pushes the individual's motivation to overcome obstacles. Models of

entrepreneurial intention recognise that individual personality plays a critical role in committing to entrepreneurship. In a study on Brazilian students, Fragoso et al. (2020) agree with other authors that self efficacy (among other factors) is a good predictor of entrepreneurial intention.

2.2.2.5. Entrepreneurial intention and gender

There are various views on how gender impacts entrepreneurial intention. Some studies, found gender differences in entrepreneurial intention (Fragoso, Rocha-Junior and Xavier, 2020), When comparing males and females, it were found that females have lower entrepreneurial intention levels, certain aspects of social influence females' negative disposition towards acting on their intention (Haus et al., 2013; Elnadi and Gheith, 2021), whilst others found no difference (Badri and Hachicha, 2019; Barral, Ribeiro and Canever, 2018a). Therefore different gender roles have disadvantaged females due to their traditional roles within families. As such, females may encounter additional obstacles due to gender, over and above the challenges that their male counterparts encounter in the course of their entrepreneurial pursuits. Maes, Leroy and Sels (2014) argue that perceived behavioural control and personal attitude explain gender differences in entrepreneurial intention.

2.3. Barriers to entrepreneurial intentions

The barriers to entrepreneurial intentions come in different forms. They can be psychological, institutional, cultural, etc, (Achchuthan and Kandaiya, 2013). These barriers are closely linked to the determinants of entrepreneurial intentions – mainly that when these determinants are negative, they will diminish or inhibit entrepreneurial intentions.

According to Wach and Bilan (2021), perceived public support can positively influence the entrepreneurial intentions of young people. The latter may relate to the widely acknowledged influence of social recognition of entrepreneurship in many countries. Negatively perceived institutional barriers such as government policies, funding, SME support, etc., tend discouraged would-be entrepreneurs (Wach and Bilan, 2021) and thus inhibit their entrepreneurial intentions.

Sarri, Lapsita and Panopoulos (2019) conducted a study in Greece during the major prolonged economic crisis and found that financial, business risk and public policy barriers inhibited entrepreneurial intention more than personal barriers. These may relate to governments' overall overcautious approach during economic crisis periods. In a study by, Kalitanyi and Bbenkele

(2018) found that language influenced entrepreneurial intentions in university students. Significant findings for the multi-cultural society that South Africa is.

Fatoki (2010) found that barriers to students entrepreneurial intentions in South Africa were capital, high crime rates, poor economy, perceived lack of support, lack of skill and risk-averse individuals. Fatoki (2010) also found out that employment, achievement, innovation, making money and independence were motivators for students' entrepreneurial intentions. These motivators relate more to individuals' positive personality traits and are primarily determined by their internal locus of control, which tend to be strong.

2.4. Theoretical framework

Achchuthan & Kandaiya (2013) state that McStay (2008) categorised entrepreneurship studies into three distinct approaches: (i) Trait – where the emphasis is on the personality trait that pushes an individual for success, recognition, to gain power, etc.; (ii) Behavioural approaches, which are extensively used. They view the entrepreneur as someone who sees and takes opportunities and consciously works towards achieving those goals; and (iii) Cognitive approaches, which are more recent and regard the entrepreneur as wise and try to make sense of the trajectory of economic activities around them. Most of these studies are conducted using TPB and other models that are its variations.

Despite the lack of an overarching theory of entrepreneurship and disagreements on definitions, the Theory of Planned Behaviour was birthed in 1991 and has dominated studies of entrepreneurship (Ajzen, 2011) and generated many studies and significant criticism. The theory offers a perspective that views entrepreneurship as a behaviour (Ajzen, 1991). Even theories that follow Ajzen's model are still based on the general principles of his theory. They recognized the importance of behaviour, psychological and socio-cultural factors. The behavioural approaches, especially the TPB, have been the most popular and used.

Since entrepreneurship is conceived as a behaviour, Ajzen's Theory of Planned Behaviour (TPB) is widely used as a theoretical framework or model to study entrepreneurial intention. The model predicts human social behaviour and has been tested since it was introduced in 1991 (Ajzen, 2011). The model has dwarfed other models that used to study entrepreneurial intention. TPB was used in this study as it was deemed an appropriate theoretical framework to analyse students' entrepreneurial intention. Several authors (Fatoki, 2014; Fatoki & Chindoga, 2011; Fatoki, 2010; Iwu *et al.*, 2016; Ncanywa, 2019) have used it in qualitative and quantitative studies to study entrepreneurial activities intention among students.

The theory of planned behaviour by Ajzen (1991) is a general model used widely to analyse and explain intentions toward entrepreneurship. It has become instructive to predict an individual's intention for specific behaviour. This study used the model to analyse students' intention, orientation, determination, and commitment to initiate, start, and operate business ventures. Ajzen (1991) argued that the intention of planned behaviour is affected by three factors: (a) Attitude towards the behaviour of entrepreneurship, (b) Subjective norms, which are beliefs held by the entrepreneur about the approval or disapproval of behaviour by people that matter most (it may be friends, family peers or community members), as well as (c) Perceived behavioural control, which is their perception of how capable they are to engage in their intended entrepreneurial activity. See Figure 1 for diagrammatical illustration of the model. Engle *et al.* (2010) argued that this theory is suitable for explaining an individual's intention to start a business or self-employment.

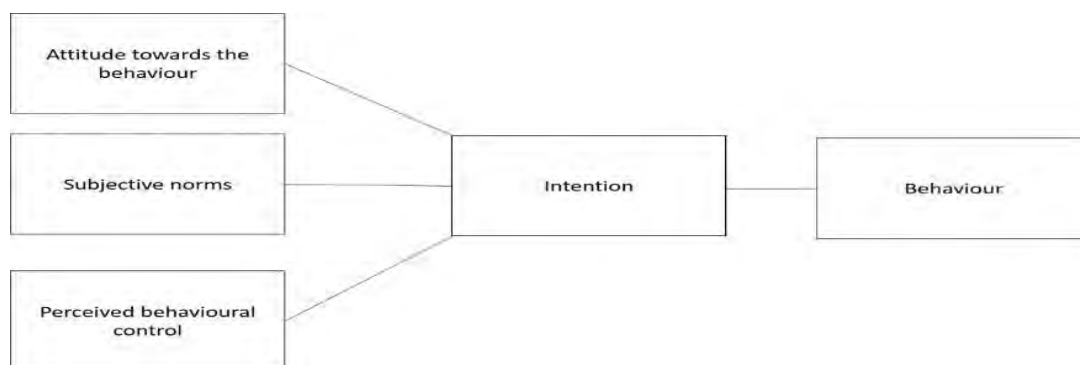


Figure 1: Ajzen (1991) Theory of planned behaviour

TPB is flexible to be used as a general model applied in various contexts, behaviours, and fields. It does not only predict behaviour but also for the understanding and explanation of the factors that motivate and influence the behaviour (Ajzen, 1991). The various variables of entrepreneurship, namely, innovation, economic variables, psychological variables, sociological variables, fit into the TPB model as follows:

Elements of Theory of Planned Behaviour	Entrepreneurship variables reconciled
Attitude towards the behaviour is determined by their evaluation of the outcome from the behaviour and the strength of their belief in it.	The economic variable of entrepreneurship recognizes economic incentives (e.g., profit, tax benefits, industrial policies, etc.) as motivators for entrepreneurial behaviour.
Subjective norms are determined by a belief that an important person or group will approve and support the behaviour.	The sociological variable recognizes cultural values, role expectations and social sanctions as motivators of entrepreneurship.
Perceived behavioural control (Self-efficacy) is determined by a person's perception of their ability to perform a behaviour.	The psychological variable recognizes the need for achievement, ability to face opposition, high standards of excellence as motivators for entrepreneurial behaviour.

Table 2: Entrepreneurship variables and how they fit into the TPB model – created by the author, adapted from Ajzen's Model for Planned Behaviour

2.4.1. Critique of the TPB Model

Models on behaviour are often critiqued for failing to consider the complexity of social phenomena. This criticism often relates to the difficulty of attributing outcomes to an intervention. In the case of TPB, the criticism is summarized by Manstead (2011) into five categories as critiqued by different authors. These are: (a) Failure of TPB to account for social factors, (b) .more understanding of the moderating factors is needed, (c) critical examination of perceived behavioural control as a construct, (d) behaviour is unpredictable and habitual, and finally (e) TPB overlooks affective factors.

This criticism of aspects of the model has led some scholars to develop a few derivatives of the model. Shapero and Sokol (1982) developed an Entrepreneurial Event Model (EEM) model. The model views entrepreneurship as an event in a person' mind. According to this model, a person is kickstarted by a possibility to pursue entrepreneurship, and they will make that decision based on (1) desirability and (2) feasibility. Adapting some aspects of EEM, (Krueger and Brazeal, 1994) developed the Entrepreneurial Potential Model (EPM) that focused on antecedents of entrepreneurial intention. The model states that entrepreneurship potential precedes entrepreneurship and combines self-efficacy theory, TPB and EEM. The practical use of TPB still dwarfs these models. Recent literature as presented in the literature review section indicates that some authors took the general criticism of TPB into account as they attend to some of these critical aspects there criticised it.

2.4.2. Previous studies conducted on students using TPB

Numerous quantitative studies have been conducted with students in South Africa using TPB. Minimal studies have been completed within the qualitative approach. Manstead (2011) pointed out that scholars who have critiqued TPB often question constructs such as perceived behavioural control and the difficulty of predicting behaviour as a social construct. The researcher believes that adopting a qualitative approach helps better understand these qualitative aspects, such as human behaviour.

The model, though, is reliable and sound for these studies. Malebana (2014) surveyed Limpopo province to test the validity of the Theory of Planned behaviour on South African students in a rural context and found out that the theory was valid. It has been used in South Africa extensively to study entrepreneurial intention.

Mabelana, in particular, has contributed a considerable number of South African based studies that shed understanding on various aspects of entrepreneurial intention Malebana (2014a and 2017). Some examples included, Malebana (2015) conducted a study with university students in the Eastern Cape and Limpopo rural provinces to test whether there were gender differences in entrepreneurial intention. The study found out that females did not view entrepreneurship as a career. Other similar studies (Malebana, 2014b and 2017) found that entrepreneurial intention was influenced by social capital and knowledge of entrepreneurial support services.

Entrepreneurial intention research contributes to understanding people's decisions (Fayolle and Liñán, 2014). Understanding how those decisions are made means that evidence-based support systems for entrepreneurs can be put in place. Such support systems could help sustain the entrepreneurship energy within individuals. Considering the low entrepreneurship in youth in South African, researching this aspect among students is crucial. Qualitative research is the key mechanism to get into these mental prototypes or cognitive scripts of entrepreneurs.

Tertiary institutions that want to promote entrepreneurship must focus on the entrepreneurship intention of university students - assessing the understanding of enablers and barriers of entrepreneurship intention and assisting in designing better entrepreneurship education initiatives (Fayolle and Liñán, 2014). The latter arises from recent developments in higher education. There is a growing trend to promote entrepreneurship at tertiary institutions, realising that employment is still a huge challenge in developing economies. In that regard, entrepreneurship is touted as the *panacea* for youth unemployment and a creator of job opportunities.

2.5. Stimulating entrepreneurial intent at universities

TPB has been used extensively in South African universities to study entrepreneurial intention (Fatoki and Chindoga, 2011; Iwu et al., 2016; Lestsoalo and Rankhumise, 2020; Malebana, 2014a, 2017; Ncanywa, 2019). Malebana (2014) confirmed in a study conducted in Limpopo that the model is valid for South Africa.

According to Audretsch (2017), there are three ways that universities influence entrepreneurship and, by extension, entrepreneurial intention. The link between universities and entrepreneurship is created through entrepreneurship capital, knowledge spillovers, and technology transfer (Audretsch, 2017).

Furthermore, different countries respond differently to the issue of entrepreneurship. Singapore, for instance, transformed its university set up to push for innovation and entrepreneurship following the model of using technology transfer offices (Mok, 2015). In China, rapid growth in higher education challenged graduate placement at universities, which pushed the Communist government to force universities to focus on entrepreneurship for young adults (Zhou and Xu, 2012).

By hosting the youth cohort of 18 – 34-year-olds, universities hold entrepreneurship capital in the form of students. Students are ambitious to acquire knowledge capital cultivated by higher education studies (Bezerra, Borges and Andreassi, 2017). Furthermore, universities create patented technologies, licenses or ventures that make value for production systems in the economy (Romano, Del Giudice and Nicotra, 2014). The technology transfer office at universities is responsible for managing these processes for the financial benefit of the university (Boh, De-Haan and Strom, 2016). Therefore, it is in the university's interest to cultivate a culture of innovation that breeds these technologies to sell them at a price to private or non-profit organizations. Technology transfer, therefore, influences entrepreneurship when it is interpreted as behaviour (Audretsch, 2017). In other words, a budding entrepreneur may be encouraged to innovate and approach the Technology Transfer Office, knowing that the office will commercialize the innovation for the benefit of the parties involved.

Universities have been exploring ways of maximising the usefulness of the knowledge they produce by transferring their research and development output into practical technologies and commodities that will add value to society (Audretsch, 2012; Audretsch, 2017). The latter led to new value-adding innovations that have improved life, and their commercial value also adds to economic output. Entrepreneurship, therefore, is recognised as providing the opportunity

and means for universities to maximise the usefulness of the knowledge they produce by applying it to create innovations that solve everyday life problems (Davey, 2015).

Knowledge regions are geographical areas where the knowledge economy is recognised and is developed for regional development. Often this happens around the institution of higher learning where knowledge is produced. The synergies between these institutions, government and entrepreneurs, is harnessed, thus setting off a higher development trajectory (Smahó, 2010). Some examples include the United States of America (USA) Route 128 knowledge regions – which spread around the Massachusetts Institute of Technology (MIT), as well as the acclaimed Silicon Valley which flourished around Stanford University (Adams, 2005; Colapinto, 2007). The same phenomenon can be observed also in Europe, where the Sophia Antipolis high-tech park developed around universities in Cote d Azur, France and the Leuven region in Belgium (Isaak, 2009).

Another element that university influences entrepreneurship is knowledge spillovers (Audretsch, 2017). The latter is when the knowledge created at university is freely accessed and used elsewhere by other organisations at lower costs than its value. These spillovers to these companies become a source of innovation and often are not located far away from these universities (Acs, Audretsch and Lehmann, 2013).

2.5 Proposed Conceptual framework

Using TPB as a theoretical foundation, the researcher made three propositions and presented the conceptual framework in Figure 2.

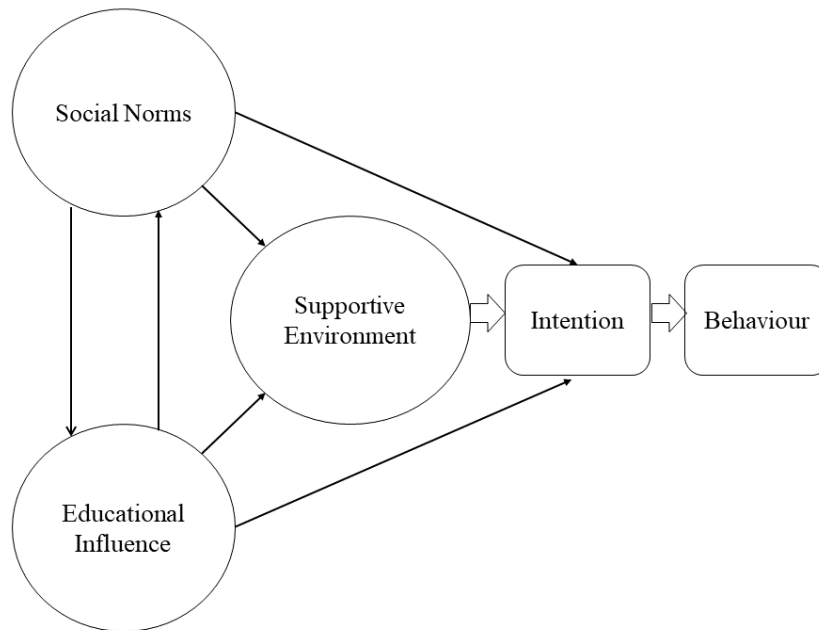


Figure 2: The conceptual framework for achieving entrepreneurial intention at universities

In response to unemployment challenges, there is a consensus among scholars that entrepreneurship plays a critical role in economic development (Coulibaly, Erbao and Metuge Mekongcho, 2018; Mahfud et al., 2020) and that entrepreneurial intention can lead to new business.

The conceptual framework above (Figure 2) proposed that the student entrepreneur's attitude or would-be entrepreneur, social norms and educational influence are critical in sustaining an entrepreneurial intention nurtured within a supportive environment. Institutional environments, such as universities and government support through policies that support entrepreneurial education are critical to fostering students' entrepreneurial intention. The conceptual framework assumes that if students are nurtured in this supportive environment, they may transcend the barriers (discussed in paragraph 2.3 of this thesis) and translate their business idea into entrepreneurial intentions. A supportive environment can also expose students to potential entrepreneurial opportunities whilst on campus. These opportunities can come in different forms and through TTO and hosting entrepreneurial competitions in higher education environments.

The model thus proposes that universities create a supportive environment to nurture entrepreneurial intention. Students in the Faculty of Commerce and the Business Schools within the university setting are influenced by their education to consider entrepreneurship.

Social norms play a critical role. Friends and families influenced some students even before their tertiary education.

From this conceptual framework, the researcher made the following three propositions:

In the literature, role models are influential in encouraging entrepreneurial intention. However, this relationship is not direct as it influences antecedents of the intention (Fellnhofer and Mueller, 2018). The role models may be family members, friends, or community members who cultivate a positive image of entrepreneurship, demonstrating prestige and self-reliance. In other words, role models influence personal attitudes and normative beliefs, thus creating a desire for individuals to adopt being an entrepreneur. Meoli et al. (2020) found that in the case of higher entrepreneurial intentions such as venture creation, context is a critical factor in explaining the motivation to act on intention or otherwise. The behaviours of others, especially family members and peers, form an immediate sphere of influence for students and their positive disposition towards the intentions.

a) ***Proposition 1: Students are motivated by peers and seeing close family members running a successful business.***

Education is indirectly linked to entrepreneurship (Mahendra, Djatmika and Hermawan, 2017), with attitude and personality traits being a solid predictor of entrepreneurial intention. Similarly, entrepreneurial education did not significantly influence students' entrepreneurial intention (Rodríguez Gutiérrez, Pastor Pérez and Alonso Galicia, 2018; Herman, 2019b). Herman (2019b) argued that such an outcome relates to entrepreneurial education effectiveness and thus proposes evaluation as an essential tool. However, entrepreneurial education and training were critical factors for entrepreneurial intention (Barba-Sánchez and Atienza-Sahuquillo, 2018). In other words, though they don't exercise direct control, they have a significant moderating effect.

b) ***Proposition 2: Students' education and exposure to entrepreneurship incubating programmes are good predictors of intention.***

Malebana (2017) asserts that entrepreneurial support can play a critical role in stimulating entrepreneurial intention. However, in a study conducted by Malebana (2017) in Limpopo and Eastern Cape rural universities, access to information about the government's business support and institutions was low. Although the latter might be the case, it is essential to note that other authors such as Mahendra, Djatmika and Hermawan (2017) have found that entrepreneurship

education and training serve as mediating factors and do not directly influence intention (Adekiya and Ibrahim, 2016).

c) **Proposition 3:** *A supportive environment is central to students realising their entrepreneurial intention. The presence or absence of business support through financing and incubation and access to information inhibits or enhances business ownership among students*

These three propositions are aligned with the objectives of the study. The first two propositions (a and b) cover the examination of how students become entrepreneurs. The third proposition (c) covers the determinants that can either hinder or enhance the entrepreneurial of students. This study uses an interpretivist approach to unlock some of these factors. It was conducted with university students at different levels of intention and educational goals.

2.6 Conclusion

In this chapter, the researcher surveyed the literature on entrepreneurial intention. The literature was examined to identify determinants of entrepreneurship intention. These were factors that either inhibit or enhance entrepreneurial intention. These include gender, knowledge and supporting environments, entrepreneurial education and training, and others. The literature also examined vital aspects of the criticism of The Theory of Planned Behaviour, reflecting on how that has influenced current research. The chapter further examined entrepreneurial studies in South Africa. Many of these studies were conducted using The Theory of Planned Behaviour, and thus it was confirmed to be an appropriate tool in the South African context.

In the next chapter, the researcher presents the methodology used to undertake this study. The chapter describes how data was collected and analysed.

CHAPTER 3: METHODOLOGY

3.1. Introduction

This study is located within the interpretivist paradigm. In this chapter, the researcher presents how this study was conducted. The qualitative methods and methodology are explained, including the data analysis approach. The use of qualitative research methods to collect the data was the best way of collecting data about the inner motivations of students towards entrepreneurial intention.

3.2. Research Methodology

The study followed the qualitative research approach. Qualitative research can be described as “the study of human action from the insider’s perspective.” (Mouton and Babbie, 2001)(p54). This research focuses on describing and in-depth understanding rather than predicting human behaviour (Mouton and Babbie, 2001). The study evaluates students’ inner motivations for their actions. Qualitative research gives the researcher a rich and in-depth understanding of the students’ motivations towards entrepreneurship.

This study adopts an interpretive approach to reveal multiple realities (de Vos *et al.*, 2005). The interpretivism tradition or paradigm concerns itself with understanding the human subjects. It moves from the assumption that human beings are conscious beings and self-directing and symbolic human beings (Mouton and Babbie, 2001). It is a paradigm that asserts that human beings are engaged in the process of making sense of their lives. The latter means that given what makes sense to them at a particular or over some time, they can select an appropriate action.

3.2.1. Method of choosing participants (Sampling)

The qualitative method used allowed setting up an inclusion/exclusion criterion before the study commenced. Demonstration of commitment to entrepreneurial intention was used as a criterion to select a sample of participants from the 7500-student population at Rhodes. The researcher selected participants by accessing databases of students interested in entrepreneurship activities on campus. The databases were retrieved from the Technology Transfer Office (TTO). The databases contained students who actively engaged in entrepreneurship development activities on campus.

