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of **BUSINESS**
UNIVERSITY OF CAPE TOWN

THE ROLE OF EPISTEMIC CURIOSITY IN THE SELF-DIRECTED LEARNING OF GRADUATES WHO HAVE TRANSITIONED TO THE WORKPLACE AND COMPLETED A STRUCTURED GRADUATE PROGRAMME

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DECLARATION

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I'm proud of myself for getting to this point. My resilience and fierce determination were bigger than my fear and insecurities. I entered the academic space feeling quite insecure and believing that I am not good enough to fit in there, academically. I leave with my head held high knowing that I can take up space everywhere and anywhere. I proved to myself that I can do anything I put my mind to! By completing this MPhil journey, I wrote a new narrative about me, my potential, my capabilities, my playing big journey, and leaning into my inner wise woman. Well done to me.

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DEDICATION

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LIST OF ABBREVIATIONS

ABBREVIATION	DEFINITION
AI	Artificial Intelligence
AU	African Union
CL	Communal Learning
NWU	North-West University
PBL	Problem-based Learning
SAGEA	South African Graduate Employer Association
SDT	Self-Determination Theory
SSDL	Staged Self-Directed Learning
UCT	University of Cape Town
WEF	World Economic Forum

ABSTRACT

This qualitative study explores and focuses on the role of curiosity in cultivating self-directed learning for graduates who have transitioned into the workplace. Young people make a significant transition when moving from the world of studies to the world of work. Their success as full-time employees depends on several factors, including their ability to engage their curiosity, stay motivated, and drive their own learning. This approach to learning requires the learner to be in the driving seat and fully engaged, which contrasts with the more passive learning experienced at school and university, where the learner is a receiver rather than a driver of knowledge and learning. The study assumes that the more engaged the learner, the more value they will derive from the learning experience. As a motivational state, this inner drive begins to build habits for adult learning that set them up well for the future.

The study sample consisted of 20 participants—10 graduates and 10 mentors—as it was important to gather perspectives from both graduates and the mentors who support them. Data was collected through semi-structured interviews, and thematic analysis was used to identify the key themes that emerged. The interviews explored how participants viewed curiosity and self-directed learning, whether and how they engaged with their own learning while in the graduate programme, the role of curiosity in their learning, and the benefits of engaging with their curiosity and learning.

The study's key themes are: inner drive, exploration, ownership, resilience, and community. Findings suggest that curiosity catalyses deeper engagement with learning material, fostering resilience and intrinsic motivation. However, external factors, such as rigid curricula and fear of failure, often stifle this natural inclination. Furthermore, the study suggests that epistemic curiosity drives intrinsic motivation, deeper engagement and ownership of learning, a drive for comprehension and sense-making, and a sense of resilience within their curiosity or exploratory behaviour. Participants also highlighted the challenges of a lack of curiosity, such as feeling unsafe to explore and an intolerant learning environment, which stifled growth. The mentors' role in advocating for the graduates and creating a supportive learning environment was highlighted. Additionally, mentors were found to play a key role in creating the psychological safety required for learning by being vulnerable and sharing their own experiences.

The study concludes by highlighting the importance of creating educational environments that nurture curiosity. It offers insights for educators seeking to design curricula and teaching strategies that promote lifelong learning. These findings contribute to the broader discourse on student-centred learning and emphasise curiosity as a critical yet underutilised component of educational practice within the South African context.

Keywords: epistemic curiosity, intrinsic motivation, self-directed learning, graduates

CHAPTER ONE – INTRODUCTION

1.1 Chapter Overview

This research focuses the role that curiosity plays in the cultivation of self-directed learning for graduates transitioning into the workplace. It explores curiosity and its role in relation to how graduates entering the workplace, while facing new realities both professionally and personally, can survive and thrive while driving their own management and learning. This chapter will briefly state the problem under examination, outline the rationale and significance of this study, define and clarify the concepts that will be used, highlight the research topic, outline the main research questions, objectives, and assumptions, and conclude by providing an overview of the structure of the dissertation.

1.2 Background to the Study

Learner engagement and motivation should start with curiosity. This study takes its departure from the position that any learner can participate in a structured programme. However, for a learner to derive maximum benefit and learning, and have deep engagement and a sense of ownership, they need to be in the driving seat. Therefore, the content must be learner centered and driven (Herranen et al., 2018). A motivated learner who is engaged and driving their own learning can elevate their learning experiences in contrast to a learner who is a participant expending minimum effort with minimal engagement. This contrast is both a challenge and opportunity as, prior to joining a graduate programme, the learner is primarily dependent on the system to provide structure and direction. This structure, in turn, may drive their motivation and also provide parameters for their curiosity, driving them to only ask questions within the set curriculum and not think beyond this.

However, upon entering the workplace, the learner is expected to drive their own learning, requiring that they pivot and use the tools and learning opportunities provided during the graduate programme to maximise and take ownership of their learning experience by engaging their own motivation, inner drive, and exploration. Unfortunately, not many are able to achieve this, but for those who can, they are able to set themselves up to not only get the most out of their learning during the programme but instil an approach/drive to learning to become lifelong self-directed learners, reliant on themselves and willing to push with or without the help of a formal programme.

This pivot is essential for the learner; however, not many formal graduate programmes are able to equip graduates for this pivot. This research recognises this pivot and, through this study, will unpack the idea of self-directed learning and curiosity as motivating factors that, amongst others, predict success and career trajectory.

1.3 Statement of the Problem

The most recently available statistics from the Department of Higher Education and Training, as of the end of 2022, reported the numbers of graduates from public higher institutions to be 225 702 from private higher institutions to be 57 302 (Department of Higher Education and Training, 2022). Although there are no specific statistics on the number of graduates entering the workplace in South Africa, the number of graduates exiting private and public education begins to provide some context of the number of qualified young people potentially entering the world of work at a rapid pace. Graduates entering today's workplace are acutely aware of the rising rates of youth unemployment in South Africa, adding an extra layer of pressure for them to succeed.

These graduates often enter the working environment based on their academic excellence. However, they frequently lack an understanding of the business world and, in most cases, have limited practical application of their acquired knowledge. Therefore, this study seeks to understand the role that self-directed learning, curiosity, and motivation play in determining the success of graduates in the workplace, after participating in graduate programmes. The study explores this tension and aims to begin to demystify curiosity as a detractor to organisational productivity to redefine it as a contributor to ensuring organisations retain their employees (Kashdan et al., 2003).

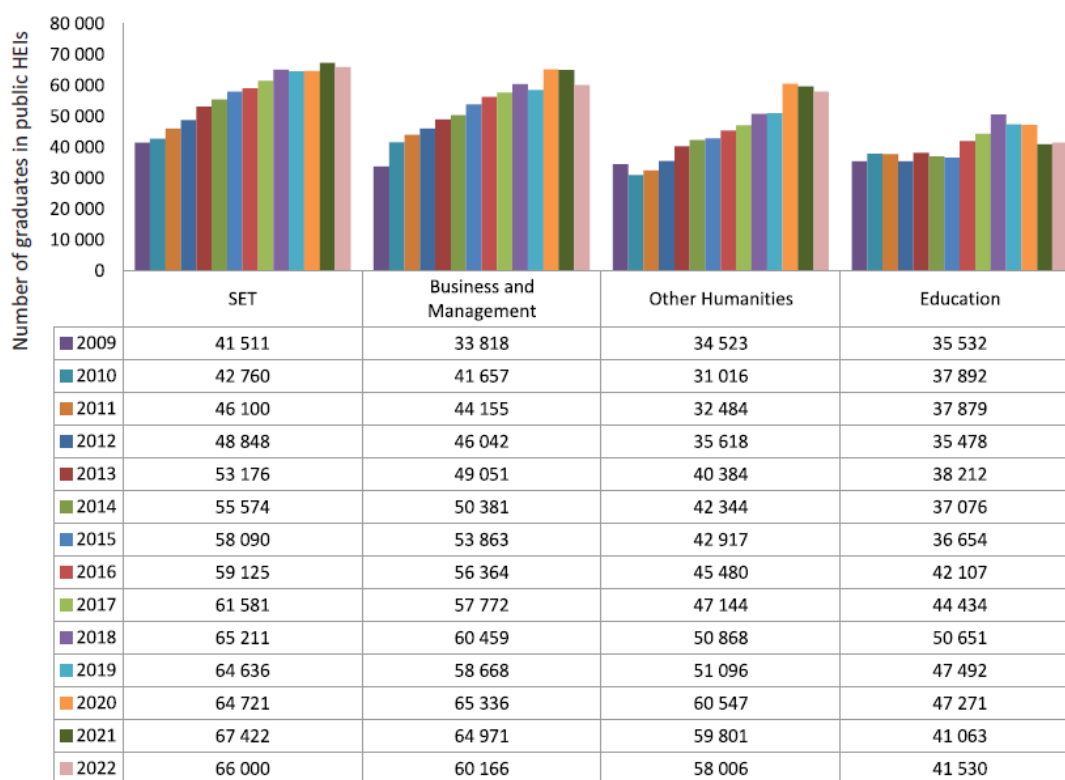


Figure 1. Number of Graduates from Public Higher Education Institutions by Major Field of Study, 2009 – 2022.

Source: Department of Higher Education and Training (2022).

Year	Higher Certificate (120-Credits)	Advanced Certificate (120-Credits)	Diploma (240-Credits)	Diploma (360-Credits)	Advanced Diploma (120-Credits)	Postgraduate Diploma (120-Credits)	Postgraduate Certificate (120-Credits)	Bachelor's Degree (240-Credits)	Bachelor's Degree (360—Credits)	Bachelor's Degree (480-Credits)	Honours Degree (120-Credits)	Master's Degree (180-Credits)	Doctoral Degree (360-Credits)	Total
2018	34 409	3 232	6 441	55 495	2 801	6 498	0	0	66 697	10 937	4 337	6 688	363	197 898
2019	39 881	3 811	5 222	57 046	3 977	8 162	0	0	70 905	8 814	4 529	6 194	437	208 978
2020	39 189	6 579	2 999	47 785	3 678	9 906	0	249	83 715	13 447	4 974	6 097	413	219 031
2021	40 324	3 316	1 568	48 756	4 030	9 191	5 495	569	88 874	18 640	5 513	6 225	414	232 915
2022	44 866	3 439	915	50 715	4 942	10 556	6 980	827	104 423	17 148	6 640	6 175	589	258 215
Percentage contribution for 2022	17.4%	1.3%	0.4%	19.6%	1.9%	4.1%	2.7%	0.3%	40.4%	6.6%	2.6%	2.4%	0.2%	100.0%

Figure 2. Number of Students Enrolled in Public Higher Education Institutions by Qualification Type, 2018-2022.

Source: Department of Higher Education and Training (2022).

1.4 Purpose of the Study

South Africa joins the rest of the world at the cusp of the Fourth Industrial Revolution which brings many exciting opportunities as well as new demands which requires a skills shift for both employers and employees where innovation and disruption are at the heart of the revolution. The World Economic Forum (WEF; 2023) Future of Jobs Report lists active learning and learning strategies as a growing skill for the future. Despite this, a gap remains regarding who would then be responsible to teach these skills, while these very graduates simultaneously attempt to equip themselves for the Fourth Industrial Revolution. Hence, there is additional pressure for graduates to transition into complex systems that are in a constant state of flux (Kang et al., 2009).

The rise of technology and easy access to information has inadvertently stifled curiosity for many, as information is so readily available that not much effort is put into obtaining it. Given this influx of information, creativity and alternate ways of learning are neglected. Curiosity is the springboard to finding out more about the world and sets in action a process of thinking and learning that has value beyond the information that is learnt, which is crucial for graduates transitioning to employment (Hardy et al., 2017). As such, the research seeks to determine the role that curiosity can play in encouraging self-directed learning as a determinant of new graduates' success in the workplace. Furthermore, despite the existence of formal graduate programmes, this does not account for all learning. Beyond formal learning programmes, there is an expectation for graduates to initiate, manage, and drive their own learning. Further, continuing their own learning is largely determined by their level of curiosity or what is referred to as their "curiosity trajectory."

Successful graduates are those who can take what has been prepared for them and build on it to drive their own learning. Curiosity, therefore, becomes a tool for learning and creates an awareness, drive, and motivation to learn. As part of their plan to learn, graduates must think about how to activate and engage their curiosity as an enabler of learning. In addition, there is an element of unlearning that must take place. Up to this point, the learner has adopted an approach to learning fit for, and fostered by, the schooling system. Within the schooling system, the learner is fairly dependent on the teacher and follows this direction, with minimal opportunity for self-direction. Upon entering the workplace, graduates must develop a different learning strategy – one that places them in the driving seat and leverages supportive resources, e.g., line manager, mentor, etc.

Therefore, a further purpose of the research is understanding self-directed learning in greater detail. This is not simply a set of skills to learn and adopt but a culture that can be further enhanced to assist organisations in building a learning culture. In a world of ongoing change, uncertainty, and ambiguity, having employees who can drive their own learning is key.

1.5 Significance of the Study

The information gap theory posits that curiosity emerges when an individual's attention is drawn to a gap in their knowledge. These information gaps create a sense of deprivation, which is identified as curiosity. Consequently, the curious individual is driven to acquire the missing information to alleviate or eliminate this sense of deprivation (Loewenstein, 1994).

Although curiosity is a natural trait in all human beings, the degree, intensity, scope, and frequency of being curious can vary between individuals, and possibly also within groups (Silvia & Kashdan, 2009). These differences may stem from genetic and environmental factors, as well as other influences. Hence the reason for this research as it seeks to understand graduates during the transition phase i.e., the first phase of formal employment, beyond a formal structured programme, and the role curiosity plays in the learning process.

Furthermore, the research seeks to understand self-directed learning in more detail and the role of curiosity in the fundamental paradigm shift for these graduates in entering the world of work. This is as, prior to being a graduate in the working world, the point of reference for learning would have been one where another person is driving the learning and providing much of the guidance and structure for how this happens.

Despite the negative perceptions surrounding curiosity in the early 1950s, the concept has since gained traction and is now regarded as a fundamental driver of education and learning. Additionally, curiosity is recognised for its role in enhancing decision-making by reducing susceptibility to stereotypes and confirmation bias. It also fosters employee engagement and collaboration, and strengthens organisational resilience by encouraging creative problem-solving in the face of uncertainty and pressure. (Ignatius, 2018).

Furthermore, the WEF's Future of Jobs Report (2023) listed curiosity not only as a top skill on the rise, but as a business priority for 2027 (Refer to Figures 1-3 below). Furthermore, the Harvard Business Review rolled out a feature around curiosity with various thought leaders contributing and writing pieces on why curiosity is important and how it should be developed and nurtured. This is to encourage business leaders to hire for curiosity, model inquisitiveness, and emphasise learning goals while also letting workers broaden their interests to assist organisations in adapting to uncertain market conditions and external pressure while boosting business success (Dweck, 2016; Ignatius, 2018)

This research presents curiosity as an alternate model, proposing that graduate programmes and other employee development programmes should nurture and encourage curiosity as a way of ensuring that organisations remain future fit. This is crucial because hiring for curiosity exemplifies inquisitiveness and, by fostering it at all levels, enables leaders and their employees to adapt to uncertain market conditions and external pressures. In today's innovation-driven world, curiosity is particularly important as it helps employees engage more deeply in their work, generate new ideas, and share these ideas with other (Dweck, 2016; Ignatius, 2018). Therefore, this study will not only argue for workplaces to foster and nurture curiosity but will also contribute to the body of research on curiosity specific to the African and Southern African context, a space that is under researched and under explored.

Top 10 skills of 2023



1. Analytical thinking	6. Technological literacy
2. Creative thinking	7. Dependability and attention to detail
3. Resilience, flexibility and agility	8. Empathy and active listening
4. Motivation and self-awareness	9. Leadership and social influence
5. Curiosity and lifelong learning	10. Quality control

Type of skill

Cognitive skills
 Self-efficacy
 Management skills
 Technology skills
 Working with others

Source
World Economic Forum, Future of Jobs Report 2023.

Note
The skills judged to be of greatest importance to workers at the time of the survey

Figure 3. World Economic Forum's Top 10 Skills of 2023.

Top 10 skills on the rise



1. Creative thinking	6. Systems thinking
2. Analytical thinking	7. AI and big data
3. Technological literacy	8. Motivation and self-awareness
4. Curiosity and lifelong learning	9. Talent management
5. Resilience, flexibility and agility	10. Service orientation and customer service

Type of skill

Cognitive skills
 Self-efficacy
 Management skills
 Technology skills
 Working with others
 Engagement skills

Source
World Economic Forum, Future of Jobs Report 2023.

Note
The skills judged to be increasing in importance most rapidly between 2023 and 2027

Figure 4. World Economic Forum's Top 10 Skills on the Rise.

Businesses' top 10 skill priorities for 2027



- | | |
|---|-------------------------------------|
| 1. Analytical thinking | 6. Curiosity and lifelong learning |
| 2. Creative thinking | 7. Technological literacy |
| 3. AI and big data | 8. Design and user experience |
| 4. Leadership and social influence | 9. Motivation and self-awareness |
| 5. Resilience, flexibility and agility | 10. Empathy and active listening |

Type of skill

■ Cognitive skills
 ■ Self-efficacy
 ■ Technology skills
 ■ Working with others

Source
 World Economic Forum, Future of Jobs Report 2023.

Note
 The skills which organizations will prioritize in workforce development initiatives from 2023 to 2027

Figure 5. World Economic Forum's Business' Top 10 Skill Priorities for 2027.

The WEF Future of Jobs Report (2023) predicted that 44% of worker's core skills are expected to change in the next five years. This statistic, married with the stark reality of an unpredictable workforce and volatile economies across the world, will require all employees in the workforce to constantly learn and upskill themselves to remain relevant.

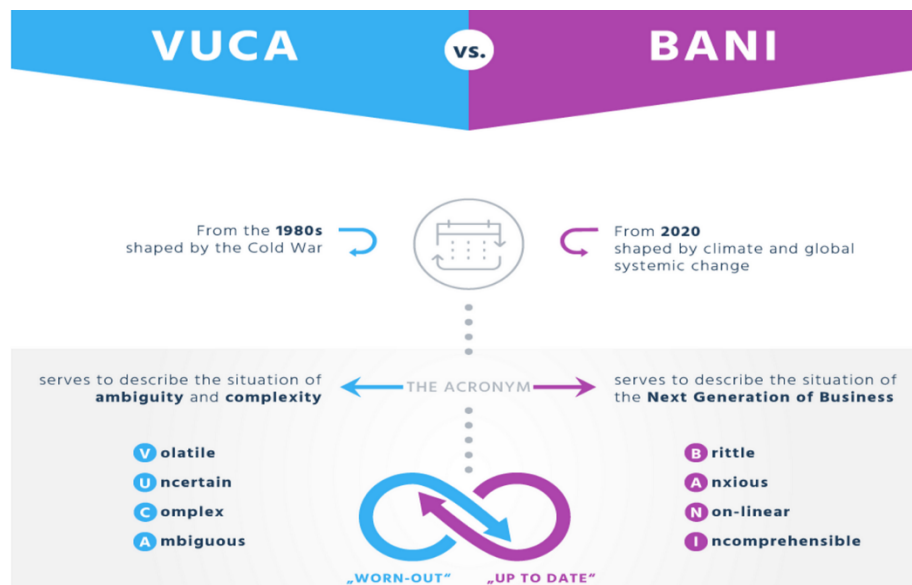


Figure 6. VUCA versus BANI by Stephan Grabmeier.

1.6 Inspiration for the Study

Curiosity has saved me. As a child, I loved being curious. I can remember being curious about acting and creativity. Growing up in an under-resourced area on the Cape Flats, curiosity allowed me to imagine scenarios as I read books. Both of my parents didn't finish high school when they were younger. This is relevant because, in my household, I am the first generation to make it to tertiary level, despite the fact that I was not academically strong in high school. The one thing I do have is a fiery determination. Like so many other people, I too had a teacher who didn't believe I would even qualify for university admission. But I did. I learnt very early in life that you have to drive yourself. Beyond that, I quickly became familiar with being a pioneer, pushing into unknown territory, and figuring things out as you go. Not having a blueprint was my normal. Being in the terrain of unfamiliarity was my everyday experience. It scared me, but it was also a wonderful exhilaration, and what drove me and inspired me to keep exploring, learning, and unlearning.

1.7 Research Question and Objectives

The primary research question was:

What is the role of epistemic curiosity in the self-directed learning of graduates transitioning into the world of work?

The sub-questions were determined as:

- How does curiosity play a role in the development of graduates?
- How does curiosity assist with the development of self-directed learning?
- What role does curiosity plays (if any) around learning and learner engagement? and
- How does curiosity play a part in one's ability to drive their own learning and development.

The research objectives were in line with the research topic, and sought to:

- explore why curiosity as a trait should be developed in graduates;
- understand how curiosity enables self-directed learning to take place as a key behaviour that graduates must adopt to make sense of the corporate landscape;
- explore the way in which curiosity enables rich learning experiences to produce engaged learners able to drive their own learning and development; and

- understand the perspective of the mentor who directs and plays a supportive role for graduates for self-directed learning.

1.8 African Union (AU) Agenda 2063

Agenda 2063 envisions an "Africa whose development is people-driven, relying on the potential of African people, especially its youth" (African Union Commission, 2015). This study aligns with this vision by emphasising how epistemic curiosity fuels self-directed learning, preparing graduates to:

- seek knowledge and skills relevant to Africa's development;
- engage in problem-solving, innovation, and critical thinking which are essential to Africa's transformation; and
- take ownership of their learning by reducing dependence on traditional, rigid educational structures.

By fostering curiosity and self-directed learning through intrinsic motivation, graduates become active agents in their personal and professional growth, contributing to Africa's broader development goals.

1.8.1 Linking African Union (AU) Agenda 2063 and this Study

Each of the themes in this study (i.e., inner drive, interest and exploration, engagement, ownership, resilience, and community) supports AU's Agenda 2063 by fostering graduates who are proactive, motivated, innovative, and lifelong learners.

Table 1. African Union Agenda 2063 Goals vs. the Present Study's Themes.

AU AGENDA 2063 GOALS	THIS STUDY
Goal 1: A high standard of living, quality of life, and well-being for all.	Curiosity and self-directed learning equip graduates with skills to adapt to the changing job market, enhancing employability and well-being.
Goal 2: Well-educated citizens and a skills revolution underpinned by science, technology, and innovation.	Graduates with epistemic curiosity are more likely to engage in continuous learning and upskilling, fostering a culture of lifelong learning and innovation.
Goal 5: An Africa with a strong cultural identity, common heritage, shared values, and ethics.	Curiosity-driven learners explore diverse perspectives, strengthening cultural identity and fostering critical dialogue on African knowledge systems.
Goal 7: An Africa as a strong, united, and influential global player.	Self-directed learners develop resilience and adaptability, enabling them to contribute to Africa's global competitiveness.

1.8.2 Curiosity-Driven Learning for Innovation and Economic Development

The AU Agenda 2063 prioritises inclusive innovation and entrepreneurship as key drivers of economic growth. Curiosity fuels innovation by encouraging graduates to:

- ask deeper questions, explore solutions, and challenge existing norms—essential for Africa's development;
- engage in self-directed problem-solving, a critical skill in sectors such as technology, renewable energy, and digital transformation; and
- develop resilience in navigating economic and technological shifts, ensuring Africa's graduates remain competitive in global markets.

For example, programmes such as the Tony Elumelu Foundation's entrepreneurship initiatives have shown that self-directed, curiosity-driven learning can lead to job creation and inclusive economic growth.

1.8.3 Community and Shared Learning: Building an African Knowledge Economy

The AU Agenda 2063 emphasises the importance of collaborative learning and indigenous knowledge systems. This study's "community" theme aligns with this by highlighting the role of:

- peer-learning networks that promote shared knowledge and skills;
- mentorship and social learning in fostering innovation and resilience; and
- culturally relevant education models that integrate African ways of knowing.

By nurturing curious, self-directed learners, Africa can develop a strong knowledge economy, reducing reliance on foreign expertise and fostering homegrown solutions.

1.8.4 This Study as a Micro-Level Contribution to the African Union Agenda 2063

Africa is projected to have significant growth over the next 10 years, should it have all the necessary components in place. We are expected to be the second fastest growing continent behind Asia. This research study contributes to the AU Agenda 2063's vision by demonstrating how curiosity-driven motivation and self-directed learning prepares graduates to be agents of Africa's transformation. By fostering lifelong learning, innovation, and community-driven knowledge-sharing, this study supports Africa's goal of a skills revolution that drives inclusive development.

1.9 The Link to Inclusive Innovation

In a personal reflection, as someone who is deeply connected to this country and continent, I love immersing myself in conversations and thought leadership on how Africa can fully actualise herself as a continent. This is incredibly important as we are a resource-rich continent, dealing with abject poverty and, despite this, trying to stand on our own post colonialism and other oppressive systems. Through my youth development/skills development work, I see myself and my business at the forefront of this challenge. I truly hope I live to see the day when we can start to become the leader we are destined to be.

This awakening for my commitment to my own continent above all other, has always been there, but the MPhil has really given me the opportunity to think about this more seriously, through this research.

My work experience that has taken me to different parts of our continent has left me wanting to achieve more here at home (Africa) and to be part of the movement that prioritises the decolonisation agenda and starting our own thought leadership. Throughout this study, I grappled with this dilemma.

Now, I am clear that I know the following – it is tempting to talk about innovation as this significant technological drive that will happen TO us. However, the MPhil has shown me that for that big innovation to happen outside, the first innovation that needs to happen, is for the individual to awaken to their truest and highest potential. A system can only innovate when the players in the system are ready, skilled, and energised to move forward with a vision. In the present study, the actors are the young professionals and the people who support them.

We must guard against thinking innovation is a big “thing” that will happen to us and come to save us. The most powerful innovation is the one that happens inside the individual. It’s the child born into poverty that makes a mental shift to develop themselves and succeed against all odds, it’s me – the person who was told that I shouldn’t bother applying to university as I won’t be able to cope, who then went on to graduate from the University of Cape Town (UCT) and build a professional career and successfully run an independent consultancy business for the last 10 years. I might not fit the world’s definition of clever but I’m incredibly resourceful and I fight for what I want.

I live for personal innovation. I live for the moment when someone gets it in the learning environment, that aha moment, the “I get it” moment. Those small yet significant moments of innovation are what I’m privy to in my daily engagements as a facilitator and mentor. Nothing beats that. Nothing is more powerful than watching someone transform their life because they had an aha moment – one where they solved a problem or one where they believed in themselves and then went on to achieve great things.

I struggled at school and one of the reasons teachers wrote me off was because I couldn’t learn within the rigid structures of an all-girls school with very strict rules. These rules provided no flexibility and, at the time, learners who thought differently were too often written off as “problematic,” rule breakers etc. My report card often said I was too talkative.

Back then, we were not aware of neurodiversity. Now I know that my constant talking, easy distraction, need to move around a lot, and daydreaming places me somewhere on the spectrum. Eighteen months after graduating from university, I landed my first trainee job in my field. I started working for a consultancy who specialising in adult learning. This was so much more than a job for me. I walked into a world where consultants understood the nuances and complexities of adult learning. A lifetime of relief washed over me as I became more exposed to the world of adult learning and specifically the research by Professor Syliva Downs. For the first time I understood that I wasn't a difficult or slow learner. I realised that I was placed in a learning system that was only designed to bring out the best in a certain type of learner. This learner was one who enjoyed memorisation, was good at rote learning, didn't focus on too much process questions, enjoyed the obedience culture, enjoyed operating within very set boundaries, and enjoyed didactic and transition-based learning. This is when my awakening happening. It was one of my biggest life aha moments! Thereafter, my experience as an adult learner soared. It is a big part of what drives me in my capacity as an adult learning facilitator. That was my personal innovation and I've never looked back. I don't consider myself to be the benchmark in this regard but imagine if every adult tapped into their inner potential. Imagine if every learner fully realised their inner potential and drive. Imagine if every learner understood what motivated them. Imagine if every learner reconnected with their innate curiosity and drove their learning with great excitement, belief, and passion. To me, that's the most powerful innovation.

1.10 Plan of Development

This research is aimed at providing the reader with an understanding of the role of epistemic curiosity and the ways in which it pushes graduates to drive their own learning as part of their professional development and success. The present chapter has unpacked the background under which this research was carried out, delved into the complexity of challenges in the South African context, and determined the importance of the study in the wake of the Fourth Industrial Revolution. The researcher also outlined the research questions, objectives, scope, and the significance of the study.

