

FACTORS THAT INFLUENCE THE ADOPTION AND IMPLEMENTATION OF

SUSTAINABLE PROCUREMENT:

A CASE OF A SOUTH AFRICAN PUBLIC UNIVERSITY

A thesis submitted in fulfillment of the requirements of the degree of

MASTER OF BUSINESS ADMINISTRATION

of

RHODES UNIVERSITY

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12 DECEMBER 2023

Abstract

Climate change and resource scarcity have become some of the world's most critical problems and are among the most significant megatrends influencing world leaders' agendas in decision-making (Rothkopf & Casey, 2014; International Social Security Association, 2014). Sustainable procurement has been identified as one of the strategic tools that can resolve these issues to help the world move towards a more sustainable and resilient future (World Bank, 2019). Through sustainable procurement practices, organisations can meet their demand and supply of goods and services while minimising environmental harm, maximising financial returns, and enhancing socioeconomic status (Villena & Gioa, 2020; Bonnemaïson, Eldandsson, Ibach & Spiller, 2021). This qualitative research used an Eastern Cape-based higher education institution in South Africa as a case study to investigate factors that influence adopting and implementing sustainable procurement, with resilience as a theoretical foundation, in higher education. The research obtained approval from the participating university as a gatekeeper for the study; it began by drafting a research proposal and securing ethical clearance from Rhodes University. Semi-structured interviews were used with seven higher education procurement staff members to get the data working in procurement in higher education. The findings from the study revealed that managerial support and knowledge of sustainable procurement were determining factors for whether or not a university developed and implemented a strategy for sustainable procurement. Secondly, the participants mostly cited barriers as inadequate financial resources resulting in limitations for the university, therefore partially implementing sustainable practices. Thirdly, the data revealed that university staff in procurement had a basic understanding of sustainable procurement.

Keywords: Sustainable procurement; Higher education institutions; Implementation of sustainable procurement; Resilience theory.

DECLARATION

I declare that the Dissertation/Thesis entitled, Factors that Influence The Adoption and Implementation of Sustainable Procurement:- A Case Of A South African Public University, which I hereby submit for the degree, Master of Business Administration at Rhodes University, is my own work. I also declare that this thesis/dissertation has not previously been submitted by me for a degree at this or any other tertiary institution and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.



Name Surname : Sive Mpapha

ACKNOWLEDGEMENTS

A heartfelt expression of gratitude goes to the almighty God, Amanyange Asekhaya (*Amantlotshane*), and to my children, Mr. Kwezi-Lomso and Miss Luminathi Minentle Mpapha. Their words of encouragement and unwavering support have been a constant source of inspiration, reminding me to persevere. My partner, has been my unwavering pillar, never leaving my side, and for that, I hold her dear.

I thank my sister, Ms. Hlalanathi Mpapha, whose support was invaluable. She stepped in as a second mother to my daughter when the demands of my studies were at their peak, especially in 2022. To my brother Siyabonga Mohammed ndiyabulela mntakatata ngokundithwala. To the rest of my family, I thank you.

A special thank you to Shirley and Maatla Rampai for the support during my stay, *u Thembi ufundile*.

To Ms. Pholisa Mpapha, Ms. Ziyanda Ntlokwana and Mr Makhaya Mkele I am grateful for everything you have done to assist me on this journey.

To Ms Lusanda Mkiva and Mr. Unathi Mhlanga, thank you for your significant assistance and support

I extend my thanks to the entire business school and the MBA group of 2021 for being a consistent source of support throughout my MBA program. Your presence made a significant difference in my journey, and I am deeply appreciative. In memory of Siyasanga Ntlakaza, your wisdom is remembered with gratitude.

I owe a debt of gratitude to my supervisor, Ms. Leticia Greyling, who went above and beyond being my supervisor. She became my counselor, motivator, and shoulder to cry on. Without her, I wouldn't be where I am today. Her patience, words of encouragement, and motivation, especially during the tumultuous year of 2022, were a source of strength.

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CHAPTER 1: INTRODUCTION TO THE STUDY

1.1 Introduction and background

In the past few years, the understanding of the integral position of procurement as a vehicle to produce sustainable results and goals for governments and organisations has increased globally (Brammer & Walker, 2011; Bonnemaïson et al., 2021). The Organisation for Economic Co-operation and Development (OECD) endorsed the transition from a compliance-driven approach to a strategic procurement perspective in 2015 to foster inclusive communities and sustainable economic growth (OECD, 2019). The South African government and state organs, such as the local municipalities and most public universities, have thus positioned procurement as a vital policy weapon for achieving key economic goals to address the country's socioeconomic issues (Fourie & Malan, 2020). The research context and guiding questions for this study are described in this introductory chapter.