Since the study was qualitative research, Mouton & Babbie (2001) state that the general rule of thumb of selecting the number of participants for a masters' degree in South Africa, in the interpretive paradigm, usually is 5-20 participants. The researcher purposefully targeted students interested in and participating in entrepreneurial activities. There were 60 students in the database. Although this study's target was to achieve twenty interviews by invitation, only thirteen participants responded and were interviewed due to a lack of response from invitees, perhaps with an added challenge of the study commencing during the month of COVID-19 lockdowns. All invitees met the criteria of participation in the study.

Twenty (20) participants were selected using a stratified sampling method, whereby the names on the database were arranged alphabetically, every third name selected for the sample. The selected students were invited to interviews via the two rounds of Zoom interviews: In the first round, the data collected from the interviews was insufficient due to the low number of participants. The second round of interviews yielded seven more interviews - six online interviews and one WhatsApp interview, and thus totalling 13 participants.

3.2.2. Data collection methods

3.2.2.1. Interview guide

The research questions were arranged such that the first section interrogated the participant's attitudes, preparations, confidence, and feelings of self-efficacy to start and operate a business successfully. The second section examined how supported student entrepreneurs or would-be entrepreneurs are to their entrepreneurial intention and activity. The latter included the influence of the participants' studies or education in stimulating and supporting entrepreneurial intention. The last section interrogated the student entrepreneurs' social norms by examining the effect of family, friends, and role models.

3.2.2.2. Online interviews

The initial objective of the study was to conduct face-to-face personal interviews. This type of interview allows the participant to express her or his opinions from open-ended questions instead of from a predetermined hypothesis-based battery of questions (Mouton and Babbie, 2001). Due to the COVID-19 pandemic, the regular personal interviews had to be replaced by online personal interviews. The interviews were conducted via the Zoom and Google Meet platforms. The WhatsApp messaging application was used in one instance where Zoom or Google Meet failed due to connectivity or bandwidth issues or as a preference from a

participant. It was very cost-effective and accessible to many, and online meetings were organised.

3.2.2.3. WhatsApp interviews

One participant chose to use WhatsApp to respond to the interview guide. The participant texted the responses via the messaging application. The participant communicated reluctance of doing an online interview. An interview guide with semi-structured interview questions for data collection was used, with the interviews recorded and transcribed as planned.

3.2.2.4. Interview Guide Focus Areas

The interview guide covered the overall themes of TPB – under which the researcher asked a battery of questions were asked. The three deductive themes from TPB were (i) entrepreneurial intention, (ii) supportive environment, and (iii) educational influence. Table 2 below summarizes the format that the interview guide took.

Attitudes	Perceived behavioural control	Social norms
Questions covered:		
a) Level of entrepreneurship intention – e.g., intending, starting, & operating a business b) Reasons behind planning or starting a business. c) Identifying and overcoming challenges	a) Perceptions about the environment b) Identifying opportunities in the current environment c) Perceptions about support in the current environment d) Educational influence	a) Attitude and support of friends and family b) Influence role models c) Longevity of entrepreneurial goals

Table 3: Structure of the interview guide

3.2.2.5. Data capturing methods

The data was captured from the Zoom session recording for 12 interviews, with only one opting to answer the questions via WhatsApp. The Zoom MP4 recordings were transcribed using an automated online transcription service from Google called Transcribe by Wreally. The accuracy of the transcription was about 70%. Due to accent identification issues, for example, the researchers isiXhosa accent compared to English accents used to standardize the programme, the accuracy was not the projected or advertised accuracy of 90%. The service provided both automatic and manual transcription. The latter also served as an added quality check, allowing playback of each recording at selected speeds until satisfied with the content of what is said. The system keeps the records online, creating extra security for storage. The

data was later coded using deductive themes. The process of capturing the data is demonstrated in Figure 3 below.

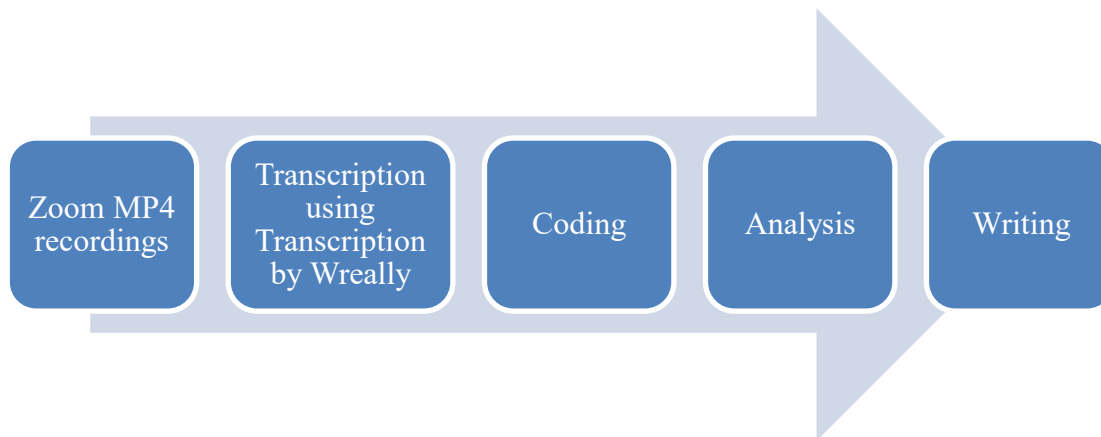


Figure 3: The data capturing process from the interviews.

3.2.3. Data Analysis

Tested thematic data analysis procedures and processes used by Virginia and Victoria Clarke (Braun and Clarke, 2006, 2012, 2019; Clarke and Braun, 2014) were followed. For this purpose, inductive codes were developed until the themes were exhausted, whereby further analysis of the themes was done. The themes that were found to be similar were combined into one. The procedure is described out by Braun and Clarke (2006), see Table 3. Thematic analysis was undertaken to identify the themes and analyse the data.

Phase	Description of the process
1. Working and getting familiar with that data	Data transcription, reading & noting ideas
2. First coding exercise	Coding data using NVivo 12 data management software
3. Searching for themes	Collating codes into potential themes and gathering related raw data (quotations)
4. Reviewing the themes	Check if the themes are not somehow duplicated and work with the coded extract. Generating the first codebook
5. Defining and naming themes	Analysis to refine themes and generate definitions and names of the themes (Second refined codebook)
6. Writing the report	Analysis of themes and delineating a compelling storyline – with direct quotations (extracts) and linking analysis back to research question and literature

Table 4: Phases of the thematic analysis, adapted from Braun & Clarke (2006)

3.2.4. Ethics/consent

Ethical clearance for the study was obtained from the Rhodes University Human Ethics Committee, and permission to carry out the interviews from the Registrar. Consent was also obtained from the various gatekeepers of entrepreneurial societies and the Technology Transfer office, for the use of their databases for sampling purposes.

3.2.5. Trustworthiness

Validity in the context of this research means the extent to which the findings of this study would stand true in a typical study with similar individuals. Exploring the entrepreneurial intentions of university students and examining the factors that enhance or inhibit such intentions may provide valuable input to the practice of entrepreneurship at institutions of Higher Learning in South Africa. The undertaking of this study by a student among fellow students allowed for an open peer to peer interaction, that deliberated on current issues relating to student entrepreneurship within the institution, the locality and nationally.

The methodology employed in this study, sought to give credibility to the study and to help ensure as much as possible that its findings may be applied to the entire student population,

and possibly give insight to the national context. For representativity, sampling was carried out such that the participants were not limited to students taking business studies, or in a particular year of study, but was drawn from the database of the Technology Transfer Office, to reflect students from different study backgrounds, at different study levels and at different stages on entrepreneurial intention. The data collection, capturing and analysis methods were also aligned with the research objectives, and limitations therewith openly presented in section 6.4 of the study.

3.2.6. Conclusion

The chapter explained what research methodology was selected, how the data was collected, processed and analysed. The COVID-19 reality presented an opportunity to use technology to complete the interviewing process. The latter was in Zoom, the Google Meet platform and WhatsApp. Online transcription services proved effective and provided extra security for data collected (recordings). Thematic analysis proved exhaustive but very comprehensive. It offered the opportunity to immerse the researcher in the data. Thus immersion made it easier to understand the participants' views.

The next chapter (Chapter 4) presents the findings from the research. The tables of the thematic analysis are also presented in Chapter 4.

CHAPTER 4: RESEARCH FINDINGS

4.1. Introduction

In this chapter, the profile of the participants is first presented to contextualize the interviews and data and, later, the research findings. The findings are the product of analysis and reflections that represent the interpretation of this data. The themes guide the conclusions deduced from the data.

4.1.1. General description of the participants

The profile of students who participated in the study is presented in Table 4, reflecting five variables - gender, age, study level (whether the student is doing a bachelor's degree, postgraduate degrees, and diplomas), faculty, and most importantly, the stage of entrepreneurial intention. The latter refers to whether the student entrepreneur was (i) intending to be an entrepreneur, (ii) is in the process of starting a business, lastly (iii) already operating a business.

The participants fell within the ages of 18 – 26, the expected age cohort of university students. Often, individuals are sensitive to openly disclosing their age; however, participants spontaneously revealed their age in the study. However, age categories were delineated in the interview schedule, and their exact age was recorded in their responses to encourage participation and respect and maintain their privacy.

The students ranged from those intending to start entrepreneurship to those already operating businesses successfully. Those operating businesses already were very ambitious and proud of their inroads into entrepreneurship. Table 4 below presented the summary of the interviewed students and took part in the study. The students came from various faculties. Compared to the rest, the Faculty of Commerce student entrepreneurs represented 54% of the total sample, followed by Law (15%), Science (15%), Education (8%) and Humanities (8%). It is not surprising that Law and Science students were the second group to engage or likely to engage in entrepreneurship given the nature of these studies. Professionals from these faculties follow pretty steep practices in entrepreneurship as they run their practices or join professional bodies. The Faculty of Commerce and some students who had an entrepreneurial intention took some courses from Rhodes Business School and participated in the University's entrepreneurship activities represented by the Technology Transfer Office. The latter highlights the importance and role of entrepreneurial education in promoting entrepreneurship.

Participant	Gender	Age	Study level	Faculty	Stage of entrepreneurial intention/activity
Resp 1	Male	25	Honours	Commerce	Intending to start a business
Resp 2	Female	26	PhD	Science	Starting a business
Resp 3	Male	22	Bachelors	Commerce	Operating a business
Resp 4	Male	18	Bachelors	Law	Intending to start a business
Resp 5	Male	24	Honours	Commerce	Operating a business
Resp 6	Male	26	Masters	Science	Starting a business
Resp 7	Female	21	Bachelors	Law	Starting a business
Resp 8	Male	23	Bachelors	Commerce	Intending to start a business
Resp 9	Male	22	PG Diploma	Education	Starting a business
Resp 10	Male	21	Bachelors	Commerce	Starting a business
Resp 11	Male	23	Bachelors	Commerce	Operating a business
Resp 12	Female	21	PG Diploma	Commerce	Starting a business
Resp 13	Female	22	Bachelors	Humanities	Starting a business

Table 5: Participants' profile

Participant	Description
Resp 1	A 25-year-old male student. He was doing a B. Com Honours degree in Financial Management. The Rhodes Entrepreneurship society sparked his interest in business, and he intends to start a business for financial reward.
Resp 2	A 26-year-old female student was pursuing a PhD in Bioinformatics. Her passion and a market gap created by the Covid-19 epidemic prompted her to start a textile business, through which she hopes to attain self-empowerment, financial freedom, and community development.
Resp 3	A 22-year-old male student. He was a Bachelor of Business Science degree. Conscious of the unemployment crisis in South Africa, he started a business five years ago to secure his job and livelihood.
Resp 4	An 18-year-old male student. He was doing a Bachelor of Arts (Law) degree. He intends to start an e-learning business for self-development and growth.
Resp 5	A 24-year-old male student. He was doing a Bachelor of Commerce Honours in Financial Management. He is operating a business that was created as a response to a gap in the market. He intends to sustain and grow the business
Resp 6	A 26-year-old male student. Hew was a Master’s degree in Mathematical Statistics degree. He is starting a business after identifying a gap in the market and is hoping to gain skills and growth through it.
Resp 7	A 21-year-old female student. She was doing a Bachelor of Arts (Law) degree. She is starting a farming business due to job scarcity and resource availability and hopes to achieve sustainability and growth.
Resp 8	A 23-year-old male student. He was doing a Bachelor of Social Science in Economics Management. He intends to start a business for social and environmental growth due to his identified need in the market.
Resp 9	A 22-year-old male student. He was doing the Postgraduate Certificate in Education. He identifies himself as a social entrepreneur starting a business after spotting an opportunity in the market.
Resp 10	A 21-year-old male student. He was doing a Bachelor of Economics degree. He is starting a business that he hopes will help him make a meaningful contribution to society while achieving self-growth.
Resp 11	A 23-year-old male student. He was doing a Bachelor of Science in Information Systems degree. He is operating a waste management business to create employment for himself and others.
Resp 12	A 22-year-old female student. She was doing pursuing a Postgraduate Diploma in Business Analysis. She uses her science knowledge (B.Sc. graduate) to explore indigenous materials and develop an organic cosmetics brand. She hopes to uplift her village economy and promote environmental sustainability.
Resp 13	22-year-old female student doing a Bachelor of Social Sciences in Journalism. She is starting a creative agency as influenced by her studies. She wishes to grow the agency into a media production and broadcasting hub.

Table 6: Description of the participants

4.1.2. Distribution by Age, Faculty and Level of Study

The standard age group classification for research purposes was not helpful as the entire research population is concentrated in the 18-25 age group. Age categories were divided into

three-year brackets for the research. The latter produced three categories - 18-20; 21-23; and 24-26 age groups, see Figure 4.

The participants for this study represented 5 out of 6 faculties, as illustrated in Figure 5 below. The latter must be encouraging as it means almost all students perceived entrepreneurship as an option to pursue despite the inclination of studies. They were also in different levels of analysis, as illustrated in Figure 6 below. Every level of study was represented in proportion mirroring the Rhodes University population.

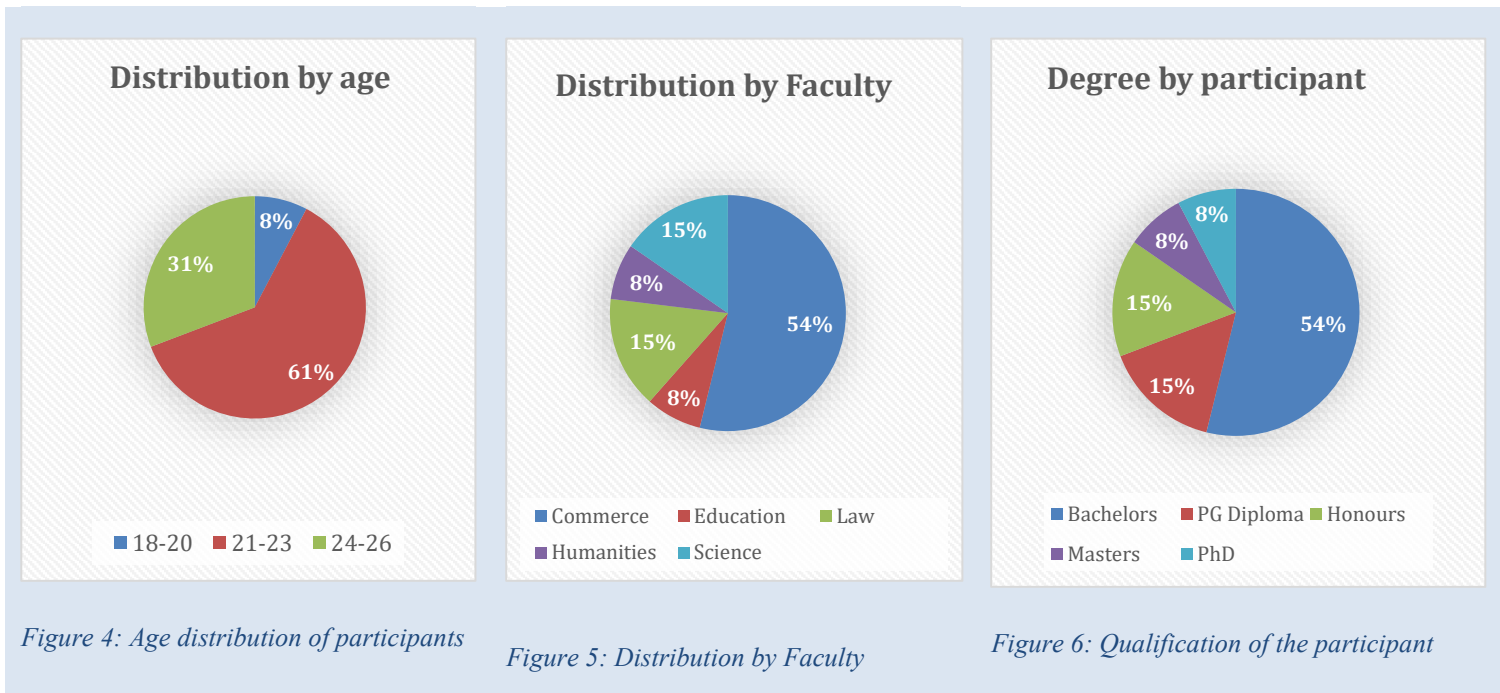


Figure 4: Age distribution of participants

Figure 5: Distribution by Faculty

Figure 6: Qualification of the participant

4.2. Findings

This research study is undertaken to gain insight into the entrepreneurship intention of university students by exploring factors that influence students to become entrepreneurs. The Ajzen Theory of Planned Behavior is used to analyze factors such as attitudes towards entrepreneurship, education, social norms, environmental factors etc, for their influence on entrepreneurial intention among students. This section presents Table 6 - 8, representing the summary of responses of each participant to the research aims according to these factors.

Table 7: Summary of responses to Attitudes theme

Participant	INTENTION Stage in entrepreneurial intention	INFLUENCER Reasons for pursuing entrepreneurship	AWARENESS AND SELF-EFFICACY Envisaged or experienced challenges
Resp 1	Intending to start	Inspired by RUES	Resources and mentoring
Resp 2	Starting a business	Passion, Covid-19	Time allocation, failure
Resp 3	Operating a business	Self-employment	Competition, managing relationships, failure
Resp 4	Intending to start	Personal drive	Market rejection
Resp 5	Operating a business	Market need/gap	Funding, price complaints
Resp 6	Starting a business	Market need/gap	Exposure, funding, managing team dynamics
Resp 7	Starting a business	Self-employment/gap	Climate, adapting to environ/legislation/econ
Resp 8	Intending to start	Gap in the market	Capital
Resp 9	Starting a business	Market opportunity	Competition
Resp 10	Starting a business	Inspired: Allan Grey	Capital, access & effective use of information
Resp 11	Operating a business	Market need	Financial management, physical storage
Resp 12	Starting a business	Educational influence	Market entry, certification, lab facilities
Resp 13	Starting a business	UCT, gap in market	Funds, Covid-19, convincing/taken seriously

Table 8: Summary of responses to *Behavioural Control* theme

Participant	ENVIRONMENT Attitude about environment	ECOSYSTEM Opportunities identified	Perception about support	EDUCATION Educational influence (Self-efficacy)
Resp 1	Supportive TTO	Linkages, R&D possibility, Business Development Services	Positive	B.Com Hons aroused entrepreneurial interest, empowering with business skills and knowledge
Resp 2	Not supportive	Networking	Negative	Open mindedness and intelligence to pursue goals
Resp 3	Not supportive	Trading with RU community, networking and linkages	Negative	Financial and business sense
Resp 4	Not supportive	None	Negative	Applying legislation and policy
Resp 5	Supportive TTO	Trading with RU community, linkages, BDS	Positive	Financial management sense
Resp 6	Supportive TTO	R&D opportunities	Positive	Technical knowledge
Resp 7	Not supportive	Intervarsity, pitching	Negative	Business Legalities
Resp 8	Supportive TTO	Trading with students, linkages, R&D, BDS	Positive	Skills, theoretical foundation
Resp 9	Supportive	EDHE Intervarsity	Positive	None
Resp 10	Not supportive	R&D possibilities	Negative	Understanding economics
Resp 11	Not supportive	Trading with students, TTO	Negative	Accounting for finances
Resp 12	Supportive Biochem 3 lecturer, TTO	Trading with university community, social media platforms, BDS	Positive	Business and analysis skills

Resp 13	Supportive	Linkages, networking, market entry	Positive	Technical knowledge
---------	------------	---------------------------------------	----------	---------------------

Table 9: Summary of responses to *Social Norms* theme

Participant	Attitude of family/friends	Influence of role models	Longevity of entrepreneurial goals
Resp 1	Neutral to positive	Mother is an entrepreneur	Yes, self employment
Resp 2	Extremely positive	Mother is an entrepreneur	Yes
Resp 3	Negative friends and extremely positive family	Mother, Vusi Thembekwayo Patrice Motsepe, Napolion Hill	Yes, aspiration for greatness
Resp 4	Neutral to positive	Grandfather, Gary V Chuck, Vusi Thembekwayo	Yes
Resp 5	Neutral to positive	Sister, William Branson	Yes
Resp 6	Neutral to positive	Both parents are entrepreneurs, “ I feel challenged to make my own contribution”	Yes, integrate to family business
Resp 7	Extremely positive	Entrepreneurial family	Yes
Resp 8	Positive	Extended family	Yes
Resp 9	Positive	Yes	Yes
Resp 10	Positive to extremely positive	Friends, Kyle Dodds	Yes
Resp 11	Negative family and extremely positive friends	Aunt and DJ Sbu	Yes, have a wealth of ideas to see through
Resp 12	Positive to extremely positive	Brother and Nomaswazi Marhambana	Yes
Resp 13	Positive to extremely positive	Extended family and Mashudu	Yes

This section presents Table 9 - 11, representing the verbatims of the different narratives from the thematic analysis, according to the three main deductive themes from the research.