Following, Chapter Two provides a comprehensive review of existing literature, research, and theoretical frameworks related to this study. It explores key concepts, previous findings, and gaps in the literature that justifies this research. The chapter establishes a foundation for this study by synthesising relevant sources and identifying how this research contributes to the field. Thereafter, Chapter Three outlines the research design, approach, and methods used to conduct the study. It details the data collection techniques, sample selection, research instruments, and analytical methods. It also discusses ethical considerations, limitations, and the rationale behind the chosen methodology.

Chapter Four then presents the results of the study, using tables, figures, and qualitative analysis. This chapter objectively reports the themes identified in the data, without interpretation. The chapter concludes with a summary of how the themes connect back to the research objectives. Subsequently, Chapter Five presents an interpretation of the findings in relation to the research questions and existing literature. It explains the significance of the results, compares them to previous studies, and explores theoretical and practical implications. Limitations of the study and suggestions for future research are also discussed. Finally, Chapter Six presents the conclusions and makes recommendations for future research. The intended praxis model for implementation beyond the MPhil is also presented.

1.11 Poems

Three poems have been included in this dissertation on the premise that this is an interpretivist study. The inclusion of the poems stems from the fact that I am as much a part of the research as I am the researcher. The poems are included on page 16 (Joyful Dance), page 103 (Fluid Classroom) and page 130 (Yellow Petals) and have been clearly marked with a page border. The poems are an expression and representation of key insights formed on this journey and is a snapshot into how my own thinking deepened the more I immersed myself in this research. To me, poetry is the ultimate expression of love, which is what this research has become to me.

JOYFUL DANCE – CELESTE STEWART

A droplet, she lands
An ignition, a spark
She dances with my neurons, inviting synapses
Exciting the axons
The anticipation is great
However, despite firing, they're not quite sure where they will land
Enter anxiety, stress, worry
Enter incomplete
Enter ambiguity
Enter uncertainty
The battles ensue
Who will win

Actually, I win, whatever the outcome
The win is the journey, the searching,
The win is the yearning, the pondering
The win is the confusion and perplexion
Because only through that, do I get the clarity I so long for

The win is the journey
That is the true prize

My joyful dance with curiosity

CHAPTER TWO – LITERATURE REVIEW

“Curiosity is one of the most permanent and certain characteristics of a vigorous intellect” -

Samuel Johnson

2.1 Introduction and Overview

The purpose of this chapter is to provide an overview of the relevant literature related to this research. This is to ensure that a full understanding of the relevant literature related to this study is demonstrated. Additionally, the literature review aims to highlight gaps in the existing literature which presents an opportunity for this study. The research question highlights three main constructs of motivation, curiosity, and learning. We will therefore commence with review of literature pertaining to motivational theory relevant to this study. This will be followed by a review of the literature regarding curiosity as well as self-directed learning. The chapter will conclude by summarising the gaps in this literature and how this study positions itself in relation to these gaps.

The literature review commences by exploring the relevant motivational theories and how these theories pertain to this particular context. The main driver for this is due to the fact that the study explores curiosity and self-directed learning from a motivational perspective. Thereafter, the chapter explores the relevant literature on curiosity and epistemic curiosity. Finally, the review explores relevant literature on self-directed learning. While conducting the literature review and locating relevant research, a particular emphasis was placed on finding research conducted in South Africa and on the African continent. This is because the purpose of the MPhil is inclusive innovation on the African continent.

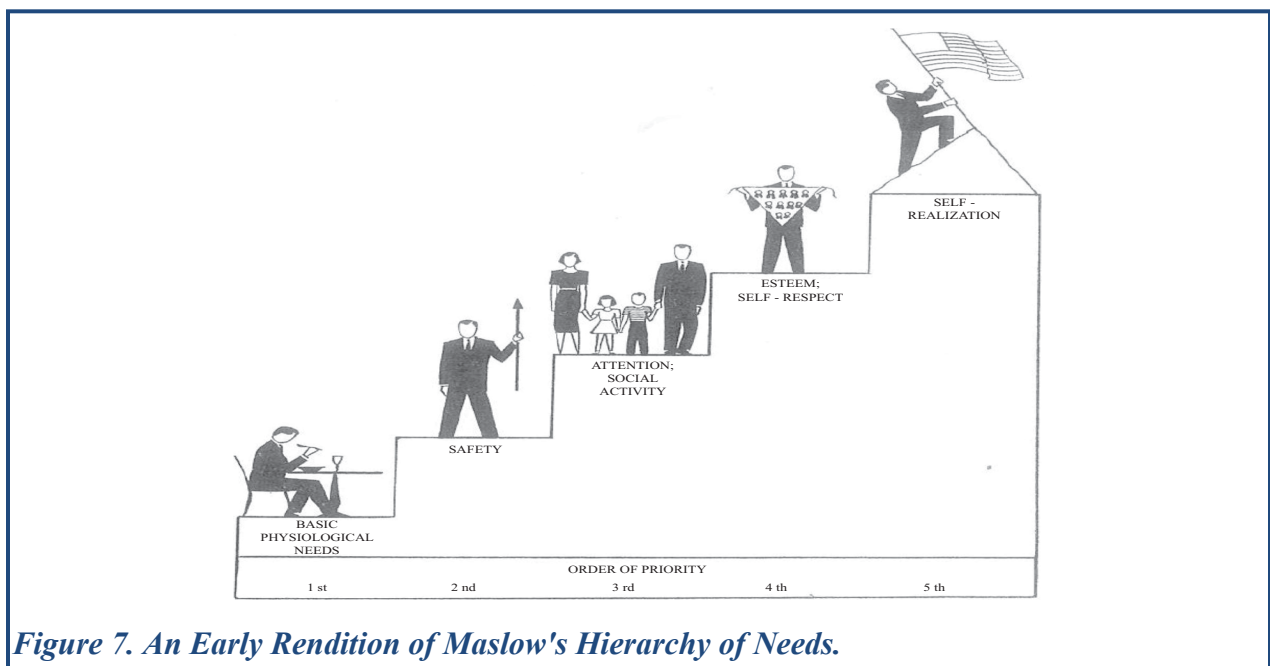
2.2 Motivation

The context for this study is embedded in motivation. The relevant motivational theories narrowed down for this specific study were Maslow’s hierarchy of needs and Self-determination theory (SDT). Both Maslow’s hierarchy of needs and SDT highlights the role of curiosity and self-direction within the respective frameworks.

Bhat and Dahal (2023) emphasised that becoming motivated is the starting point of learning, noting that “a student who can cultivate a habit of self-directed learning due to internal motivation will set themselves on an upward trajectory of personal and professional growth” (Bhat & Dahal, 2023, p. 106).

2.2.1 Maslow Hierarchy of Needs

If curiosity is to be viewed as an enabler, motivator, and driver of learning, it is important to understand theories of motivation as a point of departure. Maslow’s (1943) seminal work sheds light on the different types of needs of individuals and can shed light on what motivates people. Maslow’s (1943) theory of motivation culminated into a five-tier model of human needs, famously known as the hierarchy of needs. The five-tier model starts with physiological needs as the lower order need and culminates in self-actualisation needs. The physiological needs focus on our basic needs as humans and self-actualisation is about us reaching our full potential. Each of these five bands of needs have a unique focus (Bridgman et al., 2019).



Maslow’s five-tier hierarchy of needs is divided into two sections; deficiency needs and growth needs. In the first iteration of his work, growth needs were self-actualisation needs, which is the highest level of needs (Maslow, 1943).

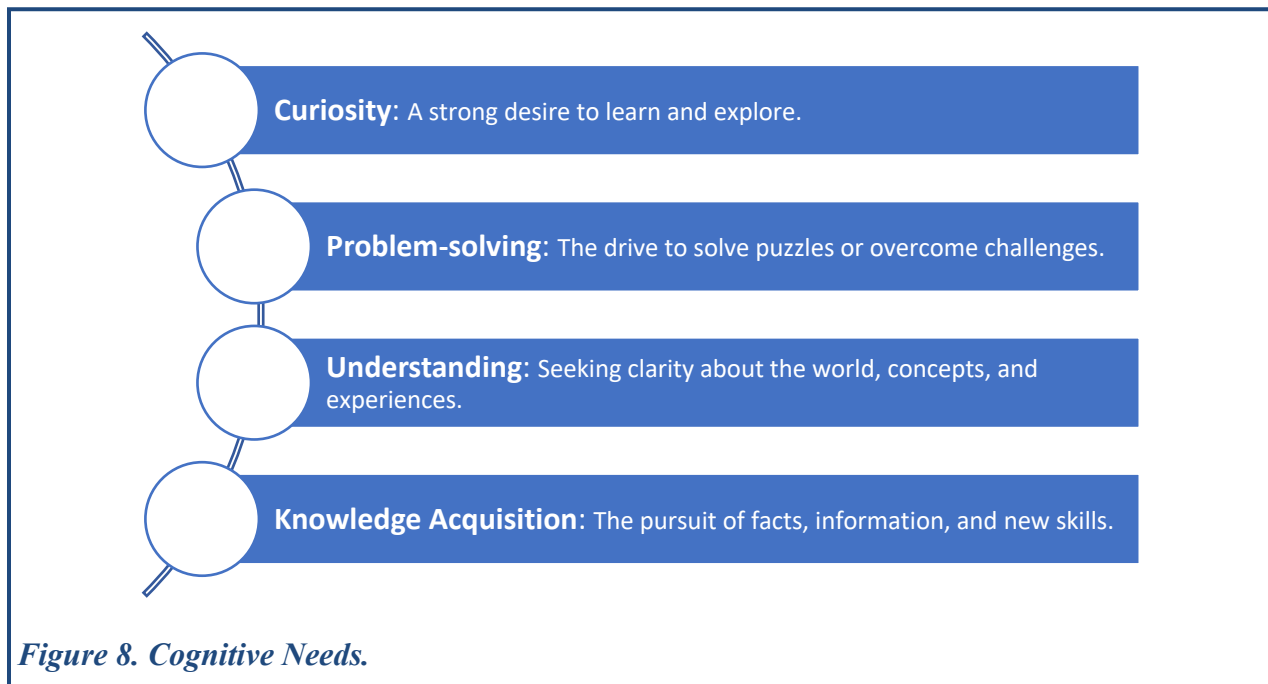
In the second iteration, extended levels were added with a specific focus on cognitive needs. Maslow's work can often be misinterpreted as linear, whereas Maslow himself posited that needs can exist on multiple levels at the same time. Maslow's hierarchy of needs also connects to deprivation theory in that when there is a gap in one of the levels, the individual's attention and drive will automatically shift to filling this gap/need. This is true even when the individual has reached/fulfilled the self-actualisation level. Intrinsic motivation, as defined by Deci and Ryan (1985) "refers to doing an activity for the inherent satisfaction of the activity itself" (p. 71). Intrinsic motivation refers to the innate drive to engage in an activity for the pure enjoyment and fulfilment it brings.

The starting point for Maslow's theory is physiological needs. Physiological needs include water, sleep, warmth, rest, and food. These are the basic, fundamental needs we have as human beings which affects our ability to survive and function. The second level of needs is safety needs, and includes stability, security, and protection. The third level of needs is love and belonging needs, where social needs become a priority. The fourth level is self-esteem needs, related to reward and recognition. This level can be divided into two categories: self-esteem needs that includes confidence, independence, and achievement, and respect from others that involves status, recognition, and admiration. The fifth level is self-actualisation and is the highest order of needs to be fulfilled in reaching your highest potential. Here, the focus is on pursuing meaning and pursuing meaningful goals. This level may vary across individuals as it concerns what is important to that specific individual. It is also at this level that intrinsic motivation is strongest (Maslow, 1943).

2.2.1.1 Maslow's Expanded Work

Maslow's initial framework was later updated to include two additional levels, creating a seven-stage model. The additional levels include cognitive needs (added above esteem needs) and aesthetic needs (added above cognitive needs). Cognitive needs include the desire to know, understand, and explore. These involve the desire for knowledge, understanding, and intellectual growth. It reflects humans' intrinsic motivation for learning, exploring, and expanding their mental capabilities. Aesthetic needs include the desire for beauty, balance, form, and order. Humans are naturally drawn to the appreciation of beauty in art, nature, or their surroundings.

Maslow's extended work highlights that cognitive needs are key to personal growth and self-actualisation. In addition, the research highlights that cognitive needs are about acquiring knowledge and making sense of the world. These needs include curiosity, problem-solving, understanding and knowledge acquisition.



These needs are essential for personal development and often become prominent after basic needs (such as safety and belonging) are met. However, for some, cognitive needs can emerge early, as they feel intrinsically motivated to learn. Curiosity encapsulates a strong desire to learn and explore. People are motivated to ask questions to understand how and why things work, explore new environments, make sense of novelty, and discover as part of their learning. Problem solving includes the human drive to apply this acquired knowledge to solve problems, overcome obstacles, evolve, and continuously improve. With overcoming obstacles is the opportunity or drive for innovative solutions, creativity, and critical thinking. Understanding is the drive to make sense of complex information, grappling with abstract concepts, understanding views, analysing information, and reasoning.

Knowledge acquisition is the drive for ongoing lifelong learning. Here the drive is to continue acquiring knowledge and information to build an even deeper understanding and continuously solve problems. The individual understands that self-improvement is a lifelong journey that never ends.

Maslow's work in the later years of his life emphasised the need for self-transcendence as an even higher stage that extends beyond self-actualisation. He argued that once individuals have fulfilled their potential (self-actualisation), they may be motivated to connect to something beyond themselves. This may include helping others achieve their potential, contributing to society, or experiencing spiritual growth. Transcendence focuses on altruism (i.e., selfless concern about the well-being of others), community service, and experiences beyond the individual's self-interest for the greater good (Koltko-Rivera, 2006).

2.2.1.2 Critical Review of Maslow Theory and Relevance to this Study

This study focuses on curiosity and learning through the lens of motivation. It draws on the seminal work of Maslow who explained motivation in general but also specifically to curiosity and learning. Maslow's (1943) traditional five-stage model, as well as the later extended work, highlights the role of curiosity and learning within the various needs of human beings. In addition, Maslow's extended work highlights exploring, making sense of new information, internalising new information, and the ongoing commitment to learning. This highlights the significance of viewing curiosity, learning, and motivation in totality. It is important to highlight that curiosity and learning can happen at the most basic level of this hierarchy. Even in a quest to resolve needs at the most fundamental level of this framework, we are activating our curiosity, problem solving, and learning. Therefore, one can put forward an argument that cognitive needs apply at every level of the framework.

A potential limitation of Maslow's framework is that learning is considered in a universal manner, whereas cultural and individual differences and personality can impact how people learn and how driven they are to learn. The way in which they approach the learning, especially if it is a communal activity and social learning is at play, will impact how those needs are met. These cultural nuances and its impact on the cognitive drive is not sufficiently explained by the framework.

However, it is explained in other theories of learning such as SDT (Muller & Louw, 2004). In this study, even though the questions are focused on the graduates' journey, not the communal one, it was hypothesised that the learning experience and appetite for curiosity is shaped by relationships, one of which could be the mentor. In this study, therefore, the view of the mentor is explored with regards to curiosity, motivation, and learning. Maslow's updated hierarchy has listed cognitive needs as a higher order need. Embedded within the cognitive needs is curiosity. These needs include everything from exploratory behaviour to solving problems – making sense of information around us. Beyond taking in new information and novelty, this level also highlights the skills required to make sense of information, emphasising the importance of sense-making.

The relevance of Maslow's theory, particularly the extended levels of motivation, are significant for this study. Maslow's research shows that humans are driven by curiosity, exploratory behaviour, and learning. Following Maslow's lead, we can posit that as human beings move through the various levels and move towards self-transcendence, engaging with curiosity and learning are par for the course. Beyond the levels where curiosity is mentioned overtly, curiosity and learning may also arise on other levels. Therefore, it doesn't have a single place in the theory, and curiosity can inherently be found in every need. It is important to note that when there are gaps in some of the lower order needs, this may impact the individual's ability to focus on the higher order needs. From this, a graduate lacking job security or accommodation may focus on these particular levels and, in doing so, not be able to allocate mental resources to the higher order needs.

This study sought to explore the role of epistemic curiosity in the self-directed learning of graduates. Graduates entering the workplace are propelled into a space where they need to internalise and process vast amounts of new information. Their success depends on their ability to manage their learning both during the programme and beyond. Beyond a structured programme, they are expected to have built the discipline to be self-motivated, even though many of the support structures or learning scaffolding is removed. Systems within the organisation are always available, such as talent and performance management etc. However, the most successful people are those who activate their inner drive for growth and success. Relying on external motivators and drivers is risky and limiting to the individual.

However, if that individual can motivate themselves internally, they begin to develop a blueprint for learning and continued growth that sets them up for success and lifelong learning. Motivation is a habit that is built and compounded over time and with repetition (Csikszentmihalyi, 1990).

Maslow's hierarchy of needs offers significant and rich insights into the fundamental human motivations that influence learner behaviour. Being aware of and understanding these insights equips facilitators, mentors, line managers, and the learners themselves to refine and adapt their learning strategies and cultivate a supportive and effective learning environment (Maslow, 1943). Having this framework in mind can assist talent professionals in organisations to build a culture and sustainable habits of learning and growth.

2.2.2 Self-Determination Theory

The second motivational theory to be explored for this study is SDT, that builds on and expands on the work of Maslow as a theory of motivation. What differentiates Deci and Ryan's (1985) work is a focus on intrinsic motivation and the argument that extrinsic motivation, in small doses and in the short term, can build intrinsic motivation in the individual. Motivation theory explores what drives us as human beings. This is an area that has long been studied by behavioural psychologists. The question – why we do what we do – often sits at the heart of understanding drive and motivation in human beings. This question led to the development of SDT as a framework that explains human behaviour from a motivational perspective. Ultimately, SDT looks to explain how individuals can articulate and pursue goals that lead to optimal development, wellbeing, and be anchored in a sense of belonging. The theory posits that humans have two types of motivation: internal and external. The authors argue that both internal and external motivation are integral to who we are and what drives us as human beings (Deci & Ryan, 1985).

Self-determination theory distinguishes between autonomous motivation and controlled motivation. Autonomous motivation refers to actions taken when individuals experience a complete sense of willingness, volition, and choice. The internal drive in this context is directed towards fulfilment, enjoyment, and personal growth.

Performance, wellness, and engagement increases when individuals are autonomously motivated. In contrast, controlled motivation is what individuals do when they are driven by obtaining an external reward or are avoiding punishment. Controlled motivation is when individuals feel pressured, demanded, and obliged to do something.

The theory posits that all human beings have a set of basic psychological, inherent needs (also referred to as psychological nutrients) which are competence, relatedness, and autonomy. Competence is the need to feel confident and effective in relation to what you're doing. Competence is our ability to control our outcomes through knowledge and skills. Relatedness is the need to feel cared for by others, care for others, and feel as though you belong in various groups that are important to you. This is our connection to others and the security this connection brings. Autonomy is the need, drive, and ability to make our own choices and decisions (Deci & Ryan, 1985). The theory posits that when one or all of these are compromised, we feel a sense of demotivation. All of these needs must be met if we are to operate effectively. As soon as one of these needs are compromised, we feel a sense of demotivation. When people feel competent, cared for, and autonomous, they will feel motivated. Not having these needs satisfied will have negative psychological consequences

Deci and Ryan's (1985) research found that autonomous motivation can be further broken down into two types of motivation – intrinsic and extrinsic. Intrinsic motivation occurs when individuals engage in an activity because they find it inherently interesting and enjoyable. In contrast, extrinsic motivation arises when individuals perform an activity to achieve a specific outcome or consequence (Deci & Ryan, 1985). Their research into extrinsic motivation and whether it could be autonomous highlighted that individuals can internalise extrinsic motivation and begin to own it. Therefore, extrinsic motivation may start off where the focus is on achieving an external reward or consequence. However, as learners start to see the value in their learning and integrate into their daily existence, they can become autonomously motivated and positively influence the outcomes they are working towards (Deci & Ryan, 1985).

Table 2. Self-Determination Theory Application to the Present Study.

NEEDS	DESCRIPTION	APPLICATION TO THIS RESEARCH STUDY
COMPETENCE	To feel confident and effective in relation to what you're doing. Competence is our ability to control our outcomes through knowledge and skills.	Can they see that they are being effective and that their work leads to tangible results?
RELATEDNESS	To feel cared for by others and care for others, feel like you belong in various groups that are important to you. this is our connection to other people and the security this connection brings. This is feeling like you are cared for.	Do they have a sense of community when joining the organisation and thereafter?
AUTONOMY	Ability to make our own choices and decisions. Autonomy is about feeling like you're in control of your destiny.	How can graduates be given the space to make their own choices and decisions?

Source: (Deci & Ryan, 1985).

2.2.2.1 Relevance to this Study

Self-determination theory provides useful insights to this study in that it provides a framework and guidelines to drive intrinsic motivation and understand how certain extrinsic motivation conditions can eventually be internalised by the learner as their own. Graduates who join a structured graduate development programme do so as a way of transitioning into an organisation and upskilling themselves with the necessary attributes to be successful in a particular role. However, graduate programmes are finite and at a certain point the learner (graduate) has to exit the programme but continue their learning. Their motivation and skill to do so is vital, as their success will depend on their ability to continuously learn, which requires that they develop inner motivation. Moreover, some graduates may find that the environment they are placed in may not be conducive to learning. In this case, the graduate's ability to drive themselves by setting goals, building a community, and mastering skills will shape them as successful professionals who can carve their success regardless of whether their environment supports them or not.

Furthermore, where extrinsic motivation is being used as an incentive to drive learning, the graduate can garner insights from SDT as to how extrinsic motivation can be used to grow intrinsic motivation and intrinsic drive. This is essential as the ability to control one's own drive and motivation is far more predictable and enjoyable than being at the mercy of fluctuating environments. The risk with the latter being that should the environment be toxic and unsupportive of learning, the graduate may have an unpredictable and inconsistent learning journey which may impact their professional goals and growth.

2.3 Curiosity

The study of curiosity has evolved over time, occurring in two distinct waves. The first wave, which peaked in the early 1960s, concentrated on defining curiosity, exploring its dimensions, and identifying its underlying causes. The second wave focused on explaining voluntary exposure to curiosity and its situational determinants (Loewenstein, 1994). Philosophers such as Aristotle considered curiosity to be an intrinsically motivated desire for information. Although they acknowledged that information could also be sought for extrinsic reasons, they made a clear distinction between such extrinsically motivated desires and genuine curiosity (Loewenstein, 1994, p. 76). Curiosity has also been described as a passion and, in some cases, as "appetitive," with authors like Bentham (1948, p. 34) referring to the "appetite of curiosity."

2.3.1 Epistemic Curiosity

In the first wave, curiosity was perceived as a drive, passion, or act of exploration, with varying ideologies surrounding the concept. By the early 1950s, the concept had become fragmented. Berlyne (1978), a psychologist and motivational theorist, proposed a categorisation of different types of curiosity. He identified two dimensions of curiosity: perceptual and epistemic. Perceptual curiosity, which he defined as "a drive aroused by novel stimuli that is reduced by continuous exposure to these stimuli," primarily applies to animals (Berlyne, 1978, p. 80). Epistemic curiosity, on the other hand, pertains to humans and involves the desire for specific knowledge. Additionally, diverse curiosity refers to a more general seeking of stimulation, closely related to boredom (Loewenstein, 1994).

Berlyne's (1978) work demonstrated the link between curiosity, motivation, arousal, and learning, resulting in ground-breaking research that showed the distinction between perceptual and epistemic curiosity with the one being specific to animals and the latter to humans (Berlyne, 1978). According to Berlyne (1978), epistemic curiosity leads to a desire to explore the environment for information that resolves the resulting conceptual conflict, thereby resulting in the acquisition of new knowledge and skills to plug the gap that has been created and has been there from the beginning (Reio & Wiswell, 2000). Therefore, epistemic curiosity is categorised as a tenet in whole or in part as knowledge-seeking.

Berlyne's (1978) work was innovative in that it posited that curiosity was a state that was stimulus evoked, thereby extending his work to drive and motivation theory stating that "cognitive uncertainty leads to increased arousal and exploratory behaviour" (Berlyne, 1978, p. 81). This observation is crucial to this research as it links curiosity to a person's need to explore, leading to a state of learning, unlearning, and re-learning. Furthermore, when the exploratory behaviour leads to the resolution of uncertainty, learning happens, and this is when knowledge is gained (Celik, 2011). Fowler's (1965) boredom-based perspective interpreted curiosity as "homeostatic," suggesting it is an internally stimulated drive. He noted the inherent contradiction in the view that the curiosity drive is both evoked and satisfied by the same stimuli (Loewenstein, 1994). However, it is perhaps neither answerable nor particularly important whether curiosity is a drive. What is crucial is that curiosity shares many features commonly associated with primary drives and can be satisfied by an appropriate response, yet it intensifies if not satisfied. Furthermore, regardless of its status as a drive, curiosity appears to be influenced by both external and internal factors (Fowler, 1965; Loewenstein, 1994).

A limitation of Berlyne's work is that he did not conclusively prove a positive relationship between curiosity and learning given that his work was incomplete at the time of his death. Nonetheless, this research presented the argument that in a case of socialisation, epistemic curiosity can and does manifest itself in three ways, namely: observation, consultation, and thinking (Reio & Wiswell, 2000).

Although Berlyne and other theorists proposed the significance of curiosity in motivating and directing learning, there is still little information regarding the importance of curiosity in adult learning. According to Berlyne (1978), the manifestation of epistemic curiosity is often linear i.e., observation, consultation, and thinking. However, later studies on adult learning have shown that curiosity is not linear. Reio (1997) examined the relationship between adult curiosity to socialisation-related learning and its impact on job performance. They noted that for successful learning to take place, adult learners must go through the three stages of epistemic curiosity interconnectedly in order to succeed and perform well in their jobs.

Loewenstein (1994) built on Berlyne's work by proposing that curiosity was closely related and linked to Gestalt psychology and the information gap theory. According to Loewenstein (1994), the information gap came about as an incompatibility between what one knows and what one wants to know, and was therefore one of the reasons behind curiosity, due to the fact that when an individual focuses on this particular gap, they feel a deprivation of knowledge, which in turn motivates them to learn more. Therefore, the belief was that curiosity was a form of "cognitive induced deprivation" that occurred when it was perceived that there was a gap in one's knowledge, thereby leading the person to be driven to close this gap by acting on their curiosity and acquiring the relevant information needed, resulting in a reduction in curiosity (Loewenstein, 1994). Golman and Loewenstein (2013) demonstrated how the acquisition of knowledge was goal oriented, where we ask ourselves questions or have others ask us questions which, in turn, becomes the guides and reference points to our thinking and acquisition of knowledge or information. The researcher found this aspect to be crucial given that this provides insights into what may drive graduates to be curious and drive their own learning.

The relationship between curiosity, learning, and performance is crucial to understand. A study by Reio and Wiswell (2000) reported that there was a "positive, statistically significant relationship between the adult state and trait of epistemic curiosity and socialisation-related learning" (p. 6). Therefore, learning associated with being socialised, i.e., socialisation-related learning, is a curiosity-driven process through which individuals seek new information that is needed to situationally perform tasks and roles in light of cultural norms and expectations (Reio & Callahan, 2004).

A recommendation from the study was the need to incorporate curiosity into adult learning theory, with motivation being studied in more detail.

2.3.2 Curiosity and Learning

However, if we are to acknowledge that the success of our current society is predicated on well thought-out innovation, creativity, problem-solving, and lifelong learning in everyone, then we must create an environment where students can learn, unlearn, re-learn, and question. MacKinnon (2017) launched the “Curiosity Project” which encouraged students to engage in intrinsically motivated, inquiry-based project learning, investigating topics that interest them. The study explored how curiosity resulted in self-directed learners who took initiative for their own learning and developed their curiosity, resulting in the development of autonomy which enabled them to drive their own learning (MacKinnon, 2017). Furthermore, the project proved that by focusing on curiosity and self-directed learning, students are motivated to learn beyond their classrooms. Therefore, an environment can be created in which learners can begin to question, explore possible answers, see the big picture, and try things without constantly being afraid of being “wrong” (MacKinnon, 2017, p. 5). Students need to be invested in their learning by believing that they have the support to learn the appropriate skills through the understanding that persistence and resilience in learning are more important lifeskills to develop than the memorisation of definitions and other terminology.