1.1.1 Sustainability and Procurement

The Brundtland Commission, formed in 1987, is commonly associated with introducing the concept of "sustainability" (Banerjee, Gupta, Koner, 2022). This Commission describes sustainability as a development that "meets the needs of the present without compromising the ability of future generations to meet their own needs" (United Nations, 1987; p.16). This comprehensive definition covers all aspects of sustainable development, including environmental, social, and economic needs—which must be balanced to produce long-term, sustainable outcomes (United Nations, 2012). Research and policy have both emphasised the significance of sustainable development (Mensah & Ameyaw, 2012). As more academics, researchers, and scholars have developed an interest in studying sustainable development challenges, the significance of sustainable development has increased (Young, Nagpal & Adams, 2016; Leal Filho, Skouloudis, Brandli, Salvia, Avila & Bacchus, 2019). This knowledge is essential for addressing pressing environmental and socioeconomic issues, including poverty, social inequality, biodiversity loss, and climate change (United Nations, 2023). Economic activities to improve human prosperity and well-being have long been the focus of development and study (IPCC, 2022). However, considering the increasing challenges of climate change and other sustainability problems, proactive measures must ensure that current growth does not expose future generations to harm (International Social Security Association, 2014). Global trade has increased more than 40 times since the 1900s due to developing economies worldwide, yet significant environmental, social, and financial

implications accompany this flow (Ospina, Betekain & Roser, 2014). Similarly, with the rise in global commerce and consumption, producers in exporting countries now bear the financial and environmental costs that formerly fell on consumers in importing nations, leading to several injustices (United Nations, 2020).

Prioritising sustainability in procurement is important for addressing the increasing challenges of social and environmental degradation in our world. The Brundtland Commission's 1987 definition of sustainability "as meeting present needs without compromising the future" resonates profoundly (United Nations, 1987, p.16). This captures the idea of the "triple bottom line"—achieving long-term results by balancing social, environmental, and economic imperatives (United Nations, 2012). The significance of sustainable development in research and policy reflects its critical importance (Mensah & Ameyaw, 2012). As scholars research the sustainable development challenges, its importance grows; it provides an essential framework for addressing poverty, inequality, biodiversity loss, and climate change (United Nations, 2023). While economic initiatives have driven progress, future generations must be safeguarded from looming threats like climate change (IPCC, 2022). The surge in global trade, while a sign of growth, brings profound environmental and social implications (Ospina, Betekain & Roser, 2014). Producers in exporting nations now bear costs previously borne by consumers in importing countries, giving rise to a range of injustices (United Nations, 2020). This necessitates a paradigm shift in procurement practices towards sustainability, where today's choices ripple positively through generations to come (Agyepong & Nhamo, 2017). Purchasing or buying of services goods for the benefit of the organisation, is known as procurement (Young, 2023).

Public procurement, which involves government and state-owned entities buying goods, services, and projects, is an important economic function for governments (Fourie & Malan, 2020; OECD, 2023). Governments and private companies worldwide are starting to recognise the importance of sustainability (Brammer & Walker, 2011). As a result, there has been a noticeable increase in sustainability projects corresponding with commitments to the Sustainable Development Goals (SDGs) or more comprehensive programs, like waste reduction, improved energy efficiency, reduced carbon emissions, and pollution prevention. (Mensah & Ameyaw, 2012). According to Theron and Dowden (2014), sustainable procurement practices are an approach for achieving sustainability. During the 2002 World Summit on Sustainable Development, the United Nations (UN) urged countries everywhere to

implement public procurement policies that support the market for environmentally friendly products and services (United Nations, 2002). Sustainable procurement practices include but are not limited to using small and local suppliers, products that are likely to be recycled or reused, adhering to labour laws, reducing carbon emissions during the transportation of goods (OECD, 2021). Even with the encouragement to adopt sustainable procurement, little is known about the implementation and adoption process within the public space, especially in universities (Leal Filho et al., 2019).

1.1.2 Sustainable Procurement in South Africa

Public procurement was considered a crucial policy lever in post-apartheid South Africa (Shai, Molefinyana & Quinot, 2019; Fourie & Malan, 2020). Section 217 (2) of the Constitution of the Republic of South Africa outlines two primary public procurement objectives in South Africa: (1) The procurement system should uphold “fairness”, “equity”, “transparency”, “competitiveness”, and “cost-effectiveness” (Fourie & Malan, 2020: p.6). (2) Secondary procurement policies can establish preference categories in contract allocation, safeguarding or advancing individuals or groups disadvantaged by unfair discrimination (Ambe & Badenhorst-Weiss, 2012).