*Table 10: Summary of the verbatims of **attitudes** towards entrepreneurial intention*

Name	Description	Verbatims (mental scripts) – samples
Anticipating & planning for challenges (barriers): Identifying challenges and devising plans to overcome them		
Anticipating challenges	Identifying challenges to overcome to implement the intention	“Failure. I expected failure. And I acted. Failure can be varied - when it comes to competition, failure when it comes to partnerships, failure when it comes to certain relationships and certain sacrifices.” Resp.3
Planning to overcome challenges	Devising solutions for the identified challenges	“Because I was very young for it, I thought that I just need to make money, but As I grew older and mature, the actual need is not capital per se ... What you need is mental preparation, emotional preparation, and physical preparation because the path of entrepreneurship is not easy. It is very demanding, and it is very draining. I could say that it is a monster in that, if you start this business and fail if you stay down, then you going to get depressed and that it is going to deprive you of your business. So, for me what I needed was mental stability and if very strong supportive structure.” Resp.3
External influence within my environment	Intention stimulated by external influence	“Okay. The idea came up a year ago because I am on the Allan Gray Fellowship.” Resp.10
Passion about entrepreneurship: Instances where the entrepreneurial intention is driven by desire and intrinsic motivation		
Take opportunities as they arise	Spotting and taking advantage of business opportunities as they come	<p>“I think generally, there are no jobs available for all South Africans, and I saw there was a market ... gap for mostly people who don't know about, don't know about Macadamia nuts and that they have large profit turnover once you started out.” Resp. 7</p> <p>“OK. Initially I saw, like, a lot of households they were giving away their bins to be washed. So yes, so I was like I am ... and if we could have a plastic that would fit perfectly into those bins. Then I started selling them in my neighbourhood, and people loved them.” Resp.11</p>
Taking steps to prepare for entrepreneurship: Fulfilling the entrepreneurial intention by taking steps towards addressing business requirements to realise the intention		

Name	Description	Verbatims (mental scripts) – samples
Intended positive outcomes	Description of what the intended or operational business will achieve	“Right now, we are in the analysis phase. Should I share one of the projects that were working on? It is a bus ticket project. There are these buses to have daily tickets. With that we are in the research, and we found a solution and we found the best part of the solution that most buses can use. What is left is testing and development.” Resp.6
Preparatory steps	Having identified the intention, what steps have been taken	“I used to rent some storage here in my street. There is this guy who own rooms, so I used to keep my merchandise there. and I used to pay R150 for every month.” Resp. 11
Practical steps taken	Demonstrated actions to execute the intention	“I did not have everything that I need, because I needed capital and I did not have capital at all, you know. What I did was I took my laptop. I took it to Cash Crusaders. From Cash Crusaders they gave some money, I remember this is ... this my screen still projecting? So, I have this paper here. You see this paper here ... I went to Cash Crusaders I took a loan with a capital debt of R1400 which I used to set myself up. Then also I needed, like, storage to keep my material so was paying storage before they build these rooms here in my home.” Resp.11
Self-confidence and need for support	Demonstration of self-confidence to execute the intention	“Yes. Definitely! I was confident because I had asked, like, a lot of people what do they think about my concept of wheelie bin plastic and they were, like, yeah it is a great idea. I would buy them!!” Resp.11
Self-confidence to persist through	Demonstrating self-confidence to stay the course despite challenges	“So, for me what I needed was mental stability and very strong supportive structure.” Resp.3
Support needed	Support needed to execute the intention	“No, we can't. I will not lie. I do not think without assistance we can. At the end of the day, we are trying to work with people, we can sell bus tickets ourselves, on the other hand, we want to be very fine with the year. Honestly speaking, we are a start-up company, and we do not know much about how running a company works. So, it will be valuable to get outside information from people that have done what we have done or what we will be doing so that we avoid crumbling on the way.” Resp.6
Ultimate influence on entrepreneurship	Self-confirmed driver of the intention	“The unemployment rates among graduates is a tragedy that could be addressed and avoided through entrepreneurship.” Resp. 1 “The one thing that brought me to entrepreneurship ... it's the people are grew up with. Uncle, my uncle is an

Name	Description	Verbatims (mental scripts) – samples
		<p>entrepreneur. People have big dreams like changing the world. Those are kind of challenges that have pushed me to who I am.” Resp.6</p> <p>“Rhodes [University] environment.” Resp.6</p> <p>“Own inclination.” Resp.2, 4</p>

Table 11: Summary of the verbatims of *perceived behavioural control* towards entrepreneurial intention

Name	Description	Verbatims (mental scripts) – samples
Educational influence: Whether current studies or received education has influenced entrepreneurship intention. Impact of current degree courses on a business idea(s)		
Contribution of current studies to the intent	Indication of whether current studies have influenced the intention	<p>“Studying B. Com Hons., so started knowing more about business in the course of studies which Studying B. Com Hons.” Resp.1</p> <p>“Definitely. I feel like my studies are like they like an extra to my entrepreneurial ventures. Like I am taking a course based on what I need to learn rather like I need to learn this, what business can I do.” Resp.11</p> <p>“Yeah. Also, in general because even my idea was conceived in my third class.” Resp.12</p>
Soft skills	Contributions that fall within the soft skills domain	<p>“Yes. And you know that the common idea in entrepreneurship is that you know what, I do not need to go to school to get educated, and if you are a passionate reader and you can read up to 57 books per year, I would believe you, but in actuality, you need a few. You need to understand how to read a Cash Journal. You need to know how to, how to read your accounting documents. You need to know how to take that document, know how to fill it with your tax clearance, take it to SARS yourself. You need to know all these things. If not, many will be cheated out of your money. It is to know how to handle your money and some of us these things, and that is what you would do understand most of the time. Another thing is that business strategies, you learn these things in management.” Resp.3</p>
Training support	Further training needed to support the intention or business idea	<p>“I think I am not necessarily advanced. I do not know enough about accountancy, technology type of things. Umm, ja. There is a lot. Balancing books. I can balance in my actual book but know how to balance</p>

Name	Description	Verbatims (mental scripts) – samples
		books on excel? I did a course, but wow, I do not even remember! And no business if you do not know how to even draw up the books for yourself. You want to be able to read what they are telling you if the books for an example ... the graph is going this way. You should be able to understand what's going on.” Resp.13

Table 12: Summary of the verbatims on *social norms* concerning the entrepreneurial intention

Name	Description	Verbatims (mental scripts) – samples
Attitudes of close people towards entrepreneurship: Effect of lack or presence of supportive attitude of people close to the entrepreneur, to entrepreneurial intention		
Attitude of friends towards my pursuit	Influence of immediate friends or peers	“My friends are positive. Like they chat and they are extremely positive ...” Resp.6 “I would say my friends and peers are extremely positive.” Resp.2, 7, 10 & 11
My friends are themselves entrepreneurs	Influence of entrepreneurial friends/peers	“Among my friends, yes. I have few back home. A friend of mine, he is doing really well. One of the best ...[Inaudible].” Resp.6 “One thing I have observed about my friends, they believe that you need to have an income, you know, and in order to have income, you can sell products, or you can provide service. Like most of my friends have been selling cigarettes. A hustle is a hustle. Others have been selling perfumes, you know. Others have been buying goods and selling them since it's tough, and one of my friends is selling socks right now. So, I would say they are extremely positive when it comes to their attitudes towards me.” Resp.11
Potential support from friends	Support expected from friends	“Supporting the business like buying from.” Resp.4
Support of friends	Practical support provided by friends/peers	“Share experiences, recommend products to others.” Resp.2 “Well, because they are entrepreneurs, they are! I actually asked one of them to mentor me. He went like, man; you must pay. He was like, you pay for my mentorship. But I get the kind of routing that ... you can do it.” Resp.3

Name	Description	Verbatims (mental scripts) – samples
		<p>“Okay, so from my friends, I usually receive like they say they find information that has something to do with farming.” Resp.7</p> <p>“Yeah, I'm actually involved in the start-up with one of my best friends because he studies computer science. We actually managed to set up the whole thing together. So, I would say he's been a big help.” Resp.10</p>
Attitudes of family members	Contribution of family members to the intention	<p>“... and in terms of my family, they are neutral they want me to work at the same time, and they do not think it's a good job.” Resp.6</p> <p>“Well, my family is extremely supportive.” Resp.2, 12 & 13</p>
Family members are entrepreneurs	Influence of family members who are entrepreneurs	<p>“My mother is an entrepreneur.” Resp.3</p> <p>“Yes, and family. If my brother is an entrepreneur, my elder brother.” Resp.12</p>
Potential support from family members	Support expected from family members	<p>“Financial support, yes. From family.” Resp.4</p> <p>“You know, capital assistance or equity assistance and also you know, yeah, word of mouth or just to promote my business to their friends to say you know my child is selling 1 2 3 4 5 6. Yes.” Resp.11</p> <p>“Money. I think it's just I also like I've been trying my best to now. Tying other like ways of actually like coming up with income with sped up Capital, and I've noticed that I haven't positioned myself well enough to I haven't I haven't been positioned myself well enough for them to want to buy into it, and I have other friends, Cape Town friend, who wants to invest and it's just like no matter how passionate I seem to my immediate family and my passion does not drive them to want to invest financially.” Resp.13</p>
Support of family members towards my pursuit	Practical support provided family members	<p>“Just moral support and advice from family. As well as encouragement, and they are willing to hear me out.” Resp.4</p> <p>“It is actually giving me space to do what I want and trying out my projects. I think that is so nice and sweet. It is, and I use like I use their resources - electricity, their house and yeah.” Resp.12</p>

Name	Description	Verbatims (mental scripts) – samples
		“Like they are very encouraging.” Resp.13
Close role models	Are the role models people that interact with the entrepreneur?	‘Nomaswazi Marambana. She's old, she is a pensioner.” Resp.12 “My mother.” Resp.1, 2 & 3
Distant role models	Role models that are distant – read or follow their stories	“Another would be, sometimes Vusi Thembekwayo, sometimes! and Patrice Motsepe and a man who called who - Napoleon Hill.” Resp.3 “There is a guy called Gary. So, I would say philanthropist at the moment, because he is sharing a lot of his money. He's an entrepreneur himself.” Resp.4 “Yes. William [Richard] Branson of virgin mobile.” Resp.5
Planned longevity of business venture: Is the business idea short term or long term		
Business planned for university life only	Business venture planned only for duration of the study	“I don't know also because I am confused.” Resp.1
Business venture would last beyond university life	Business venture planned for the long term	“Yes. I am willing to take it, maybe to life. Like it is something I am passionate about. The more I get used to it, the more I want to work with it.” Resp.6 “There are other business models that I want to pursue that I feel are greater than this. I think in the long run, I might be pushing this but not having a lot of duties. I might hand this business to someone or sell it or participate but have a little role in the business in the future.” Resp.11
Influence of current institution	Influence of current institution on entrepreneurial intent	“Ja. I would like to believe so. Like, especially the IS Department, they really expose us to a lot of, part of the business.” Resp.11 “Rhodes has helped me a lot because especially those my entrepreneurship class because Yeah. Also, in general because even my idea was conceived in my third class. I still remember. When my biochemistry lecturer was speaking about how Europeans stole our indigenous knowledge and turned it into pills and tablets - fancy looking ones that we are now consuming with those where were natural were previously our intellectual property. So, I think, I think that made me actually want to pursue something along

Name	Description	Verbatims (mental scripts) – samples
		those lines - commercialization of indigenous knowledge.” Resp.12
Support available in current institution: What support does the current institution offer		
Give opportunity to student entrepreneurs to provide services	Whether the institution gives the student a chance to explore their intent by giving them business opportunities	<p>“Trading with the students, university community and beyond.” Resp.3, 5, 7, 8, 11& 12</p> <p>“Like there must be able to give people like this is like businesses to us man young people who have businesses. For example, I have seen one thing - there are these Rhodes jackets. For example, yes. Yes, that are being sold at the shop there. They must have each, and every faculty must have like its own jackets, Faculty of Education, Faculty of Science, Faculty of whatever they have their own jackets - give that contract to students. Open it up to students. Say create those jackets, and we will buy from you and set them at a higher price. Then it enables business opportunities to us, young people.” Resp.12</p>
Involvement with student business or entrepreneurship-related societies	Active in student societies, especially entrepreneurship-related	<p>“I am already working on opening two more. I mean, I am working on opening a Toastmasters, and I am working on opening a JCI in Rhodes, but if we can get a team together, I would be on board any time.” Resp.3</p> <p>“I have joined societies but entrepreneurial society. Oh, I have, I have. It's called Black Management Forum.” Resp.6</p> <p>“I am entering through the Allan Gray Programme.” Resp.11</p>
Perceived opportunities in the current environment	Whether student entrepreneurs think there are opportunities existing within the university	<p>“Linkages, networking, market entry opportunities; Product research and development opportunities; Business Development services (advice Skills training).” Resp.1</p> <p>“Yeah. I think there are opportunities in the product research and development opportunities.” Resp.6</p> <p>“There are opportunities are available.” Resp.11</p>
Support to student entrepreneurs	Whether the university support student entrepreneurs and what support do they need	“A very small gap of sharing or rather incorporating certain ideals in young entrepreneurs when it comes to actual mentoring when it comes to actual incorporation of commercial ideals.” Resp.3

Name	Description	Verbatims (mental scripts) – samples
		<p>“Well, I would like Rhodes developing into an actual University that incorporates entrepreneurship, inviting entrepreneurs to come and talk and actually tell us about successful entrepreneurs and actually tell us about their Journey but not per se their success, but their journey to their success. And give a thin line between actually the entitlement of being given capital and actually starting without Capital because that is very much possible. Another thing is that there's not enough talk about entrepreneurship in the University. I mean, when I attended one of those pitching practices, there were only like seven people. Um, seven people, and we can talk to them; it is as if there is a wall where some don't understand what the actual core nature of entrepreneurship is. So, incorporate the culture of Entrepreneurship in the University should be one thing that we Incorporate.”</p> <p>Resp.3</p> <p>“Maybe, like, people who want to go into entrepreneurship, right? The university can have some sort of program like you don't have to take it as a course or anything, but just a program that you attend a like give you skills whatsoever advices.” Resp.4</p> <p>“A lot of individuals I have spoken to have been great entrepreneurs, but the only problem is that that's not what they are for at Rhodes, they just want to finish school and work for someone, and that's the bread of their lives. I had, like, change; you can make short courses. I don't think, like, integrating entrepreneurial skills in all the courses will be a great idea because most departments don't like that. I know a lot of people won't take it seriously, like, it will be a struggle.”</p> <p>Resp.6</p> <p>“Yes. Training in the sense of ... maybe if the university could train students like grow macadamia, so that when they go back home, maybe in hot areas they can go back with something like to start your own businesses because it does not need much attention.”</p> <p>Resp.7</p> <p>“By facilitating Entrepreneurship intervarsity Competition.” Resp.7</p> <p>“I was introduced to New Opportunities, especially funding opportunities for my business. Yeah, was exposed to coaching and mentoring. I made great minds like you.”</p> <p>Resp.3</p>

Name	Description	Verbatims (mental scripts) – samples
		<p>“For example, if I manufacturer clothing material, they will put me in the database for clothing material if I sell food, I have transport they put me in the database, and if the school requires an individual who owns vehicles for transport, who wants to manufacture jackets for faculties, then they will go to the database and check for the ones owned by students.” Resp.11</p> <p>“Yes, I think there is support. Because also, I remember, I am one person who like to develop ideas also. So, there is this office there where they will say they will help you with patent and also like starting a business and some ... provide advice. That kind of support. Thank you very much ... the Technology Transfer Office. I think that provides support for business ...” Resp.11</p> <p>“Definitely. Like I have learned a lot, especially looking at financial accounting on how to manage your money, how to create assets your own equity, how your business can be funded by your liabilities. Not at all the time that a liability is a bad thing. You know a liability can fund you assert as such I did not know - every time I thought I do not want liabilities, my business I must fund it.” Resp.13</p> <p>“Like if I conceived my ideas as a science student, I know that Rhodes would demand a certain percentage from ... that's what I know. But if you if you do it outside of the scope of maybe your research or whatever, I think it's crystal clear you do what you want. That's what I that's what I think I know.” Resp.12</p> <p>“It's really hindering progress because I remember last year, we were working on an app at Rhodes University with my group to a point where Dr Tshidi said we should contact the technology transfer offices for intellectual property and all that because the app was going to be used for Rhodes.” Resp.12</p> <p>“It encourages academia. You know, outside of academia ... if you are not an academic and you are studying at Rhodes, there is a missing link somewhere.” Resp.12</p> <p>“I think for ... I don't know with regards to, but for business training and advice there is because there are always those workshops with Suzanne.” Resp.12</p>

Name	Description	Verbatims (mental scripts) – samples
		<p>“I would like a support in line with research and development. I think that is because Yeah, I think I think that's because others are ... other functionalities.” Resp.12</p> <p>“Student ... the intervarsity thing has kind like ... even like that it feels like a very secluded from the actual University.” Resp.13</p> <p>“I actually joined because I want mentorship.” Resp.13</p> <p>“Even if it's established businesspeople, even people who have started businesses within the province. Ja just like have those... engaging with the type of ... there so many businesses in the Eastern Cape ... So just engaging with my people. I know so many male business executives, but these old men are creepy.” Resp.13</p>
Potential support	Description of support that the university can deliver to entrepreneurs	<p>“I am hoping to get them [Linkages & network, product development & research and advice & skills development].” Resp.1</p> <p>“Maybe, like, people who want to go into entrepreneurship, right? The university can have some sort of program like you don't have to take it as a course or anything, but just a program that you attend a like give you skills whatsoever advices.” Resp.4</p> <p>“I think the University would allow me to do research, but it's more technology-based, and it's more technology [inaudible] ... research and development opportunity, I think they can give me the go ahead because it can be a study of its own to see if a small company can really improve by [inaudible]. That's kind of opportunity the university - research and development opportunity.” Resp.6</p> <p>“They could support you the like buying and maybe, you know, he is delivering services or products to them”. Resp.4</p>
Types of opportunities identified	Identifying opportunities that student entrepreneurs can explore	<p>“To an extent, well, I first I heard of this entrepreneur’s challenge, but then I was interested in the concept of pitching, but I was not interested in the pitching itself, I wanted to get into an ecosystem of people in which I could coexist with people who would understand some of the issues.” Resp.3</p> <p>“Uum. Perhaps maybe because in the catering space, I mean, if I look at the dining halls mean the food that we make can topple</p>

Name	Description	Verbatims (mental scripts) – samples
		<p>them. Can topple them, and this is space within your Rhodes' entrepreneurial ecosystem. A very small gap of sharing or rather incorporating certain ideals in young entrepreneurs when it comes to actual mentoring when it comes to actual incorporation of commercial ideals.” Resp.3</p> <p>“So, I feel it's important as entrepreneurs to learn how to speak and to articulate if you can't do that, you're limiting yourself.” Resp.3</p> <p>“For example, if I manufacturer clothing material, they will put me in the database for clothing material if I sell food, I have transport they put me in the database, and if the school requires an individual who owns vehicles for transport, who wants to manufacture jackets for faculties, then they will go to the database and check for the ones owned by students.” Resp.11</p>

4.3. Thematic areas and interpretations of findings

Since this is an interpretive study, claims that are made herein are supported by direct quotes from the participants. The quotes serve as evidence of the said claims. The qualitative nature of the evidence allows the researcher to understand the real motivations behind what participants say. Unlike quantitative research, where the questions are based on predetermined constructs, the participants determined the concepts from which constructs were developed from their responses. The thematic analysis from the transcripts provided themes around which the results are interpreted and discussed.

The research findings confirmed the usefulness, relevance, and validity of the Theory of Planned Behaviour as an instrument to understand entrepreneurial intention. The use of TPB in a small-town university located in rural provinces (Malebana, 2014a) proved the theory's reliability when used across research approaches – for example, quantitative and qualitative studies. Similarly, Malebana (2014b) found that the theory was applicable and valid for use in rural settings of students at the University of Limpopo.

The research findings demonstrated that self-efficacy, social norms, and perceived behavioural control played a role in the entrepreneurship journey. The participants showed strong confidence that coincided with a robust positive intent to entrepreneurship. They took positive steps to work on their business ideas, researched aspects surrounding these ideas, and some went on to run successful entrepreneurial activities.

For most of them, their business ideas came as a response to a market opportunity/gap or need. The supportive environment proved to be critical, too, as participants indicated their appreciation of specific programmes within the university setting and expressed wishes for more. All participants took steps towards addressing the relevant requirements to fulfil their entrepreneurial intention, and others actualised their intention into an entrepreneurial activity.

The three elements of TPB were used as overall arching themes in line with the theory. Sub-themes were then induced from the data.

Main themes		
a) Attitudes	b) Perceived behavioural control	c) Social norms
Sub-themes		
i) Level of entrepreneurship intention – e.g., intending, starting, & operating a business ii) Reasons behind intending or starting a business iii) Identifying barriers and challenges iv) Planning to overcome obstacles and challenges v) Passion-driven intrinsic motivation vi) Observing self-sustaining practices	i) Self-efficacy ii) Influence of current environment iii) Identifying opportunities in the current environment iv) Educational influence	i) Attitude friends and peers ii) Attitude of family iii) Influence role models iv) Commitment and attachment to entrepreneurship v) Suggested areas to support student entrepreneurship

Table 13: Thematic areas of analysis

4.3.1. Attitudes towards entrepreneurship intention

In this section, participants’ positive disposition towards establishing a business enterprise was examined – that is, their entrepreneurial intentions. The latter includes examining the enablers and barriers to their entrepreneurial intention.

4.3.1.1. Stage in entrepreneurial intention

All participants demonstrated a positive intention to engage in entrepreneurial activities, with 54% still starting and 23% operating an established business. The remaining 23% who were not yet running a business also demonstrated a positive intention because they engaged in planning and other preparatory activities.