Similarly, Pluck and Johnson (2011) explored the concept of “information gaps” as a source of academic curiosity, while discussing the role of inquiry-based learning approaches as potential modes of stimulating student curiosity (p. 24). Furthermore, they highlighted the potential value of the information gap theory and posit that when combined with the “closeness to closure theory” it could impact and increase curiosity and subsequently learning (Pluck & Johnson, 2011). Therefore, it can be inferred that curiosity can drive intrinsic motivation and build a culture of inquiry-based learning. Hence, when curiosity is piqued, students are more motivated to learn. However, this study and the applicability of its results in the working environment has not been tested and presents a limitation in terms of its generalisability to the topic under study in the present research. Regardless, aspects around motivation and the information gap will be further explored in this research.

Rowden (2000) sought to understand the motivations behind learning by suggesting that a new employee in an organisation might not be driven by a desire to learn, but rather by a need to survive in the environment. He argued that curiosity could be driven by the pressure to develop competence in learning tasks and procedures within complex systems, as well as by financial pressures and the desire for financial security (Rowden, 2000). Rowden (2000) concluded that curiosity could be either intrinsically or extrinsically driven, with systemic pressures potentially "forcing" a sense of curiosity that leads to learning. He also noted that employees might have various reasons for wanting to learn, with curiosity being just one of them. Although Rowden acknowledged that his research did not provide sufficient evidence to link curiosity to an increased need to learn, he highlighted that other factors, such as incentives, might drive people to learn and channel their curiosity.

Mussel et al. (2012) conducted a conceptual and empirical examination of the relevance of contrast curiosity and its link to workplace performance. They proposed that epistemic curiosity, a combination of diverse and specific curiosity, involves three distinct stages of action: seeking, engaging, and conquering. "Seeking" refers to stepping beyond the known and deliberately seeking new situations that facilitate learning new information and thinking. "Engaging" involves exploring to learn more about this new information, while "conquering" entails persevering to close the gap, overcome the challenge, and reduce incongruity. This process of seeking, engaging, and conquering leads to competence, with individuals possessing higher levels of trait-related epistemic curiosity being more likely to engage in these stages. Mussel et al. (2012) also identified a link between curiosity and the Big Five personality traits, showing a positive correlation with learning, specifically openness, conscientiousness, extraversion, agreeableness, and neuroticism. A limitation of their study was the emphasis on the need for organisations to incorporate curiosity into their recruitment and selection processes. While this is essential, they also suggested that integrating curiosity into the learning and development strategy is equally important. This approach could guide organisations in nurturing the curiosity of graduates entering their businesses, thereby facilitating their learning. The latter point will be explored further in this research.

2.3.3 Curiosity in the Workplace

As businesses strive to innovate and evolve, the necessity to recruit for curiosity and develop employees' curiosity has become increasingly critical. One thought leader who has extensively explored curiosity in the workplace is Todd Kashdan. In his earlier research, Kashdan and Steger (2007) found that individuals with higher levels of curiosity challenge their self-perceptions, their views of others, and the systems in which they operate. They achieve this by continually challenging and expanding their information, knowledge, and skills. Central to this approach is an open, exploratory attitude to daily activities.

In the study by Blum-Heuser et al. (2020) four dimensions of workplace curiosity were identified: joyous exploration, deprivation sensitivity, stress tolerance, and openness to other's ideas. Joyous exploration refers to the intrinsic enjoyment of seeking out new information and experiences. Deprivation sensitivity is characterised by the tension-laden search for information to resolve knowledge gaps. Stress tolerance is the perceived ability to cope with new, uncertain, complex, and ambiguous situations. Openness to people's ideas denotes a desire to understand and appreciate diverse perspectives and ideas from others.

Merck, a pharmaceutical company with headquarters in Germany, has been at the forefront of studying curiosity in the workplace, within their organisation. This seminal research commenced in 2016 and has since resulted in the State of Curiosity Report that examines curiosity across four dimensions being inquisitiveness, creativity, openness, and distress tolerance. The research was in collaboration with Dr Todd Kashdan collaborated on the development of the Five-Dimensional Curiosity Scale. The scale measures and assesses curiosity along five dimensions which will be elaborated on here. In summary the five dimensions are Joyous exploration, deprivation sensitivity, stress tolerance, social curiosity, and thrill seeking. Joyous exploration is the intrinsic enjoyment of seeking out new information, experiences, and learning. Deprivation sensitivity is the tension-laden search for information to resolve knowledge gaps.

Stress tolerance is the willingness to embrace doubt, confusion, anxiety, and other forms of distress that arise from exploring new, unexpected, complex, mysterious, or obscure events. Openness to people's ideas is desire to understand and appreciate diverse perspectives and ideas from others. In a study by Celik et al. (2016), it was reported that curious employees tend to think divergently. This finding supports the work of Kashdan, who identified curiosity as a motivational behavioural driver for exploration. Consequently, Celik's research concluded that work-related curiosity is a positive predictor of employee innovation and performance.

2.3.4 Inhibitors to Curiosity

Dr Diane Hamilton sought to understand and identify the factors that inhibited curiosity in working adults. Her seminal research, the Curiosity Code Index (Hamilton, 2019), was designed to highlight four main factors that inhibited curiosity: fear, assumptions, technology, and experiment. Beyond inhibiting curiosity, these barriers also stifled personal growth, workplace innovation, and leadership effectiveness. Hamilton acknowledged that while there was research exploring workplace curiosity, there was no research specifically identifying the main factors that prevented employees from being curious, i.e., the inhibitors of curiosity. This gap became a driver for her research. Insights gleaned from such studies by Hamilton could help organisations understand their internal barriers to curiosity and consider how these might be mitigated to encourage more curiosity within organisations.

The Curiosity Code Index identified four inhibitors of curiosity. Fear, one of the most significant inhibitors, stemmed from concerns about failure, judgement, or rejection. Hamilton's research demonstrated that individuals may avoid asking questions or exploring their ideas if they feared being judged as incompetent or having their ideas criticised. The second inhibitor was assumptions. Assumptions are internal assessments, biases, paradigms, or beliefs that prevent individuals from questioning or challenging the status quo. This occurs when individuals believe they already know something and thus are unlikely to be curious. The third inhibitor was technology. While technology facilitates easier access to information and a broader pool of knowledge, it can also diminish the drive to think independently, explore deeply, and think critically. The fourth inhibitor to curiosity is the environment. The environment encompasses the social, cultural, and organisational context in which individuals find themselves (Hamilton, 2019).

Structured, inflexible, overly authoritarian, or fear-based content (whether in school or the workplace) discourages individuals from questioning, taking risks, and exploring beyond their comfort zones. Any social setting like this (family, school, business) will stifle curiosity over time (Hamilton, 2019).

Hamilton proposed solutions in response to these inhibitors of curiosity. Fear requires psychological safety to nurture and harness curiosity. Assumptions require individuals to challenge their internal paradigms and assumptions, with reflection being an effective way to manage this inhibitor. The inhibitor of technology can be overcome by building a culture of deep inquiry and critical thinking. The solution to the fourth inhibitor is to build a curiosity-driven culture. Hamilton's research is relevant to this study as it provides insights into what inhibited curiosity within organisations. The gap in this study is that it does not provide insights into a South African-based organisation or context. Nonetheless, valuable insights could still be gleaned from this research.

Bickett et al. (2019) examined how curiosity is viewed and applied in modern organisations. Their findings, based on two large-scale studies that explored the role of curiosity in leadership, particularly its influence on strategic decision-making and organisational ambidexterity – balances exploration and exploitation activities. Key insights include the paradoxical nature of curiosity, its double-edged sword effect, strategic decision-making, and ambidextrous leadership. The paradoxical nature of curiosity highlighted the tension leaders face in fostering curiosity to drive innovation while maintaining operational efficiency. This can be summarised as exploration versus exploitation which leaders need to balance as part of their curiosity approach and strategy. Curiosity as a double-edged sword emphasises that while curiosity is essential for new ideas and adaptation, excessive curiosity can lead to distraction or resource dilution. Leaders must align curiosity with the organisation's vision, goals, and strategy. Strategic decision-making involves balancing the space for questions and broadening perspectives while avoiding analysis paralysis. Developing ambidextrous leadership is a judgement call of when to encourage curiosity to explore new opportunities while refining existing skills and competencies (Bickett et al., 2019).

While the intention of this particular study is not to focus on curiosity in leadership, it is important to note that an employee's relationship with curiosity will be influenced by the culture of curiosity fostered by the organisation's leaders.

Blum-Heuser et al. (2020) conducted an exploratory study to understand how building a culture of curiosity can enhance and improve innovation. Their research found that curiosity is more strongly linked to innovative work behaviours than any other human trait. The study unpacked various dimensions of curiosity, including joyous exploration, deprivation sensitivity, stress tolerance, and openness to others' ideas. Blum-Heuser et al. (2020) found that a focus on curiosity led to increased job satisfaction, engagement, team performance, problem solving, and innovation. At the time of publication, Blum-Heuser et al. (2020) planned to roll out a curiosity training programme throughout the organisation and to various countries due to the positive results. The authors recommended that businesses seeking to boost innovation should create a culture of curiosity and encourage it. This culture of curiosity includes fostering exploratory thinking, viewing mistakes and failure as learning opportunities, and encouraging diverse thinking by seeking the views of others.

Silvia (2008) explored curiosity from the perspective of viewing it as an interest emotion. The author drew a correlation between interest and appraisal theory. His research shed light on what might encourage some learners to engage in exploratory behaviour, thus fostering interest or disengagement. In establishing what makes something interesting, the research highlighted that we make two appraisals, and the outcome of these appraisals determines whether we find something interesting or not. The first appraisal is novelty-complexity, where we ask ourselves whether what we are trying to understand is new, different, or conflicting. The second appraisal is comprehensibility, which is linked to coping. Here, the individual ascertains whether they have the knowledge, skills, and expertise to deal with the event. If the individual responds positively to the novelty-complexity and comprehensibility, they are likely to engage their interest (Silvia, 2008).

2.3.5 Curiosity in South Africa and on the African Continent

The initial research on curiosity commenced with the identification of the seminal works by international researchers such as Berlyne (1978), Loewenstein (1994), and Kashdan and Steger (2007). Given that the MPhil focuses on inclusive innovation on the African continent, there was a clear drive to uncover research conducted in South Africa and on the African continent. Surprisingly, limited research on epistemic curiosity was found with a South African and African focus. Thus, finding articles and research specifically focused on epistemic curiosity for graduates transitioning to the workplace in South Africa or on the African continent proved challenging. Only two somewhat relevant papers were found: Davids and Waghid's (2024) research article and Vermeulen's (2011) Master's dissertation. Both have been included in this literature review although their relevance to the present study is limited.

“Students, through teaching and learning, must reflect on what they do not know. It is only when they recognise what they know, and what they do not, that they will awaken to their own curiosity” (Davids & Waghid, 2024, p. 673). The authors argued that by being curious, students are more likely to expand their thinking, diversify their perspectives, challenge traditional beliefs or paradigms, and create a more inclusive learning environment. The study aimed to explore the role of ubuntu within the framework of curiosity, emphasising social elements and relationship building. The authors sought to understand how social dynamics and paradigms shapes who individuals learn from and what preconceived ideas they may have towards others, especially in the context of South Africa past race classification under apartheid. Although this study does not set out to explore ubuntu and how curiosity builds relationships, the research by Davids and Waghid (2024) provides insights into social dynamics and their impact on curiosity in the classroom. The research highlights that intentional curiosity ensures individuals learn from and about each other. The gaps in this literature include a clear focus on the social element of curiosity, the application of these findings to workplace-based learning, concrete frameworks and solutions for educators and facilitators to encourage ubuntu-based curiosity and understanding how technological platforms such artificial intelligence (AI) and open-source learning may limit or facilitate ubuntu-inspired curiosity.

Vermeulen's (2011) Master's research explored psychology and Western psychological paradigms in South Africa. The study highlighted the limitations, dangers, and risks of using Western psychological paradigms to study people and their behaviour in a non-Western culture. The author advocated for fostering epistemological curiosity among psychologists. Epistemological curiosity is defined as the "desire for knowledge that motivates individuals to learn new ideas, eliminate information-gaps, and solve intellectual problems" (Litman, 2008, p. 1586). Epistemological curiosity encourages open-minded thinking, questioning, and self-reflection among psychologists. By reflecting on and challenging their existing beliefs, assumptions, and worldviews, psychologists can appreciate, and value indigenous perspectives equally compared to Western methodologies. Although this study delves into curiosity in the South African context, its focus was on using epistemological curiosity to decolonise Western constructs around psychology (Vermeulen, 2011).

2.4 Self-Directed Learning

The WEF Future of Jobs Report (2023) identified analytical thinking and creative thinking as the most important skills for workers, with curiosity and lifelong learning being key drivers of workers' abilities to adapt to disrupted workplaces. Furthermore, the WEF lists curiosity and lifelong learning as business priorities for 2027. The current state of the world is characterised by "a state of nonstop change and where we are constantly bombarded with what seems to be a never-ending flow of new information are sobering" (Berger, 2015, p. 4; MacKinnon, 2017). As our world becomes more complex and dynamic, the value of questions, critical thinking, and creative thinking increases, while the value of "right" answers decreases due to the accessibility of information (MacKinnon, 2017). This suggests a need for individuals to develop skills to sort through the vast amount of information available, to question it, and to reassemble it in new ways while deconstructing it to determine its continued usefulness (MacKinnon, 2017).

Guglielmino (1977) defined a self-directed learner as:

One who exhibits initiative, independence, and persistence in learning; one who accepts responsibility for his or her own learning and views problems as challenges, not obstacles; one who is capable of self-discipline and has a high degree of curiosity; one who has a strong desire to learn or change and is self-confident; one who is able to use basic study skills, organise his or her time and set an appropriate pace for learning, and to develop a plan for completing work; one who enjoys learning and has a tendency to be goal-oriented.

Guglielmino (2013) explored the concept of self-directed learning and how it could be cultivated in formal education institutions. Although this research focuses on graduates entering the workforce, which is the phase beyond formal education, it is essential as it addresses whether institutions are adequately preparing graduates to be self-directed learners in the working environment. This raises the question of whether educational institutions have a role in teaching this as an essential and transferable skill, not only for transitioning from education to the workplace but as a skill that will support graduates throughout their careers. Therefore, it is crucial to note that being a self-directed learner during the formative schooling years can help adult learners assume this role when they enter the formal working environment, beyond structured graduate programmes.

Guglielmino developed a self-directed learning readiness scale (SDLRS). This assessment instrument constitutes a 75 item self-assessment questionnaire. The questionnaire measures eight key factors that impact self-directed learning. These eight factors are openness to learning, self-concept as an effective learner, initiative and independence in learning, acceptance of responsibility for learning, love of learning, creativity and problem-solving, future orientation, and persistence in learning. Openness to learning measures the individual's willingness to lean into new ideas and explore new experiences. Self-concept as an effective learner measures how confident the learner is in their ability to learn, while initiative and independence in learning measures how proactive the learner is in their approach to learning. Acceptance of responsibility for learning measures ownership of personal development, love of learning measures the enjoyment, and intrinsic motivation for learning, creativity, and problem-solving measures the ability to think critically and find solutions.

Future orientation measures the ability to see learning as a lifelong process and finally, persistence in learning measures overcoming challenges and maintaining effort while learning (Mentz et al., 2019).

Historically, education was considered a means to prepare for life. In the early 1940s, an individual could graduate from high school with 75% of the knowledge needed to remain successfully employed until retirement (Barth, 1997). However, 50 years later, this figure has reduced to 2% (Barth, 1997). Thus, just as childhood learning is no longer adequate preparation for life, initial training or learning is insufficient for maintaining competence in today's rapidly evolving world of work. Candy (1991) stated that:

self-directed learning is at once a social and psychological construct, a philosophical ideal, and a literal impossibility... the beginning and end of lifelong learning... keystone of the learning society, a supplement to and substitute for the formal education system; a vehicle for the mastering of established knowledge and for the transformation of personal understanding (p. 424).

This further underscores the need to centre and bolster self-directed learning.

Knowles (1975) defined self-directed learning as “a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources” (p. 18). This definition refers to learning in the broader sense, as depicted in Kolb’s (1984) learning cycle. Kolb’s theory explains that concrete experience, reflective observation, abstract conceptualisation, and active experimentation form a four-stage process or cycle that can be transformed into effective learning (Russ, 1998). Kolb’s (1984) learning cycle emphasises that for optimal learning to occur, the learner must experience all four phases. Thus, Knowles (1978) focused on the process of learning, defining self-directed learning as the learner driving their own learning, with the teacher acting as a facilitator in a supervisory role. Bhat and Dahal (2023) explored the implementation, benefits, and challenges associated with self-directed learning. The authors also examined the roles of various stakeholders (i.e., students, teachers, etc.) in promoting self-directed learning. Although the study is based on a different target population, there are useful insights that can be considered for the present research.

2.4.1 Adult Education and Adult Learning

Consequently, in exploring self-directed learning, it is imperative to begin with an in-depth examination of the background of education, specifically adult education. The pedagogy of adult education, introduced in the 12th century, rendered the learner dependent on the teacher and was predicated on the extent of knowledge the teacher could transfer to the learner, with the learner subsequently replicating it back to the teacher (Knowles et al., 2005).

In 1893, Alexander Kapp coined the term andragogy as an alternative to pedagogy. Andragogy is built on the premise that adults are more self-directed and motivated than children, necessitating opportunities for learning that are relevant to their lives, promoting lifelong learning beyond formal education (Kapp, 1833; Loeng, 2017). The 1960s witnessed increased research on adult learning, with Cyril Houle's (1963) seminal work, *The Inquiring Mind*, making a substantial contribution to the field. Through in-depth interviews, Houle explained the processes involved when adult learners engage in learning, categorising lifelong learners into three groups: goal-oriented, activity-oriented, and learning-oriented (Houle, 1963).

Building on Houle's work, Tough (1971) further investigated adult learning, focusing on adult's efforts to learn, including decisions, preparations, motivations, assistance, challenges, and needs. Tough (1971) sought to understand whether learning differed from teaching and whether a natural learning process existed. Tough (1971) expanded on various aspects of adult learning, including deliberate efforts to learn, learning episodes and projects, the prevalence and significance of learning projects, the content and motivations for learning, preparatory steps for learning projects, the role of planners, and the implications for institutions and instructors. Tough further demonstrated that most adults engaged in one or two learning projects annually, with the average person completing eight (Tough (1971)). The study concluded that adults are inherently predisposed to learning and particularly excelled in self-directed learning.

Lindeman (1926) identified key assumptions regarding adult learners that are foundational to modern adult learning theory. Lindeman (1926) posits that adults are motivated to learn as they experience needs and interests that incites their learning, which should be the starting points for organising adult learning activities.

Additionally, Lindeman (1926) noted that adults' orientation to learning is life-centered, making life situations, rather than subjects, the appropriate units for organising adult learning. Experience is identified as the richest resource for adult learning, with the core methodology being the analysis of experience. Lindeman (1926) emphasised that adults have a profound need to be self-directing, suggesting that the role of teachers is to engage in a process of mutual inquiry with learners rather than merely transmitting knowledge and evaluating conformity. Although Lindeman's work did not specifically address graduates entering the workplace, considering graduates as adult learners allows the conclusion that they, too, desire to direct their own learning.

2.4.2 Self-Directed Learning in South Africa: Self-Directed Learning during COVID

Mahlaba (2020) explored the significance of self-directed learning, particularly in the context of navigating the COVID-19 pandemic. The value of this study lies in its focus on a South African context. Although the study is situated within a specific time period (COVID-19), its insights can provide guidance on why and how to equip learners to be self-directed as we prepare for ongoing and possibly unknown changes. Regardless of the nature of the change, learners must continue to drive their own learning. If a culture persists where learners depend on external sources to drive their learning, navigating phases that require reliance on their own skills and agency will be profoundly challenging. Mahlaba (2020) reported that both teachers and learners in higher education should focus on preparing learners to be self-directed. He asserted that both learners and teachers share responsibility for fostering self-directedness, with learners taking more ownership and teachers adopting a less didactic approach. For educators, this represents a significant shift from being the primary knowledge holders to facilitating learners in designing their learning plans, exploring ways to drive their learning, and accurately identifying their learning gaps. In a self-directed learning environment, the teacher's role is to assist learners in becoming motivated, particularly through internal drive and motivation. As teachers assist students to become agile self-directed learners, they must also accommodate a more fluid learning environment. Mahlaba (2020) emphasised the role of higher education institutions in teaching self-directed learning.

Specifically, within the South African context, it is necessary for students to be provided with resources such as internet connectivity and data to enable self-directed learning. Additionally, there should be a clear plan to assist teachers in becoming self-directed learners themselves, thereby leading by example. The study identified gaps, including its primary focus on school and tertiary students rather than workplace learning beyond higher education. Further elaboration on the challenges faced by learners transitioning to self-directed learning could provide additional insights into fostering a culture of self-directed learning. Another gap in the literature is the lack of specific solutions that institutions and workplaces can adopt to build a culture of self-directed learning. Additionally, the study did not address how to measure a learner's readiness to become self-directed.

Morris (2024) explored self-directed learning and elucidates why it is a key meta-competence for individuals navigating an ever-changing, ambiguous, and unpredictable world. The author defined four core dimensions of self-directed learning and their implications for lifelong learning: motivation, self-regulation, autonomy, and self-efficacy. Motivation drives individuals to initiate and sustain their learning, encompassing both intrinsic (growth, curiosity) and extrinsic (career advancement, societal expectations) motivation. The author referenced theories such as Maslow's hierarchy of needs to understand what drives self-directed learning. Self-regulation involves the individual's ability to focus on goal setting, time management, and problem-solving to overcome challenges, referring to the ability to plan, monitor, and evaluate one's learning process. Learners should adapt their learning approach based on feedback received. Autonomy, the next dimension, involves learners taking the actions they believe are best for their own learning process. Learners must troubleshoot, identify their needs, find necessary resources, and set attainable goals. Self-efficacy pertains to learners' belief in their ability to succeed in their learning tasks and goals. Morris connected his work to Bandura's (1978) theory of self-efficacy, stating that successful self-directed learning outcomes are iterative, builds confidence, and encourages further self-directed learning.

Further, the author identified barriers to self-directed learning, distinguishing between psychological (fear of failure, low confidence) and systemic (rigid structures, lack of accessible resources) barriers.

The study highlighted practical implications for learners, educators, and organisations. Learners were encouraged to use the four dimensions framework to drive their learning while developing a growth mindset for resilience and adaptability. Teachers and educators were encouraged to integrate elements such as inquiry-based learning, problem-solving tasks, and allowing time and space for reflection. Organisations should foster self-directed learning by offering flexible, learner-driven development programmes and promoting a culture of ongoing learning to keep pace with the ever-changing business landscape (Morris, 2024).

While research in South Africa exists, such as by Mseleku (2024), it does not clearly focus on the topics of this particular study. Currently, scales measuring self-directed learning within the South African context are available and have reported that being self-directed is key to student success and fostering lifelong learning, as indicated by Botha and Masenge (2022). However, this research context differed as it measured self-directedness in open, distance, and e-learning environments. Despite the different contexts, the study underscores the importance of self-directed learning in the South African environment.

Another study on self-directed learning in the South African context by Stywayi et al. (2021) aimed to understand how three elements of self-directed learning influence student career development self-efficacy. This qualitative study, with a sample of 150 students from a rural campus in the Eastern Cape, concluded that self-management (the ability to plan and manage learning activities), a desire for learning (enjoying seeking out and making sense of new information and developing skills), and self-control (managing emotional states during the learning journey) influence career development and self-efficacy. The study suggested that institutions should develop these skills in students to adequately prepare them for their careers. However, the study's limitation was its focus on one university in a specific geographical location and its exploration of self-directed learning while students were still studying, whereas this particular study focuses on graduates in the workplace.

The North-West University (NWU) has established a unit for "Self-Directed Learning," with a vision to promote self-directed learning that leads to lifelong learning across all education sectors through excellent research (Mentz et al., 2019).

The research unit held its first International Self-Directed Learning Conference in 2017. Subsequently, the book “Self-Directed Learning for the 21st Century: Implications for Higher Education” was published (Mentz et al., 2019). The NWU research prioritises the advancement of self-directed learning across all education sectors. They strive to develop strategies tailored to diverse contexts, fostering the growth of self-directed learning skills. Their vision is to expand the body of scholarship on self-directed learning both internationally and across the African continent.

Malcolm Knowles defined self-directed learning as “a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes” (Knowles et al., 2005). This definition places significant ownership on the learner to engage in self-directed learning. However, it does not adequately address the type of environment and how this shapes the learner's self-perception and potential for learning.

Guglielmino (1977) designed a survey and posited that a highly self-directed learner takes initiative, operates independently, persists in their learning, accepts total responsibility for their learning, views obstacles as learning opportunities, self-regulates, is self-disciplined, highly curious, confident, and has a strong desire to learn and change. Such a learner can use basic study skills, manage their time effectively, organise themselves, pace their learning, and have a plan to complete their work, making them very goal oriented. This highly self-directed learner enjoys learning (Guglielmino, 1977). Both Knowles and Guglielmino’s research focuses significantly on the learner within a system but does not sufficiently address how the system itself might influence the learner.

Research by Hiemstra and Brockett (2012) and de Klerk and Fourie (2017) highlighted that the learning environment and processes play a crucial role in how self-directed learning is adopted and promoted by an individual within a system. Researchers explored two groups within the South African context to understand how self-directed learning occurs and how the context impacts learning. De Beer and Mentz (2017) explored self-directed learning within indigenous groups and analysed Khoisan participants in the Hantam area of the Northern Cape province.

They reported that young children had a baseline level of knowledge about indigenous plants for sustenance and nutrition, but their knowledge did not extend to medicinal purposes, which remained with the elders due to potential risks. Thus, younger children continued to learn from elders by building on their foundational knowledge. The researchers concluded that learning, including self-directed learning, is context dependent.

Mentz et al. (2019) explored the application of self-directed learning with teachers in two separate scenarios. They reported that teachers should move away from pure transmission-based learning, which often grounds their role, and adopt approaches such as problem-based learning (PBL) and communal learning (CL) to build a learner-centered culture. The researchers compared a group of teachers in Limpopo (cycle 1), who faced challenges in adopting self-directed learning due to an inability to move away from a transmission-based approach, with a group of teachers in Calvinia, Namakwa (cycle 2), who saw increased learner engagement and enjoyment through adopting more PBL and CL as key aspects of self-directed learning. This research highlighted that the environment matters in adopting self-directed learning and that its success depends on more than just the individual, as Knowles' definition might suggest. Self-directed learning involves the person, the context (environment), and the process (PBL and CL). This finding aligns with the Person Process Context (PPC) model of self-directed learning by Hiemstra and Brockett (2012), and provides valuable insights for promoting self-directed learning in corporate settings.

Confessore and Confessore (1992) stated that for self-directed learning to occur, the following four factors need to be in place: desire, resourcefulness, initiative, and persistence, expanded on in Table 3 below.

Table 3. Four Factors of Self-Directed Learning by Confessore and Confessore.

DESIRE	• How would you describe your desire to learn? • What have you given up to learn more? • How has your desire to learn changed in the past 10 years?
RESOURCEFULNESS	• What learning opportunities have you been able to access? • Which of those would you have thought to be out of your reach? • How have you worked to continue to learn?
INITIATIVE	• What learning opportunities were you coerced into my family or another force? • What learning opportunities have you sought for yourself? • Why did you seek those learning opportunities?
PERSISTENCE	• What learning endeavours have been the most difficult? • Did you continue? Why? • Did you start studying at university? Did you finish?

In exploring research on self-directed learning on the African continent, Babyak (2012) built on Confessore's measurement of self-directed learning and expanded the construct to include the following seven codes: a) ideas on learning (including cultural norms), b) desire, c) resourcefulness, d) initiative, e) persistence, f) weaknesses and areas for improvement in learning in Senegal, and g) the strengths of Senegalese learning. The study examined self-directed learning among small- and medium-sized enterprise owners and reported that while self-directed learning was prevalent among successful business owners, its presence alone was insufficient and needed to be coupled with self-efficacy—the belief in one's ability to succeed—which was lacking in the traits of the study participants (Babyak, 2012).