The Public Finance Management Act (PFMA), passed into law in 1999, established a set of regulations for supply chain management in South African state-owned organisations and national and provincial ministries (Treasury, 1999). The PFMA (Treasury, 1999: p.48) defines an effective procurement system as "fair, equitable, transparent, competitive, and cost-efficient," aligning with the constitutional pillars. As Hanks, Davies, and Perera (2008) noted, South Africa moved away from a strict 'rules-based procurement system used by the State Tender Board to a more adaptable and decentralised structure. The decentralisation of the procurement system grants local governments and sub-units the flexibility to determine how budget allocations are managed, a key component in achieving sustainable public procurement (Turley & Perera, 2014). This flexibility offers more chances to inform decision-makers and buyers on how to include social and environmental factors in the procurement process (Turley & Perera, 2014). A noteworthy strategy, the black economic empowerment approach, promotes the public sector's support of black-owned organisations to counterbalance economic advantages historically enjoyed by white-owned organisations due to apartheid (Brammer & Walker, 2011). The concept of sustainable procurement encompasses Broad-Based Black Economic Empowerment (BBBEE) initiatives and other policy objectives like localisation,

environmental sustainability, and ethical labor practices (Leal Filho et al., 2019). Despite governmental reforms, challenges persist in South Africa's public procurement procedures, including non-compliance with procurement legislation and irregular tendering processes (Smart Procurement, 2011).

1.1.3 Sustainable Procurement in Higher Education Institutions

Higher education institutions are encouraged to prioritize sustainable procurement practices to manage their impact on the environment and society (Brammer and Walker, 2011). These universities serve as both consumers and providers of public education and research services, and their financial investments have wide-ranging impacts on the economy, environment and society (Awuzie & Emuze, 2015; Young et al., 2016; Pacheco-Blanco & BastanteCeca, 2016; Leal Filho et al., 2019). This significance is particularly noticeable in countries like South Africa, which struggle with environmental and economic issues like resource depletion, pollution, and joblessness (World Food Programme, 2022). South African higher education institutions may implement sustainable procurement practises to address these challenges, enhancing their resilience. Sustainable procurement practices offer multiple ways to strengthen resilience (Leal Filho et al., 2019).

Although there is a greater body of research on sustainable procurement practices in developed nations higher education institutions, more information has to be shared to increase public awareness of the topic; there is a need for more information to be shared on this knowledge to raise awareness on the subject (Young et al., 2016; Awuzie & Emuze, 2015). Given that most universities are public, studies conducted in the public sector regarding sustainable practices apply to research within public universities (Leal Filho et al., 2019). Some universities have integrated sustainable practices into their procurement strategies, taken measures essential for sustainable development in their infrastructure projects, and focused on sustainable teaching and learning methods (Awuzie & Emuze, 2015). Certain South African public universities are members of the Purchasing Consortium Southern Africa (PURCO SA), which is dedicated to promoting collaboration among its members to save time and resources in addition to establishing partnerships with any organisations involved in the Southern African Higher Education Sector, through expert and focused cooperative procurement initiatives (PURCO SA, 2021). As noted by Awuzie and Emuze (2015), while higher education institutions in sub-Saharan Africa have committed to achieving sustainable development, there is a lack of

comprehensive reporting on the necessary procedures for ensuring a successful transition. This has led to the assumption that they may have recorded below-average results.

Resilience in the context of higher education relates to an institution's capacity to endure and adapt to a wide range of internal and external stresses, such as shocks of environmental, social, or economic adversities, disruptions, and transformations (Shaya, Abukhait, Madani & Khattak, 2022; Brende & Sternfels, 2023). Higher education institutions must address these issues and reduce their environmental impact by implementing sustainable procurement processes. Furthermore, higher education institutions have a social responsibility to support local communities (Leal Filho et al., 2019). They can support local enterprises, promote equitable trade, and improve social conditions through sustainable procurement practices. This, in turn, can yield economic advantages for both the institution and the local community (Leal Filho et al., 2019). Universities have the potential to revive the local economy and generate employment opportunities by endorsing local sourcing and sustaining environmentally-conscious enterprises. South Africa has demonstrated its dedication to sustainability through its national policies and frameworks (Gupta & Laubscher, 2018).