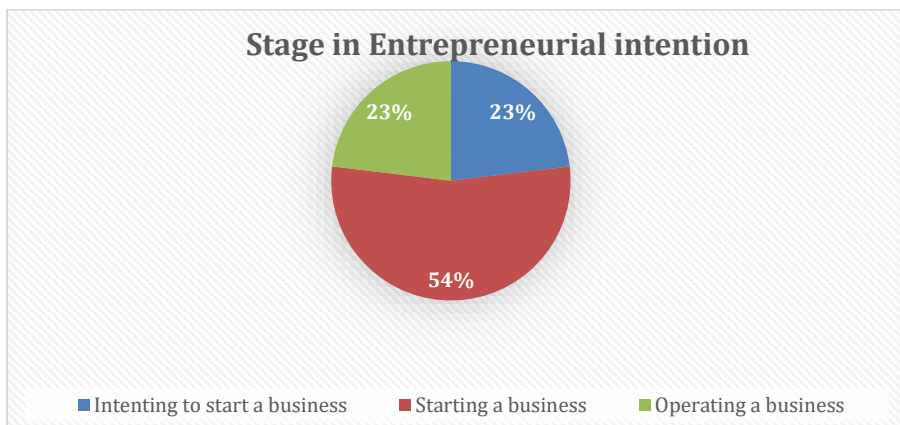


Figure 7: Stage of entrepreneurial intention

4.3.1.2. Reasons behind intending or starting a business: Enablers

The entrepreneurial intention of some of the students or participants was triggered by external influence within their environment. For instance, some held a scholarship from companies who want to encourage entrepreneurship, like Allan Gray.

“Okay. The idea came up a year ago because I am on the Allan Gray Fellowship.” Resp.10

The high unemployment rate gave these students something to ponder and challenge their creativity. Students saw unemployment as presenting an opportunity harness – literally setting in motion their entrepreneurial intention. The latter was stronger where entrepreneurial education was influential. These students have finished their first degrees and enrolled for postgraduate studies in business to explore entrepreneurship.

Significantly, other factors, including business opportunity that arises, passion for entrepreneurship, and educational influence – for example, scholarships offered by financial services institutions to support entrepreneurship, and applying scientific knowledge to solve current problems, were the triggers of the intention to engage in entrepreneurship.

“I think generally, there are no jobs available for all South Africans, and I saw there was a market ... gap for mostly people who don't know about, don't know about Macadamia nuts and that they have large profit turnover once you started out.” Resp.7

“OK. Initially I saw, like, a lot of households they were giving away their bins to be washed. So yes, so I was like I am ... and if we could have a plastic that would fit perfectly into those bins. Then I started selling them in my neighbourhood, and people loved them.” Resp.11

The triggers were underlain by strong values such as setting goals and putting all energies to ensure that the goal is achieved. These inclinations spoke to the participants' internal motivations or psychological capital and explained their drive to overcome the challenges. Already formal education and exposure to entrepreneurial education laid a good foundation for them to pursue their business ideas despite encountering barriers along the way or grappling with the practicalities of the business idea itself.

“What you need is mental preparation, emotional preparation, and physical preparation because the path of entrepreneurship is not easy. It is very demanding, and it is very draining. I could say that it is a monster in that, if you start this business and fail if you stay down, then you going to get depressed and that it is going to

deprive you of your business. So, for me what I needed was mental stability and if very strong supportive structure.” Resp.3

4.3.1.3. Identifying barriers and challenges: Anticipating and planning for barriers

The psychological capital of respondents allowed them to anticipate and act on barriers that had the potential of negatively affecting their intention. All participants had encountered hurdles in their pursuance of entrepreneurial intention. What set them apart was their acknowledgement of the barriers' presence and then actively devising a plan to overcome them, sometimes just through sheer determination to succeed in the goal.

“I think just learning how to ... as the changes happened ... being a quick on how to work with them and find the best solution that's going to work for you at that moment has been my best. Just being positive and asking for help when you don't know and do not understand.” Resp.7

The hurdles or challenges were mainly a desired financial support or capital, business mentorship, marketing, resources, failure, etc. What is important to note is that these challenges did not make the student entrepreneurs give up their business ideas or enterprises. One participant operating a few businesses felt strong that failure is inevitable in business. His view was that an entrepreneur must plan for it to overcome it. In other words, he argued that failure is guaranteed and must be considered as the necessary ingredient of pursuing entrepreneurial intention.

“Failure. I expected failure. And I acted. Failure can be varied - when it comes to competition, failure when it comes to partnerships, failure when it comes to certain relationships and certain sacrifices.” Resp.3

Entrepreneurs have intrinsic motivation to devise plans to overcome challenges that come their way—red-flagging the difficulties as part of their strategic approach to strategising and executing their business activities. The participant perceived challenges as a distraction. Therefore, such distraction must be dealt with to smoothen the implementation of the entrepreneurial intention or execute the business activity. Anticipating the challenges was simultaneously accompanied by a plan to overcome the challenges. They demonstrated the self-confidence to “continue working”, quickly act, find the best solution and keep a positive attitude.

4.3.1.4. Planning to overcome barriers and challenges: Taking positive steps to prepare for entrepreneurship intention

Taking positive practical steps to realise entrepreneurial intention was essential to all participants. Identifying the barriers or challenges is an intrinsic script for motivation to succeed. It is a practical step towards success. The difficulties identified did not provide psychological barriers to students' intention pursuit. Most commonly, it was perceived as a hurdle they had prepared. The battle for entrepreneurial intention was primarily perceived as psychological. If you win and eliminate the psychological barriers, you win the struggle with the barriers. Reading and equipping oneself with relevant business models similar to your business models was key to success. Education was, therefore, perceived to be a premium to success.

“A challenge. I love challenges. The only guarantee in success is that I overcame the challenge, but the challenge was so daring. The outcome is obviously an increase in profits. That is ... that is a must but most of them ... another important aspect is growth. I expect growth in myself, growth in my vision, growth in my goals. Most importantly, growth in my intellect. And in my business. Reading - entrepreneurship must go with reading. You must be able to understand certain scenarios if you read models which are, which are directly proportional to your business model and understand how that works and understand where what failed in which company. The understanding the very specific details of it. It's going to help you grow mentally and know how to tackle the outcomes of your business. So, education is one of the most pivotal things when it comes to this.” **Resp.3**

Participants took practical steps to overcome barriers without looking for external intervention. For instance, self-education about business models (as described in the quote above) and taking action to ensure that those hurdles do not become psychological barriers. The focus was always on a positive outcome. Failure was perceived as an inevitable outcome when you are pursuing entrepreneurship that requires mental fortitude and a strong support structure. This attitude spoke to the power of self-efficacy in the students. They did not allow challenges to deter their cause of action. So, they believed in themselves and that whatever task they applied themselves to, they would overcome it.

“Right now, we are in the analysis phase. Should I do share one of the projects that were working on? It's a bus ticket project; there are these buses to have daily tickets with that we are in the research, and we found a solution and we found the best part of the solution that most buses can use. What is left is testing and development.”

Resp.6

4.3.1.5. Passion-driven intrinsic motivation

Not only was entrepreneurship viewed as an employment and job creation vehicle, but participants were also passionate about it. Passion about the activity of entrepreneurship was a critical psychological enabler of intention. Participants demonstrated an appreciation of entrepreneurship as a business activity and a passion-driven intrinsic motivation to solve existential problems. This passion seemed to be influenced by the environment around which student entrepreneurs found themselves – especially early.

“It was curiosity trying to understand a deeper understanding of what was going in the economy at a very young age. So, in high school, there was actually a trend that was showing the impact of our economy and unemployment in the future. Even I was studying even though I was working for a matric and would eventually go into university. It was a reality that it does not guarantee me sustainable income. So, the very core of what I wanted to do was that I wanted to create passive income that has been recurring in my mind since a very young age. I'm starting a business was the only solution to our economic downturn sight.” Resp.3

The curiosity to solve problems seems to be among the factors that drive entrepreneurship intention. Self-employment and unemployment were seen through these lenses by entrepreneurs. For these problem-solvers, even daily discussions were around what is happening globally and the economy. They then gravitate towards discussing solutions to current challenges. This kind of inclination made them contenders for people who can identify opportunities and devise solutions that can have financial rewards for them.

“We were just sitting down there thinking about worst companies that are scared to evolve into the Fourth Industrial Revolution. The biggest issue is that small companies that were making it announced that they started falling apart because of such threat ... (inaudible). Those companies that keep up with the rest of the world [survived].”Resp.6

4.3.1.6. Observing self-sustaining practices

Growing in an environment where self-sustenance is a daily habit proved to play a role. For instance, students who grew up on a farm are encouraged by the rigour of farming. Some argued that seeing family members or people close to them trying to make a living there motivated their inclination towards entrepreneurship as they grew up. It is this spirit of self-sustenance that directed them into entrepreneurship. The participants appear to be influenced by observing the effort of sustaining livelihoods on the farm. They conclude that the challenges they observed on the farms and the effort exerted to overcome them motivated their resolve to become entrepreneurs. The challenges and struggles were perceived as opportunities to solve existential problems, amenable to being turned into entrepreneurship intention and activity. In

other words, they were devising practical solutions to the unravelling challenges presented and the opportunity to make money out of them.

“The one thing that brought me to entrepreneurship ... it's the people are grew up with. Uncle, my uncle is an entrepreneur. People [who] have big dreams like changing the world. Those are kind of challenges that have pushed me to who I am.”

Resp.6

4.3.2. Perceived behavioural control or self-efficacy

Perceived behavioural control refers to the participants' belief about their abilities to control their behaviour to achieve their entrepreneurial intention. In other words, it is a reflection of self-confidence and personal opinion of capabilities to overcome barriers and achieve your goal. It, therefore, reflects self-efficacy in the individual. It is a function of the beliefs about factors that can facilitate or block (enablers and barriers) the execution of their entrepreneurial intention. If, therefore, there is an entrepreneurial intention and perceived behavioural control as described in this paragraph, the entrepreneur's behaviour can be predicted. The latter is based on the commitment to overcome the barriers and how the intention is translated from an intention.

4.3.2.1. Self-efficacy

Self-efficacy is the belief someone has in his abilities to execute performance levels to attain set goals (Bandura, 2010). In this study, the research found that self-efficacy was a huge psychological boost for participants to overcome barriers towards realising their entrepreneurial intention. Those participants who encountered barriers or challenges had the self-confidence to forge forward and overcome despite the setbacks. A supportive environment around them laid the foundation of resilience. The support came in the form of friends or family members. Often that support was in the form of encouragement. They did the arduous work themselves, ensuring their business activity or intention succeeded.

“I did not have everything that I need, because I needed capital and I did not have capital at all, you know. What I did was I took my laptop. I took it to Cash Crusaders. From Cash Crusaders they gave some money, I remember this is ... this my screen still projecting? So, I have this paper here. You see this paper here ... I went to Cash Crusaders I took a loan with a capital debt of R1400 which I used to set myself up. Then also I needed, like, storage to keep my material so was paying storage before they build these rooms here in my home.” **Resp.11**

4.3.2.2. Influence of current environment (university)

4.3.2.2.1. Nurturing entrepreneurship at university

For all the participants, Rhodes University is their current environment, besides their home base. Before the COVID-19 pandemic, they spent their time on campus. It is noteworthy that some of them started their entrepreneurship journey long before joining the university. In such instances, the university was chosen as the university of choice to study business-related content to strengthen their business acumen.

The environment student entrepreneurs find themselves in plays a crucial role in their entrepreneurship intention. Though some of these student entrepreneurs were entrepreneurs before joining Rhodes University, their self-confidence in entrepreneurship was why they mainly registered in the Faculty of Commerce or Rhodes Business School. Some took various routes (e.g., doing the postgraduate diploma in business from the School of Business). Applying and being admitted at Rhodes University was an extension of their entrepreneurial intention – skilling themselves with soft skills to run their business correctly.

These student entrepreneurs were primarily influenced by friends or family members from where they grew up. Rhodes University was perceived as providing good education that helped these entrepreneurs run their businesses. However, there was a feeling that the university does need to focus on entrepreneurship education and training. Some other authors in the African continent, like Adekiya & Ibrahim (2016) in Nigeria and Rudhumbu *et al.* (2016) in Botswana, confirmed the importance of entrepreneurship education programmes and the positive outcomes. Introducing entrepreneurship education programmes at an early age was proved by Huber *et al.* (2014) to influence entrepreneurship positively.

“Rhodes has helped me a lot because especially those [in] my entrepreneurship class because ... Yeah. Also, in general because even my idea was conceived in my third class. I still remember. When my biochemistry lecturer was speaking about how Europeans stole our indigenous knowledge and turned it into pills and tablets - fancy looking ones that we are now consuming ... those were natural ... were previously our intellectual property. So, I think ... I think that made me actually want to pursue something along those lines - commercialization of indigenous knowledge.” Resp.12

“Ja. I would like to believe so. Like, especially the IS Department, they really expose us to a lot of ... part of the business.” Resp.11

4.3.2.2.2. The role of the Technology Transfer Office (TTO)

The participants (student or aspiring entrepreneurs) were appreciative of the role of TTO in nurturing entrepreneurship among students. They viewed the activities that were organised and facilitated by the TTO as critical to their success as current and future entrepreneurs. The Intervarsity Entrepreneurship Challenge was considered a significant motivator of entrepreneurial intention.

“I think for ... I don't know with regards to ..., but for business training and advice there is because there are always those workshops with Suzanne.” Resp.12

“So, in the beginning of the year, we joined some students - intervarsity thing for entrepreneurs. That was the support I received because I learned how to pitch my business, and I got exposed to investors, and yes, there was support.” Resp.7

They did believe, though, that there is room for improvement. For instance, most participants thought hosting and interacting with well-established entrepreneurs could add more value to their entrepreneurship journey. Therefore, it might be worthwhile for Rhodes University or the TTO to consider arranging interaction platforms between established entrepreneurs and student entrepreneurs by hosting entrepreneurship dialogues and competitions. For example, one participant used an instance of UCT hosting well-known entrepreneurs such as Vusi Thembekwayo and others. They deliver speeches, and funders invite students to pitch their business ideas. These are refereed, and the winner is allocated seed funding or prize money of up to R100 000 or mentorship programmes.

“That's another weird thing. I was actually part of the Entrepreneurship Society at UCT, and opportunities just come with that. So, I went to one; they had like numerous throughout the year. They had speakers, they had all these, and they had like [of] Vusi Thembekwayo, they had these big business people, and like the one event I went to they were giving away like R100 000 to a business.” Resp.13

The activities of the TTO and other business-related societies do, however, need to be profiled among business students. A significant number of participants claimed ignorance of some internal related activities until they were exposed to them whilst participating in the Intervarsity Challenge.

“I just learned that about the existence of entrepreneurship societies at Rhodes last year when we went to an entrepreneurship intervarsity at Nelson Mandela University, and I met the individual student of these societies.” Resp.13

“But I don't know, but again the Transfer Office, yho Suzanne, they have been very welcoming, and like encouraging of just being a student entrepreneur but like even with them, it's like you don't know enough. Even them ... may ... like ...draw more from like technology-

based businesses. Like they very like heavily interested in developing people's 3D printers. Of which I don't have use of that printer! So, it feels like I don't have a priority.” Resp.13

The above assertion must be considered that TTO does send frequent email communication to all students. So, this must be taken to mean, perhaps, a multi-media communication platform needs to be used to create awareness of its activities, especially during the registration process for Commerce students. Possibly, these extra activities could be executed by entrepreneurship when it is established, which some proposed and supported. The latter will allow TTO to focus on its core business whilst the student-run the society.

“Well, I would like [to see] Rhodes developing into an actual University that incorporates entrepreneurship, inviting entrepreneurs to come and talk and actually tell us about successful entrepreneurs and actually tell us about their journey but not per se their success, but their journey to their success. And give a thin line between actually the entitlement of being given capital and actually starting without Capital because that is very much possible. Another thing is that there's not enough talk about entrepreneurship in the University. I mean, when I attended one of those pitching practices, there were only like seven people. Uum ... seven people, and we can talk to them; it is as if there is a wall where some don't understand what the actual core nature of entrepreneurship is. So, incorporate the culture of Entrepreneurship in the University should be one thing that we Incorporate.” Resp.13

4.3.2.3. Identifying business opportunities in the current environment

Some of the questions posed to participants sought to test their entrepreneurial intentions by gauging whether they see opportunities in the current environment or are doing business with the university. All participants were not doing any business with the university but believed in opportunities to do business. For instance, some thought that the university could source promotional materials from student entrepreneurs, and they quoted Wits University as a university that does that to support student entrepreneurs.

“Like they must be able to give people like us, like, businesses to us young people who have businesses. For example, I have seen one thing - there are these Rhodes jackets. For example, yes. Yes, that are being sold at the shop there. They must have ... each and every faculty must have like its own jackets, Faculty of Education, Faculty of Science, Faculty of whatever they have their own jackets - give that contract to students. Open it up to students. Say create those jackets, and we will buy from you and set at a higher price. Then it enables business opportunities to us, young people.” Resp.11

“For example, if I manufacturer clothing material, they will put me in the database for clothing material if I sell food, I have transport they put me in the database, and if the school requires an individual who owns vehicles for transport, who wants to manufacture jackets for faculties, then they will go to the database and check for the ones owned by students.”

Resp.11

The university was also thought to work on its strengths to offer student entrepreneurs linkages

with markets and funding opportunities, networking, market entry opportunities, product research and development opportunities, training, and advisory services on skills to develop business.

4.3.2.4. Educational influence

Behaviours that are considered critical to shaping entrepreneurship intention are examined. Education or current studies, as well as environmental issues, were deemed to be important in the shaping of entrepreneurial intention. For instance, some participants' entrepreneurial curiosity was aroused by their studies. The studies aroused their entrepreneurial curiosity, and later, they translated their interest into an entrepreneurial intention.

“Studying B. Com Hons, so started knowing more about business in the course of studies which aroused entrepreneurial interest.” Resp.12

Education is regarded as key in shaping soft skills like management, which are critical for running a successful business. Thus, education boosts the self-confidence of overcoming challenges and, therefore, is a factor in self-efficacy. Some participants demonstrated that they were already blossoming entrepreneurs when they came to the university to study. They then took practical steps to align their studies with their entrepreneurship activities.

“That place ...[inaudible] I think I am fortunate because of the experience. When it comes to the degree, I already know how to how to incorporate all these things because I have the experience.” Resp.3

In other words, they took the initiative to build a skill set that they considered critical in the prosperity of their business. They also reflected on skills they thought needed to be successful entrepreneurs and aligned their education goals with acquiring qualifications to achieve those goals.

The students demonstrated self-efficacy as, in some instances, the attitude of family members was discouraging and dismissive towards their entrepreneurial intention. Some family members were not necessarily supportive of the idea and preferred their “children” (young student entrepreneurs) to pursue meaningful employment. The latter happened even though some of these parents were themselves, entrepreneurs.

4.3.3. Social norms

Social norms refer to the influence of the social environment in which entrepreneurs find themselves. The researcher examined how the social environment of student entrepreneurs influenced or shaped their entrepreneurship intentions.

Social norms, i.e., the acceptability of entrepreneurship among loved ones, were cited as the most compelling factor that positively influenced students towards entrepreneurship. The attitudes of family and friends, social acceptance, recognition, and professional respect had a more decisive influence, including the participants' attitudes. Interestingly, the participants' valuing of family and friends' acceptance was not dependent on any expectation for material support.

The university environment was cited as having a positive influence on entrepreneurial intention, with most of the participants claiming that their business ideas were directly informed by their studies.

Most of the participants further believed the university supports students' entrepreneurial activities through the activities of the Technology Transfer Office. 85% of the participants made suggestions of opportunities the university can provide to give more meaningful support to student entrepreneurs.

4.3.3.1. Attitude of friends and peers towards entrepreneurship intention

Friends had a solid positive disposition towards supporting their friends as entrepreneurs for most participants. The study did not investigate whether other factors such as belonging or social approval had a significant impact on friends supporting their entrepreneur friends or not. However, one thing that was well established was that this positive disposition provides an environment that nurtures entrepreneurial intention and positively reinforces the budding entrepreneur. All participants had a supportive circle of friends.

Most importantly, as one of the participants put it, the choice of friends is a conscious decision when you are an entrepreneur. An entrepreneur must choose friends that support and encourage the business idea, and friends must relate to your entrepreneurship journey in various degrees. A positive disposition of friends and peer serve as a significant motivation to keep an entrepreneur focused on the goal of establishing an enterprise.

“Because I mean with ... actually I’m going to look at this question holistically and then the issue is this kind of question is not even supposed to be a question, because if you are to have this question and entrepreneur must know how to select friends. If you don’t ... if you don’t know how to select people in your circle and select the people you surround yourself with, you’re going to stay negative extremely negative because those are people you surrounded yourself with. In all ... in all honesty, an entrepreneur must have an extremely strong and resilient mind. Now why I say that that? These are factors of saying surrounding you people with such a mind: If you surround yourself with peers who don’t have vision, don’t have goals, whose end goal is to actually make quick cash, who feed themselves in quick schemes, who don’t read, who indulge themselves in TV every day. You don’t take time to read, don’t think for themselves, don’t reflect on themselves. Then they won’t have a negative impact on your entrepreneurial skill, which is when your mental health will go down. But if you surround yourself with the opposite [positive], then it is going to be extremely positive because it is the selected group you surrounded yourself with.” Resp.3

Friends were regarded as people that the entrepreneur bounces ideas, offers a shoulder to cry on when things are tough, help spread the word regarding the entrepreneur’s work or enterprise, and supports the business by becoming patrons. Each friend was regarded as having other networks that the entrepreneur can access through friendship to connect with influential businesses, markets, support, etc. Friends were expected to market a friend’s company to his or her network. When these expectations materialise, they strengthen the resolve and agency to carry on the entrepreneurial intention despite lingering challenges and barriers.

“I would say just having people who have connections meaning your friends are supposed to be able to connect you to someone to help you. I was actually connected to Allan Gray by one of my friends.” Resp.11

4.3.3.2. The attitude of family members towards entrepreneurship intention

The support of the family was perceived as critical to pursuing entrepreneurial intention, although family members with no entrepreneurial inclination tended to be biased against entrepreneurship. For instance, one participant claimed that his parents were lukewarm (neutral) in their approval of his hustle; even though he was doing well, they still expected him to finish his studies and get employed. This may be related to parents being protective of their children’s future due to entrepreneurship's uncertainties.