2.4.3 Graduates and Learning

When graduates enter the workplace or industry, their approach to learning is influenced by their experiences during higher and tertiary education. Learning in the workplace necessitates a different approach, as the learner must drive their own learning. This contrasts significantly with learning in school and in tertiary education, where the system provides much of the structure for how, when, and why learning occurs. As the world continues to evolve, there is an increasing expectation for learners to be self-directed when they enter the working environment. This transition to being a self-directed learner can be challenging, particularly as learners have previously relied on the system for direction and motivation.

Upon entering the workplace, a pivot to self-directed learning is required. This implies that the motivation, skill, and drive for learning must primarily come from within the individual. It is important to note that line managers do not play the same role as teachers and should remain focussed on operational targets and performance. In corporate settings, learning is often seen as secondary to performance. Therefore, it is up to the individual to prioritise and drive their own learning. Developing this habit early in one's career is beneficial, as the advantages for the individual are substantial. Relying on external motivators can be risky, especially in a fluid and ever-changing workplace. Additionally, within organisations, the focus shifts from measuring progress through assessments to measuring progress based on performance. To optimise performance, ongoing learning and upskilling are essential.

2.4.4 The Staged Self-Directed Learning (SSDL) Model

The seminal work of Grow (1991) presents a model of self-directed learning called the Staged Self-Directed Learning (SSDL). This model delineates different levels of self-directed learning and focuses on how teachers can equip learners to become self-directed. The teacher's purpose is to match the learner's stage of self-direction and prepare the learner to advance to higher stages. Although this study does not focus on teachers, the model can provide useful insights for line managers and mentors alike. Since mentors were part of the study, insights can be drawn, justifying the inclusion of this paper in the literature review. The SSDL model is depicted in Figure 9 below.

Table 4. Stages of Self-Directed Learning Model

STAGE	STUDENT	TEACHER	EXAMPLES
STAGE 1	Dependent	Authority Coach	• Coaching with immediate feedback. • Drill. • Informational lecture. • Overcoming deficiencies and resistance.
STAGE 2	Interested	Motivator, Guide	• Inspiring lecture plus guided discussion. • Goal setting and learning strategies.
STAGE 3	Involved	Facilitator	• Discussion facilitated by teacher who participates as equal. • Seminar. • Group projects.
STAGE 4	Self-directed	Consultant, Delegator	• Internship, dissertation, individual work, or self-directed study group.

Source: Grow (1991).

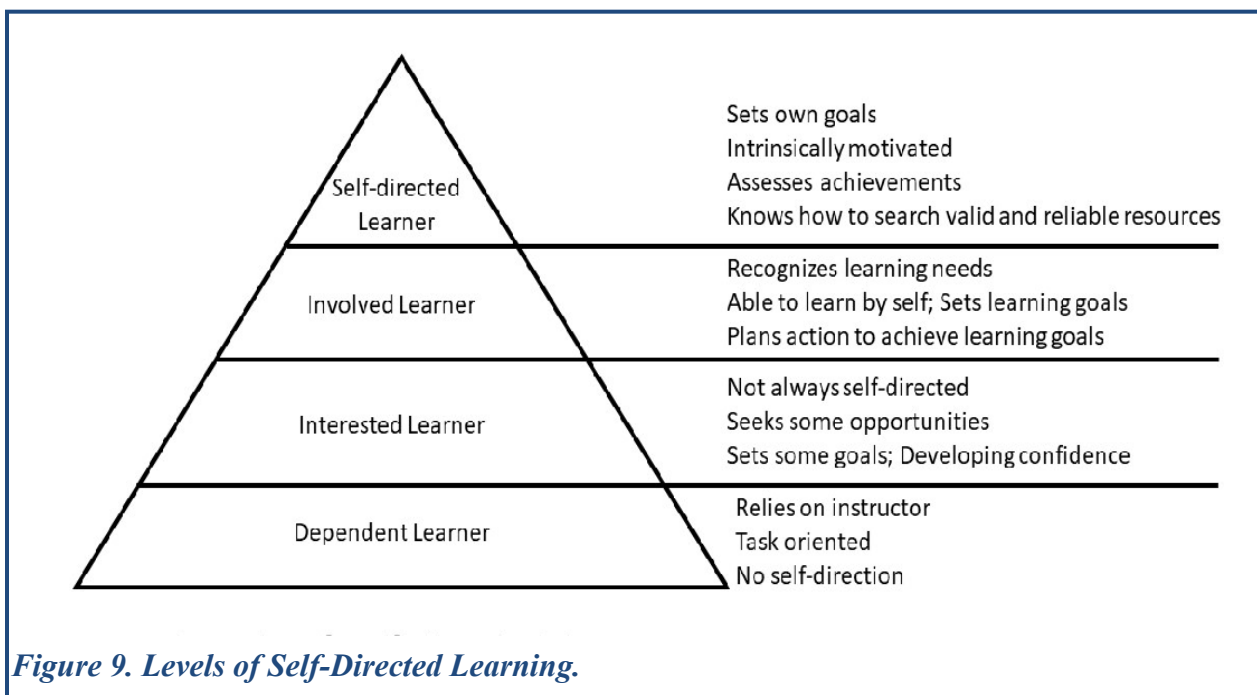


Figure 9. Levels of Self-Directed Learning.

Source: Gupta and Singh (2022).

In stage one, the dependent learner relies on the teacher for clear direction and structure. Learning is explicit and teacher-centered, with learners thriving under well-defined parameters. The teacher is regarded as the expert who delivers specific input and skills. In stage two, the learner is interested. This learner, still under the teacher's guidance, is content to "go with the flow." They are interested but still require support, often forming a personal connection with the teacher. The teacher's role is to encourage, motivate, and provide support within the structure established in stage one. Communication between teacher and student is two-way, with the teacher still directing. Stage three involves the engaged learner. This learner brings life experience, knowledge, and insights to the learning experience, viewing themselves as equal to the teacher. The teacher acts as a facilitator, allowing the learner to take initiative and make decisions. The teacher offers a range of tools and techniques, and the learner decides which to use, positioning the teacher as a guide. Stage four is the self-directed learner. "Self-directed learners set their own goals and standards, with or without help from experts" (Grow, 1991, p. 13). Stage four learners can thrive in any environment but prefer high autonomy. These learners manage their own progress and goals, with the teacher continuously partnering with them to develop their ability to manage their learning. The teacher essentially acts as a consultant.

The SSDL provides a framework for learners and teachers but does not specify how or whether it applies to workplace adult-based learning. Learner progression is not linear, as the visual diagram might imply. There are no specific measures to determine the learner's stage accurately. Therefore, clear measurements are needed to assess learners at various stages accurately. The model also fails to explore what happens when there is no teacher. In the context of workplace learning, and drawing on Malcolm Knowles' definition of self-directed learning as something that happens "with or without the help of others" (Knowles, 1978), learning can occur with or without resources. Furthermore, the model does not explore specific interventions teachers can apply to increase learner autonomy or self-directedness.

2.5 Summary of Key Themes

In exploring the main research question, the literature on curiosity, learning, and motivation was examined. The value of this research lies in understanding the three main constructs of this study and exploring and highlighting the interplay between these constructs.

It is within this overlap that opportunities for application related to personal empowerment, upskilling, continuous self-directed learning and innovation can be explored at both individual and organisational levels. The three constructs in this study (curiosity, learning, and motivation) are interconnected and play an essential role in human evolution, learning, growth, and achievement. This extensive literature review has explored the literature for each of these key constructs while also weaving a narrative on how these constructs work together to help graduates take charge of and drive their learning and growth. This is an essential skill for young professionals and a habit that will assist them throughout their career trajectory. The gaps in the literature are presented in the following sub-sections.

2.5.1 Motivational Theories: Maslow and Self-Determination Theory

In both motivational frameworks, Maslow's hierarchy of needs and SDT, the view of motivation in relation to curiosity and learning was explored in a universal manner. However, cultural and individual differences, as well as personality differences, can impact how people learn and their drive for learning. The approach to learning, especially in communal and social learning contexts, will affect how these needs are met. These cultural nuances and their impact on cognitive drive are not sufficiently explained by the frameworks. Motivation was explored within a Western construct, and although universal truths can be extracted and applied, there may be limitations regarding applicability in South African and African contexts. The frameworks are broad and do not specify motivational nuances for young professionals entering the workplace and undergoing a crucial life and career transition. The research on motivation lacks detail on how the environmental setting or organisational culture impacts motivation for individuals and teams. Maslow's theory and SDT are broad frameworks that lack empirical tools to quantify and measure self-actualisation in detail.

2.5.2 Understanding Curiosity in the Workplace

The literature review suggests that curiosity can drive learning. Furthermore, there is an increased focus on curiosity in the workplace, how it is being measured, and how companies are training the skill of curiosity. Various researchers have explored the connection between curiosity and learning. Global organisations such as the WEF have listed curiosity and lifelong learning as important skills for the future, emphasising the necessity of these skills. Since the 1960s, there has been an increase in research and appreciation of curiosity.

What was once seen as inquisitive, defiant behaviour associated with mischievous children and nosy women is now viewed as essential to exploratory behaviour, engagement, and success.

Extensive research has been conducted on the topics of curiosity, learning, and motivation in psychology, education, and behavioural studies. Curiosity, in particular, has received growing interest since the 1960s due to its value in innovation and growth. The literature for this study highlighted that curiosity, and specifically epistemic curiosity, has been studied extensively in education and in first-world countries. Research by Kashdan has been adopted by the pharmaceutical company Merck, which emphasises growing curiosity internally among employees. In workplace-based curiosity, there is a focus on recruiting employees who show a disposition for curiosity and further developing this skill within the organisation.

There is a substantial amount of research on curiosity in the workplace conducted within Western contexts. Merck, for instance, conducts ongoing research on measuring curiosity within the workplace in Germany, the United States, and China. However, there is no clear evidence that similar surveys are being conducted in the South African or broader African context. While generalisations may emerge across different locations and countries, research in South Africa could highlight specific nuances and factors to consider when fostering curiosity and self-directed learning in this region.

2.5.3 Understanding Curiosity in the South African Workplace

The work by Kashdan in researching workplace-based curiosity is pioneering. Therefore, there is an opportunity for more organisations to understand what drives curiosity internally, with a view to developing their staff's skills and capacity to grow their curiosity. However, his research was conducted in countries in the Northern Hemisphere/first-world countries. While general principles around curiosity are applicable to every organisation, it is important to research curiosity in developing countries, as the contextual significance and relevance would enrich the study. Africa as a continent, though fast-growing, is still grappling with the legacy of post-oppressive/post-colonialist rule. These oppressive systems stifled independent thinking, expansive thinking, exploratory thinking, innovation, and problem-solving. Thus, the literature review highlighted a gap in research on curiosity in South Africa and the African continent.

The limited research that does exist has been included, but there is an opportunity for further studies, and this is where the current study will add value.

Research on curiosity should ideally map the human development life cycle. Therefore, while extensive research exists around school-based curiosity, this should be extended to workplace-based curiosity. As the world pivots in a post-COVID era, which has challenged and changed where and how we work, understanding curiosity is essential to hybrid working models. This is because it can shed light on what drives and motivates employees to learn, grow, and perform.

The literature review has highlighted that there is limited research on understanding the role of curiosity in learning for young professionals entering industry and corporate South Africa. Additionally, there is a gap in the literature on the perspective of mentors, in their capacity as a supportive role, regarding curiosity and their thoughts on the value of curiosity, especially pertaining to learning and motivation. The current study will shed light in that regard.

2.5.4 Understanding Curiosity and Self-Directed Learning for Graduates

The current literature review has revealed some research in the area but less so on the topic of how to measure curiosity and how to build it. Although this study focuses on graduates, generalisations can be applied to all employees in business, not just young professionals. Conversely, areas such as motivation and self-directed learning have been studied in more detail compared to curiosity. The literature review has indicated extensive research on motivation and intrinsic motivation. However, there is a gap in understanding intrinsic motivation for this group of people—young professionals entering the workplace. Beyond that, these insights can be applied to older, more established employees. Similarly, there have been minimal studies on self-directed learning on the African continent. Yet, every day, individuals respond to their challenges by engaging in self-directed learning, especially in cases where resources are limited. Graduates entering the workplace need to pivot in terms of their learning approach. Until this point, their learning has been shaped for them as part of the education system. Being a self-directed learner requires a different approach to learning, and this study will add to the existing literature in that regard.

2.5.5 Understanding Curiosity, Self-Directed Learning, and Motivation in a Young Democracy

South Africa has a unique history, having transitioned from being governed under apartheid laws to existing in a vibrant democracy. Our current democracy recognises every citizen as equal before the law, but this was not always the case. Until 1994, all South Africans lived under the apartheid regime, which divided people along racial lines. These segregations determined every aspect of life, from where and how people lived to access to schools, healthcare, and public transport. This had significant implications for various stages of human development, including areas of self-actualisation and motivation. Furthermore, education and learning were designed to foster an obedient mindset, preparing Black and Coloured South Africans to occupy low-level positions where the goal was to "do as you are told." Self-directed learning was not considered.

This paper and the literature review positions curiosity and self-directed learning within the South African context. The researcher is deeply mindful that the very act of being self-driven, exploring freely, and driving one's own learning represents a significant paradigm shift, especially for those who experienced apartheid directly, including the author. However, these ways of thinking, connected to basic survival, are still embedded in our communities despite different legislation being in place.

If older individuals have a traumatic response to speaking out and pursuing their desires, there is a probability that these behaviours are not encouraged by the older generation and within our communities. Therefore, when exploring self-directed learning and curiosity, it must be done with sensitivity to the fact that these behaviours are not always embraced socially, particularly in homes and families of people of colour who exist in a post-oppression system with lingering psychological and social remnants. Given that graduate programmes in South Africa are often linked to organisations' Employment Equity strategies, these programmes must be designed with these South African nuances and sensitivities in mind.

CHAPTER THREE – RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research design and outlines the various techniques, methods, and approaches used by the researcher to explore the research objectives and carry out the research in answering the research question of **“what is the role of epistemic curiosity in the self-directed learning of graduates transitioning into the world of work?”** The research onion will be used as a guide to develop the research methodology. Therefore, the chapter will provide a holistic understanding of the decisions made by the researcher regarding research design and methodology. The chapter also includes a description of the research philosophy, the study population, participant sampling methods, the data collection process. The chapter will also address the ethical issues pertaining to the research process as well as highlight issues regarding reflexivity and limitations of the study.

3.2 The Research Onion

This research utilises the research onion theory advanced by Saunders et al. (2016) as the basis for developing and subsequently carrying out the research. The research onion (see Figure 10 below) outlines six key stages that a researcher must navigate during the research process. Each stage requires a deep interrogation of not only the researcher's beliefs but also of the theories put forward regarding similar topics and strategies, choices, data collection, and analysis. These elements collectively contribute to answering the research questions posed. The researcher chose the research onion because it is a useful tool that facilitates holistic thinking about methodology while guiding decisions related to research design and methodology. The research onion has also been positioned in its suitability for business studies research and presents a detailed, thorough, and pragmatic framework to consider research methodology.

The research onion is a comprehensive framework for developing a research methodology. While it can be tempting to shift directly from a research question to data collection (e.g., exploring curiosity through interviews or surveys), it is crucial to consider all the various elements of the methodology from the outset. This is where the research onion serves as a valuable guide for researchers.

The research onion comprises six layers, each representing a critical stage of the research design process. It is recommended to work from the outermost layer to the innermost core of the research onion. The six stages are:

- Research Philosophy: The underlying beliefs guiding the research, such as positivism, interpretivism, and pragmatism.
- Research Approach: The method of theory development, including deductive and inductive approaches.
- Methodological Choices: The data collection and analysis methods, encompassing mono-method, mixed-method, and multi-method approaches.
- Research Strategy: The plan for conducting the research, which may include experiments, case studies, interviews, surveys, etc.
- Time Horizon: The temporal scope of the study, whether cross-sectional or longitudinal.
- Techniques and Procedures: The specific methods for data collection and analysis.

By systematically addressing each layer, researchers can ensure a well-structured and thorough research methodology.

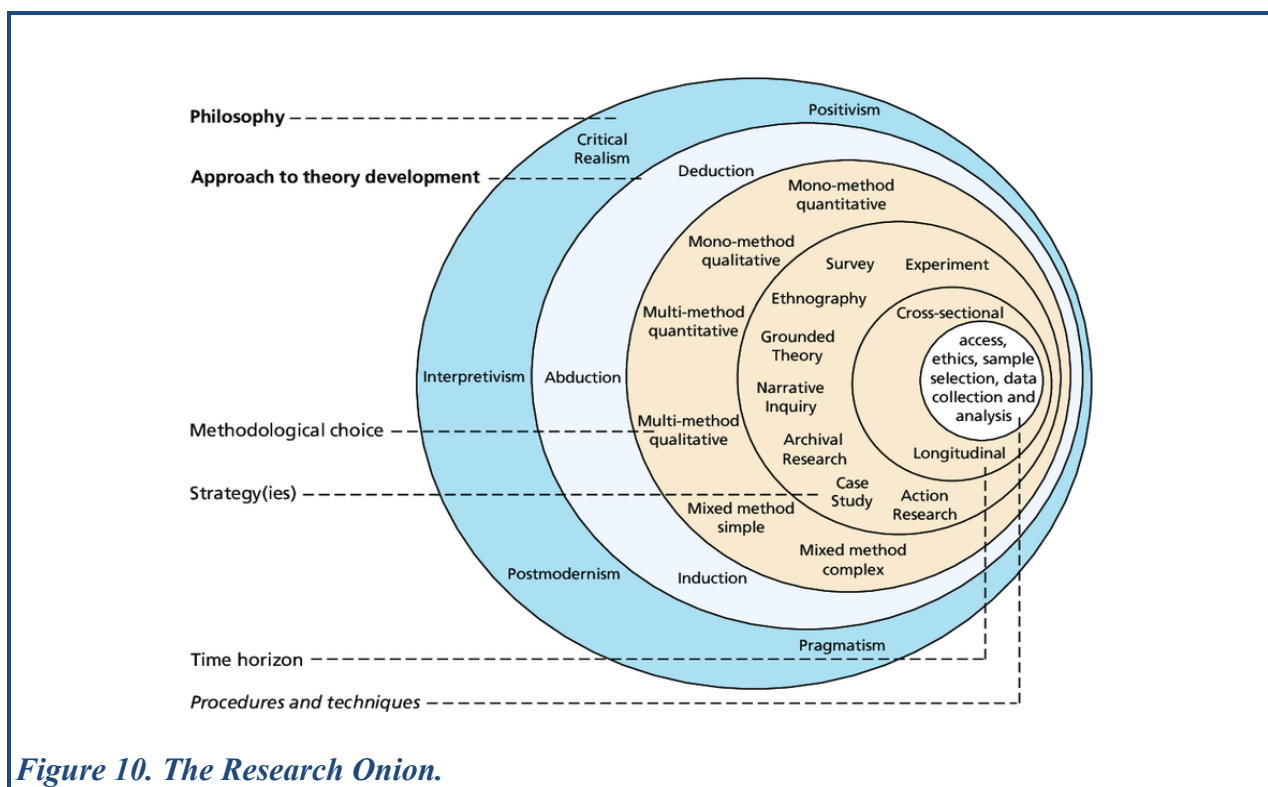


Figure 10. The Research Onion.

Source: Saunders et al. (2016).

3.3 Research Philosophy

According to Saunders et al. (2016), a research philosophy is the foundation of any study as it describes a set of beliefs upon which the research is built. The researcher aimed to understand the role of curiosity and self-directed learning in graduates who had completed a formal graduate development programme and were in their first year of employment in a corporate environment.

The complexities in this study arose from the primary focus on curiosity, which was driven by various factors, some innate to the individual and others shaped by the external environment. In addition, the literature presented differing views on how individuals approach curiosity: some consider it a trait, others a state of motivation, and still others see it as project specific. Considering these varying beliefs and views, as well as the researcher's focus on the thoughts and ideas of the participants while also taking a holistic view that includes social and cultural factors, individual thoughts and ideas, the corporate setting, and other complexities within the construct of epistemic curiosity, the interpretivism philosophy was found to align best with the study (Saunders et al., 2016).

By adopting an interpretivist approach, the researcher was able to explore epistemic curiosity and how it may have motivated graduates to drive their own learning as part of their professional development and success. Through interviews, the researcher also considered and explored whether other factors could affect an individual's curiosity and the actions they might take with that curiosity. Therefore, the interpretivist approach allowed the researcher to delve into both the graduates' and mentors' perspectives, developing a deep understanding and appreciation for the various emergent issues and complexities within the phenomena under study (Pham, 2018).

Following an interpretivist approach enables the researcher to gain insights into and understand people's experiences, thoughts, emotions, and social interactions, rather than merely quantifying them (Pervin & Mokhtar, 2022). This approach is particularly valuable in capturing the richness and complexity of human behaviour. Key ideas within interpretivism include:

- Reality is Subjective: Individuals experience things differently, and these subjective experiences are crucial to understanding human behaviour.

- **People’s Perspectives Matter:** Beyond numbers, interpretivism seeks to understand thoughts, feelings, and social interactions, recognising the importance of individual perspectives.
- **Context Matters:** The same phenomenon can have different meanings within a group of people based on their background, culture, or experiences. Contextual factors are essential in interpreting social interactions and behaviours.
- **Qualitative Methods:** Interviews, observations, and case studies help explore human experiences in depth, providing a comprehensive understanding of the phenomena under study (Pervin & Mokhtar, 2022; Pham, 2018).

In this study, the interpretivist approach was employed to explore the workplace experiences, motivations, and thought processes of learners, rather than simply measuring their behaviour quantitatively. The reasons why interpretivism added value and was effective for this study include:

- **Subjectivity of Curiosity, Motivation, and Learning:** Although these constructs are defined in the literature review, individuals experience curiosity, motivation, and learning uniquely. This subjectivity is essential for understanding the nuances of these constructs.
- **Personal Nature of Self-Directed Learning:** Despite being on similar graduate programmes at the two client sites used for this research, individuals approach their learning differently. Some attend the provided courses, others watch YouTube videos, listen to podcast episodes, or rely on mentors. Interpretivism recognises these differences and uses them to enrich the study, highlighting the diverse ways in which individuals engage with their learning.
- **Emphasis on Meaning, Not Just Outcomes:** Interpretivism allows exploration of the “why” and “how” questions, providing deeper insights into the motivations and thought processes behind behaviours. This emphasis on meaning helps to uncover the underlying reasons for actions and decisions.
- **Rich, In-Depth Methods:** Through the interviews conducted in this research, curiosity, motivation, and learning were explored in real situations, not simulations. As a researcher, you are not just looking at scores; you are uncovering the stories, meanings, and experiences behind curiosity, motivation, and learning.

This approach captures deep insights that numbers alone cannot explain, offering a more holistic understanding of the phenomena under study (Pervin & Mokhtar, 2022).

By employing an interpretivist approach, this study was able to delve into the complexities of human behaviour, providing a richer and more nuanced understanding of the workplace experiences, motivations, and thought processes of learners. This approach not only highlights the importance of individual perspectives and contextual factors but also underscores the value of qualitative methods in capturing the depth and richness of human experiences (Pham, 2018).

3.4 Approach to Theory Development

The research onion specifies three approaches to theory development: deductive, inductive, and abductive. For this study, an inductive approach was deemed appropriate as it allows new insights to emerge from the learners' experiences rather than imposing predefined ideas and ideologies. An inductive approach begins with data collection and then develops patterns or themes to formulate a theory or idea. In contrast, a deductive approach starts with an existing theory and tests it using data (Saunders et al., 2016).

In this study, theory development will commence with gathering data via interviews. The collected data will then be analysed to identify patterns and themes. These patterns and themes will be used to develop concepts and explore relationships between them. Finally, based on the developed concepts and relationships, a theory, such as a praxis model, will be formulated. This inductive approach ensures that the theory is grounded in the actual experiences and insights of the learners, providing a more nuanced and contextually relevant understanding of the phenomena under study.

3.5 Methodological Choice

Babbie and Mouton (2007) defined research design as the framework that outlines how research is undertaken to achieve the desired research objectives. Therefore, this research aimed to explore and understand the role of epistemic curiosity and self-directed learning in graduates who had completed a formal graduate development programme and were in their first year of employment in a corporate environment. The study was exploratory or interpretive in nature, seeking to uncover insights, viewpoints, and ideas to understand what drove graduates to learn and grow as they transitioned from graduate training programmes into the world of work.

The researcher aimed to address this question by delving into the role of epistemic curiosity in the self-directed learning of graduates transitioning into the workplace, a question that has not been studied in-depth in the South African context. Given the relatively new focus on epistemic curiosity and self-directed learning in graduates and its impact on their transition into employment, an exploratory approach allowed for flexibility and deeper investigation into the topic (Babbie & Mouton, 2007).

The research employed a qualitative approach, allowing the researcher to examine lived experiences in detail through semi-structured interviews. This approach enabled a deeper identification of issues from the perspective of the study participants and an understanding of the meanings and interpretations they attributed to behaviours, events, or objects (Hennink et al., 2020). Furthermore, this approach provided a better understanding of the contextual influences surrounding the study topic. By adopting an interpretive paradigm, the researcher was able to understand the lived experiences of graduates and mentors from their own perspectives, appreciating their “subjective meaningful experiences” (Snape & Spencer, 2003, p. 7). Given the topic under study, it was important to consider social, cultural, historical, and personal contexts during data collection and analysis.

A qualitative approach also allowed for flexibility and spontaneity, key tenets of epistemic curiosity, enabling the researcher to adapt interview questions as the interviews progressed or as needed. Additionally, this approach allowed for a smaller sample size, enabling the researcher to engage in discussions with respondents around the explored topic (Oranga & Matere, 2023). This facilitated seeking clarification and gaining a deeper understanding from participants, as insightful and relevant responses were provided on the topic of individual self-drive and motivation (Maxwell, 2009).

The next three layers of the research onion—methodological choice, strategies, and time horizon—are considered aspects of research design. These layers focus on transforming the main research question and research objectives into a coherent research project. The research design represents the overall plan for the research project.

For this study, the methodological choice was mono-method qualitative, meaning that a single data collection technique was employed. Specifically, semi-structured interviews were used to gather data. This approach allowed for in-depth exploration of the participants' experiences and perspectives, aligning with the interpretivist framework of the study.

3.6 Research Strategies – Narrative Inquiry/Analysis

A research design is a blueprint for collecting, measuring, and interpreting data, and serves as a strategy for answering a research question using data (De Vaus, 2013). According to the research onion, typical qualitative designs include phenomenological, ethnographic, grounded theory, historical, case study, action research, and narrative analysis. For this study, the researcher chose to use narrative analysis with an inductive approach. This choice added value by allowing the data to speak for itself in a “bottom-up” manner, meaning that the analysis was driven by the data rather than pre-existing hypotheses, theories, or frameworks.

With an inductive approach, the process begins by examining the data and identifying patterns and themes. This contrasts with a deductive approach, where data is analysed through the lens of pre-existing hypotheses or theories. In other words, the analysis is led by the actual data, ensuring that the findings are grounded in the participants' experiences and perspectives. This method aligns with the interpretivist framework of the study, providing a rich and nuanced understanding of the phenomena under investigation.

3.7 Time Horizon

A fundamental question to consider regarding time is whether the research will be a “snapshot” in time, or a collection of snapshots taken over an extended period. These approaches correspond to cross-sectional and longitudinal time horizons, respectively. This study can be classified as cross-sectional, as it involved interviewing participants at a specific point in their journey. The research and data collection occurred at that single point in time, providing a snapshot of the participants' experiences and perspectives at that moment.

3.8 Ethical Considerations

To maintain research integrity, certain ethical guidelines were adhered to when conducting the research. Participation in the study was voluntary, and participants were allowed to opt out of the study at any time, with respondents having the right to refuse participation without penalty or prejudice (Barrow et al., 2022). Given the pre-existing relationship between the researcher and the Capitec and Media24 graduate programmes, it was crucial to emphasise this and assure the research participants that there would be no repercussions if they withdrew from the study. The researcher emphasised the voluntary nature of participation to assure the participants of their choice to participate without any pressure or coercion.

Furthermore, all respondents remained anonymous, and any information provided was kept confidential. Information from the interviews was used for general inferences only, and where direct quotes were used, respondent details were anonymised to protect their identity. The researcher anonymised the graduate and mentor details by assigning them a character or number (e.g., Graduate 1) in the findings chapter to further protect their identity.

The consent form that preceded the online interview outlined the purpose of the research and ensured that respondents were fully aware of what they were agreeing to before participating in the conversation (see [Appendix B](#)) This ensured that respondents were well informed before providing their consent (Bhutta, 2004).

The researcher also sought and obtained ethical clearance from UCT's Graduate School of Business ethics review board. This confirmed that the research aims and design were ethically acceptable and followed the institution's code of conduct, while also ensuring that the research material and procedures were of the required standard.

3.9 Sampling and Research Population

The population under study comprised a) graduates who had completed a formal graduate development programme and were in their first year of employment in a corporate environment, and b) mentors who supported these graduates through the graduate programme.

The researcher administered semi-structured interviews online via Zoom, with each interview scheduled for approximately one hour. The organisations through which the graduates and mentors were sourced were selected due to the pre-existing relationship between the researcher and these organisations, allowing for a readily available subset of research participants. A total of 10 graduates and 10 mentors were interviewed, consisting of five graduates from Capitec and five from Media24, while five mentors from Capitec and five mentors from Media24 were also interviewed. A visual summary is included in Table 5 below.

Table 5. Participant Sampling Details.

PARTICIPANTS	CLIENT		TOTAL
	MEDIA24	CAPITEC	
GRADUATES	5	5	10
MENTORS	5	5	10
TOTAL	10	10	20

The researcher employed non-probability sampling, where the probability that a respondent was selected was unknown, given that the researcher was using Capitec and Media24 graduate programmes to access respondents (Acharya et al., 2013). The researcher utilised convenience or purposive sampling because of their pre-existing working relationship with the organisations through which research participants were sourced (Acharya et al., 2013). Purposive sampling was chosen as the graduates and mentors from these two programmes met the researcher's criteria for participation, having been part of the graduate programme, whose completion was a prerequisite for joining the larger workforce.

The researcher followed the steps in purposive sampling, beginning by identifying and defining the research problem. The study population was determined to be graduates and mentors who were part of these graduate programmes. Through homogeneous sampling, the research participants were further narrowed down to those who had previously interacted with the researcher through a course offered as part of these graduate programmes at Media24 and Capitec. A total of 20 graduates and mentors were approached and subsequently interviewed by the researcher for the purposes of the study. The availability of graduates and mentors from Capitec and Media24 made data collection cost-effective, eliminating the need to seek respondents from other sources.

Additionally, purposive sampling allowed the researcher to select a sample highly representative of the attributes of interest, given the specificity of the research topic (Palinkas et al., 2015).

3.10 Data Collection

3.10.1 Data Collection Tool

The researcher used semi-structured interviews, developing an interview guide with a list of open-ended questions that defined the research topic while allowing the interviewer and respondent to discuss certain aspects in more detail. The semi-structured interviews were “conversations with a purpose” (Burgess, 1984). The researcher explored the role of epistemic curiosity in the self-directed learning of graduates transitioning into the world of work.

The questionnaire developed by the researcher was a standardised measurement instrument, as no existing data collection tool specifically addressed the topic under study. Therefore, the researcher created the tool based on literature reviews and small-scale studies conducted around curiosity and graduate motivation in the global North (De Vaus, 2013). Consequently, from a scientific perspective, the reliability and validity of the tool could neither be tested nor established (Bond, 2004). Nonetheless, the researcher believed that among the 20 respondents, the questions developed produced consistent responses.

3.10.2 Using Zoom

The initial plan was to conduct predominantly in-person interviews and use Zoom for participants based in Johannesburg, Durban, and other locations. However, the 2020 lockdown in response to the COVID-19 pandemic restricted in-person engagements. With many companies working remotely, the researcher conducted all the planned interviews via Zoom, an online platform.

3.10.2.1 Advantages of Zoom

Zoom offers the opportunity to reach participants regardless of their geographical location, reducing travel time and costs associated with in-person interviews, as participants can join from their home offices or, occasionally, from their workplace.

When utilised with the camera on, Zoom provides the researcher with valuable data through the observation of facial expressions, which are essential as a form of body language. Body language and facial expressions are considered data that add richness to the study (Oliffe et al., 2021).

Zoom is accessible to anyone and does not require research participants to set up an account. While there are no costs to the participants, the cost is borne by the researcher, who utilised a Zoom business account to extend the interview time beyond the 45-minute threshold provided in the free version. The interviews were recorded, allowing the interviewer to revisit the content, body language, and gestures during data analysis. Conducting interviews on Zoom is particularly convenient for participants working from home, as it eliminates the need for travel and allows them to be in a comfortable and private setting (Gray et al., 2020).

In addition to the Zoom recording and transcript, a voice recording was made using the researcher's phone's voicemail functionality as a backup. All Zoom interviews were stored on the researcher's device and in the cloud, as per the data management plan submitted. The recorded interviews are only accessible through a shared link and supporting passwords, ensuring confidentiality and data security. Furthermore, Zoom has a security feature that allows only invited participants with a password to join the meeting. The meeting room feature verified invited participants before admitting them to the online interview.

3.10.2.2 Limitations of Zoom

While Zoom provided the use of a camera for observing the participants, the dual-camera view (i.e., researcher and participant) meant the researcher was constantly able to see herself while viewing the participant. This had to be managed to avoid distraction. The researcher used the self-camera to ensure she was a) focusing on the participant by actively listening and paying attention, and b) maintaining objective facial expressions and body language. Online meetings with the camera switched on were preferred for the interviews, requiring a high-quality internet connection. Ensuring a high-quality connection can be costly for research participants in South Africa, particularly if they reside in areas with unstable connectivity. Factors such as load shedding can also affect the quality of the internet connection, which is beyond the control of both the researcher and the participant.

In some cases, internet quality and speed were better at the office, enabling uninterrupted conversations, and participants were encouraged to book a meeting room at the office if permitted (considering COVID-19 protocols). Alternatively, the researcher was willing to work around potential connectivity challenges and disruptions.

Slower connections can result in speech delays, which, if not managed, can interrupt the organic flow of a conversation or interview. In such cases, the researcher risks interrupting or interjecting too soon, impacting the flow of the conversation and the richness of the data collected. The researcher ensured she listened well and allowed the participant to finish expressing their thoughts before interjecting or following up with the next interview question. As a certified Time to Think facilitator, the researcher was accustomed to the practice of not interrupting and creating space for people to think fully in conversations.

Eye contact is key to listening and building rapport with participants. Achieving eye contact using Zoom is challenging, as the camera and the participant's Zoom tiles are in different places. To maintain some form of eye contact, the researcher reminded herself to look into the camera of her laptop, which was challenging. The researcher explained the eye-contact dilemma on Zoom beforehand to ensure participants were aware and felt comfortable.

While an interview on Zoom confirmed the time of the interview, the researcher had no control over the respondent's physical location. It is easy to join an interview from a mobile device while driving or running an errand. The researcher mitigated this as much as possible by emphasising the importance of being in a conducive environment. Online interviews at home or in the office are prone to additional distractions (home sounds, noisy neighbours, renovations, family distractions, etc.), but these were managed accordingly. In the event of distractions, the researcher checked with the participant to ensure they were comfortable continuing, and participants always had the option to reschedule if required.

Many organisations in South Africa use Microsoft Teams for meetings; therefore, some participants were unfamiliar with Zoom and, in a few cases, even preferred Microsoft Teams over Zoom.

This was the case with one particular mentor who is an investigative journalist and was concerned about the recorded data being stored on a cloud. The participant was reassured of security and given the option to have the interview via Microsoft Teams if preferred. The researcher established the participants' level of comfort with Zoom at the start of the interview and provided a quick overview of the system. At the time of the interview, there were concerns regarding Zoom's access security, as there were reports of unauthorised individuals joining online meetings. It was established that a possible reason for this was the distribution of meeting links, thus compromising security. Such challenges were not encountered with these participants, as they were diligent in keeping the meeting links to themselves. The research participants were reminded that the meeting was for their use only and that the links should not be circulated to anyone else.

3.10.3 The Semi-Structured Interview

The semi-structured interview used by the researcher consisted of the following sections (see [Appendix C and D](#)):

- Defining curiosity;
- Defining self-directed learning;
- Role of curiosity;
- Driving your own learning and development;
- Link between curiosity and self-directed learning;
- Expressing your curiosity (graduates only);
- Gauging someone's curiosity levels (mentors only);
- Benefits of curiosity as a contributor to learning;
- Encouragers and dissuaders of curiosity in graduates (mentors only);
- Motivation you to drive your own learning (graduates only); and
- Advice for curiosity and driving your own learning.

3.10.3.1 Challenges Conducting Semi-Structured Interviews

The researcher administered the study using semi-structured interviews. Semi-structured interviews are classified as non-standardised interviews as they combine a pre-determined set of open-ended questions while providing the interviewer with the opportunity to explore emergent themes further (Mouton et al., 2013).

The researcher selected semi-structured interviews because they allowed for flexibility, enabling the interviewer to probe further or omit questions depending on the responses and insights shared by the respondent on the topic under study (Saunders et al., 2016). Despite this flexibility, the ability of the researcher to deviate from initial research questions while probing responses could have reduced the study's validity, given the departure from the original set of planned questions. While conducting the interviews, the researcher referred to the research goal to guide the conversation, thereby reducing instances of obtaining irrelevant information. Furthermore, all interviews were recorded, allowing the researcher to revisit the recordings and obtain further insights after consulting the identified research goals and objectives.

In addition, semi-structured interviews allowed for improvisation around question structure, as these were wholly or partially improvised. This improvisation could unintentionally introduce bias into the new questions or result in leading questions, thereby invalidating the responses (Saunders et al., 2016). To reduce the risk of bias, the researcher broke down big ideas or concepts into smaller, multiple questions, further avoiding the risk of confusing or leading the participant. This approach ensured that clear answers were obtained, which did not deviate from the initial set interview questions.

3.11 Self-Reflection as a Researcher

In studying curiosity, I was constantly and acutely aware of my own curiosity and questions driving this research. I was as much a part of the research as I was driving it. Reflexivity is the act of examining ourselves, as researchers, and our position within the research. Through this process, we appraise ourselves and are aware of our situatedness in the research study. Within this situatedness, we identify how we impact the study, the people, the data, and all the interpretations that follow. This is particularly important in subjective studies, as it allows the researcher to turn the lens on themselves and be critically aware of their own thinking, ideologies, and assumptions affecting the research (Berger, 2015).

As an example, below is a list of the questions I often found ruminating in the back of my mind:

- Why am I interested in this research?
- Why am I doing this research?

- What about curiosity fascinates me so much?
- Is curiosity really that important?
- How is my familiarity with the participants affecting my study?
- What do I think about my findings?
- Why might I be thinking that?
- How do I know I have interpreted the data correctly?
- What other views might exist?
- What preconceived ideas might I have, and how are these shaping my study?
- How do I currently reflect?

Reflexivity is the self-appraisal in research. It means turning the researcher lens back onto oneself to recognise and take responsibility for one's own situatedness within the research and the effect that it may have on the setting and people being studied, questions being asked, data being collected, and its interpretation. As such, the idea of reflexivity challenges the view of knowledge production as independent of the researcher producing it and of knowledge as objective (Berger, 2015, p. 2).

To ensure academic rigor, particular attention was paid to the principles of reliability and validity as expressed by (Saunders et al., 2016). Reliability is the extent to which the data collection will produce consistent findings, ensuring transparency in the sensemaking of the data, and the extent to which similar observations and conclusions will be formed by another researcher. Validity covers whether the study measures what it is intended to measure and whether the findings are as they profess to be. The following measures were taken to ensure reliability and validity throughout the study: clear documentation, transparency, iteration, traceability, thick/detailed description, and authenticity.

The University of Cape Town requires every researcher to have a detailed data management plan in place to support the research. All records for the research (data, methodology, reflections, etc.) were saved on a common drive. This included the researcher's initial thinking, the interview guides, the consolidated database used for consolidating all the interview content, and the subsequent documents created for the thematic analysis.

The research questions were designed in consultation with the supervisor and reviewed by peers for additional feedback. The research questions were updated after the pilot interviews. In conducting the thematic analysis, the database clearly records the initial detailed data and shows illustrates how the researcher moved to first- and second-order analysis. Coding is marked on the database, and where there was confusion or attention needed, comments were added for the researcher to revisit at a later stage.

3.12 Limitations

The qualitative research approach is flexible, allowing the researcher to adapt quickly and enabling research participants to be more descriptive and expressive in their responses. Although the researcher could pose questions directly to respondents, they were limited to obtaining answers to questions they thought to ask. In this case, the researcher used semi-structured interviews and allowed for follow-up conversations for responses that needed further probing.

Furthermore, qualitative studies often face criticism for lacking academic rigor, as they may not have safeguards in place to protect against bias, which in turn impacts the reliability of the findings. Consequently, the researcher employed a first- and second-order analysis approach during data analysis (Gioia et al., 2013). Although various thematic categories emerged during the first stage, the researcher used the second phase to consolidate the data, focusing on emergent themes and asking whether these themes suggested concepts that helped provide a narrative for what was being studied (Gioia et al., 2013). Therefore, the first and second-order approaches provided the researcher with multiple sources of input to build a data structure and basis for analysis. By using this approach, the researcher upheld the integrity of the study by ensuring academic rigor, providing a systematic way to make sense of the data, and minimising opportunities for subjectivity and bias in the analysis phase. Semi-structured interviews enabled the researcher to guide the conversation while keeping participants on topic, allowing for open-ended responses for more in-depth insights and encouraging two-way conversation.

Despite these advantages, semi-structured interviews can be time-consuming, as open-ended questions can lead to long answers that may exceed the allotted time (Ritchie et al., 2003).

Additionally, the researcher could unintentionally write leading questions that could bias the responses. Given the pre-existing working relationship between the researcher and the study participants, there was a risk of social desirability bias, where participants may answer questions in a way that they believed would make them look good while concealing their true opinions (Deterding & Waters, 2021). To mitigate this, the researcher began each interview by providing relational guidelines, explaining the research purpose and their role in a different capacity than the one occupied in their pre-existing relationship.

The purposive sampling method selected by the researcher resulted in variability and bias being challenging to measure and control (Acharya et al., 2013), as respondents were sourced from the Capitec and Media24 graduate programmes. Secondly, given that respondents were not selected randomly, the study's results could not be generalised to a larger group. Furthermore, the small sample size affected the statistical power of the study, making it more difficult to detect significant relationships or differences (Maxwell, 2009).

3.13 Data Analysis

To analyse the interview data, the researcher employed thematic analysis, a qualitative research method that facilitates the identification, analysis, and interpretation of patterns within data (Braun & Clarke, 2006). Thematic analysis proved highly effective for this study as it enabled a deep engagement with participants' experiences, allowing for a nuanced exploration of how curiosity drives self-directed learning. The manual nature of this analysis ensured that the researcher remained fully immersed in, and close to, the data, preserving the richness and depth of the narratives shared.

The data analysis process commenced with rewatching the Zoom recordings of each interview to relive the interactions and begin the process of becoming acutely familiar with the data. This step was critical in capturing non-verbal cues, such as body language, tone, and pauses, which provided additional context to the verbal responses. Each recording was replayed multiple times to ensure a thorough understanding of the discourse. Following this, each interview was transcribed verbatim, ensuring that every spoken word was accurately documented for subsequent analysis.

Braun and Clarke's (2006) six stages of thematic analysis were meticulously followed to ensure a rigorous and systematic approach. The first stage, familiarisation with the data, involved immersing the researcher in the interview recordings and transcripts, repeatedly listening to and reading the data to become thoroughly acquainted with it. The second stage, generating initial codes, entailed systematically working through the data and identifying recurring ideas, key phrases, and emerging concepts (Saldaña, 2021). These initial codes were then grouped into preliminary themes, providing a structured yet flexible framework for organising participants' perspectives.

The third stage, searching for themes, involved collating the initial codes into potential themes, examining how different codes could be combined to form overarching themes. The fourth stage, reviewing themes, required refining and consolidating these themes, ensuring they accurately represented the data and were coherent and distinct. This stage also involved re-evaluating the themes against the entire data set to confirm their validity.

The fifth stage, defining and naming themes, involved further refining the themes and developing clear definitions and names for each theme, ensuring they captured the essence of the data. The final stage, producing the report, involved synthesising the themes into a coherent narrative, presenting the findings in a way that addressed the research questions and highlighted the key insights.

The analysis was conducted in two distinct stages: first- and second-order analysis. In the first-order analysis, after immersing in the interview recordings and transcripts, the researcher engaged in initial open coding, systematically working through the data and identifying recurring ideas, key phrases, and emerging concepts within the data (Saldaña, 2021). These initial codes were then grouped into preliminary themes, providing a structured yet flexible framework for organising participants' perspectives. This stage was instrumental in capturing the breadth of responses without prematurely narrowing the scope of analysis.

In the second-order analysis, building on the first-order analysis, the researcher engaged in a more refined and iterative coding process, wherein themes were consolidated, re-evaluated, and hierarchically structured into overarching categories. This phase allowed for deeper analytical engagement, ensuring that the emergent themes were not merely descriptive but also interpretative and explanatory. To facilitate this process, an Excel spreadsheet was utilised, providing a systematic means of organising, tracking, and refining the evolving thematic framework.

Upon completing the coding and thematic refinement, all identified themes were transferred to a separate document, where the researcher engaged in further synthesis and collapsing of themes to derive core findings. This final stage was essential for distilling the key insights that encapsulated the study's central research question.

To enhance the trustworthiness and credibility of the analysis, the researcher sought peer debriefing by inviting a colleague to review the data, coding framework, and emerging themes. This external perspective offered a fresh and objective lens, helping to validate the robustness of the themes and identify any potential biases or overlooked patterns (Lincoln & Guba, 1985). Such an approach aligns with best practices in qualitative research, reinforcing the rigour and reliability of the findings.

By employing this comprehensive and immersive approach to data analysis, the researcher ensured that the study remained deeply grounded in participants' lived experiences, while also maintaining methodological rigour in the interpretation and synthesis of findings.

3.14 Conclusion

This research utilised an interpretivist paradigm and employed a qualitative research approach to explore the role of epistemic curiosity in the self-directed learning of graduates who have transitioned the workplace. Semi-structured interviews were conducted to gather in-depth insights from participants, allowing for flexibility in responses while maintaining a focus on key themes. Data was analysed manually using thematic analysis, ensuring immersion in the data and enabling the identification of meaningful patterns and themes. This approach aligns with the study's interpretivist stance, emphasising subjective experiences and contextual understanding.

Ethical considerations, including informed consent and confidentiality, were upheld throughout the research process. Limitations such as potential researcher bias and the time-intensive nature of manual analysis are acknowledged.

CHAPTER FOUR – FINDINGS

4.1 Introduction

This study aimed to explore the role of epistemic curiosity in the self-directed learning of graduates who had completed a graduate programme and were subsequently employed by the organisation. This chapter provides a comprehensive description and explanation of the findings within the context of this study. The results from this study address the research questions and objectives outlined in Chapter One above. The main research question was: **What is the role of epistemic curiosity in the self-directed learning of graduates transitioning into the world of work?** A thematic approach was used to summarise the data and extract themes. The findings provide the foundation for the discussion chapter, where an interpretation and analysis of the data in relation to the research questions and objectives will be provided.

The study participants comprised 20 individuals, including 10 graduates and 10 mentors. The participants were from two organisations and were clients of the researcher. The purpose of including mentors in the study was to obtain the perspectives of those who support the graduates, thereby enriching the study. Findings and conclusions from this study can provide organisations with suggestions for improving existing graduate programmes as they strive to further support and develop graduates entering the labour market. Furthermore, the insights gained from the study need not be limited to graduates alone. The WEF Future of Jobs Report (2023) predicted that 44% of workers' core skills are expected to change in the next five years. This statistic, coupled with the stark reality of an unpredictable workforce and volatile economies worldwide, means all employees will need to constantly learn and upskill themselves if they wish to remain relevant. Thus, the findings from this study will provide useful and rich data on how to build learning habits and cultures beneficial to all employees.

The analysis of the data unearthed themes in response to the research questions. In some cases, there were overlaps between the themes, indicating shared views by the graduates and mentors. In other cases, the mentors had different perspectives.

Overall, what emerged was an alignment between the mentors and the graduates in response to the research question and in unearthing the themes. This chapter has been written to summarise the data objectively. The themes are listed per question, providing a summary of the data and highlighting differences in themes where they have occurred. Quotations from the graduates and mentors have been used. Graduates are labelled as GX whereas mentors are labelled as MX, which X denoting the participants unique numerical identifier. Direct quotations have been included to substantiate the themes and provide examples.

The consolidated feedback from the graduates and mentors are presented by common themes for each question. In instances where there were different themes, this was highlighted and presented. The chapter concludes with two tabular summaries. The first table provides a summary of the themes that emerged per heading, while the second table presents the correlation of the themes to the research questions. In order to move towards building a narrative and finding themes from the large volume of data obtained, “data headings” were created per section. This allowed the researcher to move towards answering the main research question.

4.2 Data Headings

Table 6. Data Headings.

NUMBER	DATA HEADINGS
1)	Define curiosity
2)	Define self-directed learning
3)	Role curiosity played
4)	Driving your own learning and development
5)	Link between curiosity and self-directed learning
6)	Express your curiosity (graduates only)
7)	Gauge someone’s curiosity levels (mentors only)
8)	Benefits of curiosity as a contributor to learning
9)	Encourages and dissuades curiosity in graduates (mentors only)
10)	Motivated you to drive your own learning (graduates only)
11)	Advice for curiosity and driving your own learning

4.3 The Participants

The participants selected for the study were graduates who had completed a structured development programme and mentors who had supported graduates on a programme. To ensure there was a balanced view with the study, an equal number of graduates and mentors were interviewed. Despite being in different organisations, the conversation was centered around their experiences around their curiosity and learning, thus creating a common agenda. There was a familiarity with the research participants, the graduates in particular, as they would have attended workshops with the researcher as part of their soft skills or self-leadership development while on the structured graduate programme. However, the graduates were reminded that the researcher sought to obtain objective, honest feedback despite there being a previous relationship and degree of familiarity.

4.4 Defining Curiosity

The first question was designed to obtain feedback from the participants about how they defined curiosity and what came to mind when they heard the word "curiosity." This introductory question served the purpose of initiating a conversation about curiosity by exploring and elucidating the participants' understanding of the term. The research participants were deliberately not asked about the term epistemic curiosity because it was assumed that they may not be familiar with this specific form of curiosity. To avoid the potential unfamiliarity of the term epistemic curiosity becoming a stumbling block, especially as the introductory question, the decision was made to start with the term curiosity, as it was assumed to be more familiar to the research participants. This, in turn, would better initiate the conversation and semi-structured interview. In exploring the term curiosity, two themes emerged for both groups of participants, namely *Exploring Curiosity* and *The Drive for Curiosity*. Each of these themes is explained below with a focus on the similarities and differences between the participants (graduates and mentors).

4.4.1 Exploring Curiosity

When considering curiosity in terms of definitions and associations, the graduates thought about curiosity in terms of exploring. This theme also included two sub-themes of *Novelty* and *Courage*. The mentors, on the other hand, thought about *Exploring*, *Having a Growth Mindset*, and *Questioning Everything*.

When thinking about and defining curiosity, both groups of participants (graduates and mentors) considered this in terms of *Exploring Curiosity*. The graduates described curiosity as something that broadens one's horizons and encourages movement outside the known and one's comfort zone. In moving out of one's comfort zone, participants expressed that the benefit of exploring resulted in learning and acquiring new information. This exploration included a heightened level of self-awareness, as graduates became aware of gaps in their knowledge and competence that needed to be addressed. Predominantly, this category focused on how curiosity pushed individuals out of their comfort zones and into unknown or new spaces.

Participants directly and indirectly referred to *Novelty* when describing curiosity, noting that it involves being open to new experiences. With curiosity comes a newfound awareness of information previously unknown. They also described being fascinated by things they had no prior knowledge of, thereby highlighting a positive emotion associated with this awareness. Participants spoke of this new information as triggers stemming from this knowledge and exposure to "newness." Novelty also played a role in capturing attention, which may arguably increase the likelihood of paying attention and thus result in learning later on. This was demonstrated by Participant G4 in, "*Wanting to know, not knowing and wanting to know, being fascinated by things that you have no knowledge of because you're just curious and you find something fascinating and interesting. I think it also requires a bit of context.*"

When thinking about curiosity, a number of participants highlighted that one needs to have the courage to speak up and ask questions. This was specifically considered to be true in environments where curiosity may not be welcomed, encouraged, or fostered. Therefore, there is an element of risk taking. Even when the environment is open to curiosity, the respondents still commented that, as someone asking the question, they still needed to develop the confidence to be able to articulate their question as there was always the fear of rejection.

Similar to the graduates, the mentors also thought of exploring when defining and thinking about curiosity. This included asking questions and being motivated to learn more when asking these questions, thus exploring. The thinking and questions that came from this state of exploring also broadened their horizons with new and different perspectives.

The mentors saw curiosity as a way of unpacking what they saw on the surface (“finding the story behind the story”). Exploring was also seen as a desire to learn more and realising there is always more to explore. Mentors expressed that curious people are intrigued by new information, explore, and also have a willingness (inner drive) to do so. The benefit of exploring was that it created a spark in their mind. The very act of exploring or being in a state of exploring may initiate curiosity. Therefore, being comfortable exploring can lead to a spark in the mind which can lead to learning. A significant difference between the mentors and graduates when defining curiosity is that early on the mentors referred to learning in their responses and definitions. Participant M2 shared that they “*think of learning. I think of anybody a bit curious, is also a person keen on learning and trying new things and exploring. Be it anything, be it a place, thoughts or ideas.*” Further, Participant M7 narrated:

Curiosity in my mind is just that innate willingness to explore the world around you and to learn new things and not to like approach it from a formalistic point of view but almost a childlike open mindedness, so again to my mind it's almost that willingness to explore the world around you and to learn as much about the world around you as possible.

4.4.4 Drive for Curiosity (Tenacity)

The second theme identified was the *Drive or Tenacity for Curiosity*. In this theme, and in the context of defining curiosity, participants spoke about being eager to have access to information, remaining relevant, and having a desire to improve yourself. All of these had a stance that curiosity was a quality that pushed people. According to the participants, the result of this drive was social inclusion, improving yourself, and remaining relevant. Under this theme the mentors also expressed having a growth mindset. For participant G10, this was expressed as:

I wanna know more, why is that like that. I think the word that comes with that is why or how. And I think for me it actually speaks to the type of stories I like to write because they always involve people, people I don't know and I always want to know but why is that like that for you. I think even during the corona virus thing, when it was happening, I always wanted to go out. One of the best stories I wrote, I remember, I loved it so much, we went to an informal settlement called Zandspruit. And I wanted to find out how the people in that informal settlement where the houses, shacks are actually built right next to each other, how are they dealing with corona but they are being told to social distance. But how?

You have 10 people living in a shack now what must I do. So yar, basically for me I wanna know how, why? I'm curious or if I don't understand something, please teach me. Why does this work like this? So yar basically, why and how.

Participant G3 responded by noting that, “*curiosity... I think being eager to know something,*” while Participant G9 defined curiosity as a “*never ending well of wanting to dive into information that's always readily available, especially now with the internet and social media.*”

The mentors also spoke about drive, with a specific focus on having a growth mindset to emphasise self-improvement and growth. Mentors associated the word curiosity with the desire to be better. Curiosity involves a willingness to learn new things, but not just any random new thing. It is about learning with the goal of improving and growing as a person, thus reflecting focused, intentional curiosity rather than random curiosity. Curiosity is also about a mindset that sees possibilities rather than problems. There must be a maturity to acknowledge that one does not know everything. Curiosity can also be described as having a growth mindset. Included in this growth mindset is the skill, ability, and confidence to be interested and to ask questions. Asking questions is key because it broadens horizons and leads to learning. Included in this theme is also having a childlike sense of play when being curious. Participant M6 shared:

I think it's about having a growth mindset it's about seeing possibilities and not problems it's about acknowledging that you don't know everything so there's always more that you can find out and I think it's also about wanting to be better than you are currently, so you are being curious have because you want to see more, they then you have at the time.

4.5 Defining Self-Directed Learning

The second question of the interview asked the respondents to unpack what came to mind when they heard the term self-directed learning. The themes that emerged from the data were *Ownership* and *Inner Drive* (includes motivation), *Knowledge and Sense Making*, and *Self-Awareness*. These themes are explained below.