“... and in terms of my family, they are neutral they want me to work at the same time, and they do not think it’s a good job.” Resp.6

“My family believe that I must go to school, get my degree and move on. This plastic thing, these business ideas, they think it’s just a waste of time. They want me to focus on my academic work.” Resp.11

The support of family members was associated mainly with providing financial support during hard times. Student entrepreneurs or would-be entrepreneurs also acknowledged their dependency on their parents for other resources like food, accommodation, and daily needs as critical to pursuing entrepreneurship. Family members were also essential in providing emotional support as entrepreneurship was perceived as a rollercoaster journey. Family *members were also expected to spread word-of-mouth about the entrepreneur's ventures or products to their circle of friends.

“Financial support, yes. From family.” **Resp.4**

“You know, capital assistance or equity assistance and also you know, yeah, word of mouth or just to promote my business to their friends to say you know my child is selling 1 2 3 4 5 6. Yes.” **Resp.13**

“It is actually giving me space to do what I want and trying out my projects. I think that is so nice and sweet. It is, and I use like I use their resources - electricity, their house and yeah.”
Resp.13

“The support that I would need is that they speak about my products.” **Resp.12**

Students growing in such environments where family members were entrepreneurs seemed to have a stronger entrepreneurial intention. Interestingly, it appeared that the student entrepreneurs did not discuss much of their business with their entrepreneur parents. It appears that the parents or family members provided role models for entrepreneurship. The student entrepreneurs seemed more inclined to discuss their business ideas with their peers, even amongst the most promising of the student entrepreneurs.

4.3.3.3. Influence of role models on entrepreneurship intention

Except for two participants, who had their role models as close relatives and an acquaintance coming from the same village, all participants tended to have role models who were successful people with whom they did not have direct personal relationships. Role modelling did not carry a relational value but more an aspirational value. Some went on to make sure they read their life stories or motivational books. The latter suggests that hosting these established entrepreneurs and creating a platform to share their stories could help support universities' drive to cultivate entrepreneurial intention in students.

“Another would be, sometimes Vusi Thembekwayo, sometimes! and Patrice Motsepe and a man who called who - Napoleon Hill.” **Resp.3**

“There is a guy called Gary. So, I would say philanthropist at moment because he is sharing a lot of his money. He's an entrepreneur himself.” **Resp.5**

“Yes. William [Richard] Branson of virgin mobile.” Resp.5

“I would say my biggest role model is a managing director at what is Inside Online. His name is Kyle Dodds. And yeah, he's been a big man towards me, and yeah, he's a great intrapreneur. He studied civil engineering ... no sorry Structural Engineering, he studied structural engineering and ended up not doing anything engineering.” Resp.10

“Yes, definitely I do have. DJ Sbu. So that guy showed us that things are possible as Black people. Although they may be talking white monopoly, how these companies are monopolising industries for black people to enter, but you know DJ Sbu showed us that it's possible.” Resp.11

4.3.3.4. Commitment and attachment to entrepreneurship

Except for one participant, all participants were confident that they would pursue their entrepreneurship adventures beyond university years. This question was asked as a proxy for testing their commitment to their stated cause. Even the single participant who doubted that he would pursue the current venture stated that he would still pursue entrepreneurship, but the current one is temporary. The commitment to entrepreneurship, therefore, was present in all 13 participants. The doubts can only be related to the practical approach to entrepreneurship, where participants consider failure as inevitable for an entrepreneur as a matter of the process and journey that he or she goes through. Commitment to entrepreneurship means trying another idea despite previous failures; hence, it is essential to have strong support structures in their environment.

“There are other business models that I want to pursue that I feel are greater than this. I think in the long run, I might be pushing this but not having a lot of duties. I might hand this business to someone or sell it or participate but have a little role in the business in the future.” Resp.11

“After, future plans. Future plans are just durable, and once I get my BBS, I look to incorporate it in my entrepreneurship and at the same time incorporate my public speaking skills to grow it into lucrative group of consultancies.” Resp.3

“Yes. I am willing to take it, maybe to life. Like it is something I am passionate about. The more I get used to it, the more I want to work with it.” Resp.6

4.3.3.5. Suggested areas to support student entrepreneurship

To ensure a nurturing climate in their current environment, i.e. Rhodes University, participants listed some suggestions that they thought would strengthen entrepreneurship. Those suggestions include:

- Hosting established entrepreneurs to give talks and adjudicate competitions,
- Incorporation of entrepreneurship in the curriculum

- Training and advisory services hosted by the university for students,
- Hosting intervarsity entrepreneurship competitions

These were practical suggestions informed by previous experiences they were exposed to in other environments before becoming Rhodes University students for some of the participants.

4.4. Conclusion

This chapter presented the qualitative data from the study. It further provided the preliminary interpretation of that data by giving the inductive themes from the same data. Using the broad areas of the TPB as a guide, the themes fell under three categories – (a) attitudes, (b) social or subjective norms, and (c) perceived behavioural control.

The study confirmed the relevance and validity of the Theory of Planned Behaviour for students in a rural Eastern Cape university. Entrepreneurial education supported students' entrepreneurial intention by providing a supportive environment. This supportive environment was in relevant commerce courses and those from the Rhodes Business School. Some of the students confirm this assertion. They stated they came to Rhodes University to skill themselves up to run their businesses even though they were already practising entrepreneurs.

All students or participants in the study were either entrepreneurs or in the preparatory stage of their entrepreneurial intention. For all of them, self-efficacy seem to be a prized attribute to see through their journey on entrepreneurship. All of them appreciated the support of friends and family and tended to have role models that they were following even though there was no relational value except aspirational value. The most vital suggestion from the participants was that Rhodes University must host established entrepreneurs who can deliver speeches and host or adjudicate entrepreneurial competitions.

The next chapter, Chapter 5, presents an in-depth discussion of the findings. Chapter 5 discusses the results and relate them to what established scholars (literature) says. In other words, it discusses the findings concerning whether they support or reject what other scholars found in their studies.

CHAPTER 5: DISCUSSION

5.1. Introduction

The findings in this qualitative study confirm those in the current literature that demonstrates that entrepreneurship education and subjective norms influence the attitude towards entrepreneurial intention and the perceived behavioural control (Entrialgo and Iglesias, 2016). The study found that a healthy supportive environment, education, social recognition of entrepreneurship, influence of role models, friends and family, all mediate entrepreneurial intention.

The findings, therefore, align with the tenants of the Theory of Planned Behaviour. For example, a supportive environment in friends, family and entrepreneurial education, and self-efficacy were antecedents of entrepreneurial intention. Therefore, attitudes, social or subjective norms, and perceived behavioural control are confirmed antecedents of entrepreneurial intention (Fayolle and Liñán, 2014). There is always a cyclical relationship between these elements, and therefore the relationship is not linear. Some factors mediate the entrepreneurial intention.

The study found out that all participants had a strong entrepreneurial intention and took steps to prepare themselves for their entrepreneurial intention. For instance, some participants researched their business idea and acquired as much information as possible to understand the nature of their business. Some of their business ideas came as a response to a market opportunity, gap or need. They identified opportunities and took steps towards acting on them. The following paragraphs discuss the research findings to explore their alignment to established literature.

More and more, governments are looking to entrepreneurship as a mechanism to alleviate soaring unemployment (Karadağ, 2016; Barba-Sánchez and Atienza-Sahuquillo, 2018; Shaibu and Mmeremikwu, 2018; Fragoso, Rocha-Junior and Xavier, 2020). Through entrepreneurial education that is geared towards solving these unemployment challenges, universities aim to produce graduands that are entrepreneurial and ambitious to support their countries in creating employment (Mahola, Aderibigbe and Chimucheka, 2019; Zhang, Duysters and Cloodt, 2014). Therefore, it is important to understand students' motivations, enablers, and barriers to their entrepreneurial intention so that educational interventions are responsive to the challenges encountered.

5.2. Barriers and enablers of entrepreneurial intention

Many authors have viewed capital and funding as critical barriers (Kebaili, Al-Subyae and Al-Qahtani, 2017; Iwu et al., 2016; Malebana, 2014a; Mahola, Aderibigbe and Chimucheka, 2019). Participants in this study believed they negatively influenced their entrepreneurial intention. Financial barriers, fear of failure, and market and knowledge barriers have played a significant role in inhibiting entrepreneurial intention in Qatari students (Kebaili, Al-Subyae and Al-Qahtani, 2017). They also perceived institutional and governmental policies as barriers to entrepreneurial intention. For instance, there was generally limited knowledge or limited access to funding opportunities, especially from the government with stringent requirements that tend to go against encouraging entrepreneurship.

The participants also felt more could be done on entrepreneurial education in university environments. Their course's commercial subjects and content were good enough to improve their soft skills. Still, they felt the university could do more to elevate entrepreneurial education. The positive environmental influence was important in realising entrepreneurial intentions (Okhomina, 2010).

All these limitations as far as it pertains to this study were not hindering the participants from trying to achieve their entrepreneurial intentions. Their personality traits were strong and tended to demonstrate self-efficacy (Çolakoğlu and Gözükar, 2016)

5.3. Determinants of entrepreneurial intention

These factors enhance or diminish student entrepreneurs' motivation to achieve entrepreneurial intention. The study examined these factors by addressing the two study objectives as presented in sub-section 1.4.2 in Chapter 1. Positive or negative disposition determines inclinations towards intention in the issues discussed below.

Various factors enabled the entrepreneurial intentions of participants. For most participants, the entrepreneurial intentions were triggered by an identified business opportunity, passion for entrepreneurship, educational influence (e.g., programmes offering scholarships for entrepreneurship), and the need to apply the knowledge acquired at the university to solve current problems. These antecedents of entrepreneurial intention are related to values and motivations (Fayolle, Liñán and Moriano, 2014).

Bowmaker-Falconer & Herrington (2020) argue a relationship between economic opportunities and individuals' efficacy or self-efficacy. Identifying the existing opportunity and

acting to cease it depends on the individual's confidence in his business abilities (i.e., self-efficacy). For entrepreneurs, self-efficacy seems a strong personal trait. The data analysis shows an interplay between attitudes towards entrepreneurship, self-efficacy, and role models, confirming studies conducted by Nowiński & Haddoud (2019).

5.4. Attitude towards the entrepreneurial intention

A positive attitude towards entrepreneurship is an enabler of entrepreneurial intention. Entrepreneurship, according to Krueger, Reilly and Carsrud (2000)(p411), “is a way of thinking” that focuses on taking opportunities and have a strong resolve (self-efficacy) of defeating a threat that poses a risk to entrepreneurial intention. Krueger, Reilly and Carsrud (2000) believe that entrepreneurs start deciding to pursue entrepreneurship long before they even identify an opportunity. As a way of thinking, analysing attitudes is critical to understanding the journey from entrepreneurial intention to actual business activity.

For instance, in this study, all the participants were engaged in entrepreneurship. They were at different stages, such as starting, intending to and operating a business. All respondents had a strong disposition towards entrepreneurship characterised by the following attitudes:

- a) Self-efficacy is described as an immense psychological capital to overcome many barriers.
- b) Social acceptability and desirability of entrepreneurship as a business activity. The latter is reflected in the commitment and passion to entrepreneurship as friends and family admire it. Entrepreneurs' social recognition with respondents' social circles strengthened their desire to be entrepreneurs.
- c) Supportive environment and social capital. Friends or peers, family, relatives and people in their social circles were supportive of their intentions or, at worst, people who, even though not approving of their chosen direction, did not discourage them. The latter were often parents of the participants who wished to prioritise completing their studies before embarking on a challenging activity like entrepreneurship. Indeed, it can be argued that these are just protective parents who go against the adventurous mind of an entrepreneur.
- d) Strong social and psychological capital induced a positive disposition towards barriers. Barriers were perceived as challenges with the territory, and participants took active steps to overcome them.

Zig Ziglar is quoted to have said, “your attitude, not your aptitude, will determine your altitude.” This quotation emphasizes the importance of a positive attitude that drives a person to overcome obstacles in the path and the strong belief that they can be overcome (self-efficacy). Self-efficacy is one of the mechanisms of human agency (Bandura, 2000). It is a personal belief that self-application can overcome undesirable outcomes (Bandura, 2000) to achieve the desired ones. The focus is firmly on achieving the desired results.

In this study, human agency, as expressed through the mechanism of self-efficacy, seemed strong in all participants. All the participants had a positive disposition to establish a business enterprise. Those who already had businesses were positive about running them successfully. They all took steps towards addressing the various relevant requirements to run a business. All the participants understood that entrepreneurship, especially in South Africa, has enormous challenges such as financing, infrastructure, training, etc., to support their intention.

Interestingly, the study was the presence of participants who became entrepreneurs before coming to university. They identified opportunities in their neighbourhoods, offered solutions, and pursued opportunities elsewhere. They were characteristically passionate during the interviews about entrepreneurship and their intention. They typically elaborated freely on the challenges they encountered and how they planned to overcome them. One of them was running more than two enterprises already.

5.5.Factors influencing the entrepreneurial attitude

Various factors influenced the attitude of students towards their entrepreneurial intentions. For most participants, the entrepreneurial intentions were triggered by an identified business opportunity, passion for entrepreneurship, educational influence (e.g., programmes offering scholarships for entrepreneurship), and the need to apply the knowledge acquired at the university to solve current problems. These antecedents of entrepreneurial intention are related to values and motivations (Fayolle, Liñán and Moriano, 2014).

i) Social capital

As social beings, human beings often do what will give them approval from those in their social circles. Likewise, in pursuing entrepreneurship, approval of entrepreneurship by those influential people around students drove their entrepreneurial intention (Malebana, 2016). Mabelana (2016) argued that individuals were more likely to form entrepreneurial intentions when they knew it was acceptable within their social circles. This research study was

confirmed. Malebana (2016) found that the intention to start a business is likely to materialize if supported by a close social circle and gains admiration from the community and business people.

The social circles in the environments students find themselves in play a critical role in forming their entrepreneurial intention. The latter happens both at the university and in their home environments. Socio-contextual issues may either enhance or inhibit an individual's attitude towards entrepreneurship (Meoli et al., 2020). The people with which students socialize greatly influence their positive attitude towards entrepreneurship. The following paragraphs discuss some of these influences.

ii) The attitude of family members

Contextual influences have been found to play a critical role in entrepreneurial intention (Kacperczyk, 2013). In this regard, relationships between individuals play a crucial role in entrepreneurial intention, as relational support strongly influences the intention. Relational support is the approval or supports social circles, especially family and friends, give to an entrepreneur (Ambad and Damit, 2016). The supportive role of family influenced the participants' attitudes and strengthened their entrepreneurial intentions. Even though parents did not offer overt support for some students, they were not overly discouraging. They were influenced by care and were therefore protective of their “children” as they have experienced the grind of entrepreneurship. Thus, some parents were neutral or negative about “their child starting a business” but were not stumbling blocks to realising their intention.

Similar to what Ambad and Damit (2016) discussed in their paper, participants acknowledged the support parents or family members gave as providing funding, subsistence, and role models. The participants mentioned that family members were also crucial emotional support through the rigours of pursuing a business idea. Not only is the backing emotional, but it is also offering resources; for instance, most of the participants are students operating their businesses from their homes before venturing on their own. The latter is more so for those about to start or are starting their businesses. Family members are generally optimistic but sometimes sceptical, especially those who are entrepreneurs themselves. This scepticism suggests that they are protective of their children as they have a better understanding of the rigours of entrepreneurship pursuit. It is not discouragement *per se*; instead, just being cautious from those who have travelled the road (parents); hence none of those participants who said their

parents were neutral or negative towards their entrepreneurial intentions seemed bothered at all.

Where close family members expressed appreciation of entrepreneurship, it meant validation and social acceptance. It enhanced the status of the person involved and hence supportive value that drive the motivation to succeed. Furthermore, the family provides financial and emotional support when necessary and available. In this study, relational support was recognised as a supportive mechanism for entrepreneurial intention, as other scholars such as Meoli et al. (2020) and Ambad and Damit (2016) discussed.

iii) Attitude of friends and peers

Friends, for most of the participants, supported their entrepreneurship intention. It was easy to relate to peers, especially those sharing the same goals. There was a strong sentiment that it is part of string entrepreneurship drive choose friends that share the same interest and can support emotionally and socially through connections or networks. The participants felt that sharing aspirations, challenges, and bounce ideas with friends was easy. It is even better if they were all on the same plane of entrepreneurship. There is an expectation that they market a friend's business to their networks and patronise the business where possible. In other studies, Kacperczyk, (2013), peers acquainted at universities were likely to transmit information about opportunities and thus the likelihood of influencing the entrepreneurial intention of their peers.

iv) Influence of role models

McStay (2008) and Fatoki (2014) stated that previous exposure to business, role models and networks are important in directing an individual's entrepreneurial intention. Role models in entrepreneurship are the aspiring value it bestows on the individual (Nowiński and Haddoud, 2019). The admiration of established entrepreneurs as role models shaped the entrepreneurial intentions of most of the participants. Participants aspired to be like their favourite established entrepreneurs whose path and resilience they admire. So, the influence of role models on entrepreneurs and their intention is social acceptance – they want to emulate their success. Most significantly, this is even better if the parties interact.

Except for one, few participants claimed to have a person in their locality that served as a role model. Their role models are entrepreneurs and celebrities such as Vusi Thembekwayo, Sir Richard Branson. One participant was influenced by a local neighbour who was a pensioner and an entrepreneur. These role models' influence seems to be the entrenchment of the value

of persistence and pushing through to succeed. The role models and business stories motivate some student entrepreneurs to come in life. The key driver in the participants identifying with these role models is the underlying social recognition their pursuit of entrepreneurship has brought to them. Participants admired the independence it brings, its fulfilment of the need to succeed, fulfilling a social responsibility role and the financial rewards it ultimately brings (Barba-Sánchez and Atienza-Sahuquillo, 2018). It, therefore, can be concluded that role models play a significant role in shaping entrepreneurial intentions.

v) Psychological capital or personality traits

Students interviewed in this study were alert towards their entrepreneurial intention. They demonstrated entrepreneurial alertness Çolakoğlu and Gözükar, (2016) by pursuing opportunities they identified in their home environments or taking positive steps to realize their intention while still studying. Their entrepreneurial alertness was significant given that Kebaili, Al-Subyae and Al-Qahtani, (2017) found that psychological barriers such as the likelihood of business failing, lack of funding, bankruptcy, etc., inhibit entrepreneurial intention.

However, the participants demonstrated that they would not allow anything between them and their intention. As soon as there was a stumbling block, they devised plans to overcome such challenges. They, therefore, demonstrated a strong positive attitude. Many authors, Ambad and Damit, (2016); Barba-Sánchez and Atienza-Sahuquillo, (2018); Malebana, (2014a) have shown the significance of psychological capital in determining entrepreneurial intentions. This strong positive attitude towards entrepreneurship is confirmed by:

vi) Passion (driven by personality traits)

Passion for entrepreneurship is an underlying value for most participants. Passion about entrepreneurship reflects certain personality traits that an individual possesses, such as internal locus of control, risk-taking, drive to achieve or succeed, innovation and tolerance of ambiguity (Çolakoğlu and Gözükar, 2016; Karabulut, 2016; Mamun et al., 2017). The most passionate of the participants were already running successful business enterprises. This passion was demonstrated by the commitment of most of the participants to pursue their current business ventures beyond university years. Even the very few who were unsure whether they would still follow their existing businesses beyond university years were very sure about pursuing entrepreneurship in the future. Passion drives intrinsic motivation as entrepreneurial behaviour is undertaken out of enjoyment. The curiosity to solve problems seems to be among the factors that drive entrepreneurship intention. So, most participants seem to enjoy solving problems as

their life orientation. These orientations have a strong influence on their efficacy. Comparing personality traits of students Çolakoğlu and Gözükara, (2016) and Karabulut (2016) concluded that students with entrepreneurial intentions demonstrated more innovation, higher alertness and need to achieve, as well as a more significant locus of control.

vii) Anticipating and planning for barriers

The personality traits of participants such as greater locus of control, strong need to achieve, high-risk tolerance and entrepreneurial alertness Karabulut (2016); Çolakoğlu and Gözükara (2016) caused the participants to anticipate and plan to encounter barriers in their pursuit of the intention. The participants demonstrated a strong attitude to achieve success. Given that the South African government acknowledges the potential of entrepreneurship to alleviate the high youth unemployment and graduates, the respondents were aware of the entry challenges in entrepreneurship such as funding, general SMEs support and government policies. However, they anticipated and planned for these challenges, demonstrating their strong psychological capital and supported by social capital.

The participants identified the challenges that presented themselves as barriers and took steps to overcome or try to overcome any hurdle in their way. Among these barriers was funding for entrepreneurs (access to capital), access to markets for their products, marketing expertise and mentoring were some of challenges that the entrepreneurs have encountered. These findings are more in line with the observation made by Fatoki (2010). However, none of these challenges has stopped them from pursuing their intention. For example, three of the participants already operated businesses, and seven were starting and overcoming these obstacles. The obstacles are regarded as challenges to be overcome in the pursuit of business. Self-efficacy, believing in themselves to set aside challenges and achieve their goal was their drive.

viii) Overcoming the challenges

Participants took positive steps to overcome the challenges confronting their pursuit of business opportunities. In other words, the challenges were never regarded as insurmountable obstacles as challenges were regarded as part of the excitement of entrepreneurship. To quote one of the participants directly: "...I love challenges. The only guarantee in success is that I overcame the challenge, but the challenge was so daring." This participant is one of the successful student entrepreneurs as he got into entrepreneurship before coming to the university. Considering that

entrepreneurs are faced with challenges such as capital, skill, risk, etc., (Fatoki, 2010), it needs the determination to succeed to overcome them.