4.5.1 Ownership and Inner Drive

In this theme, the graduates spoke about individuals taking charge of their learning and driving what and how they wanted to learn. Several graduates described self-directed learning as self-driven. Participants directly and indirectly referred to an inner drive that originates from the individual. This drive occurs after exposure to new information or the realisation that there is a gap in their current knowledge. What follows is a proactive drive, as opposed to someone waiting passively for another person to fill that gap. Instead, the participants emphasised the need for the individual to take charge. Ownership included the ability to comprehend the new information. Participant G4 emphasised “*self-driven. Steer the direction you want to go. Learning defined by me. Learning driven by me.*” While Participant G10 noted being “*in charge of how I learn. Drive comes from me. Taking charge. I am interested in something and want to know more about it myself.*”

The mentors, on the other hand, expressed an intentionality in this theme, emphasising that learning needed to be directed, i.e., being conscious and clear about what you are learning. This theme also defined self-directed learning as “exploring with intent.” The mentors conveyed that self-directed learning involved the individual taking charge of their learning and driving the process. They suggested that learners should explore something they are interested in, whether in the personal or professional domains. There appears to be a personal aspect to self-directed learning, as it is not something forced upon the individual but rather a topic they choose and are keen to acquire relevant information for their growth and success. Self-directed learning also involves taking charge of one's learning. This theme included autonomy, where the learner would be thrown into the deep end of a task and have the skill and drive to figure things out. This is self-directed learning. Autonomy also involves teaching oneself, thus driving one's own learning and developing additional skills when there is a gap. Consequently, the learner is independent and not reliant on someone in the environment to teach them; they can learn independently. The learner is motivated to learn.

4.5.2 Knowledge and Sense-Making

The graduates perceived self-directed learning as a process wherein the learner actively seeks knowledge within their immediate environment. Beyond the mere acquisition of knowledge, the learner must also interpret and make sense of this newly acquired information. Integral to this theme is the practice of posing questions throughout the self-directed learning process.

4.5.3 Self-Awareness

Self-awareness encompasses the learner's understanding of their own learning and information processing methods, as well as their ability to reflect on the material they are engaging with. It involves recognising one's strengths and areas for development, particularly when receiving feedback from others. This self-awareness is crucial for the learner to appreciate their own value and strengths, and to develop a clear sense of identity. Possessing such self-awareness can significantly enhance one's ability to self-motivate and effectively direct their own learning. Participant G5 emphasised, “*The SELF in self-directed learning is important. The awareness a person has of how they learn. This awareness helps them with motivation and drive to learn.*”

The mentors underscored that self-directed learning involves the ability to accurately and honestly identify areas for development through self-awareness and self-assessment. This internal dialogue can serve as a catalyst, fostering curiosity and encouraging exploratory behaviour to learn and discover more.

4.6 Role of Curiosity and its Value

After broadly exploring the concepts of curiosity and self-directed learning, the researcher sought to determine the role curiosity plays for graduates entering the workforce. In the subsequent question, study participants were asked to consider the impact of curiosity on their professional journeys and the value it added. Graduates reflected on their personal experiences, while mentors provided insights from their perspective as supporters of the graduates, offering an external viewpoint. Two primary themes emerged from this inquiry: *Inner Drive* and *Learning and Development*. The learning and development theme was further divided into two sub-themes: *Comprehension* and *Feeling Safe to Explore*.

4.6.1 Inner Drive

The first role curiosity plays for graduates entering the workforce is that it helps them develop an inner drive, akin to intrinsic motivation. Participants described inner drive as a spark that propels graduates to step out of their comfort zones, fostering a sense of ownership and enabling them to capitalise on available opportunities. This inner drive is characterised by a sense of ownership that allows learners to optimise growth opportunities within the organisation. It can distinguish an average graduate from an exceptional one, enabling them to exceed all expectations. Unlike relying on external sources or initiatives for motivation, inner drive is self-generated.

Participants noted that curious graduates could push themselves beyond what is expected and achieve more. This inner drive helps graduates develop a sense of ownership, which can benefit them by making them stand out from their colleagues and increase their chances of securing placements beyond the programme. It also assists graduates in determining whether they are meeting their line managers' performance expectations, thus extending the benefit beyond learning to include performance and results. Additionally, this inner drive helps graduates think about and map their career paths, providing clarity on their goals and preventing others from dictating their career trajectories. Participant G4 stated:

So, if you're not curious, you won't be able to drive your own path. It will always be at the back of your mind that you wanted to, you could have, but it didn't materialise. You'll look back at some points and think, 'I actually would have liked to have done 1, 2, 3, 4, 5 during my grad programme and the initial part of my journey, but I didn't because I didn't act on my curiosity.'

4.6.2 Learning and Development (or Growth)

The second role curiosity plays is in learning and development, or growth. Participants indicated that by being curious and interested, graduates can direct their learning by asking questions when uncertain. Curiosity encourages graduates to exceed expectations rather than settle for mediocrity, leading to improved performance and more effective ways of working. Participant G1 articulated this by stating, *"yes, absolutely, because curiosity and ownership tie together. If you're not curious and you're not asking questions, you're going to baseline the whole way; you're not going to grow and show your potential, so curiosity is very important."*

Mentors also highlighted the role of curiosity in learning and development. They strongly asserted that curiosity drives learning and growth for graduates entering the workforce. This is particularly significant for graduates on structured programmes, where the primary function is to absorb large amounts of information. While interest alone does not guarantee learning, mentors suggested that curiosity propels individuals beyond initial interest and novelty, leading to actual learning. In other words, curiosity transforms initial interest into a positive learning outcome. This category includes showing interest and asking questions, both of which facilitate learning and are indicators of self-directed learning. When discussing learning in response to the question, mentors spoke about graduates learning not only about their roles but also about the business and the systems they work with:

One of the most important roles. Curiosity keeps you open and committed to learning. Curiosity helps you reel in your initial expectations of the working world to what you are experiencing in reality. This realignment helps with the shock and keeps you open to learning – Participant M2.

Learn more, success, asking questions, make it far in the organisation. Helping you get where you need to be long term, career moves, next move beyond the graduate programme. Curiosity can be a motivator as well, curiosity can help you with focus and drive – Participant M3.

Plays a big role. Gives you the mandate to explore, ask the questions you need to ask, make sense and innovate. Curiosity works when there is some kind of direction given. For curiosity to work, it needs direction or moulding (shaping, guidance). Opportunity to innovate. Spot opportunities and take the lead. But also get direction and guidance – Participant M9.

Curiosity is paramount. Use opportunity to explore further. Helps you achieve and get things done. Helps you find your place in the organisation. Helps you understand the dynamics of an organisation (sense making). Ability to step back, internalise what you learnt, then grow from there going forward (interesting point - mentor is saying there is a direct link between being curious and personal growth/learning)...

Curiosity can also help with leaders perception of you because they will see your curiosity and it will help you stand out from the rest. Leaders and colleagues are more willing to engage with you because they see you are keen/hungry/curious. People will trust you more and be willing to give you more work because they see how engaged you are. Without curiosity, you risk stagnating and not growing into your full potential – Participant M10.

The two sub-themes under learning and development were: *Feeling safe to explore/courage in Learning and Comprehension and Sense-making*, both of which are substantiated below.

4.6.3 *Feeling Safe to Explore/Courage in Learning*

Participants observed that while curiosity and learning are essential, they can also heighten responses such as fear, insecurities, imposter syndrome, and negative self-judgement. However, curiosity can help graduates avoid becoming entangled in these negative emotions and insecurities, enabling them to persevere. It fosters confidence and self-assurance, which are crucial when challenging the status quo. Additionally, curiosity involves an element of risk-taking, which is integral to personal and professional growth:

Trust can be curious and make mistakes because someone isn't going to 'come down on them.' Curiosity vs treading carefully. Curiosity is about going bravely into the world, exploring things and questioning things and not being concerned that if I do something wrong, somebody is going to reprimand them for it. This fear means graduates will be tentative or won't want to 'stick their necks out.' Being fearful means you will play it safe. Feeling free means you can explore without fear or intimidation – Participant M7.

Expectations and pressure graduates put on themselves, can also be a barrier to curiosity. If they came in curious, there would be a lot more to learn and a lot more opportunities and they would be a lot more open to saying how it works – Participant M6.

Curiosity makes you explore and even if you make mistakes, you take a risk and you grow – Participant M10.

4.6.4 Comprehension/Sense-Making

Participants noted that when in a state of curiosity, individuals are inclined to think more deeply and make sense of the information they are processing. Curiosity aids in developing fresh ideas, solving problems, and understanding the information being reviewed, thereby deepening one's comprehension rather than accepting things at face value. Additionally, curiosity enhances critical thinking, as it encourages individuals to test information before accepting it.

4.7 Driving Own Learning and Development

For the next question, participants were asked to explain, based on their experience within the organisation, how they have observed graduates driving their own learning and development. The objective of this question was to identify and highlight the specific behaviours associated with graduates taking charge of their own learning and development. The following themes emerged: 1) *Proactivity* (including self-improvement), 2) *Inner Drive*, 3) *Resilience*, and 4) *Supportive Learning Environment*.

It was noteworthy that three of these themes pertained to the internal qualities of the individual, while the fourth theme, "Existing in a Supportive Learning Environment," highlighted the significant role the environment plays in how and whether graduates drive their own learning. This point was particularly emphasised by the mentors, with Participant G2 noting, *it's not about what you earn but what you learn.*"

4.7.1 Proactivity (including self-improvement)

Participants emphasised that driving one's own learning and development must begin with the individual. Being proactive involves taking the initiative and setting clear goals or visions for where one wants to be, then aligning learning activities to achieve those goals. Graduates who drive their own learning are intentional and focused in their efforts. They proactively initiate many learning opportunities within the organisation or throughout their journey.

Mentors particularly stressed that, despite the presence of a learning infrastructure (such as structured programmes or training initiatives), a fundamental element of driving one's own learning is proactivity.

This involves spotting and seizing learning opportunities, utilising available resources (whether extensive or limited), and taking responsibility and ownership of one's learning. Proactivity is an internal motivating quality that must come from the learner themselves. It also entails being aware of one's environment to act on opportunities that will benefit and enhance learning. Both graduates and mentors agreed that proactivity is a significant determinant of successfully driving one's own learning.

So I think when you're new to a company you could sometimes take a passive approach to things but you need to take an active approach. He sometimes don't get a second chance to prove himself so you need to always be on it at any given opportunity so I think that is some of the learning and skills as well. For me it would be someone who is still filling their curiosity so if you are curious about something, sometimes it could be even a simple Google search or just reading, I do this quite often as well sometimes I'll be watching a show and then I'll see something and I'll just Google it and read up about it. I think the Internet has made that's easier in a way and that's the future of like learning, even be related to your career I think that all learning is valuable, so even if you're someone who has a highly technical skill you can study something that is related to art. – Participant G2.

The amount of effort that you put in would show at the end and also your engagement and proactivity in your development also plays a role. So what I've observed is that we all do not land up at the same level and what I mean is that when we start the organisation has envisioned a goal for each one of us in one of our area various areas but if you as a grad do not put in effort on top of the structured development plan that the organisation developed you won't end up in the same level as a grad who has put in the extra effort, who fed the curiosity if you want to put it like that – Participant G4.

So I think that's the benefit of coming in with fresh eyes is because you don't really know the boundaries, you're asking questions you're pushing boundaries, it could be the craziest thing but it refreshes people at the end of the day and I've seen that way grads come in and they hit the ground running the asking questions even if it's not really relevant to what they're doing, so yeah I've experienced that with a lot of grads...

Mentor can motivate and support but it must come from the graduate themselves. Mentor can support and encourage but the graduate must have the drive to see things through. Mentor can't do things on your behalf – Participant G1.

Individual drives it. Self-directed learning is the individual driving learning beyond the obvious. Self-directed learning is thinking beyond the tools provided and digging for me, further insights, resources that can assist with learning. Self-directed learning is also discerning so you know how to use the best material/resources provided – Participant M10.

I've seen it with people who have been on the programme before. There's a lot of journalists that I know that have been on this programme before, and I see what they do, like they're always trying to better themselves and they actually go for it and that is very inspiring – Participant G8.

4.7.2 Inner Drive

In this category, participants highlighted the importance of internal motivation for graduates driving their own learning and development. Graduates who exhibit proactive learning and curiosity are those who effectively manage their own learning and development. This begins with an inner drive and extends to a willingness to learn, ask questions, and juggle multiple tasks and deadlines.

This category also underscores that graduates who take charge of their own learning and development will, over time, become confident in their ability to deliver on tasks and deadlines, feeling reassured in their capabilities. Such graduates are willing to go beyond what is provided to them, utilising their tools and frameworks to develop deeper insights and understanding, which will inevitably benefit them in the long term.

4.7.3 Resilience

In the context of resilience, research participants discussed the importance of pushing boundaries and not being afraid to question the status quo. They noted that driving one's own learning and pushing boundaries are intrinsically linked.

Participants also highlighted the courage required to make suggestions to leaders or more senior individuals, indicating that resilience involves an element of risk-taking.

Resilience is also about managing imposter syndrome throughout this journey. It involves building the mental stamina necessary to sustain self-directed learning. Thus, resilience encompasses the ability to persist despite challenges, maintain confidence, and continue driving one's own learning and development.

You'll also encounter a lot of impostor syndrome in your first few years of work, so you think you might not deserve to be there and because you're the junior you might be looked at as someone who doesn't know what they're doing even if you do know what you're doing and sometimes you feel like you don't know what you're doing even though you do know what you're doing, and learning sometimes reinforces that – Participant G2.

4.7.4 Supportive Learning Environment

Graduates who drive their own learning thrive in supportive learning environments where they are encouraged, and mistakes are viewed as part of the learning journey. Such environments are open, welcoming, and inclusive, with colleagues willing to listen to and help shape the graduates' ideas for the future. This section underscores the importance of curiosity, exploration, and openness in fostering a workspace where learners feel encouraged to explore, ask questions, and take advantage of the numerous learning opportunities available within the organisation.

Interestingly, while mentors acknowledged that driving one's own learning is largely an internal process, they particularly emphasised the significance of organisational culture. If the culture promotes openness and learning, it becomes easier for graduates to drive their own learning and development. Conversely, in a closed and stifling culture, even individuals with a strong internal desire and drive to learn may struggle. Thus, the environment plays a crucial role in whether graduates will effectively drive their own learning and development, fostering their internal drive and ambition.

4.8 Link Between Curiosity and Self-Directed Learning

In the subsequent part of the interviews, the researcher examined the link between curiosity and self-directed learning. The majority of participants recognised a clear connection between these two constructs and described how they interact.

Graduates noted that curiosity acts as the spark, while learning is the end result. Curiosity initiates the thinking process that precedes learning. Participants acknowledged that curiosity alone is insufficient; however, when combined with self-directed learning, it yields multiple benefits. Beyond being the initial force, curiosity can sustain learning, encourage learners to take initiative, guide the direction of learning, identify gaps, and stimulate interest in additional areas.

Participants described curiosity as the initiator and learning as the outcome. Curiosity starts the process, which then progresses towards learning. They emphasised that engaging with one's learning requires some form of curiosity to delve deeper. Curiosity also influences who graduates learn from, as they may need to engage with colleagues to acquire informal or job-related knowledge. In any learning context, participants believed that curiosity is essential for discovering more. Learning often involves navigating uncertainty, and curiosity drives the direction one takes. It highlights gaps, prompting further exploration and engagement.

Participants also expressed that curiosity helps maintain engagement and relevance in terms of skills and industry trends. It facilitates taking initiative and can lead to curiosity in other valuable areas. Thus, the overall consensus was that curiosity and self-directed learning are intrinsically linked and work synergistically.

Curiosity is the initial step and then self-directed learning follows that. They work together. Curiosity kicks starts the process then you move towards learning. Curiosity is the initial step followed by self-directed learning. Curiosity is the initiator (spark) and learning is the result – Participant G2.

However, curiosity indirectly plays a role because I must be interested in something and then I'll start to formulate a goal for myself influenced by, centered around, this goal
Self-directed learning is intentional but the intentionality is influenced by curiosity –
Participant G5.

Yes they are linked. In any instance where learning is involved, you would need some form of curiosity to find out more. Learning based on not knowing and uncertainty. Curiosity will drive a certain direction you take. Curiosity will drive who you learn from. Learning highlights a gap therefore you need curiosity to find out more – Participant G6.

The following themes were identified: 1) *Focused Exploration*, 2) *Personal Growth*, and 3) *Learner Engagement*. Learner Engagement had two sub-themes: *Interest* and *Drive*.

4.8.1 Focused Exploration

Participants noted that curiosity instils confidence to explore, but emphasised the importance of focused exploration. This type of exploration is essential because it adds value to the learner. Focused exploration often begins with a question, and participants highlighted the importance of entertaining these questions to kick-start the exploration process and discover more. Exploration serves not only as a learning initiator but also as a driver and sustainer of learning. Maintaining an open, exploratory mindset was emphasised as crucial for learning, in contrast to a closed mindset. Participants highlighted that conducting thorough research exemplifies focused exploration. They described exploration as an iterative process, where skills developed in one area can be applied to other areas of growth. This process also fosters a mindset and confidence that encourages exploration and the courage to learn in unfamiliar or less skilled areas. Finally, focused exploration can ignite an internal desire to figure things out independently, fostering self-reliance in learning rather than dependence on others to shape and drive one's learning.

Two go hand-in-hand. Without curiosity, you wouldn't necessarily want to learn more about the world. Through being curious, you want to explore more and more, uncover more that leads to questions and provoke more thoughts – Participant M7.

The strength of your curiosity if that is the right way to express it will determine how far you are willing to go if you are learning. If you are not driving it then somebody else would be driving it and if you not driving it then it's not self-directed learning – Participant M9.

4.8.2 Personal Growth

Graduates commented on how the link between curiosity and self-directed learning resulted in personal growth, highlighting aspects such as pushing boundaries, stepping out of comfort zones, and acquiring new skills. They also noted that curiosity helps in identifying specific learning goals.

When considering the connection between curiosity and self-directed learning, *Growth* emerged as a significant theme in the graduate interviews. According to the graduates, curiosity and self-directed learning work together to foster development and growth in learning. The act and skill of asking questions lead to exponential growth. Curiosity and self-directed learning encourage taking on new projects outside of one's comfort zone, learning new skills, and maintaining motivation. Curiosity initially helps identify what one wants to learn, while planning and self-directed efforts ensure that the learner drives their own learning journey.

Mentors also discussed growth in relation to the link between curiosity and self-directed learning. They pointed out that curiosity leads to self-teaching, preventing stagnation. Mentors highlighted that a lack of curiosity can stifle growth, career progression, and learning, potentially leading to boredom and confinement in a role. Curiosity drives individuals to learn beyond what is required, stay stimulated, and acquire new skills. Additionally, curiosity fosters empathy, which is crucial for building relationships and connections in the workplace. It also enhances resourcefulness on the learning journey and facilitates the discovery of new concepts, ideas, and ways of working.

If you use that drive to push yourself forward you can learn things and not be stagnant, lacking curiosity will stifle your growth, career progression, learning and can result in boredom. Lack of curiosity will keep you boxed in a role – Participant M4.

4.8.3 Learner Engagement

In addressing the link between curiosity and self-directed learning, participants highlighted the importance of learner engagement. They emphasised that learners become more engaged by taking on new projects, embracing novelty, and being willing to step out of their comfort zones. This engagement involves identifying learning goals and objectives, planning for learning, and taking the initiative to drive the learning process independently.

Within this theme, participants also discussed the roles of interest and drive. They noted that curiosity fuels interest, which in turn drives the learner to actively pursue new knowledge and skills. This proactive approach to learning ensures that learners remain engaged and motivated throughout their educational journey.

4.8.4 Interest

The mentors emphasised that it is easier to be curious about something you are genuinely interested in. Therefore, learners should find a "hook" to spark their interest, as this interest will fuel their curiosity and drive them to learn. The mentors stressed that a desire to learn, which can be seen as the end result or goal, begins with an initial interest in something, serving as the initiator or catalyst for the learning process.

Get to know their story. Find out what drives them. Your interest in them as a mentor, shows you care. This care, can help people settle and learn better. Its in the detail, in the care. Care can also be seen as relationship building, trust, psychological safety – Participant M1.

People who are curious would inevitably learn consistently and continuously in their own manner – Participant M10.

4.8.5 Drive

Graduates expressed that curiosity acts as the initiator, with learning being the outcome of this curiosity. They viewed curiosity as the catalyst that kick-starts the journey towards learning.

Curiosity drives individuals throughout their learning journey, motivating them to learn more and clarify their learning needs. By allowing themselves the space to be curious, learners may discover new areas of interest they were previously unaware of.

4.9 Expressing Curiosity on the Graduate Programme

The graduates were asked whether they could express their curiosity while on the programme. The purpose of this question was to determine whether the graduates “activated” their curiosity and to gauge the organisational culture's openness to curiosity, based on the graduates' lived experiences. The responses from the graduates were quite mixed. While most graduates felt they could express their curiosity during the programme, there was a notable distinction regarding timing. Some graduates felt they could express their curiosity from the outset, whereas others needed time to “grow into their curiosity.” Two themes emerged from these responses: 1) *Sense Making* and 2) *Drive*.

4.9.1 Sense making

Graduates discussed how they utilised internal structures, systems, and learning support to make sense of and consolidate the new information they encountered. They noted that sense-making occurred both on the job and within formal learning environments. This process involved the ability and skill to comprehend the large volumes of new information they were required to process during the programme. Thus, sense-making was an essential part of the comprehension ability required of the learners, or graduates.

4.9.2 Drive

Drive pertains to the individual's internal motivation to learn. Participants acknowledged that some people may feel unable to express their curiosity. However, they emphasised that a significant part of expressing curiosity is an internal drive, originating from the individual's desire to make sense of information, acquire new skills, and grow. This category also highlighted the importance of graduates taking initiative, using internal resources to bridge knowledge gaps.

Drive involves the willingness to venture into uncharted areas as part of learning and expressing curiosity. It was described in both negative and positive terms: a) Sometimes the fear of stagnation or boredom drove them, and b) The desire to achieve a specific goal or vision motivated them. Drive is crucial as a means of managing and mitigating fear. Although fear is inevitable when exploring new territories, the drive to learn surpasses the fear of the unknown, enabling continued progress. Participants found great satisfaction in “filling the gaps” and acquiring necessary skills where there were previously deficiencies.

4.10 Graduates’ Level of Curiosity

When exploring how mentors gauge the graduates’ level of curiosity upon joining the organisation, three themes emerged:

- *Rapport*: Mentors build a relationship with graduates to understand their interests and motivations. Establishing rapport helps mentors assess the graduates' curiosity through conversations and interactions.
- *Observation and Attention*: Mentors observe the graduates' behaviour and attentiveness. They pay attention to how graduates engage with tasks, ask questions, and seek out new information, which provides insights into their level of curiosity.
- *Belief*: Mentors hold a belief in the potential of the graduates. They gauge curiosity by recognising the graduates' willingness to explore, take risks, and show initiative, reflecting their underlying curiosity and drive to learn.

These themes highlight the multifaceted approach mentors use to assess and nurture curiosity in graduates.

4.10.1 Rapport (Interest and Listening)

To gauge a graduate's level of curiosity, mentors must be prepared to establish a connection and build rapport. This process is not simply an objective assessment; it involves forming a relationship with the graduate. By listening attentively, getting to know them, and showing genuine interest in their story, mentors can encourage graduates to open up. Curiosity is a deeper quality that mentors can more accurately assess when graduates feel seen and understood, free from fear. This requires mentors to break down initial barriers and truly get to know the graduates, allowing them to see the real level of curiosity.

Curiosity may manifest differently for each individual, so mentors should avoid presumptions or generalisations about how it appears. Deep listening and interest can also provide mentors with a clearer picture of the support the graduate needs. Mentors emphasised that they gauge a graduate's level of curiosity when the graduate finds the courage to ask questions, even when feeling nervous.

4.10.2 Observation and Attention

Another way mentors gauge graduates' level of curiosity is by observing how they take initiative and drive tasks related to their learning. For instance, mentors look for whether graduates schedule their own meetings and demonstrate proactivity in their learning. They assess if graduates are aware of their learning gaps and, beyond identifying these gaps, whether they formulate and follow through on a plan to address them. Graduates must also be able to articulate what they have learned at various points in their learning journey. Overall, mentors expect graduates to direct their own learning and effectively utilise all available resources to support their development.

4.10.3 Belief

Providing psychological safety and creating a zone of trust with the graduate is crucial for them to open up. It's important that graduates trust their mentors. Building rapport is essential, and mentors must constantly reassure graduates that they will uphold the social contract. Mentors can also build trust by sharing their own fears and insecurities, demonstrating vulnerability, and showing the graduate who they really are. This openness helps create a supportive and trusting relationship, encouraging graduates to express their curiosity and engage fully in their learning journey.

4.11 Curiosity as a Contributor to Learning

The next part of the interview explored what participants considered to be the benefits of curiosity as a contributor to learning. This was a key question in the study, as respondents clearly articulated how curiosity contributed to, or even resulted in, learning. Here are some direct quotes illustrating their perspectives:

- *It's curiosity that will drive your learning and push you to go further*– Participant G1.
- *Introspection (am I doing this for the right reason?)* – Participant G3.
- *Fuels my hunger to find out more information* – Participant G5.
- *What curiosity does is contribute to the strength of your learning* – Participant G10.

The following categories emerged from the interviews: 1) *Growth*, 2) *Self-Motivation*, and 3) *Creativity*.

4.11.1 Growth

There was a strong emphasis on self-improvement, continuous learning, and ongoing growth. This focus can help graduates become the best versions of themselves. Iteration was a significant aspect of this category. Alongside growth, individuals also engage in self-discovery, making it a key component of this theme. Growth involves being open to learning, implying that the drive for learning must come from within the individual—an internal motivation rather than an external factor.

Growth also means staying relevant and responding positively to changes in the environment, which can lead to personal growth when approached with the right mindset. Mentors drew a strong correlation between curiosity and the willingness and capacity for learning and absorbing information. As one mentor noted, *"a big contributor to learning because the more curious you are, the more you want to find out. The more curious you are, the more you want to take in information."* Lastly, mentors observed that curiosity can lead to exciting opportunities or discoveries beyond what is immediately apparent, such as those found in a structured programme or a job description.

4.11.2 Self-Motivation

There is always a temptation to become bored, especially as one becomes familiar with their role, colleagues, and environment. On one hand, self-motivation helps avoid boredom. On the other hand, it drives individuals to seek learning in both the known and unknown, seeking stimulation and finding novelty in certainty, as noted by Todd Kashdan (2023). This category also includes the satisfaction of having acquired the information one set out to learn. Self-motivation encourages continuous exploration and learning, even within familiar settings. It helps individuals remain engaged and find new challenges, ensuring ongoing personal and professional growth.

Curiosity results in satisfaction that you have acquired the information you set out to –
Participant M9.

A big contributor to learning because the more curious you are, the more you want to find out. The more curious you are, the more you want to take in information. Curiosity leads to self-development - use the information to better yourself – Participant M8.

Beyond facilitating learning, the mentors also noted that the advantages of curiosity as a catalyst for learning could enhance the excitement of the learning process. This is because the decision to learn originates from within the individual, rather than being directed by external instructions.

Makes learning exciting because it's not forced on you – Participant M5.

4.11.3 Creativity and Thinking Outside the Box

The benefits of curiosity as a contributor to learning include its ability to encourage individuals to think beyond their current roles, thereby broadening their cognitive frameworks and mental paradigms. This lateral thinking fosters the development of skills and confidence necessary for creative thinking in the workplace.

4.12 What Encourages and Dissuades Curiosity in Graduates

The next question posed to the mentors was what fosters curiosity in graduates? The objective here was to identify the drivers of curiosity and the positive enablers of curiosity in graduates. Participants concurred that the factors fostering curiosity included: 1) an enabling environment, 2) commitment to learning, and 3) inner drive. Conversely, factors that dissuade curiosity in graduates are: 1) a toxic work culture or environment, and 2) a lack of self-belief among graduates.

An environment that promotes learning. An environment that allows you to learn. People opening doors for you – Participant M8.

Mentors also emphasised that a company culture which encourages curiosity in graduates is one that permits mistakes during the learning and exploration process. They highlighted the necessity of an open environment where individuals feel free to ask questions without hesitation, fostering a trusting and open culture. Additionally, having approachable colleagues further stimulates curiosity in graduates.

Mentors discussed the importance of having a manager who promotes learning, exploration, and the drive to pursue one's goals. An environment that allows for self-expression and initiative also encourages curiosity.

4.13 Motivators for Driving Learning

Participants were asked to reflect on and respond to the question regarding what motivated them to drive their own learning. The themes that emerged from the interviews included *acquiring knowledge and staying informed*, *achieving independence and autonomy*, and *receiving recognition*.

4.13.1 Acquiring Knowledge and being Informed

This theme encompassed several factors. Firstly, graduates expressed a passion for acquiring knowledge. They also mentioned that the ability to be well-informed during conversations motivated them to seek knowledge. Similarly, being knowledgeable in meetings and fully engaging in discussions—from comprehension to contribution—was a significant motivator. Acquiring knowledge positions individuals better to participate meaningfully in such settings.

4.13.2 Independent/Autonomy

Participants spoke about developing the ability to do things on your own and not rely on others to do what's expected of you. Graduates discussed that being independent was a motivator.

Carving out your own way – Participant G2.

4.13.3 Recognition

Participants remarked on the validation received when they successfully accomplish tasks independently. This recognition is connected to Maslow's (1943) hierarchy of needs, specifically the self-esteem level, where the focus is on developing competence and skills as part of personal mastery.

4.14 Advice for New Graduates

In conclusion, participants were asked to provide advice for new graduates entering the workplace, specifically regarding curiosity and self-directed learning. The aim was to gather insights from graduates who had completed the programme and had the opportunity to engage in self-directed learning and curiosity-driven activities. With the benefit of hindsight, these graduates were asked to share their recommendations for their peers entering the workforce. The question specifically requested that the graduates focus their advice on the constructs of curiosity and self-directed learning. The following themes emerged from their responses: 1) Mindset, 2) Drive, and 3) Community.

If you're not naturally curious that's ok. Then self-directed learning becomes an even bigger thing for you. How else will you learn and be yourself? Self-directed learning can drive you in the absence of curiosity – Participant G10.

4.14.1 Mindset

In this theme, graduates discussed the significance of maintaining a positive mindset and self-belief. They highlighted the importance of “just going for it” and being aware of self-imposed limitations, particularly during the learning journey, which involves navigating new experiences and making sense of them. A healthy mindset is crucial in this context. This category also encompassed the graduates' ability and skill to recover from failure and develop resilience. Having a thick skin is essential for perseverance. Additionally, the graduates emphasised the value of being open-minded and not hesitating to ask questions.

4.14.2 Imposter Syndrome

Graduates emphasised the necessity of learning to trust themselves and avoid second-guessing or doubting their own judgement. Self-belief and confidence are crucial for fostering curiosity and facilitating learning. It is also important to discern feedback without taking it personally, for instance, considering factors such as the timing of an idea or the individuals with whom one is communicating. This perspective aligns closely with Paul Silvia's (2008) appraisal theory, which posits that while one may not have all the answers, it is essential to have confidence in one's ability to figure things out.

Don't doubt/second guess yourself or believe you are wrong. Maybe it's the timing of your idea or the people you're communicating with work to preserve that child-like curiosity that society tends to destroy – Participant G5.

You won't know it all but you must have the confidence in your ability to figure things out – Participant G6.

Open yourself to things. Anticipate that you'll be challenged (its' part of the course) – Participant G8.

4.14.3 Mindset (mentors)

Similar to the graduates, the mentors identified that maintaining a positive and open mindset is essential for fostering curiosity and driving self-directed learning. They emphasised the importance of a growth mindset, which involves recognizing that all experiences contribute to progress and using the lessons learned from mistakes to continuously improve. Resilience was also a key theme, with mentors highlighting the importance of setting boundaries, taking risks, and having the courage to share ideas.

Unlike the graduates, the mentors placed a strong emphasis on the importance of focus. They stressed that graduates must manage their focus and minimise distractions, such as those from social media. Focus also involves the habit and discipline of working towards one's goals and vision, with curiosity and self-directed learning playing a crucial role in this process.

Growth mindset. Remain interested and open to opportunities. Have a good level of resilience. Manage your stress – Participant M6.

See the opportunity in everything. Don't dwell on the bad parts. Have a positive mindset. Be flexible and willing to change – Participant M10.

4.14.4 Drive

Graduates emphasised the importance of being opportunistic, encouraging new graduates to take full advantage of all opportunities available within the programme and beyond. This involved taking ownership of one's own learning and being internally motivated. Specific behaviours identified in this category include:

- Absorbing as much information as possible
- Utilising free software available to you
- Maintaining a sense of curiosity about everything
- Setting personal and professional goals
- Enrolling in short courses
- Cultivating intrinsic motivation
- Engaging in regular reflection

Self-directed learning can sustain motivation even in the absence of curiosity, while authenticity fuels curiosity. Graduates advised being unapologetically oneself and using one's job description to monitor learning and progress throughout the year. This approach aligns with Knowles' (1975) definition of self-directed learning.

Set goals. Find short courses to enrol – Participant G3.

Soak up as much as you can. Use the free software available to you – Participant G7

Learn from criticism. Learn from feedback to improve your craft – Participant G8

Self-directed learning can drive you in the absence of curiosity – Participant G9

Mentors emphasised the importance of having a sense of inner drive, motivation, and focus when advising new graduates entering the workplace. From their perspective, these qualities are key to success. In this category, it is essential for graduates to direct their own learning, set up personal learning systems, and develop skills and competencies beyond what is provided through formal environments and structured programmes.

Mentors highlighted the importance of establishing oneself by acquiring knowledge and developing expertise early on. This category also touched on the significance of driving one's career, which is crucial for success.

Mentors pointed out that it is important for graduates to be proactive and to continually push themselves. Additionally, graduates need to ensure they have brand visibility, making their presence and contributions known within their professional sphere.

The world is your oyster. Grab the opportunities. Spot the opportunities. Capitalise on this new way of working and use it to your advantage – Participant M3.

Be proactive - ask your manager what is expected of you (don't wait for them to tell you) Don't doubt your progress. Keep pushing, keep trying. Make sure others know more about you too - make your brand visible – Participant M5.

4.14.5 Community

Graduates emphasised that curiosity and learning cannot be pursued in isolation; they require engagement with the community. The advice shared here was to build community while exploring and learning. Graduates highlighted the importance of asking for help and guidance from the people and experts around them. Equally important is learning to accept help and guidance from others.

Lean into your community. Ask for help and guidance from others. Accept help and guidance from others (an element of learning is a team sport) – Participant G7.

Mentors emphasised that building connections and fostering a sense of community are essential for effective learning. Graduates must recognise the importance of making and maintaining connections with their team members. They highlighted the habit of connecting with colleagues beyond work-related issues, stressing the value of checking in with the people around them.

In the context of working from home or remotely, mentors advised using technology to get to know colleagues and team members, thereby building and nurturing relationships. This approach is crucial for creating a supportive and collaborative work environment.

4.15 Thematic Overview

Table 5 below presents a summary of the interview questions and the theme that emerged from each question.

Table 7. Summary of Interview Questions and Emergent Themes.

QUESTION	THEME SUMMARY
Define curiosity	Explore, Drive
Define self-directed learning	Ownership & Inner Drive, Knowledge & Sense Making, Self-Awareness
Role curiosity played	Inner Drive, Learning & Growth, Feeling safe to explore
Driving your own learning and development	Proactive (includes self-improvement), Inner Drive, Resilience and Supportive Learning Environment.
Link between curiosity and self-directed learning	Focused exploration, Personal Growth and Learner Engagement (Learner engagement had 2 sub-themes: interest and drive)
Express your curiosity (graduates only)	Sense Making and Drive
Gauge someone's curiosity levels (mentors only)	Rapport, Observation & Attention and Belief
Benefits of curiosity as a contributor to learning	Growth, Self-Motivation and Creativity
Encourages and dissuades curiosity in graduates (mentors only)	Encourages: An enabling environment, Commitment to learning and Inner Drive Dissuades: Toxic work culture or environment and Graduates lack of self-belief
Motivated you to drive your own learning (graduates only)	Acquiring knowledge and being informed Independent/Autonomy Recognition
Advice for curiosity and driving your own learning	Mindset, Drive and Community

4.16 Conclusion

Table 8. Relationship between the Interview Questions, Themes, and Research Questions.

INTERVIEW QUESTION	THEME SUMMARY	RESEARCH QUESTION (RQ)
Define curiosity	Explore, Drive	RQ 1
Define self-directed learning	Ownership & Inner Drive, Knowledge & Sense Making, Self-Awareness	RQ 1
Role curiosity played	Inner Drive, Learning & Growth, Feeling safe to explore	RQ 1 RQ 2
Driving your own learning and development	Proactive (includes self-improvement), Inner Drive, Resilience and Supportive Learning Environment.	RQ 5
Link between curiosity and self-directed learning	Focused exploration, Personal Growth and Learner Engagement (Learner engagement had 2 sub-themes: interest and drive)	RQ 1
Express your curiosity (graduates only)	Sense making and Drive	RQ1-5
Gauge someone's curiosity levels (mentors only)	Rapport, Observation & Attention and Belief	RQ2
Benefits of curiosity as a contributor to learning	Growth, Self-Motivation and Creativity	RQ 3 + RQ 4
Encourages and dissuades curiosity in graduates (mentors only)	Encourages: An enabling environment, Commitment to learning and Inner Drive Dissuades: Toxic work culture or environment and Graduates lack of self-belief	RQ4
Motivated you to drive your own learning (graduates only)	Acquiring knowledge and being informed Independent/Autonomy Recognition	R4+R5

FLUID CLASSROOM - CELESTE STEWART

Who, what, and where is the classroom?

The classroom is fluid, it's everywhere and nowhere,
it's clear and incredibly vague,
it's exciting and overwhelming,
it's rewarding and dull,
it's clear and deeply ambiguous.

The classroom in an individual and a group.
The classroom is in a team meeting and in one mind
The classroom is in a slow brew and a quick sprint.
It's inside and it's out.

The classroom is the past, present and the future.
The classroom is a room and it's no space at all.
The classroom is structure and it's movement.
The classroom is nature.
The classroom is space and no space at all.
The classroom is confusion and insight.
The classroom is daftness and clarity.

The classroom is anger and relief.
The classroom is tears and joy.
The classroom is stuckness and realisation.
The classroom is deprivation and opportunity.
The classroom is compliance and defiance.

The classroom is gasping for air and then freedom to breathe.
The classroom is overwhelm and then its freedom to fly.

The classroom is you.
The classroom is me.
The classroom is nowhere and everywhere.

CHAPTER FIVE - DISCUSSION OF FINDINGS

5.1 Introduction

This chapter will discuss the research findings and examine how these findings relate to the relevant literature explored in Chapter Two. The chapter aims to add meaning and interpretation to the data and draw correlations back to the explored literature to either support existing literature or present a different perspective. Primarily, the discussion chapter is designed to discuss the findings in relation to the research question guiding this study. Furthermore, the findings will either complement the research findings or present a different set of ideas and ideologies.

The purpose of this study was to explore and understand the role of curiosity in self-directed learning from a motivational perspective. The study participants consisted of a) graduates who had moved into the workplace into a full-time role and had completed a graduate programme, and b) mentors who support graduates. The intention was to understand what drives curiosity and the role it plays in terms of individual motivation, drive, and learner engagement. The insights gained from this study provide an understanding of the lived experiences of graduates in terms of curiosity and learning motivation, both as separate constructs and how these constructs overlap. Beyond that, the perspectives of mentors, who play a supportive role, added depth and credibility to the findings by highlighting the perspectives of two groups of people: graduates and mentors.

This research used an interpretivist approach to collect qualitative data through semi-structured interviews. The interviews collected data from graduates and mentors alike. Two existing client companies were identified as they were available to the researcher. Ten graduates and 10 mentors were interviewed. The data was analysed to derive themes. The main (primary) research question was: **What is the role of epistemic curiosity in the self-directed learning of graduates transitioning into the world of work?**

The following sub-questions guided the interviews and the research:

- What role does curiosity play in the development of graduates?
- How does curiosity assist with the development of self-directed learning?
- What role does curiosity play (if any) in learning and learner engagement? and

- How does curiosity inherently play a role in one's ability to drive their own learning and development?

In exploring the main research question and the sub-questions, the data indicated that curiosity played the role of initiating learning by becoming an initial spark and activating interest. Furthermore, curiosity encouraged thinking as it activated exploratory behaviour. Participants clearly expressed that curiosity works best when it involves intentional learning and exploration. This implies that curiosity with specific learning aimed at achieving a certain learning goal is most effective. The discussion is structured around six key themes that emerged from the data: **inner drive, interest and exploration, engagement, ownership, resilience, and community**. The themes relevant to the research questions are explored below with a link back to the literature review in Chapter Two highlighting how curiosity fosters independent knowledge acquisition, motivation, critical thinking, and lifelong learning habits among graduates.

5.2 Inner Drive: The Motivation to Learn

In answering the main research question, the most significant theme that emerged from the study was inner drive. Both graduates and mentors consistently referred to inner drive when exploring the interview questions. The reference to inner drive was either directly mentioned or inferred throughout the interviews. Furthermore, this theme surfaced in a number of questions and was explored further during the interviews. An essential element of self-directed learning is the intrinsic motivation to seek knowledge, which aligns with the concept of epistemic curiosity (Kashdan & Steger, 2007; Loewenstein, 1994). Participants in this study expressed a strong inner drive to learn, often triggered by an awareness of gaps in their knowledge. This drive triggered by the awareness of the gaps in their knowledge is in line with the seminal research on curiosity by Berlyne (1978).

Participants emphasised how the graduate needs to be “in the driving seat” and steer their own learning. Inner drive had a particular emphasis on motivation as an enabler of learning. Participants believed this inner drive helped graduates drive their own learning and push for what they want. Participants thought the inner drive would enable graduates to optimise their learning opportunities and engagements. The emphasis on inner drive was that the drive for the learner must come from within the individual, i.e., it should not be an external or extrinsic drive.

Inner drive is about the individual, the graduate in this study, having the desire, drive, and mental fortitude to drive their own learning. The findings in this study correlate with research by Bridgman et al. (2019) and the extended work of Maslow as found in (Koltko-Rivera, 2006), emphasising that curiosity and learning are intrinsic states of the individual or learner. Furthermore, it also aligns with the literature reviewed on the adult learner, with a particular emphasis on andragogy, where the adult learner must internalise in order to successfully learn in the workplace. This inner drive can facilitate a deeper connection for curiosity and self-directed learning. The leading overarching theme around inner drive in this study supports the literature on SDT and autonomous motivation (Ryan & Deci, 2000) and its role in self-directed learning and learner engagement. Deci and Ryan's (1985) work highlighted that individuals have three main drives: to feel competent, cared for, and autonomous. When these three needs are met, the learner feels motivated to learn. Furthermore, the authors elaborated that an internal drive associated with autonomous motivation is focused on fulfilment, enjoyment, and growth on the part of the individual. Beyond that, performance, wellness, and engagement increase. Thus, the overarching theme of inner drive corroborates the findings on inner motivation.

Participants further emphasised inner motivation and how this impacts the ability to optimise learning opportunities and learner engagement. Therefore, simply experiencing the learning was not enough; one must be engaged on a motivational level to optimise the experience. The literature around self-directed learning supports this (Ryan & Deci, 2000). Graduate programmes provide some of the structure and guidance needed to learn the key skills graduates need to be successful in their roles. Even a well-thought-out and designed graduate programme will have gaps and opportunities for the graduate to extend their learning. Herein lies the opportunity to develop self-directed learning skills. For this to happen, the research suggests the graduate needs to have the inner drive to spot these opportunities. Developing this habit not only sets the graduate up for maximum learning while on a structured programme but also sets in motion a habit of driving their own learning beyond the formal programme.

This supports the research by Silvia and Kashdan (2009), where the authors highlighted how intrinsic motivation sustained curiosity. Furthermore, the theme of inner drive found in this study correlates with the work of Loewenstein (1994) and his information gap theory.

Lowenstein found that internal curiosity drove the learner to bridge the gaps between the knowns and the unknowns. Inner drive allows the graduate to maximise every learning opportunity while on the programme and beyond. This is important because not every learning opportunity is neatly packaged as such. Some learning opportunities are embedded in the day-to-day operations of an organisation, and unless the graduate is open-minded and driven, they will miss out on opportunities to learn more than what is laid out in the formal programme.

5.3 Interest and Exploration: The Act of Seeking New Knowledge

Another significant theme emerging from this study is interest and exploration. Graduates need to be interested in what they are learning and experiencing and be willing to explore, to go beyond their comfort zones. Being interested refers to the capacity to continuously ask questions which can keep one engaged but also heighten self-awareness. This suggests that the individual must be open to, and enjoy, exploring. Exploration contributed to the learner taking a proactive approach to learning. This correlates with the workplace research on curiosity by Blum-Heuser et al. (2020) where the dimension of curiosity called “Joyous Exploration” was highlighted. As shown in the literature review, joyous exploration is the intrinsic enjoyment of seeking out new information, experiences, and learning.

Exploring is about the skill and confidence to a) acquire information and b) make sense of information. Adult learners are often required to come into complex systems such as organisations, which has a massive focus on operational efficiency, productivity, and profit. Thus, practices and cultures within these systems don’t always prioritise learning. However, by being interested in the systems, processes, and experiences around them, graduates can optimise learning opportunities that may not present themselves as such, if it were not for the interest of the learner.

Exploration aligns with information-seeking theories (Pirolli & Card, 1999) which suggest that learners engage in iterative cycles of searching, evaluating, and integrating knowledge. Furthermore, epistemic curiosity facilitates a growth mindset (Dweck, 2016), as participants embraced uncertainty and complexity, perceiving them as opportunities rather than obstacles. Exploring is about working with the novelty and newness, particularly as a graduate, and remaining open to learning.

Being interested is in truly engaging with the content in order to reap the rewards of maximum learning. This correlates with the work of Loewenstein (1994) whose research demonstrated that being in a heightened state of curiosity drives the individual to “close the gap” and acquire the necessary information. His research also showed that being in a state of curiosity meant the learner increased their chances of learning additional information and also committing the information to long-term memory.

Interest is about being fully engaged with the content you are exploring, even if you lack understanding. This means constantly understanding what you are learning, why you are learning, what progress you have made, how far you still have to go, and what the gaps are etc. Engaging with the content to understand it also requires an understanding of how far you have to go. Exploring is about the willingness to move out of your comfort zone and into the unknown. On an emotional level, this may be challenging as we seek, as human beings, a desire to be competent and to add value. However, the temporary discomfort that comes with exploring beyond one’s comfort zone, could yield benefits for the individual some of which includes future-proofing and fully optimising every learning opportunity, especially those that presents itself in the informal space.

Exploring may bring with it fear and insecurity. It might activate the imposter syndrome, which is a normal response to exploring the unknown. This study found that exploring does bring along fear and possibility activates insecurities due to a lack of belief the graduate might have in themselves or a lack of experience. This correlates to Silvia’s (2008) research on interest and appraisal theory. The findings in this study support the findings of Silvia, particularly regarding the graduate making an appraisal as to whether they can cope with the inevitable novelty when exploring. Someone who believes they will be able to cope and make sense of the new information, will continue being interested in exploring new phenomena. Someone who believes that they do not have the internal capacity or resources to make sense of new information will not pursue any further, even though they can see this information is new and the pursuit thereof will benefit them in the long run. Thus, learning to manage that fear and insecurity is essential to keep the interest alive and for the graduate to trust and embrace this as part of the experience of exploring (Silvia, 2008).

5.4 Engagement: Comprehension and Sense-Making

Comprehension and sense-making pertain to the graduate's ability to “figure things out,” a crucial aspect of workplace learning. These cognitive skills necessitate that graduates engage with large volumes of unfamiliar data to discern its meaning and connect new information with their existing knowledge. This process can be deeply frustrating if graduates do not focus on how they are learning rather than solely on what they are learning (process vs content focus). Participants highlighted that graduates would encounter both large quantities of information and complex data. Therefore, it is imperative for graduates to reflect on their thinking and learning processes, particularly in terms of comprehension and sense-making. Memorisation-based learning strategies are insufficient as the learning objective shifts from rote memorisation for assessments to developing a deep understanding for problem-solving, analytical thinking, comprehension, and real-time application of knowledge (Downs, 1995). Consequently, participants emphasised the necessity for graduates to grapple with concepts and cultivate the intrinsic motivation and skills to navigate and make sense of complex learning, both within the graduate programme and as a lifelong habit for continuous learning in the workplace.

Engagement in learning necessitates both comprehension and sense-making, processes that enhance understanding and enable learners to create meaningful connections between new and prior knowledge. Participants noted that interest in a subject, whether short-term or long-term, could enhance cognitive stamina, aiding in understanding even if initial comprehension is lacking. Awareness of how one is learning, rather than just focusing on the content, is a key differentiator between workplace learning and school learning. The latter often emphasises rote learning, memorisation, and assessment-focused learning, which is predominantly transmission-based.

The ability to be fully engaged and immersed in learning is beneficial, particularly for graduates who must make sense of large volumes of new information throughout their graduate journey. Developing the skill and habit of sense-making equips graduates with a lifelong tool that they can leverage beyond the graduate programme. This is especially pertinent as businesses evolve in response to market changes, necessitating continuous upskilling.

Participants indicated that graduates need to problem-solve and independently work through challenges as part of the learning experience, which requires a degree of risk-taking. Mentors particularly emphasised the importance of providing a safe space for graduates to process new data independently. They also highlighted the value of guiding graduates by sharing their own experiences and strategies for understanding information.

Participants described engaging with learning material critically and reflectively, aligning with constructivist theories of learning. Sense-making is also related to epistemic emotions (Pekrun, 2006), where curiosity-driven learners experience cognitive stimulation and persistence in learning tasks. This theme supports the notion that epistemic curiosity not only initiates learning but also sustains engagement over time, reinforcing learning agility (De Meuse, 2017).

Ultimately, the responsibility for comprehension and sense-making rests with the graduate. This represents a significant paradigm shift from school-based transmission learning, where comprehension and sense-making occur within the confines of clearly defined tasks. In the business world, tasks are often interconnected, requiring a more fluid approach to learning. Graduates must possess the mental stamina and flexibility to optimise learning opportunities and ensure continuous development in the workplace.

5.5 Ownership for Learning: Taking Control of One's Learning

What emerged from the study, particularly from the mentors, emphasised the point that graduates need to be proactive and take ownership of their learning. Self-directed learners exhibit a strong sense of ownership over their learning process, setting their own learning goals, monitoring progress, and adjusting strategies as needed (Knowles, 1978). By taking ownership, graduates ensure maximum return on learning. Being proactive involves using the learning infrastructure provided by a graduate programme as a basis, but then going beyond that. It is about the mindset and drive of the individual to seek out their own additional learning opportunities and take initiative. Therefore, the structure provided by a graduate programme should not indicate the boundaries of learning, and if the learner is not mindful, they may fall into this thinking trap.

This is largely due to the way of learning as a school learner, or pedagogy, where the learner is encouraged to operate within the boundaries of a lesson or programme and not extend beyond that. Furthermore, the learner should maximise each learning opportunity.

In exploring the theme of ownership of learning, mindset was highlighted, and this correlates with the research by Dweck (2016) on a fixed versus growth mindset. This indicates that the mindset of the graduate impacts the learning experience. Therefore, it places ownership on the graduates to understand their mindset and realise how this mindset may be impacting their learning experience. A fixed mindset may result in a cautious and limited learning experience, as it mirrors a learning experience modelled at school level where the teacher drives the learning. Beyond the responsibility for learning, within a fixed mindset, the learner dislikes pushing beyond the comfort zone, does not see mistakes as valuable learning experiences, enjoys predictability and certainty over exploration and deeper learning, sticks with tried and tested methods, and does not appreciate being challenged. A growth mindset, on the other hand, is one where the learner believes they can learn anything they set their minds to, appreciates stretch tasks as they believe it enhances learning, and enjoys trying new things (Dweck, 2016).

Taking ownership is required, which is different from learning at school, as the onus for learning is largely with the learner. Therefore, whether there is a well-thought-out graduate plan, a more loosely structured one, or no plan at all, the learning still needs to happen. Although a plan with supporting colleagues is helpful, it is not the deciding factor as to whether graduates will have a good learning experience. Being proactive and having a proactive mindset, as well as ownership of learning, is what matters. The mindset of "the buck stops with me" should be applied. This is significant because it requires a switch from the more passive role a learner would play in a schooling system shaped by pedagogy to andragogy. Here, the learner must buy into and believe that they are responsible for their learning. This aligns with Zimmerman's (2002) model of self-regulated learning, which emphasises goal setting, self-monitoring, and reflection as crucial components of effective self-directed learning. Ownership fosters accountability, as learners take responsibility for their development rather than relying on external structures or authority figures.

A plan or structured programme is merely a tool. Ultimately, people who make the most of their learning are those who decide to be in the driving seat. This has two benefits: 1) it helps the learner gain the most out of their learning experience in the graduate programme, and 2) it helps to build a habit of lifelong learning that will set them up well to continue focusing on their learning for their career trajectory. Having this mindset can also help the learner spot learning opportunities better, as opposed to expecting learning opportunities to be presented to them (Grow, 1991).

Graduates must have a vision for themselves and be intentional with their exploration. Beyond intentionality with the content one is learning, this intentionality also needs to focus on the individual. This study highlighted the ability of the graduate to see themselves differently, in other words, to have a goal for themselves and work towards this goal. This is vital, especially in cases where the graduate might be a pioneer in their family, being the first to move into the corporate space. Though this level of being a pioneer is often celebrated in South Africa, it requires the individual to have a sense of hope for something they can grow into but cannot see immediately.

Participants spoke about this, and mentors saw their role as vital in supporting the graduates to grow into their future roles. However, this must be driven by the individual and must be based on a desire to learn and grow into something unfamiliar but exciting. When exploring curiosity and self-directed learning in South Africa and the African continent, where learners are often the first in their family to qualify with a tertiary degree and move into corporate spaces, having hope is vital as it can play a significant role in motivating one to continue learning and growing. It is unrealistic to expect the environment to change. However, the individual can rely on their inner agency on this journey, and hope is key to this (Boyatzis & Akrivou, 2006).

Lemmetty and Collin (2020) described self-directed learning as one form of workplace-based learning. They discussed the paradigm shift required and how becoming a self-directed learner involves acquiring a new set of skills. The authors noted that although becoming a self-directed learner is an individual project for which the employee is responsible, the system or organisation also plays a part in how and whether people can become self-directed learners. This is because the organisational culture directly impacts this process.

The authors highlighted that becoming a self-directed learner is a form of, or a way to foster, autonomy. The authors also discussed how employees need to be self-directed learners to improve performance. Thus, there is a need to be a full-time learner while also performing. In his TED Talk, Eduardo Briceño mentioned being in the learning zone and the performance zone. He emphasised why both zones are important and stated that people who only spend time in the performance zone will ironically see their performance plateau after a while. Therefore, being a self-directed learner is not just important for graduates but for all employees operating in a BANI world, with the pressure of needing to continuously learn and unlearn.

5.6 Resilience: Overcoming Challenges, Judgement, and Building Courage

Resilience emerged as a significant theme, reflecting participants' ability to navigate learning challenges, overcome self-doubt, and persist despite setbacks. Several participants highlighted the role of psychological safety in fostering their willingness to take intellectual risks. The ability to overcome judgment—both self-imposed and external—was critical in maintaining their epistemic curiosity. Research suggests that epistemic curiosity is correlated with openness to experience and reduced fear of failure (Kashdan & Steger, 2007), indicating that resilience is a key enabler of sustained self-directed learning. Moreover, Bandura's seminal work stresses that self-efficacy plays a role in developing learning resilience, as learners who believe in their abilities are more likely to persist in the face of challenges.

Being curious has its benefits, but curiosity is not always well received, particularly in a very conservative culture or one that does not embrace learning. In a toxic culture where colleagues do not like or have not bought into the idea of their role in driving on-the-job learning, young people may be met with resistance or colleagues who refuse to assist. In such cases, resilience is crucial. Therefore, even if met with resistance, one must find a way to work around it to ensure they meet their learning goals. In other words, do not let or allow a difficult colleague to stop you. Be resilient with your curiosity. This aligns with Todd Kashdan's (2024) work and measurement of curiosity, as well as Diane Hamilton's (2019) four factors that inhibit curiosity.