The participant overcame these obstacles, and by the time he joined the university, he was already running about three business enterprises. Failure is not perceived as an obstacle that should force an entrepreneur to give up but as a surmountable hurdle. The GEM-SA 2019-2020 study asserts that fear for failure has been increasing steadily in South Africa from 2001 to 2017, where it sat at 40.9% among latent entrepreneurs in the ages of 18-64 (Bowmaker-Falconer and Herrington, 2020). Some participants conceded that failure and rejection are inevitable in business, but a supportive environment carries the entrepreneur through.

The participants viewed challenges through Bandura (2000) perspective: personal efficacy or self-efficacy. In this perspective, challenges are obstacles to be surmounted, like running hurdles in athletics. With the right mind, focus and support, these are surmounted. Two examples illustrate how committed two participants were to overcoming their challenges. One saw an opportunity of selling plastic liners for wheelie rubbish bins. He rented a backroom house to store his merchandise until he could build extra storage in his home. The other one pawned his laptop to get capital to start his business.

5.6. Social norms

Social-contextual conditions influence people's behaviours and, therefore, individuals' entrepreneurial intentions (Bowmaker-Falconer and Herrington, 2020). Human motivation to act and overcome challenges or events in people's surroundings is influenced by social conditions (Deci and Ryan, 2012; Ryan and Deci, 2000b). The conditions may forestall or facilitate a healthy psychological state and self-efficacy (Bowmaker-Falconer and Herrington, 2020; Ryan and Deci, 2000a). This assertion attempts to demonstrate how important the environment a person finds himself or herself. There is always a dialectical relationship between people and their environment. Those around them influence them, and in turn, they may affect those around them.

For entrepreneurship, social norms refer to the level of acceptability and acknowledgement of entrepreneurship among family members, close relatives, and mainly in the environment that a person finds herself. The entrepreneur needs social acceptance and acknowledgement (Rana et al., 2021). Participants valued the support and recognition they got from those close to them.

As student entrepreneurs, the participants were more often around campus. Therefore the university played a significant role in their immediate environment. The participants claimed that the university environment, in the form of their studies and exposure to the activities of the TTO, was influential on entrepreneurial intention. Most of the participants, except two established entrepreneurs, considered their intention to be influenced by their studies. Consequently, most participants claimed that their studies directly informed their business ideas.

5.7.The supportive environment

A supportive environment for entrepreneurship plays a moderating role by influencing the relationship between attitude or personality traits and entrepreneurial intention (Okholina, 2010). In this study, the university and the policy environment within which it operates are critical factors for students' entrepreneurial intentions. Much as government policies regarding entrepreneurship impact the university, it works as an independent institution that can leverage its power to support budding entrepreneurs under its wings. This influence resides with the courses it offers for commerce and business students and the work of the TTO. Most universities are now introducing entrepreneurial education that cuts across the faculties.

In this study, few respondents pursued their entrepreneurship goals despite being discouraged by their close relatives or friends. The latter contrasts with the study conducted by Díaz-Casero et al. (2012), who found that students in Spain and Portugal had positive environments. The finding of this study is important because the context is that it was conducted in a developing economy with a high unemployment rate and very low entrepreneurship compared to the rest of the continent. The latter situation may explain the psychological determination of these entrepreneurs to overcome even what appears to be a discouraging immediate environment.

5.7.1. Education influence and entrepreneurial education

The Rhodes University environment was perceived with a positive disposition for providing good business studies. Some students who came to the university as established entrepreneurs stated that that was their way of accessing education to empower themselves. Some participants claimed their ideas were borne in their classes, confirming that education influences entrepreneurship (Rudhumbu et al., 2016). Some participants' interest in entrepreneurship was rekindled when they pursued postgraduate studies with the Rhodes Business School. In the latter instance, participants would harness their scientific knowledge acquired in their previous degrees to convert it to entrepreneurial intention. Furthermore, entrepreneurship education

programmes effectively initiate entrepreneurship activities in students (Huber, Sloof and Van Praag, 2014; Rudhumbu et al., 2016; Stamboulis and Barlas, 2014).

5.7.2. Influence of the Technology Transfer Office

According to O’Kane et al. (2021), TTOs focus mainly on academic knowledge commercialisation. In the study, participants demonstrated appreciation of the TTO’s activities. Participants felt that the office was creating a platform for entrepreneurship. However, some participants thought that office’s work needs more exposure through multi-media platforms within the university community. The Intervarsity Entrepreneurship Challenge was popular among the participants, even those not aware of other entrepreneurship supporting activities within the university. Participants felt a platform must be created to interact with established entrepreneurs outside the university. Some of these entrepreneurs may even be former Rhodes University students who can share their own stories to motivate student entrepreneurs. The participants supported an Entrepreneurship Society that will promote entrepreneurship activities among students.

Rhodes University’s Technology Transfer Office was viewed by the respondents of this study, as contributing positively to the entrepreneurship intention of students. Such positive perception of the ecosystem cultivated self-efficacy, which often was counter-weighted by the complex environment in which SMEs found themselves in the South African economy. The latter relates mainly to the perceived lack of support manifesting as debilitating bureaucracy.

Therefore, it is essential to involve business people or entrepreneurs to interact with the students to influence their intention. The interaction could take the form of guest lecturing by successful entrepreneurs and other organized events (Mahfud et al., 2020). To develop entrepreneurial traits, institutions of higher learning need to understand the factors that influence entrepreneurial intention (Barral, Ribeiro and Canever, 2018b).

5.7.3. Perceived business opportunities in the university environment

Student entrepreneurs felt that there were opportunities to do business with the university. The participants cited promotional materials, transportation services, and catering as possible avenues. These responses were used to confirm the inclination of participants to entrepreneurship to confirm their entrepreneurial intention. Similarly, those who are strong in their entrepreneurship intention were likely to say they will pursue their business ideas beyond university, with some indicating they might adapt their strategies.

5.8. Perceived behavioural control or self-efficacy

For most participants, the motivation and self-belief in solving problems and overcoming challenges was key to their entrepreneurship intention. However, Bandura (2000) called personal efficacy, widely known as self-efficacy, this kind of behaviour. The belief underlies human motivation – the idea that people can influence circumstances or events that affect their lives (Bandura, 2010). It is a vital characteristic of leaders or those who do well.

Interestingly, what could be regarded as external motivation (Legault, 2016), educational influence plays a role in shaping entrepreneurial intention. The latter could be explained better by Self-Determination Theory (Deci and Ryan, 2012), which argues that fulfilling psychological needs such as competence, relatedness, and autonomy lead to satisfaction and intrinsic motivation to perform tasks. In contrast, education may be viewed as extrinsic motivation with an instrumental value that supports the entrepreneur's goal towards entrepreneurial intentions. Social or contextual conditions may enhance or diminish motivation.

The positive influence of education on entrepreneurship intention is good news for programmes trying to shape individuals into entrepreneurs by offering them scholarships or fellowships. For example, some of the participants felt that their current studies formed the fabric of shaping their entrepreneurial intention and mainly assisted them with the soft skills part of entrepreneurship. They viewed these soft skills as critical to running a successful business.

Deci and Ryan (2012) argue further that when external rewards for behaviour are internalized, they take the form of intrinsic motivation. Education, in general, and this study specifically seem to conform to this theory. The participants considered education as influencing their soft skills. For some, it influenced the direction of their entrepreneurship intention; some felt that it would enhance their business operations by improving their business management skills or soft skills.

5.9. Revisiting the conceptual model

After the data analysis, the model presented in Figure 2, in Chapter 2, was revisited and revised. The revised model is shown in Figure 8 and reflects the journey of student entrepreneurs towards their intention and realising their business activity.

The model proposes that the student starts with a Lean Startup. The latter idea is based on what the participants discussed in the interviews and the analysis. The Lean Startup can be modified

and built into a more significant business dictated by its performance. Student entrepreneurs must be allowed to pitch business ideas. These ideas must be exposed to the scrutiny of their peers to review and give feedback that enhances the idea further. Such an approach creates confidence in the entrepreneur and solidifies the supportive environment. This approach makes it easy for the student entrepreneurs to realise their intention.

The student's attitude towards entrepreneurial intention is solidified by social and psychological capital and educational influence. For instance, some students were strongly influenced by social recognition of entrepreneurship in their environments. They then aspire to achieve their goals through entrepreneurship as they have a friend or family in their social circles who are successful entrepreneurs or who motivate them. Others are launched into entrepreneurship through education or registered in higher education to improve their soft skills to run their business better.

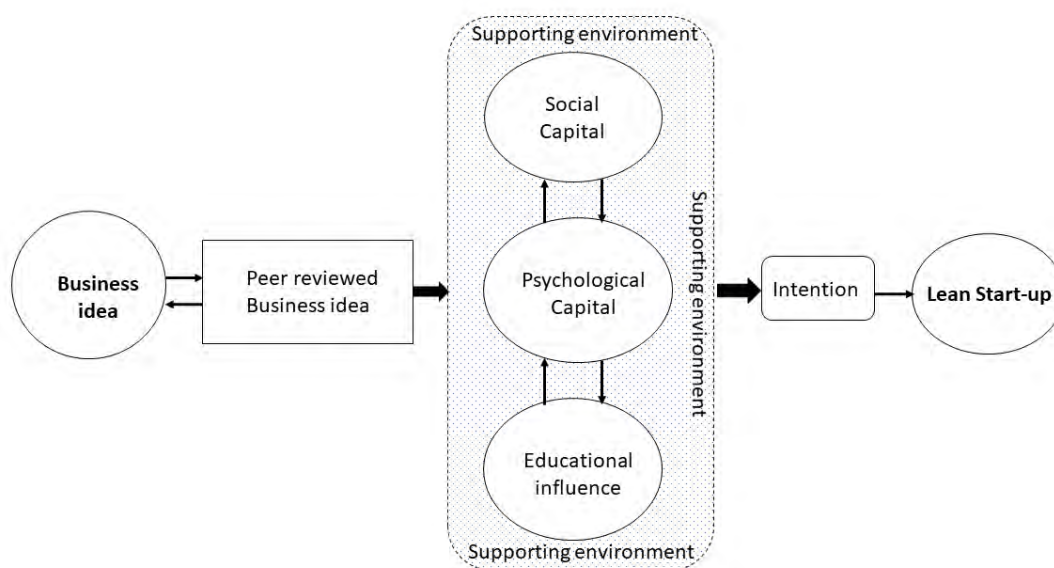


Figure 8: A revised conceptual model

5.10. Conclusion

The interplay between attitude, norms and perceived behavioural control has been confirmed in this study. The participants' attitude towards entrepreneurial intention was strong and positive. Those already operating a business demonstrated a stronger internal locus of control and could carry through their intentions without strong support from family members. Most participants tended to rely on peers or friends and role models that seemed to moderate their

entrepreneurial intention. The social and supportive environment was important for carrying through their intention. In the university environment, they still needed more to popularise what the university does and create platforms to rub shoulders with established entrepreneurs.

In the next chapter, Chapter 6, conclusions are drawn from this empirical study and summarized into recommendations and future directions for further research.

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

6.1. Introduction

This chapter concludes the study by drawing the reader to critical findings. It summarizes key findings and determines the implications for students' entrepreneurial intention. The conclusions contextualize the barriers facing students who pursue entrepreneurship as a career. Attention is drawn to the use of entrepreneurship to solve unemployment against the barriers that student entrepreneurs face. The chapter summarizes key issues around important entrepreneurship, such as education, attitude, and a supportive environment.

This chapter also makes generic recommendations. These recommendations are primarily suggestions that participants, as students at an institution of higher learning, put forward to support a nurturing environment for their entrepreneurial intentions.

6.2. Conclusion

This study involved university students as participants in investigating and gaining insight into their entrepreneurial intentions and exploring factors that enhance or inhibit their intentions. The students intended to start, start, and those already operate a business. All the participants had a strong positive attitude towards entrepreneurial intentions, and a few had already turned their entrepreneurial intentions into successful business activities. All participants recognized challenges and barriers to their entrepreneurial intention. However, not had they identify these barriers, but they took positive steps to overcome them.

The study unravelled how students became entrepreneurs. For instance, factors such as social recognition, the influence of social circles, educational influence, and supportive environment were critical ingredients for their entrepreneurial intention. These participants have found gaps in the market in their expertise or simple, just opportunities that needed to be explored to make money. Parents and their environment influenced some to take up entrepreneurship, whilst

others their studies or education was the influence, with a few following up studies to strengthen their skills in their entrepreneurship.

The study also helped understand the barriers that inhibit student entrepreneurs from realizing their intention. The study found that the participants had a strong internal locus of control as integral to their personality traits. The participants' attitude towards their entrepreneurial intentions was very strong. They took positive steps to overcome barriers and identified them to engage their entrepreneurial intentions. Students perceived access to funding and capital, business opportunities with the university and lack of interaction with established entrepreneurs as barriers. However, these were perceived barriers that did not hinder them. Instead, participants identified the barriers and positively overcame them, thus focusing on their entrepreneurial intention. The participants' positive attitude and strong internal locus of control made them focus on their entrepreneurial intentions without hindrance.

In Chapter 2, a conceptual framework (Figure 2) was presented and proposed that attitude, social norms and educational influence nurtured by a supportive environment were critical for students to pursue their entrepreneurial intentions. The conceptual framework assumed a supportive environment would make it easier for students to focus on their entrepreneurial intentions and convert them into business ideas. The participants described their ideal supportive environment, which was mainly characterised by creating a platform that would allow them to interact and exchange ideas with established entrepreneurs.

The researcher presented a conceptual model (Figure 2) that captured the three propositions. The three propositions were:

- a) Students are motivated by peers and seeing close family members running a successful business.
- b) Students' education and exposure to entrepreneurship incubating programmes are good predictors of intention.
- c) A supportive environment is central to students realising their entrepreneurial intention. The presence or absence of business support through financing and incubation and access to information inhibits or enhances business ownership among students.

These propositions were confirmed by the study as discussed in the preceding chapters. However, a few adjustments were made (see Figure 8). Students' business ideas must be nurtured within a supportive environment to carry through the intention and convert it into a

business activity. That supportive environment must develop and strengthen their ideas by exposing them to peers. The exposure of those ideas to peer review creates a safe space among equals. Such an approach builds self-confidence and contributes to an improved positive attitude, leveraging social and psychological capital. The influence of education further strengthens self-confidence by strengthening soft skills necessary to succeed in the business (e.g., management skills, accounting, understanding of financial statements, etc.).

The model also proposes that Lean Start-up is a critical success factor for student entrepreneurs. The latter is equivalent to starting small with the idea that the student can afford and growing it as the business idea comes to fruition and yields profits. Those already operating business participants demonstrated how effective and motivating this approach can be. One participant, for instance, started a business of providing Wheely bin plastic liners, sold a laptop to raise capital, and needed more space as the business became profitable. He was able to hire warehousing storage by renting backrooms. The Lean Start-up is a supportive model as it protects the entrepreneur from incurring huge costs and accommodates the difficulty of accessing funding. The Lean Start-up allows the student to build a business track record that can be used to access funding to expand the business idea.

It has become evident that there is an interplay between attitudes towards entrepreneurship, self-efficacy, and role models. For instance, all participants were positive about their entrepreneurial intention and demonstrated a strong internal locus of control by anticipating and planning for challenges. The internal locus of control was so strong that one who already runs a few businesses were convinced that failing is part of the entrepreneurship journey and relished the challenge. The self-confidence in overcoming challenges in their entrepreneurship was also demonstrated and strengthened by aspiring to established role models such as entrepreneurs in their social circles and known established entrepreneurs.

The positive attitudes towards entrepreneurial intention manifest in participants' agency driven by intrinsic motivation. They were mainly triggered by a passion for entrepreneurship, market opportunities and finding ways to convert the knowledge gained from acquired education qualifications. Personality traits, social recognition of entrepreneurship, their own need for success created an environment that cultivated a positive attitude towards entrepreneurship. Self-efficacy was, therefore, a necessary behaviour that is at the centre of pursuing entrepreneurship.

Social capital also proved an important factor. Attitudes of people around the students, such as family and close friends, were influential in cultivating a culture of positive attitudes towards entrepreneurship. Family members were perceived as providing a stable environment that gives emotional support. Failure, rejection, and disappointments were accepted as part of the entrepreneurship journey and family was regarded as a critical foundation for emotional support.

Even though role models were far from participants, they were considered essential for self-motivation. Their life stories were encouraging. Bearing the latter in mind and the recommendation from participants for physical interactions with established entrepreneurs, hosting these established entrepreneurs once or twice a year could be an excellent achievement for the university.

The study also found that education moderates attitudes toward entrepreneurial intentions and social norms. The influence and social recognition of entrepreneurship by peers, family and social circles cultivated positive attitudes. Some of the participants were motivated into entrepreneurship by their educational programmes. The investment made by some bursary and fellowship programmes can have positive outcomes for cultivating entrepreneurship at universities.

6.3. Recommendations

Based on the conclusion in Section 6.2 above and suggestions put forward by participants during the interviews, this section presents some recommendations below.

6.3.1. Creating an enabling environment for student entrepreneurs by the university (Rhodes)

The participants felt strongly that, in addition to the current initiatives by the TTO, Rhodes University should create a platform for student entrepreneurs to interact with established entrepreneurs. Participants recommended that the university should host speaking engagements and entrepreneurial competitions. These competitions will be sponsored and hosted by well-known entrepreneurs. The speaking engagements can be held quarterly events or twice a year. These engagements would assist student entrepreneurs in building self-confidence, creating connections and finding mentors in the real world of entrepreneurship. Participants stated that some of these established entrepreneurs are fully aware of university brainpower from young students and are willing to tap into this pool of budding entrepreneurs and provide funding for their business ideas.

6.3.2. Elevating prominent offices for student entrepreneurial activity

The university should elevate the entrepreneurial policies to introduce entrepreneurship to students at tertiary institutions such as the Entrepreneurship Development in Higher Education. Prominent offices within the university should spearhead support of these initiatives. The TTO as a support office should profile its work and any entrepreneurship activities within the university. Creating more awareness of entrepreneurship programmes within the university should be elevated by the prominent offices with the institution. The university should develop a clear distinction between the functions of the TTO (promotion of commercializing academic knowledge) and programmes specifically meant to empower students to be better and competent entrepreneurs. If the boundaries are blurred, the study has shown that there may be a potential conflict as students may start withholding their ideas.

6.3.3. Student societies

Participants demonstrated a massive appetite for establishing an Entrepreneurial Society in the university, especially by established student entrepreneurs. This society can take some of the tasks they felt the TTO should do, which falls outside of the TTO – e.g., hosting entrepreneurial

events such as talks. Profile and awareness of entrepreneurship societies such as Enactus must be profiled and elevated as the participants were unaware. The latter also demonstrates the need to elevate entrepreneurship to a prominent office within the university.

6.3.4. Contribution of Private Sector

The university can encourage more private sector investors to invest in fellowships and bursaries that encourage entrepreneurs, such as the Allan Grey Fellowship Programme. They can have positive spin-offs for entrepreneurship, as education influences entrepreneurship. Some budding student entrepreneurs who came to the university were motivated by their business activity. They felt they were successful in operating businesses but needed to acquire in-depth knowledge of running them, analysing financial statements, understanding the economy's needs, etc. Hosting students with such entrepreneurial prudence also means the university, in the long term, will be populated by a significant number of self-sufficient students or with guaranteed sponsors.

6.4. Limitations of the study

The researcher collected the data during Level 5 of the National Lockdown, which required social distancing, restricted personal physical interaction, and thus no personal interviews. Zoom, Google Meet, and WhatsApp were used for data collection, to respond to the situation. Zoom and Google Meet allowed interview sessions closer to personal interviews as the researcher and respondents could see each other's faces at least. However, due to connectivity issues, often the camera had to be switched off to free up congestion in the bandwidth. Sometimes not all audio recordings were audible; save the backup audio recorder.

The researcher wrote an additional Addendum to the Ethical Review Application, requesting permission to continue virtual interviews through Zoom, WhatsApp Call, and Google Meet. The amended mode of contact for the interviews was also approved.

The study cannot be extrapolated to the general population as it was qualitative. In qualitative research, context and personal experiences are essential. They serve as a guide to capturing key concepts whose prevalence can be measured by a quantitative follow-up survey. Probing (follow up questions) was central to the questions asked in the interview guide. So what appears to be some quantitative questions might be deceiving to the reader.

6.5. Future research

This study revealed that entrepreneurial education is critical in mediating and developing entrepreneurial intentions. Not many studies have been conducted in South African on this aspect of entrepreneurship. The researcher, therefore, suggests that entrepreneurial education must be investigated in future entrepreneurship research programmes. The exploding unemployment levels among youths and graduates inform the latter stance. The South African government has realised that entrepreneurship can alleviate unemployment and create job opportunities. Consequently, the government introduced the Entrepreneurship Development in Higher Education policy in 2016, marking its serious attention to the matter.

Furthermore, further research on entrepreneurship must focus on the knowledge of supportive policies and initiatives and explore the debilitating effect of entry barriers on young entrepreneurs and how these barriers can be overcome. Policy direction should be incentives to start companies and small projects to run for a year renewable based on performance.

6.6. Conclusion

RUESC approved the study and concluded it under Rhodes ethical research guidelines. The approval letter is attached in Annexure 1. Annexures 1-3 are the tools used to support and complete the study.

ANNEXURES

Annexure 1: Study ethical clearance from RUESC



Human Ethics subcommittee
Rhodes University Ethical Standards Committee
PO Box 94, Grahamstown, 6140, South Africa
t: +27 (0) 46 603 8055
f: +27 (0) 46 603 8822
e: ethics-committee@ru.ac.za
www.ru.ac.za/research/research/ethics
NHREC Registration no. REC-241114-045

20 May 2020

Dr. Tshidi Mohapelo
Email: g97k8186@campus.ru.ac.za

Dear Dr. Mohapelo

Title: The entrepreneurial intention of students at Rhodes University: an explorative study

Principal Investigator: Dr. Tshidi Mohapelo

Collaborators: Mrs. Ayanda Kenye-Duma,

This letter confirms that the above research proposal has been reviewed and **APPROVED** by the Rhodes University Ethical Standards Committee (RUESC) – Human Ethics (HE) sub-committee.

Approval has been granted for 1 year. An annual progress report will be required in order to renew approval for an additional period. You will receive an email notifying when the annual report is due.

Please ensure that the ethical standards committee is notified should any substantive change(s) be made, for whatever reason, during the research process. This includes changes in investigators. Please also ensure that a brief report is submitted to the ethics committee on the completion of the research. The purpose of this report is to indicate whether the research was conducted successfully, if any aspects could not be completed, or if any problems arose that the ethical standards committee should be aware of. If a thesis or dissertation arising from this research is submitted to the library's electronic theses and dissertations (ETD) repository, please notify the committee of the date of submission and/or any reference or cataloging number allocated.

Sincerely,

Prof Arthur Webb

Chair: Human Ethics Sub-Committee, RUESC- HE

Annexure 2: Study interview guide

Note to interviewer: *Since this is a qualitative study, probe answers are given to get a better understanding of the reasons behind each answer (e.g., If a participant says YES s/he believes s/he could run a business successfully, then follow with a question to probe why does s/he believe so. Can you tell me what drives your confidence that you can do that?*

DEMOGRAPHICS

Age (tick one block):

18 – 20	21 – 23	24 – 26	27 – 30	30+
---------	---------	---------	---------	-----

Gender (tick one block):

Male	Female	Other
------	--------	-------

Race:

Degree being studied:

Academic year of study:

INTENTION

1. At what level of entrepreneurial intent are you?

Intending to start a business	Starting a business	Operating a business
-------------------------------	---------------------	----------------------

2. What brought about this intention?

3. What preparatory steps are/were required to start the venture?

- Of these, what steps have you taken?
- Do/did you believe that you're able to complete all the necessary preparatory work without assistance?

Yes	No
-----	----

4. Do/did you believe that you're able to start the business by yourself and run it successfully?

Yes	No
-----	----

5. What positive outcomes do/did you expect going into entrepreneurship?

6. What challenges do/did you expect in your business venture?

7. How do/did you plan to overcome the challenges?

SUPPORTIVE ENVIRONMENT

8. Does/did Rhodes University play any role in enabling or encouraging your entrepreneurial intent'?

Yes	No
-----	----

- If yes, what role does/did the university play?

9. Are you aware of Rhodes University's entrepreneurship policy and how it affects you?

10. Are there any opportunities available for your business venture within the Rhodes University environment?

Yes	No
-----	----

a. If yes, what kind of opportunities

Trading with the university community and beyond	Linkages, networking, market entry opportunities	Product research and development opportunities	Business Development services (advice Skills training)	Other opportunities (<i>elaborate</i>)
--	--	--	--	--

11. Is there any support available at the university to you pursuing your business?

Yes	No
-----	----

a. If yes, what support is available?

12. What support would you like to receive from the university?

Yes	No
-----	----

EDUCATIONAL INFLUENCE

13. Have your studies influenced your intention to pursue entrepreneurship?

a. If so, how?

14. Will/do your studies assist you in your business?

Yes	No
-----	----

a. If so, how?

15. Do you require any business skills training for you to succeed in your business venture?

Yes	No
-----	----

SOCIAL NORMS

16. What is the attitude of your friends and/or peers to entrepreneurship

Extremely positive	Positive	Neutral	Negative	Extremely negative
--------------------	----------	---------	----------	--------------------

17. Are there any entrepreneurs among your friends?

Yes	No
-----	----

18. Is there any support you are receiving from your friends in pursuing your business?

Yes	No
-----	----

a. If yes, what support do they provide?

19. What support would you like to receive from your friends?

20. What is the attitude of your family to entrepreneurship

Extremely positive	Positive	Neutral	Negative	Extremely negative
--------------------	----------	---------	----------	--------------------

21. Are there any entrepreneurs among your family?

Yes	No
-----	----

a. If so, who?

22. Is there any support you are receiving from your family in pursuing your business?

Yes	No
-----	----

a. If yes, what support do they provide?

23. What support would you like to receive from your family?

Yes	No
-----	----

24. Are there any entrepreneurs among your role models?

Yes	No
-----	----

25. Is your business venture intended for the university setting only?

Yes	No
-----	----

26. Do you plan to take this business venture into the future and run it in the long term?

Yes	No
-----	----

Anything else you wish to highlight

27. All in all, what factor influenced you the most to pursue entrepreneurship?

Own inclination	Rhodes Environment	Educational influence	Social norms – family and friends	Market analysis – opportunity/gap
-----------------	--------------------	-----------------------	-----------------------------------	-----------------------------------

28. Is there any other issue you wish to highlight that enabled, influenced, or encouraged your entrepreneurial intention?

Yes	No
-----	----

If yes, what do you wish to highlight?

Annexure 3: The complete study codebook demonstrating themes coded from the data

Name	Description of themes	Number of transcripts/files	Number of times code/theme referred to
Attitude towards entrepreneurship	Positive intent towards business	13	97
Anticipating & planning for challenges	Identifying challenges and devising plans to overcome them	13	27
Anticipating challenges	Identifying challenges to overcome to implement the intention	12	15
Planning to overcome challenges	Devising solutions for the identifying challenges	11	12
<i>External influence within my environment</i>	<i>Intention stimulated by external influence</i>	2	2
Passion about entrepreneurship	Intention driven by passion and intrinsic motivation	5	5
Take opportunities as they arise	Spotting and taking advantage of business opportunities as they come	10	11
Taking steps to prepare for entrepreneurship	Fulfilling the entrepreneurial intention by taking steps towards addressing business requirements to realise the intention.	13	56
<i>Intended positive outcomes</i>	<i>Description of what the intended or operational business will achieve</i>	<i>11</i>	<i>12</i>
<i>Preparatory steps</i>	<i>Having identified the intention, what steps have been taken</i>	<i>10</i>	<i>12</i>
Practical steps taken	Demonstrated actions to execute the intention	12	20
<i>Self-confidence and need for support</i>	<i>Demonstration of self-confidence to execute the intention</i>	<i>13</i>	<i>31</i>
Self-confidence to persist through	Demonstrating self-confidence to stay the course despite challenges	11	14
Support needed	Support needed to execute the intention	10	16
Ultimate influence on entrepreneurship	Self-confirmed driver of the intention	6	7
Perceived behavioural control	Description of behaviours that are considered critical to the intention	12	21
Educational influence	Views on whether current studies or received education has an influence	12	21
<i>Influence of current studies</i>	<i>Influence of current degree courses on the business idea</i>	<i>12</i>	<i>13</i>
Contribution of current studies to the intent	Indication of whether current studies have influenced the intention	10	14
Soft skills	Contributions that fall within the soft skills domain	7	7
<i>Training support</i>	<i>Further training needed to support the intention or business idea</i>	<i>7</i>	<i>7</i>
Social norms	Influence of the social environment in which entrepreneurs find themselves	13	159
Supportive environment	Environment that nurtures entrepreneurial intention - positive reinforcement	13	159

Name	Description of themes	Number of transcripts/files	Number of times code/theme referred to
<i>Attitudes of close people towards entrepreneurship</i>	<i>Contribution of people close to the intention</i>	13	139
Attitude of friends	Influence of the attitude of friends and peers	13	53
Attitude of friends towards my pursuit	Influence of immediate friends or peers	13	14
My friends are themselves entrepreneurs	Influence of entrepreneurial friends/peers	9	9
Potential support from friends	Support expected from friends	8	8
Support of friends	Practical support provided by friends/peers	13	22
<i>Attitudes of family members</i>	<i>Contribution of family members to the intention</i>	12	51
Attitudes of family members towards my pursuit	Influence of the attitude of family members	12	14
Family members are entrepreneurs	Influence of family members who are entrepreneurs	10	14
Potential support from family members	Support expected from family members	8	10
Support of family members towards my pursuit	Practical support provided family members	10	13
Influence of role models	Do role models influence the intention	11	16
Close role models	Are the role models people that interact with the entrepreneur?	2	2
Distant role models	Role models that are distant – read or follow their stories	7	10
No role models	Not influenced by any role models	4	4
Planned longevity of business venture	Is the business idea short term or long term	10	19
Business planned for university life only	Business venture only planned for duration of the study	9	10
Business venture would last beyond university life	Business venture planned for the long term	8	9
<i>Influence of current institution</i>	<i>Influence of current institution on entrepreneurial intent</i>	11	9
<i>Intrinsic motivation</i>	<i>Own motivation drives the intent</i>	2	2
<i>Support available in current institution</i>	<i>What support does the current institution offer</i>	7	9
Give opportunity to student entrepreneurs provide services	Whether the institution gives the student a chance to explore their intent by giving them business opportunities	4	4
Involvement with student business or entrepreneurship-related societies	Active in student societies, especially entrepreneurship-related	8	12
Perceived opportunities in the current environment	Whether student entrepreneurs think there are opportunities existing within the university	8	10

Name	Description of themes	Number of transcripts/files	Number of times code/theme referred to
Support to student entrepreneurs	Whether the university support student entrepreneurs and what support do they need	10	22
Potential support	Description of support that the university can deliver to entrepreneurs	11	21
Types of opportunities identified	Identifying opportunities that student entrepreneurs can explore	7	10

REFERENCES

- Achchuthan, S. and Kandaiya, S., 2013. Entrepreneurial intention among undergraduates: Review of literature. *Sivarajah, K., & Achchuthan, S.(2013). Entrepreneurial Intention among Undergraduates: Review of Literature. European Journal of Business and Management, 5(5), pp.172–186.*
- Acs, Z.J., Audretsch, D.B. and Lehmann, E.E., 2013. The knowledge spillover theory of entrepreneurship. *Small Business Economics, 41(4), pp.757–774.* <https://doi.org/10.1007/s11187-013-9505-9>.
- Adams, S.B., 2005. Stanford and Silicon Valley: Lessons on becoming a high-tech region. *California management review, 48(1), pp.29–51.*
- Adekiya, A.A. and Ibrahim, F., 2016. Entrepreneurship intention among students. The antecedent role of culture and entrepreneurship training and development. *The International Journal of Management Education, [online] 14(2), pp.116–132.* <https://doi.org/10.1016/j.ijme.2016.03.001>.
- Agetue, F.N., 2017. ENTREPRENEURSHIP TRAINING: A TOOL FOR JOB CREATION AND SUSTAINABLE NATIONAL DEVELOPMENT IN NIGERIA. *Journal of Teacher Perspective, [online] p.8.* Available at: <https://www.globalacademicgroup.com/journals/teacher%20perspective/ENTREPRENEURSHIP%20TRAINING%20A%20TOOL%20FOR%20JOB%20CREATION%20AND.pdf>.
- Ajzen, I., 1991. The theory of planned behavior. *Organizational Behavior and Human Decision Processes, [online] 50(2), pp.179–211.* [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T).
- Ajzen, I., 2011. The theory of planned behaviour: Reactions and reflections. *Psychology & Health, [online] 26(9), pp.1113–1127.* <https://doi.org/10.1080/08870446.2011.613995>.
- Aman, M.A., Salman, M.S. and Yunus, A.P., 2020. COVID-19 and its impact on environment: Improved pollution levels during the lockdown period – A case from Ahmedabad, India. *Remote Sensing Applications: Society and Environment, [online] 20, p.100382.* <https://doi.org/10.1016/j.rsase.2020.100382>.
- Ambad, S.N.A. and Damit, D.H.D.A., 2016. Determinants of Entrepreneurial Intention Among Undergraduate Students in Malaysia. *Procedia Economics and Finance, [online] 37, pp.108–114.* [https://doi.org/10.1016/S2212-5671\(16\)30100-9](https://doi.org/10.1016/S2212-5671(16)30100-9).
- Arora, S., Bhaukhandi, K.D. and Mishra, P.K., 2020. Coronavirus lockdown helped the environment to bounce back. *Science of The Total Environment, [online] 742, p.140573.* <https://doi.org/10.1016/j.scitotenv.2020.140573>.
- Audretsch, D., 2012. Entrepreneurship research. *Management Decision, [online] 50(5), pp.755–764.* <https://doi.org/10.1108/00251741211227384>.
- Audretsch, D.B., 2017. Entrepreneurship and universities. *International Journal of Entrepreneurship and Small Business, 31(1), pp.4–11.*
- Audretsch, D.B., 2021. Have we oversold the Silicon Valley model of entrepreneurship? *Small Business Economics, [online] 56(2), pp.849–856.* <https://doi.org/10.1007/s11187-019-00272-4>.

- Badri, R. and Hachicha, N., 2019. Entrepreneurship education and its impact on students' intention to start up: A sample case study of students from two Tunisian universities. *The International Journal of Management Education*, [online] 17(2), pp.182–190. <https://doi.org/10.1016/j.ijme.2019.02.004>.
- Bandura, A., 2000. Exercise of Human Agency Through Collective Efficacy. *Current Directions in Psychological Science*, [online] 9(3), pp.75–78. <https://doi.org/10.1111/1467-8721.00064>.
- Bandura, A., 2010. Self-Efficacy. In: *The Corsini Encyclopedia of Psychology*. [online] American Cancer Society. pp.1–3. <https://doi.org/10.1002/9780470479216.corpsy0836>.
- Barba-Sánchez, V. and Atienza-Sahuquillo, C., 2018. Entrepreneurial intention among engineering students: The role of entrepreneurship education. *European Research on Management and Business Economics*, [online] 24(1), pp.53–61. <https://doi.org/10.1016/j.iedeen.2017.04.001>.
- Barral, M.R.M., Ribeiro, F.G. and Canever, M.D., 2018a. Influence of the university environment in the entrepreneurial intention in public and private universities. *RAUSP Management Journal*, [online] 53, pp.122–133. <https://doi.org/10.1016/j.rauspm.2017.12.009>.
- Barral, M.R.M., Ribeiro, F.G. and Canever, M.D., 2018b. Influence of the university environment in the entrepreneurial intention in public and private universities. *RAUSP Management Journal*, [online] 53(1), pp.122–133. <https://doi.org/10.1016/j.rauspm.2017.12.009>.
- Bernstein, A., 2015. Crisis demands we ditch our aversion to lowly paid jobs. *Op-eds*. Available at: <<https://www.cde.org.za/crisis-demands-we-ditch-our-aversion-to-lowly-paid-jobs/>>.
- Bezerra, É.D., Borges, C. and Andreassi, T., 2017. Universities, local partnerships and the promotion of youth entrepreneurship. *International Review of Education*, 63(5), pp.703–724. <https://doi.org/10.1007/s11159-017-9665-y>.
- Bird, B. and Jelinek, M., 1988. *The Operation of Entrepreneurial Intentions*. [SSRN Scholarly Paper] Rochester, NY: Social Science Research Network. Available at: <<https://papers.ssrn.com/abstract=1505229>> [Accessed 19 May 2019].
- Boh, W.F., De-Haan, U. and Strom, R., 2016. University technology transfer through entrepreneurship: faculty and students in spinoffs. *The Journal of Technology Transfer*, 41(4), pp.661–669. <https://doi.org/10.1007/s10961-015-9399-6>.
- Bosma, N. and Kelley, D., 2019. *GEM Global Entrepreneurship Monitor - 2018/2019*. [online] GEM Global Entrepreneurship Monitor. Available at: <<https://www.gemconsortium.org>> [Accessed 19 May 2019].
- Bowmaker-Falconer, A. and Herrington, M., 2020. *Global Entrepreneurship Monitor South Africa (GEM SA): 2019/2020 Report*. GEM-SA Report. Stellenbosch.
- Braun, V. and Clarke, V., 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology*, [online] 3(2), pp.77–101. <https://doi.org/10.1191/1478088706qp063oa>.

Braun, V. and Clarke, V., 2012. Thematic analysis. In: *APA handbook of research methods in psychology, Vol 2: Research designs: Quantitative, qualitative, neuropsychological, and biological*, APA handbooks in psychology®. Washington, DC, US: American Psychological Association. pp.57–71. <https://doi.org/10.1037/13620-004>.

Braun, V. and Clarke, V., 2019. Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, [online] 11(4), pp.589–597. <https://doi.org/10.1080/2159676X.2019.1628806>.

van Broekhuizen, H., 2016. *Graduate unemployment and Higher Education Institutions in South Africa*. Stellenbosch Economic Working Papers: 08/16. [online] Stellenbosch: Stellenbosch University. p.48. Available at: <<https://resep.sun.ac.za/wp-content/uploads/2018/07/wp-08-2016.pdf>> [Accessed 23 Oct. 2021].

Carnevale, J.B. and Hatak, I., 2020. Employee adjustment and well-being in the era of COVID-19: Implications for human resource management. *Journal of Business Research*, [online] 116, pp.183–187. <https://doi.org/10.1016/j.jbusres.2020.05.037>.

Carree, M.A. and Thurik, A.R., 2010a. The Impact of Entrepreneurship on Economic Growth. In: Z.J. Acs and D.B. Audretsch, eds. *Handbook of Entrepreneurship Research: An Interdisciplinary Survey and Introduction*, International Handbook Series on Entrepreneurship. [online] New York, NY: Springer. pp.557–594. https://doi.org/10.1007/978-1-4419-1191-9_20.

Carree, M.A. and Thurik, A.R., 2010b. The Impact of Entrepreneurship on Economic Growth. In: Z.J. Acs and D.B. Audretsch, eds. *Handbook of Entrepreneurship Research: An Interdisciplinary Survey and Introduction*, International Handbook Series on Entrepreneurship. [online] New York, NY: Springer. pp.557–594. https://doi.org/10.1007/978-1-4419-1191-9_20.

Clarke, V. and Braun, V., 2014. Thematic Analysis. In: T. Teo, ed. *Encyclopedia of Critical Psychology*. [online] New York, NY: Springer. pp.1947–1952. https://doi.org/10.1007/978-1-4614-5583-7_311.

Çolakoğlu, N. and Gözükar, İ., 2016. A Comparison Study on Personality Traits Based on the Attitudes of University Students toward Entrepreneurship. *Procedia - Social and Behavioral Sciences*, [online] 229, pp.133–140. <https://doi.org/10.1016/j.sbspro.2016.07.122>.

Colapinto, C., 2007. A way to foster innovation: a venture capital district from Silicon Valley and route 128 to Waterloo Region. *International Review of Economics*, 54(3), pp.319–343.

Coulibaly, S.K., Erbao, C. and Metuge Mekongcho, T., 2018. Economic globalization, entrepreneurship, and development. *Technological Forecasting and Social Change*, [online] 127, pp.271–280. <https://doi.org/10.1016/j.techfore.2017.09.028>.

Davey, T., 2015. *Entrepreneurship at universities: exploring the factors influencing the development of entrepreneurship at universities*. Post-Print. [online] *Post-Print*. HAL. Available at: <<https://ideas.repec.org/p/hal/journal/hal-02419603.html>> [Accessed 27 Feb. 2021].

De Lannoy, A., Graham, L., Patel, L. and Leibbrandt, M., 2020. Why Is Youth Unemployment So Intractable in South Africa? A Synthesis of Evidence at the Micro-Level. *Journal of Applied Youth Studies*, [online] 3(2), pp.115–131. <https://doi.org/10.1007/s43151-020-00012-6>.

De Vos, A.S., Strydom, H., Fouché, C.B. and Delport, C.S., 2005. *Research at grass roots: For the social sciences and human service professions*. van Schaik Pretoria.

Deci, E.L. and Ryan, R.M., 2012. Motivation, personality, and development within embedded social contexts: An overview of self-determination theory. In: *The Oxford handbook of human motivation*, Oxford library of psychology. New York, NY, US: Oxford University Press. pp.85–107.

Díaz-Casero, J.C., Ferreira, J.J.M., Hernández Mogollón, R. and Barata Raposo, M.L., 2012. Influence of institutional environment on entrepreneurial intention: a comparative study of two countries university students. *International Entrepreneurship and Management Journal*, [online] 8(1), pp.55–74. <https://doi.org/10.1007/s11365-009-0134-3>.

Elnadi, M. and Gheith, M.H., 2021. Entrepreneurial ecosystem, entrepreneurial self-efficacy, and entrepreneurial intention in higher education: Evidence from Saudi Arabia. *The International Journal of Management Education*, [online] 19(1), p.100458. <https://doi.org/10.1016/j.ijme.2021.100458>.

Engle, R.L., Schlaegel, C., Dimitriadi, N., He, X., Alvarado, I., Jose V. Gavidia, J.V., Wolff, B., Delanoe, S. and Buame, S., 2010. Entrepreneurial intent: A twelve-country evaluation of Ajzen's model of planned behavior. *International Journal of Entrepreneurial Behavior & Research*, [online] 16(1), pp.35–57. <https://doi.org/10.1108/13552551011020063>.

Entrialgo, M. and Iglesias, V., 2016. The moderating role of entrepreneurship education on the antecedents of entrepreneurial intention. *International Entrepreneurship and Management Journal*, 12(4), pp.1209–1232. <https://doi.org/10.1007/s11365-016-0389-4>.

Ezeuduji, I.O. and Ntshangase, S.D., 2017. Entrepreneurial Intention: South African Youth's Willingness to Start Tourism Businesses. 13(5), p.11.

Farouk, A., Ikram, A. and Sami, B., 2014. The Influence of Individual Factors on the Entrepreneurial Intention. *International Journal of Managing Value and Supply Chains*, [online] 5(4), pp.47–57. <https://doi.org/10.5121/ijmvsc.2014.5404>.

Fatoki, O., 2014. The entrepreneurial intention of undergraduate students in South Africa: The influences of entrepreneurship education and previous work experience. *Mediterranean Journal of Social Sciences*, 5(7), p.294.

Fatoki, O. and Chindoga, L., 2011. An investigation into the obstacles to youth entrepreneurship in South Africa. *International business research*, 4(2), pp.161–169.

Fatoki, O.O., 2010. Graduate entrepreneurial intention in South Africa: Motivations and obstacles. *International Journal of Business and Management*, 5(9), p.87.

Fayolle, A. and Liñán, F., 2014. The future of research on entrepreneurial intentions. *Journal of Business Research*, [online] 67(5), pp.663–666. <https://doi.org/10.1016/j.jbusres.2013.11.024>.