The mentors emphasised that a tolerant environment is key to nurturing curiosity. According to the mentors, a tolerant environment means that mistakes are embraced as part of the learning experience. This supports the seminal research by Hamilton (2019), who identify the environment as one of the four inhibitors of curiosity. The mentors, in particular, thought it was important to share their own mistakes with the graduates in order to normalise mistakes and move away from a punitive culture regarding mistakes. They saw embracing mistakes and using them as part of the learning journey as vital to fostering a culture of curiosity and self-directed learning. By sharing mistakes, the mentors also make themselves vulnerable, which can hopefully result in higher trust.

In exploring the emotion of interest, Silvia (2008) discussed appraisal theory and the role it plays in exploratory behaviour. Silvia's research highlights that when the individual or learner does not feel assured or confident within themselves that they will be able to make sense of new information, they are unlikely to pursue and make sense of what they find interesting. Similarly, in this research, the theme of having courage in learning was highlighted. Although curiosity may initiate learning, the ability to sustain that growth opportunity requires the learner to reassure themselves when they are operating in unfamiliar learning and thinking territory (Silvia, 2008). The participants expressed that feelings of doubt, insecurities, and imposter syndrome might be heightened, but that graduates should focus on building their confidence and remaining self-assured. The research by Hamilton (2019), which highlighted the inhibitors of curiosity, identified fear as one of the four inhibitors. Furthermore, the authors indicated that fear requires psychological safety for curiosity to flourish.

5.7 Community: Learning in Social Contexts

One of the research objectives of this study was to explore the perspective of the mentor who directs and plays a supportive role for graduates in self-directed learning. A key point highlighted by the mentors was the need for, and the power of, community, of which mentors are but one stakeholder. The findings from this study suggest that the mentor plays a vital role in the community in several ways. The mentor can share their own lived experiences, which creates a sense of psychological safety.

By sharing what worked for them when they were in a similar position to where the graduate currently is, the mentor can help alleviate the anxiety and insecurities activated when one is in a new or unfamiliar space by normalising how they experienced something similar. The mentor also plays a vital role in helping the graduate turn mistakes into rich learning experiences. This means that building a sense of community can help graduates drive their own learning.

Although self-directed learning emphasises autonomy, this study found that social interactions and learning communities play a crucial role in sustaining epistemic curiosity. Participants highlighted the importance of peer discussions, mentorship, and collaborative learning environments in shaping their learning journeys. This aligns with Sylvia Down's research on how adults learn (Downs, 1995). Her research posits that learning is inherently social and that knowledge is co-constructed and learning enhanced through interaction. Community-driven learning facilitates learning, and learners develop expertise by engaging with more knowledgeable peers. Additionally, epistemic curiosity thrives in environments where questioning and critical dialogue are encouraged, suggesting that curiosity is both an individual and collective endeavour.

The term "self" in the phrase "self-directed learning" can be misinterpreted as a task or activity the learner needs to seek out, process, and achieve on their own. However, nothing could be further from the truth. The "self" refers to the learner in the system, the actor in the system. This learner, though self-directed, relies on the support and guidance from the people, systems, and resources around them. Thus, the word "self" must not drive a message that the learner must do everything on their own. While there are elements like motivation and resourcefulness that come from an internal place, this inner drive can be influenced (sometimes substantially so) by the external environment. In other words, it is an interactive, interdependent system and process, not an isolated one.

By recognising the importance of community and social interactions in self-directed learning, this study underscores the value of a supportive network in fostering curiosity and facilitating learning. The mentor's role, as part of this community, is crucial in providing psychological safety, normalising experiences, and turning mistakes into learning opportunities.

This holistic approach to self-directed learning highlights the interplay between individual autonomy and collective support, ensuring a richer and more effective learning experience.

5.8 Personal Reflection

One of the highlights for me was reflecting on the intersection between curiosity and judgement. In other words, what happens to exploratory behaviour when one is constantly on the receiving end of negative, critical judgement? This source of judgement might be an external environment (i.e., a toxic work environment) or it could also be internal negative judgement (imposter syndrome, etc.). It is my personal view that negative critical judgement impedes curiosity, and building a form of resilience is key to overcoming that judgement. This is an area I believe needs further research.

In 2018, I was fortunate to attend the first curiosity conference hosted by pharmaceutical company – Merck. I immersed myself in a world that was completely different and unknown to me – the world of information technology and medical staff embodying curiosity to drive innovation and find solutions to problems within their fields. Culturally, it was also very different as this was a German-based organisation. Attending the conference was both exciting, as I got to learn from people very different from me, and also enlightening, as I got to see an industry different from my own where curiosity was so interwoven into what people were doing. Curiosity was also closely linked, if not dependent on, the ability to innovate and solve problems. As someone in a very different industry, I left the conference with a key question – how can those of us in the people behavioural and leadership development space act like scientists? The question was burnt into my mind as I could see how the approach of behaving like a scientist could assist us in our role of shaping talent through the various roles we play and initiatives we drive.

5.9 Conclusion

Entering the workplace as a new graduate is both exciting and overwhelming. It is exciting in that it presents many opportunities for the graduate to apply what they have learnt and pursue their career. It is overwhelming in that as soon as they enter the workplace, they are faced with the stark realisation of a) how much they do not know and b) what they need to learn to be successful in the business world.

This is true even for those who eventually want to leave the corporate world and enter entrepreneurship. The rate of change, complexities, and the ongoing pressure to continuously pivot in one's career requires individuals to constantly learn and evolve if they want to remain relevant in the working world. This study, in exploring curiosity and self-directed learning for graduates, actually identifies habits not only for young people but for all adults navigating the workplace.

CHAPTER SIX - CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

The purpose of this study was to explore and focus on the role of epistemic curiosity in cultivating self-directed learning for graduates who have transitioned into the workplace. Data was collected through semi-structured interviews, and thematic analysis was used to identify the key themes that emerged. The interviews explored how participants viewed curiosity and self-directed learning, whether and how they engaged with their own learning while in the graduate programme, the role of curiosity in their learning, and the benefits of engaging with their curiosity and learning. The key themes identified in this study were: inner drive, interest and exploration, engagement, ownership, resilience, and community. The findings strongly suggested that curiosity catalysed deeper engagement with learning material, fostering resilience and intrinsic motivation. The conclusions are discussed below followed by recommendations from this study, recommendations for future research and researcher reflections. The intended praxis model has also been discussed.

6.2 Recommendations from the Study

It is recommended that the insights gained from this study be used to further enhance existing graduate programmes in supporting graduates who have made, and continue to make, one of the most significant transitions in their lives and careers. These insights will not only help enhance graduate programmes but could also assist with the retention of young people, a dilemma many organisations are currently facing. The study can provide rich data to organisations designing learning programmes to support graduates in their transition by considering the design of meaningful learning experiences for engagement, growth, and support. Given how the world is changing, all employees are expected to constantly upskill themselves in the workplace in response to these changes or as a consequence thereof. Therefore, insights gained from this study can be applied to existing employees who also need to learn and be self-directed learners in the workplace. Although the study focused specifically on graduates as adult learners, insights from this study can be applied to all adult learners in the workplace as they all face the dilemma of upskilling themselves to remain relevant.

Mentors, as the first line of support to the graduate, must encourage and teach graduates to activate their intrinsic motivation. Beyond the mentor, the graduate programme should include elements that upskill graduates in the area of inner motivation. If the graduate has been encouraged to drive their own learning at school and university, it becomes an easier habit to access when they enter the workplace. If they have not, it might take a bit longer, but the skill and habit can be developed. Furthermore, as the graduate settles into the organisation, inner drive can be measured through the internal performance management system. In a one-on-one setting with a graduate, practices such as mentor conversations coupled with developing a vision, setting goals, reflecting, and accountability can become the building blocks to grow the required inner drive in the graduate. On an organisational level, companies should steer away from incentivising all learning as this may create an expectation that every learning should be coupled with an extrinsic reward. As the research by Ryan and Deci (2000) illustrated, not all extrinsic motivation is “bad.” Some extrinsic motivators can be internalised by individuals after a while, thus showing the potential advantage of limited extrinsic motivators. However, building a culture of incentivising all learning runs the risk of creating a culture where employees only learn for an extrinsic incentive. The value of intrinsic motivation is a culture that must be built in an organisation.

6.3 Recommendations for Future Research

It is recommended that further research be conducted on curiosity and self-directed learning for several reasons. Curiosity has not been sufficiently researched on the African continent. There are numerous studies, such as the work of Blum-Heuser et al. (2020), which have been fully integrated at Merck. While these studies can be applied to South Africa and the African continent, it is recommended to explore curiosity and self-directed learning through our lens and context. This is because, in South Africa, curiosity, learning, and autonomy must be seen within the context of our democracy. Apartheid, the previous system used to classify people based on race, brought with it a ranking that was used in education. Beyond the ranking, the bigger issue is how people internalised oppression and how this internalisation impedes autonomy, agency, exploratory behaviour, and the ability to be self-directed as an adult learner. South Africa is not isolated in this regard. The rest of our continent also faces the challenge of existing in post-oppressive states or young democracies that require a different set of skills. While this presents liberating opportunities and experiences, the indoctrination of being submissive is still very prevalent in our communities.

Thus, it is recommended that curiosity, as an exploratory state and set of behaviours, should be explored within our context to understand how curiosity in our environments shares nuances with other countries and provides ideas on what we need to focus on to foster a culture of curiosity in our homes, schools, and workplaces.

In considering previous work such as that of Lowenstein's, how do we equip learning professionals to build a culture of self-direction in the learning solutions they design? While the study focused on the graduate themselves shifting from pedagogy to andragogy, so too must People Development Practitioners, including Talent Specialists who design learning programmes. They must be supported in moving away from a predominantly didactic approach to one where didactic methods are used a) where necessary and b) kept to a minimum, encouraging learners to engage with their innate inner drives.

Further research is encouraged on the topic of curiosity at school. This is because a learner's relationship with their innate curiosity is largely influenced by how they experience curiosity at school (or not). Thus, the way they engage with their curiosity in the workplace cannot be viewed in isolation from how their curiosity is nurtured at home and how curiosity is encouraged at school. The habits formed around curiosity and self-directed learning will directly shape how they engage as adult learners.

6.4 Praxis Model

Six themes were consolidated through the discussion: inner drive, interest and exploration, engagement, ownership, resilience, and community. These themes emerged as the strongest indicators of how curiosity drives, fosters, and contributes to inner motivation and self-directed learning. In light of these findings, I developed a praxis model called the Curiosity Driven Learning Programme: Thriving as a Learner in the Modern Workplace. The goal is to initially offer this programme to the client sites where the research was conducted. The plan is to implement it with these clients first in 2025 and then expand the offering to the broader market and client base at Bold Curiosity in 2026. New clients will also be informed about the programme, should they wish to explore its implementation within their businesses.

6.4.1 Programme – Thriving as a Learner in the Modern Workplace

As illustrated in Figure 11, a graduate will join the programme in March 2025. The learning programme will span eight months and will consist of the following modules or components:

1. Introduction and Overview

- Purpose of the programme
- The importance of lifelong learning in career growth
- How to approach the programme: mindset and expectations

2. Inner Drive – The Science of Motivation

- Understanding intrinsic vs. extrinsic motivation
- The neuroscience of motivation and how habits shape drive
- Strategies to foster inner drive (goal setting, purpose alignment)
- The value of motivation in career growth

3. Interest and Exploration – Learning Beyond your Comfort Zone

- What is exploration, and why is it essential for workplace learning?
- The balance between structured learning and curiosity-driven exploration
- Overcoming resistance (fear of failure, uncertainty)
- Corporate-friendly ways to explore (informational interviews, cross-functional projects, skill sprints)

4. Engagement – Deep Learning for Career Impact

- Defining engaged learning: attention, curiosity, and effort
- Deep learning vs. surface learning
- How deep learning contributes to professional impact
- Techniques for insight formation (reflection, synthesis, application)

5. Ownership – Becoming a 21st Century Self-Directed Learner

- What is learning ownership, and why does it matter?
- Proactive learning strategies (self-directed learning, seeking feedback, growth mindset)
- Setting personal learning objectives in the workplace
- Overcoming passive learning habits

6. Resilience – Navigating Challenges and Complexities in Learning

- The psychology of resilience in learning
- Managing setbacks and learning from mistakes
- Setting healthy boundaries to balance work and learning
- Coping with stress and avoiding burnout

7. Community – Learning in a Social Context

- The role of social learning in professional growth
- Identifying and leveraging mentors, peers, and networks
- Being a contributor: how to share knowledge and support others
- Building a culture of learning in your workplace

8. Conclusion and Consolidation

- Key takeaways from the programme
- Creating a personal learning roadmap
- Commitments and next steps
- Final reflections and next steps



Figure 11. Praxis Model: Thriving as a Learner in the Modern Workplace.

The learning programme will be holistic, blending online and in-person workshops to create a comprehensive blended learning solution. The revised five-dimensional curiosity assessment (Blum-Heuser et al., 2020) will be utilised to conduct a pre-programme evaluation. This assessment will provide graduates with a profile of their current curiosity levels and will be used to guide and coach them throughout the programme. Additionally, it will offer insights into each learner's optimal learning methods and the transfer of learning.

Following the assessment, the programme will consist of six learning modules, each corresponding to the themes discussed in this study: inner drive, exploration, engagement, ownership, resilience, and community. These modules will be delivered monthly, with each month dedicated to a specific theme. Each module will include pre-work to engage the learner's curiosity and initiate self-directed learning. This will be followed by more substantial learning materials and a compulsory monthly sense-making session, where the group will come together to work through the learning elements and focus on forming insights. The modules will conclude with an assessment focused on the transfer of learning, based on business projects.

A learning playbook, primarily visual, will summarise the key points of each module. Learners will be able to personalise the playbook with their own notes and insights. An assessment and impact dashboard will be available to track each learner's progress and growth, including examples of how they have applied the learning from each module. The programme will conclude with two final assessments. One will be content-based, focusing on a consolidated evaluation to measure learning. The other will involve the five-dimensional curiosity assessment to gauge how the learners' curiosity skills and habits have developed throughout the programme.

The researcher will serve as a consultant and facilitator throughout the programme, with additional co-facilitators contracted to lead elements of the monthly sessions. There will be ongoing monthly feedback and progress reports provided to the client.

6.5 Reflection on the MPhil Journey

I started this MPhil journey in 2018. Little did I know the extent of the growth I would go on. It's easy to start a course and think of it as a product you will engage in for the next few years. That the outcome – a praxis model would be somewhat connected but also disconnected from the author, the designer.

I should have known better because nothing in my life is random or superficial.

From the beginning of the MPhil journey, I was thrown into what felt like a tumble dryer. It was very unfamiliar territory. The classes focused on complex academic conversations. The conversations were rich academically, but I struggled to find the connection to my “real world”. This real world is one where you have limited time as a consultant, it's competitive and the focus is on impact and making money. Here, in the academic space, we had time to discuss topics at length, using complex language I didn't understand and quite frankly, it looked like the annual Met but for academic egos. One after the other, my classmates would converse, not to understand but to outshine each other. I wished there were more opportunities to have ‘clean’ conversations – conversations where we kept topics simple without diluting the message.

At first, I thought I would complete my thesis at the end of 2019. That didn't happen! Then COVID hit and I thought I would use the time at home (lockdown etc.) to finish my thesis. The death of a very, very close family member threw me into the deepest cycles of grief. Not only was I dealing with grief but I was trying to make sense of how someone I loved so dearly, life was ended so abruptly, and overnight (literally). While we mourned Roy's death, I couldn't hug my parents because they were in isolation. I visited my parents' home and stood outside my parents' window. I watched my mom as she was engulfed in sadness. I watched her collapse and found myself treading the grief of losing Roy on the one end, and the worry that my parents might also not make it. It was touch and go with my mom at one stage. It was hell, sheer hell!

The end of the year was fast approaching, and I was hoping that was the end of a tumultuous year. But as is so often the case, I didn't know we had one more significant event coming up.

My husband was retrenched on a Zoom call after working for the company he was employed at, for so many years. He was the most loyal employee and here he was, being informed about his retrenchment taking effect within 24 hours and no certainty that the company would pay out his retrenchment package. That December, we were caught up in HR and legal consultations, to ensure that my husband would at least, get paid what he was meant to.

I watched my partner deal with the fact that the rug had been pulled out from beneath him. I watched him crumble as he tried to make sense of unethical leadership practices and the lack of humanity one could have, towards another human being. I had to contain my own anger. I tend to fight injustice head on. This fight was different. It didn't help anyone if I fought head on because even if I did that, my husband would still be dealing with the same outcome. The fight now was being there for my partner, and keeping it together. Overnight, I took on the role of the breadwinner in the house. I know for sure, Shane would have done the same for me. I didn't have a problem doing that. We navigated the choppy waters of the next 3-4 years by putting one foot in front of the other. We shifted from long term thinking both of us grew accustomed to, to navigating what was immediately in front of us and steer/navigate the next wave. And we were faced with all the challenges that come with limited finances. Today, a few years on, our lives have been grounded again in that my husband has started his own architecture firm. He is a true example of post traumatic growth. He has taken something unpredictable and traumatic and used that cement to anchor his phenomenal growth. Shane is my hero. Whilst so many men beat the chests in fake authority and power, Shane is the true embodiment of power. This quiet leadership is incredibly loud and a harbour in very misty waters.

Back to my thesis, in the time I had planned to focus on my thesis, so much unplanned change took priority in my life. All of the unplanned change were growth opportunities and these took priority. I started each year with a promise that this would be the year, I found the focus and stamina to complete my thesis. As each year came to an end, I'd be engulfed in more guilt and insecurities about not meeting my deadline. My insecurities and imposter syndrome grew bigger and louder with each passing year.

2024 – now 6 years later and being the only one who didn't submit yet, I fell into serious self-doubt. To the outside world I was always talking about my thesis, and maybe even with pride. But deep down, the usual suspects had taken route – not good enough, not clever enough, slow learner, too stupid, can't keep up with others, don't deserve my place, disappointing people, letting others down etc.

“What is surprising is that curious brains work more slowly than average. That is not a problem, because they also notice more” – Dr Carl Naughton

This was the year, I had to finish this project! It also happened to be the 10th year of my entrepreneurial journey. Yikes! When I started this organisation, Bold Curiosity, there were not too many consultants operating in the space of professional development for graduates entering into the workplace. And believe me, we still have lots to do in that space. I'm not for one second saying that the work there is done. But I enjoy being in spaces where no-one has gone before or where very few people dare to tread. I'm a pioneer and a rebel. I enjoy being the first, the trendsetter. And so the space of graduate development started to feel 'full'. This, coupled with the fact that some key relationships had ended, forced me to seriously consider what the next 10 year chapter might look like. I'd been in the trenches for too long. Now it was time to come up for air, to breathe, to dream and design and accompanying plan. It was time for the next blueprint. This is where my MPhil finds me in a meaningful way. What started out as an annoying academic disconnected ego-fuelled experience HAS become the way. Whilst the focus of the MPhil is inclusive innovation on the African continent, I've seen myself grow and innovate over these past few years. And the MPhil has given me a foundation in which to cement my learning and growth. Life has a funny way of keeping us on our toes. The thing I was fighting, has become the very thing I have embraced. So as this thesis comes to an end, I know I stand on the cusp of my own personal innovation and with that, the ability to affect innovation on a greater level. But I had to go through my own experiences first, and deal with my inner 'demons'. And those fears and insecurities will always be there. But this journey has shown me that I AM good enough, clever enough, smart enough. And I'll take this newfound relationship with myself into the next phase of my growth, my evolution, my being.

So where does this leave me on my MPhil journey. Well, in many ways I don't know, haha! But I do know that writing this thesis, has sparked my own curiosity about curiosity, motivation and learning. 3 pillars that I firmly support for anyone on a journey of growth. And now I want to explore curiosity on my own continent. I fundamentally believe in my country and my continent. I'm an advocate for the decolonization agenda and creating spaces where we acknowledge and celebrate our own wisdom, intellect and intelligence. By us, for us.

Quite frankly, I'm tired of finding it so incredibly easy to reference thought leaders from first world countries, yet I have to look long and hard, to find thought leaders from our own continent, writing about a topic like curiosity (as one example).

And thus begins another chapter for me. Only this time, I think it's incredibly bigger than me. There is a knowing and an unknowing of being where I am right now. The knowing exists in the fact that I will submit my thesis soon. The unknowing? That where I find myself currently on my journey, kick starts another wave of change and currently, my praxis model is my only guide. But what I know about me is that I thrive under conditions like this. Because being a rebel, struggling at school and even as a post graduate student, forging my own way has taught me to love a blank canvas. It's taught me to get comfortable grabbing the paintbrush and filling the canvas in a way that works for me and for others. I love being a pioneer. I love a blank canvas. Because a blank canvas means I can create. And that, is a wonderful space to be in. It's what I was born to do and ironically, the very thing I hated, this academic journey, has become a key piece in the puzzle called "Celeste's life".

Thank you MPhil. My pain has become my purpose and my mess, my message.

I exit the formal component of the MPhil journey with scars and a deep pride in my resilience to have finished stronger than I started. And now, the real work begins.

6.6 Conclusion

In addressing the research question, “what is the role of epistemic curiosity in the self-directed learning of graduates transitioning into the world of work?”, this study provided insights through six main themes. These themes illustrate the interplay between curiosity and learning for graduates, supported by the perspectives of mentors. However, curiosity is multi-faceted, necessitating ongoing research to understand how to foster curiosity not only in graduates but in all professionals. It is recommended to explore how to cultivate curiosity when learners must assimilate new information and as an ongoing habit.

A focus on studying curiosity within the South African context is essential. Epistemic curiosity is complex and nuanced. Researchers have expanded on I-type (interest type) and D-type (deprivation type) epistemic curiosity. Therefore, continued research in the field of epistemic curiosity, particularly focusing on I-type and D-type, is recommended.

The themes derived from this study were based on research conducted with two client sites. It is recommended to expand this research to additional companies within South Africa and across the African continent. This is particularly important given the limited studies on curiosity conducted on this continent. Currently, the pharmaceutical company Merck conducts research to measure curiosity in the workplace. There is an opportunity to collaborate with these researchers to explore conducting similar research in South Africa and the African continent. Lastly, it is recommended to extend research on curiosity and self-directed learning to educational institutions, aiming to build the habits of curiosity and self-directed learning from an early age and throughout a learner's lifetime. An important extension of this would be to partner with the NWU for collaboration opportunities on their current research on self-directed learning in educational institutions.

YELLOW PETALS – CELESTE STEWART

She chose a new path
The old one looked familiar,
Felt familiar,
Is familiar,
But in the familiarity lies pain, protection, and being guarded
Walls as high as you can see
Camouflaged by sunflowers
But as they drop their heads at night,
The wall becomes visible
Showing herself to the Moon

She is as grey as the Moon
Hurt that has been turned to stone
Hurt that now protects
With a promise not to let any more hurt in
That very promise, cementing the wall

She considers a different path
Perplexed by the choice, she decides to consider it
Pensive, she dips her foot into the ocean on the other side
Sure, the water is colder than behind the wall and the sunflowers
But today, she smiles

Sure, it's cold
But she knows she can master it
Because the sunflowers told her so
Their seeds become her wings
Their yellow petals, her gentle landing place
The hurt becomes her liberation
The dry cement crumbles and becomes the sand that supports her in the new quest

She sees the endless ocean line and she knows ...

It's a new beginning.

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APPENDICES

Appendix A: Ethics Approval Letter

	Faculty of Commerce Private Bag X3, Rondebosch, 7701 2.28 Leslie Commerce Building, Upper Campus Tel: +27 (0) 21 650 1375/ 6748 Fax: +27 (0) 21 650 1380 E mail: oom faculty@uct.ac.za Internet: www.uct.ac.za  @Commerce UCT  UCT Commerce Faculty Office
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Celeste Stewart	29/11/2019
Graduate School of Business	
University of Cape Town	
REF: REC 2019/011/025	
The role of epistemic curiosity in enabling the learning of graduates who are transitioning to the world of work	

We are pleased to inform you that your ethics application has been approved. Unless otherwise specified this ethical clearance is valid until 30 November 2020.

Your clearance may be renewed upon application.

Please be aware that you need to notify the Ethics Committee immediately should any aspect of your study regarding the engagement with participants as approved in this application, change. This may include aspects such as changes to the research design, questionnaires, or choice of participants.

The ongoing ethical conduct throughout the duration of the study remains the responsibility of the principal investigator.

We wish you well for your research.

Signed by candidate

2019.11.29
15:04:20 +02'00'

Jacques Rousseau
Commerce Research Ethics Chair
University of Cape Town
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"Our Mission is to be an outstanding teaching and research university, educating for life and addressing the challenges facing our society."



MASTER OF PHILOSOPHY IN INCLUSIVE INNOVATION

INTERVIEW CONSENT FORM:

Participant name:

I volunteer to participate in a research project conducted by Celeste Stewart as partial fulfilment of the requirements for the MPhil Degree at the Graduate School of Business. I understand that the research is designed to gather information about epistemic curiosity and self-directed learning in graduates transitioning to the working world and that I will be one of approximately 20 people being interviewed for this research.

Background and purpose of the research

This MPhil is a study that aims to explore and gain insight into how epistemic curiosity facilitates the learning of graduates transitioning to the working environment. The data will be gathered through one-on-one interviews with graduates and mentors in organisations. Due to our current climate, the interviews will be conducted on Zoom, MS teams or WhatsApp.

Ethics approval

Ethical consent for the study has been approved by the *UCT Commerce Faculty Ethics in Research Committee*.

Participation and confidentiality

I understand that my participation in this research is voluntary, that I will not be compensated and that I may withdraw at any time. The interview will take approximately 45 - 60 minutes to complete and will be recorded. I understand that I will not be identified by name in any reports using information obtained from this interview and that my confidentiality as a participant in this study will remain secure. Subsequent uses of records and data will be subject to standard data use policies which protect the anonymity of individuals and institutions.

Should you have any questions or concerns please contact me directly, Celeste Stewart – 082 9263859, or my supervisor, Christina Swart-Opperman, on 071 8558150.

Consent

I consent to participate in this interview, based on the terms outlined above and subject to the following additional condition of my own (if any).

Signed by interviewee

.....

Signed by Student

Date

7 September 2020

Date

Appendix C: Graduate Interview Guide

- What does curiosity mean to you / When I say the term curiosity, what comes to mind for you?
- Okay, and when I say the term self-directed learning what comes to mind for you?
- What role does curiosity play who graduates entering the world of work? Would you say that it adds value? What value do you think it adds?
- Based on your experience as a mentor this business, how have you observed graduates drive their own learning and development?
- Okay so if we were watching a YouTube clip or a Netflix documentary that showed a graduate in your business driving their own learning and development, what would we see what are some of the behaviours that we would see this in action?
- And then would you say that there is a link between curiosity and self-directed learning?
- Do you feel that you could express your curiosity while you are on the programme? And since the programme do you feel that you can continue to express your curiosity?
- What encourages curiosity in young people, so let us just look at the opposite; in your opinion what dissuades young people from being curious?
- What would you considered to be the benefits of curiosity as a contributor to learning

What advice would you give the new graduates coming in?

End.

Appendix D: Mentor Interview Guide

- What does curiosity mean to you / When I say the term curiosity, what comes to mind for you?
- Okay, and when I say the term self-directed learning what comes to mind for you?
- So, based on your experience as a mentor what role does curiosity play who graduates entering the world of work? What value do you think it adds?
- Based on your experience as a mentor this business, how have you observed graduates drive their own learning and development?
- Okay so if we were watching a YouTube clip or a Netflix documentary that showed a graduate in your business driving their own learning and development, what would we see what are some of the behaviours that we would see this in action?
- And then would you say that there is a link between curiosity and self-directed learning?
- Okay based on your experience of new people coming into the business how do you gauge the persons level of curiosity?
- So, we are now heading towards the end of the interview just a few more questions on my side. In your opinion how do people learn in the workplace?
- What encourages curiosity in young people, so let us just look at the opposite; in your opinion what dissuades young people from being curious?
- If you were to give advice to the new grads coming in next year as a mentor in light of what we just spoke in now with curiosity and self-directed learning , What advice would you give the new grads coming in?

End.