Fayolle, A., Liñán, F. and Moriano, J.A., 2014. Beyond entrepreneurial intentions: values and motivations in entrepreneurship. *International Entrepreneurship and Management Journal*, [online] 10(4), pp.679–689. <https://doi.org/10.1007/s11365-014-0306-7>.

- Fragoso, R., Rocha-Junior, W. and Xavier, A., 2020. Determinant factors of entrepreneurial intention among university students in Brazil and Portugal. *Journal of Small Business & Entrepreneurship*, [online] 32(1), pp.33–57. <https://doi.org/10.1080/08276331.2018.1551459>.
- Franzén, E.M. and Kassman, A., 2005. Longer-term Labour-market Consequences of Economic Inactivity during Young Adulthood: A Swedish National Cohort Study. *Journal of Youth Studies*, [online] 8(4), pp.403–424. <https://doi.org/10.1080/13676260500431719>.
- Gondwe, G., 2020. *Assessing the Impact of COVID-19 on Africa's Economic Development*. Available at: <https://unctad.org/system/files/official-document/albcmisc2020d3_en.pdf> [Accessed 21 Oct. 2021].
- Haus, I., Steinmetz, H., Isidor, R. and Kabst, R., 2013. Gender effects on entrepreneurial intention: a meta-analytical structural equation model. *International Journal of Gender and Entrepreneurship*, [online] 5(2), pp.130–156. <https://doi.org/10.1108/17566261311328828>.
- Herman, E., 2019a. Entrepreneurial Intention among Engineering Students and Its Main Determinants. *Procedia Manufacturing*, [online] 32, pp.318–324. <https://doi.org/10.1016/j.promfg.2019.02.220>.
- Herman, E., 2019b. Entrepreneurial Intention among Engineering Students and Its Main Determinants. *Procedia Manufacturing*, [online] 32, pp.318–324. <https://doi.org/10.1016/j.promfg.2019.02.220>.
- Herrington, M., Kew, P. and Mtwanga, A., 2017. *GEM Global Entrepreneurship Monitor - South Africa Report 2016-2017*. [online] GEM Global Entrepreneurship Monitor. Available at: <<https://www.gemconsortium.org>> [Accessed 19 May 2019].
- Higgs, H., 1891. Richard Cantillon. *The Economic Journal*, [online] 1(2), pp.262–291. <https://doi.org/10.2307/2956249>.
- Hoselitz, B.F., 1951. The Early History of Entrepreneurial Theory. *Explorations in Entrepreneurial History*, [online] 3(4), p.193. Available at: <<https://search.proquest.com/openview/a185729543050b622a7ffd0b000c6916/1?cbl=1819326&pq-origsite=gscholar>>.
- Howorth, C., Tempest, S. and Coupland, C., 2005. Rethinking entrepreneurship methodology and definitions of the entrepreneur. *Journal of Small Business and Enterprise Development*. [online] <https://doi.org/10.1108/14626000510579626>.
- Huber, L.R., Sloof, R. and Van Praag, M., 2014. The effect of early entrepreneurship education: Evidence from a field experiment. *European Economic Review*, [online] 72, pp.76–97. <https://doi.org/10.1016/j.euroecorev.2014.09.002>.
- Isaak, R., 2009. From collective learning to Silicon Valley replication: The limits to synergistic entrepreneurship in Sophia Antipolis. *Research in International Business and Finance*, [online] 23(2), pp.134–143. <https://doi.org/10.1016/j.ribaf.2008.03.006>.
- Iwu, C.G., Ezeuduji, I.O., Eresia-Eke, C.E. and Tengeh, R., 2016. The entrepreneurial intention of university students: the case of a university of technology in South Africa. [online] Available at: <<https://repository.up.ac.za/handle/2263/60902>> [Accessed 19 May 2019].

Kacperczyk, A.J., 2013. Social Influence and Entrepreneurship: The Effect of University Peers on Entrepreneurial Entry. *Organization Science*, 24(3), pp.664–683. <https://doi.org/10.1287/orsc.1120.0773>.

Kalitanyi, V. and Bbenkele, E., 2018. Cultural values as determinants of entrepreneurial intentions among university students in Cape Town-South Africa. *Journal of Enterprising Communities: People and Places in the Global Economy*, 12(4), pp.437–453. <https://doi.org/10.1108/JEC-01-2017-0017>.

Karabulut, A.T., 2016. Personality Traits on Entrepreneurial Intention. *Procedia - Social and Behavioral Sciences*, [online] 229, pp.12–21. <https://doi.org/10.1016/j.sbspro.2016.07.109>.

Karadağ, H., 2016. The role of SMEs and entrepreneurship on economic growth in emerging economies within the Post-Crisis Era: an analysis from Turkey. [online] <https://doi.org/10.15640/jsbed.v4n1a3>.

Kautonen, T., Gelderen, M. van and Tornikoski, E.T., 2013. Predicting entrepreneurial behaviour: a test of the theory of planned behaviour. *Applied Economics*, [online] 45(6), pp.697–707. <https://doi.org/10.1080/00036846.2011.610750>.

Kebaili, B., Al-Subyae, S.S. and Al-Qahtani, F., 2017. Barriers of entrepreneurial intention among Qatari male students. *Journal of Small Business and Enterprise Development*, 24(4), pp.833–849. <https://doi.org/10.1108/JSBED-11-2016-0186>.

Khan, Y., 2018. The Effectiveness of Entrepreneurial Activities for Economic Development: A Route to Innovation and Job Generation. [online] Available at: <https://essuir.sumdu.edu.ua/handle/123456789/69706> [Accessed 27 Oct. 2021].

Kongolo, M., 2010. Job creation versus job shedding and the role of SMEs in economic development. *African Journal of Business Management*, [online] 4(11), pp.2288–2295. <https://doi.org/10.5897/AJBM.9000376>.

Krueger, N., 1993. The Impact of Prior Entrepreneurial Exposure on Perceptions of New Venture Feasibility and Desirability. *Entrepreneurship Theory and Practice*, [online] 18(1), pp.5–21. <https://doi.org/10.1177/104225879301800101>.

Krueger, N.F. and Brazeal, D.V., 1994. Entrepreneurial Potential and Potential Entrepreneurs. *Entrepreneurship Theory and Practice*, [online] 18(3), pp.91–104. <https://doi.org/10.1177/104225879401800307>.

Krueger, N.F. and Kickul, J., 2006. *Are Social Entrepreneurs Really Different? Discrete Choice Modeling of Triple Bottom Line Venture Preferences*. [SSRN Scholarly Paper] Rochester, NY: Social Science Research Network. <https://doi.org/10.2139/ssrn.1150490>.

Krueger, N.F., Reilly, M.D. and Carsrud, A.L., 2000. Competing models of entrepreneurial intentions. *Journal of Business Venturing*, [online] 15(5), pp.411–432. [https://doi.org/10.1016/S0883-9026\(98\)00033-0](https://doi.org/10.1016/S0883-9026(98)00033-0).

Ladd, T., Hind, P. and Lawrence, J., 2019. Entrepreneurial orientation, Waynesian self-efficacy for searching and marshaling, and intention across gender and region of origin. *Journal of Small Business & Entrepreneurship*, [online] 31(5), pp.391–411. <https://doi.org/10.1080/08276331.2018.1459016>.

- Legault, L., 2016. Intrinsic and Extrinsic Motivation. In: V. Zeigler-Hill and T.K. Shackelford, eds. *Encyclopedia of Personality and Individual Differences*. [online] Cham: Springer International Publishing. pp.1–4. https://doi.org/10.1007/978-3-319-28099-8_1139-1.
- Leibbrandt, M., Woolard, I., Finn, A. and Argent, J., 2010. Trends in South African Income Distribution and Poverty since the Fall of Apartheid. [online] <https://doi.org/10.1787/5kmms0t7p1ms-en>.
- Lestsoalo, M.E. and Rankhumise, E.M., 2020. Students' entrepreneurial intentions at two South Africa universities. *Journal of Entrepreneurship Education*, [online] 23(1). Available at: <<https://search.proquest.com/openview/49aaf1e965968961eabbfdecaec0cc66/1?cbl=28224&pq-origsite=gscholar>> [Accessed 27 Feb. 2021].
- Leunbach, D., 2021. Entrepreneurship as a family resemblance concept: A Wittgensteinian approach to the problem of defining entrepreneurship. *Scandinavian Journal of Management*, [online] 37(1), p.101141. <https://doi.org/10.1016/j.scaman.2021.101141>.
- Liñán, F., Rodríguez-Cohard, J.C. and Rueda-Cantuche, J.M., 2011. Factors affecting entrepreneurial intention levels: a role for education. *International entrepreneurship and management Journal*, 7(2), pp.195–218.
- Lukács, E., 2005. The Economic Role of SMEs in World Economy, Especially In Europe. *European Integration Studies*, [online] IV(1), pp.3–12. Available at: <<https://www.ceeol.com/search/article-detail?id=110801>> [Accessed 19 May 2019].
- Maes, J., Leroy, H. and Sels, L., 2014. Gender differences in entrepreneurial intentions: A TPB multi-group analysis at factor and indicator level. *European Management Journal*, [online] 32(5), pp.784–794. <https://doi.org/10.1016/j.emj.2014.01.001>.
- Mahendra, A.M., Djatmika, E.T. and Hermawan, A., 2017. The Effect of Entrepreneurship Education on Entrepreneurial Intention Mediated by Motivation and Attitude among Management Students, State University of Malang, Indonesia. *International Education Studies*, [online] 10(9), pp.61–69. Available at: <<https://eric.ed.gov/?id=EJ1153613>> [Accessed 23 Oct. 2021].
- Mahfud, T., Triyono, M.B., Sudira, P. and Mulyani, Y., 2020. The influence of social capital and entrepreneurial attitude orientation on entrepreneurial intentions: the mediating role of psychological capital. *European Research on Management and Business Economics*, [online] 26(1), pp.33–39. <https://doi.org/10.1016/j.iedeen.2019.12.005>.
- Mahola, S., Aderibigbe, J. and Chimucheka, T., 2019. South African University Students' Entrepreneurial Intention as a Correlate of Entrepreneurship Risk Perceptions and Aversion. *JOURNAL OF HUMAN ECOLOGY*, 67. <https://doi.org/10.31901/24566608.2019/67.1-3.3153>.
- Malebana, J., 2014a. Entrepreneurial intentions of South African rural university students: A test of the theory of planned behaviour. *Journal of Economics and Behavioral Studies*, [online] 6(2), pp.130–143. <https://doi.org/10.22610/jeb.v6i2.476>.
- Malebana, M., 2015. Gender differences in entrepreneurial intention in the rural provinces of South Africa. *Journal of Contemporary Management*, 12, pp.615–637.

- Malebana, M.J., 2014b. The Effect of Knowledge of Entrepreneurial Support on Entrepreneurial Intention. *Mediterranean Journal of Social Sciences*, [online] Vol. 5 20 (2014):(5), p.20. Available at: <<http://www.richtmann.org/journal/index.php/mjss/article/view/3831>> [Accessed 27 Feb. 2021].
- Malebana, M.J., 2016. The influencing role of social capital in the formation of entrepreneurial intention. *Southern African Business Review*, 20(1), pp.51–70.
- Malebana, M.J., 2017. Knowledge of entrepreneurial support and entrepreneurial intention in the rural provinces of South Africa. *Development Southern Africa*, [online] 34(1), pp.74–89. <https://doi.org/10.1080/0376835X.2016.1259990>.
- Mamun, A.A., Nawi, N.B.C., Mohiuddin, M., Shamsudin, S.F.F.B. and Fazal, S.A., 2017. Entrepreneurial intention and startup preparation: A study among business students in Malaysia. *Journal of Education for Business*, 92(6), pp.296–314. <https://doi.org/10.1080/08832323.2017.1365682>.
- Manstead, A.S.R., 2011. The benefits of a critical stance: A reflection on past papers on the theories of reasoned action and planned behaviour. *British Journal of Social Psychology*, 50(3), pp.366–373. <https://doi.org/10.1111/j.2044-8309.2011.02043.x>.
- McStay, D., 2008. *An investigation of undergraduate student self-employment intention and the impact of entrepreneurship education and previous entrepreneurial experience*. PhD. Bond University.
- Meoli, A., Fini, R., Sobrero, M. and Wiklund, J., 2020. How entrepreneurial intentions influence entrepreneurial career choices: The moderating influence of social context. *Journal of Business Venturing*, 35(3), p.105982. <https://doi.org/10.1016/j.jbusvent.2019.105982>.
- Minniti, M., 2010. Female Entrepreneurship and Economic Activity. *The European Journal of Development Research*, [online] 22(3), pp.294–312. <https://doi.org/10.1057/ejdr.2010.18>.
- Mok, K.H., 2015. The Quest for Global Competitiveness: Promotion of Innovation and Entrepreneurial Universities in Singapore. *Higher Education Policy*, [online] 28(1), pp.91–106. <https://doi.org/10.1057/hep.2014.30>.
- Mouton, J. and Babbie, E., 2001. The practice of social research. *Cape Town: Wadsworth Publishing Company*, p.674.
- Ncanywa, T., 2019. Entrepreneurship and development agenda: A case of higher education in South Africa. *Journal of Entrepreneurship Education*, 22(1), pp.1–11.
- Ndiaye, N., Abdul Razak, L., Nagayev, R. and Ng, A., 2018. Demystifying small and medium enterprises' (SMEs) performance in emerging and developing economies. *Borsa Istanbul Review*, [online] 18(4), pp.269–281. <https://doi.org/10.1016/j.bir.2018.04.003>.
- Nicolaidis, A., 2011. Entrepreneurship-the role of higher education in South Africa. *Educational Research*, 2(4), pp.1043–1050.
- Nowiński, W. and Haddoud, M.Y., 2019. The role of inspiring role models in enhancing entrepreneurial intention. *Journal of Business Research*, [online] 96, pp.183–193. <https://doi.org/10.1016/j.jbusres.2018.11.005>.

Obschonka, M., Silbereisen, R.K. and Schmitt-Rodermund, E., 2010. Entrepreneurial intention as developmental outcome. *Journal of Vocational Behavior*, [online] 77(1), pp.63–72. <https://doi.org/10.1016/j.jvb.2010.02.008>.

OECD, 2017. *OECD Economic Surveys: South Africa Overview*. OECD Economic Surveys. [online] Paris: OECD. Available at: <https://dx.doi.org/10.1787/eco_surveys-zaf-2017-en>.

OECD, 2020, 2021. *South Africa Economic Snapshot - OECD*. [online] Available at: <<http://www.oecd.org/economy/south-africa-economic-snapshot/>> [Accessed 16 Feb. 2021].

O’Kane, C., Cunningham, J.A., Menter, M. and Walton, S., 2021. The brokering role of technology transfer offices within entrepreneurial ecosystems: an investigation of macro–meso–micro factors. *The Journal of Technology Transfer*, 46(6), pp.1814–1844. <https://doi.org/10.1007/s10961-020-09829-y>.

Okhomina, D., 2010. Entrepreneurial orientation and psychological traits: the moderating influence of supportive environment. *Journal of Behavioral Studies in Business*, 2, pp.1–16.

Oni, O. and Mavuyangwa, V., 2019. Entrepreneurial intentions of students in a historically disadvantaged university in South Africa. *Acta Commercii*, [online] 19(2), pp.1–7. <https://doi.org/10.4102/ac.v19i2.667>.

Packard, M.D., 2017. Where did interpretivism go in the theory of entrepreneurship? *Journal of Business Venturing*, [online] 32(5), pp.536–549. <https://doi.org/10.1016/j.jbusvent.2017.05.004>.

Rana, K.S., Abid, G., Nawaz, M. and Ahmad, M., 2021. The Influence of Social Norms and Entrepreneurship Knowledge On Entrepreneurship Intention: The Mediating Role of Personal Attitude. *International Journal of Entrepreneurship*, [online] 25. Available at: <<https://www.proquest.com/openview/233f3c9cb31ea9d6cfbe081d4692ab96/1?cb1=29727&parentSessionId=ZPVxh%2FWJ7IYFTEXk5wjmtqyt9Y6pLCxRuSMajtJYRZc%3D&pq-origsite=gscholar&accountid=13504>> [Accessed 20 Dec. 2021].

Remeikiene, R., Startiene, G. and Dumciuviene, D., 2013. Explaining Entrepreneurial Intention of University students: The Role of Entrepreneurial Education. In: *Active Citizenship by Knowledge Management & Innovation*. [online] Knowledge, Management & Learning International Conference 2013. Zadar, Croatia. p.9. Available at: <<https://www.toknowpress.net/ISBN/978-961-6914-02-4/papers/ML13-258.pdf>>.

Ribeiro-Soriano, D., 2017. Small business and entrepreneurship: their role in economic and social development. *Entrepreneurship & Regional Development*, [online] 29(1–2), pp.1–3. <https://doi.org/10.1080/08985626.2016.1255438>.

Rogerson, C.M., 2008. Tracking SMME Development in South Africa: Issues of Finance, Training and the Regulatory Environment. *Urban Forum*, [online] 19(1), pp.61–81. <https://doi.org/10.1007/s12132-008-9025-x>.

Romano, M., Del Giudice, M. and Nicotra, M., 2014. Knowledge creation and exploitation in Italian universities: the role of internal policies for patent activity. *Journal of Knowledge Management*, 18(5), pp.952–970. <https://doi.org/10.1108/JKM-06-2014-0253>.

Rudhumbu, N., Sivotwa, D., Munyanyiwa, T. and Mutsau, M., 2016. Attitudes of Students towards Entrepreneurship Education at Two Selected Higher Education Institutions in

Botswana: A Critical Analysis and Reflections. *Journal of Interdisciplinary Studies*, [online] 5(2). Available at: <<http://www.richtmann.org/journal/index.php/ajis/article/view/9269>> [Accessed 1 Mar. 2021].

Ryan, R.M. and Deci, E.L., 2000a. Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. *Contemporary Educational Psychology*, [online] 25(1), pp.54–67. <https://doi.org/10.1006/ceps.1999.1020>.

Ryan, R.M. and Deci, E.L., 2000b. Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), pp.68–78. <https://doi.org/10.1037/0003-066X.55.1.68>.

Sarri, A., Lapsita, S. and Panopoulos, A., 2019. Drivers and barriers of entrepreneurial intentions in times of economic crisis: The gender dimension. *South-Eastern Europe Journal of Economics*, [online] 16(2). Available at: <<https://ojs.lib.uom.gr/index.php/seeje/article/view/9616>> [Accessed 21 Dec. 2021].

SBI, 2018. *The Number of Formal Micro, Small & Medium Businesses In South Africa*. Available at: <<https://www.smallbusinessinstitute.co.za/wp-content/uploads/2018/10/SBIbaselineAlert1final.pdf>>.

Shaibu, O.G. and Mmeremikwu, F.C., 2018. ENTREPRENEURSHIP EDUCATION IN NIGERIA: A PANACEA FOR YOUTH EMPOWERMENT AND EMPLOYMENT GENERATION. *Nigerian Journal of Business Education (NIGJBED)*, 4(2), pp.43–54.

Shapiro, A. and Sokol, L., 1982. *The Social Dimensions of Entrepreneurship*. [SSRN Scholarly Paper] Rochester, NY: Social Science Research Network. Available at: <<https://papers.ssrn.com/abstract=1497759>> [Accessed 28 Feb. 2021].

Smahó, M., 2010. The Role of Knowledge in Regional Development. Theoretical Considerations and the Case of the Austrian-Hungarian Border Region. *WIFO, WIFO Working Papers*.

Stamboulis, Y. and Barlas, A., 2014. Entrepreneurship education impact on student attitudes. *The International Journal of Management Education*, [online] 12(3), pp.365–373. <https://doi.org/10.1016/j.ijme.2014.07.001>.

STATS-SA, 2021a. *Quarterly Labour Force Survey: Quarter 2, 2021*. Quarterly Labour Survey. [Quartely report] Pretoria. Available at: <<http://www.statssa.gov.za/publications/P0211/P02112ndQuarter2021.pdf>> [Accessed 30 Jul. 2021].

STATS-SA, 2021b. *Quarterly Labour Force Survey Quarter 3: 2020*. Quarterly Labour Survey. [online] Pretoria: Statistics South Africa. Available at: <<http://www.statssa.gov.za/?s=Quarterly+labour+force+survey>>.

Stel, A. van, Carree, M. and Thurik, R., 2005. The Effect of Entrepreneurial Activity on National Economic Growth. *Small Business Economics*, [online] 24(3), pp.311–321. <https://doi.org/10.1007/s11187-005-1996-6>.

Wach, K. and Bilan, S., 2021. Public support and administration barriers towards entrepreneurial intentions of students in Poland. *Aministratie si Management Public*, (36), pp.67–80. <https://doi.org/10.24818/amp/2021.36-04>.

Webb, C., 2021. "These aren't the jobs we want": youth unemployment and anti-work politics in Khayelitsha, Cape Town. *Social Dynamics*, [online] 47(3), pp.372–388. <https://doi.org/10.1080/02533952.2021.1906148>.

World Bank, 2021. *Global Economic Prospects: The Global Economy: on Track for Strong but Uneven Growth as COVID-19 Still Weighs*. [online] World Bank. Available at: <<https://www.worldbank.org/en/news/feature/2021/06/08/the-global-economy-on-track-for-strong-but-uneven-growth-as-covid-19-still-weighs>> [Accessed 21 Oct. 2021].

Zafar, A. and Mustafa, S., 2017. *SMEs and Its Role in Economic and Socio-Economic Development of Pakistan*. [SSRN Scholarly Paper] Rochester, NY: Social Science Research Network. Available at: <<https://papers.ssrn.com/abstract=3085425>> [Accessed 14 Feb. 2021].

Zhang, Y., Duysters, G. and Cloudt, M., 2014. The role of entrepreneurship education as a predictor of university students' entrepreneurial intention. *International Entrepreneurship and Management Journal*, 10(3), pp.623–641. <https://doi.org/10.1007/s11365-012-0246-z>.

Zhou, M. and Xu, H., 2012. A Review of Entrepreneurship Education for College Students in China. *Administrative Sciences*, [online] 2(1), pp.82–98. <https://doi.org/10.3390/admsci2010082>.