South Africa faces various environmental challenges, such as climate change, resource depletion, and pollution (WFP, 2021). South Africa has made commitments to sustainability through its national policies and frameworks. The South African government has emphasised the importance of sustainable development and green procurement practices (United Nations, 2023). Studying sustainable procurement in higher education aligns with these policy objectives. While there is a growing body of literature on sustainable procurement, more research is still explicitly needed to focus on higher education institutions in South Africa. Investigating the factors influencing the adoption and implementation of sustainable procurement practices in this context can help fill this knowledge gap. The researcher evaluated the institution's challenges and opportunities by conducting a case study at a South African public university in the Eastern Cape province. The research findings will provide valuable insights and recommendations for the case study institution and other higher education institutions in South Africa and beyond, aiming to enhance their sustainability efforts through procurement practices.

1.2 Problem Statement

Although sustainable procurement practices are widely acknowledged as crucial to creating inclusive communities and achieving sustainable economic growth, there is still a lack of awareness and implementation of sustainable procurement practices in higher education institutions (HEIs) despite these practices being widely acknowledged as crucial to creating inclusive communities and achieving sustainable economic growth (Pacheco-Blanco & Bastante-Ceca, 2016; Young et al., 2016; Leal Filho et al., 2019). The lack of research and literature on sustainable procurement practices within South African HEIs highlights the need for a focused research into the factors influencing their adoption and implementation. This research attempts to close this knowledge gap and to provide insightful information to policymakers entrusted with creating or updating sustainable procurement regulations in higher education by concentrating on the drivers and barriers to sustainable procurement practices inside HEIs. This contribution seeks to provide a comprehensive narrative highlighting the importance of adopting and implementing sustainable procurement and the drivers and barriers that may affect this process. This research on the factors that influence the adoption and implementation of sustainable procurement practices within the context of higher learning institutions is further aimed at adding to the existing literature and assisting decision-makers when developing or reviewing policies around the issue of implementing sustainable procurement in higher education institutions. A contribution that narrates and advocates for process review on adopting and implementing sustainable procurement and the barriers thereof.

1.3 Research aim and objectives of the study

The main goal of this research was to investigate the factors influencing the adoption and implementation of sustainable procurement practices in a South African public university context. In order to achieve the research goal, the following sub-objectives were pursued:

- To identify the drivers influencing the adoption and implementation of sustainable procurement practices.
- To identify the barriers to sustainable procurement adoption and implementation.
- To make recommendations for adopting and implementing sustainable procurement, facilitating improved resilience.

1.4 Justification of the research

The study will focus on factors influencing sustainable procurement practices within HEIs, which will benefit the decision-makers and policymakers. The research is motivated by limited

research in higher education and aims to contribute to the knowledge gap in sustainable procurement practices within South African public universities.

1.5 Organisation of chapters

Chapter 1 - Introduction: The first chapter of this thesis provides a general overview of the research topic. It explains the research context as well as the guiding research goals.

Chapter 2 – Literature Review: The second chapter of this study reviews the literature around sustainable procurement. This chapter thoroughly explains the concept of Sustainable procurement and current debates surrounding the topic. This chapter also presents the guiding theoretical framework for this study.

Chapter 3 – Research Methods: The third chapter of this study explains the adopted methodological framework used in collecting the necessary data. The chapter further provides information about the data collection and analysis method used.

Chapter 4 – Findings and Results: The fourth chapter presents and analyses the study's findings. This chapter is divided into three key sections based on the research goals. The first section examines how the participants understand sustainable procurement. The second section looks into the drivers of sustainable procurement according to the participants. This chapter's last section looks at the barriers to implementing sustainable procurement in a university setting.

Chapter 5: Discussion: This chapter discusses the research findings within the context of relevant literature, similar studies, and the guiding theoretical framework.

Chapter 6: Conclusions: This final chapter summarises the key discussions from each chapter. It further provides recommendations for sustainable procurement implementation within a university.

CHAPTER 2: A REVIEW OF THE LITERATURE

2.1 Introduction

Introducing sustainable within a university setting is of great importance because of its positive effects on the economy, students, and other stakeholders (Awuzie & Emuze, 2015; Young et al., 2016; Leal Filho et al., 2019). This chapter aims to explain the concept of sustainable procurement and discuss key trends around the concept based on various studies. The first section of this chapter will discuss the key principles related to sustainable procurement and its origin. The second section of this chapter will look at the key drivers and barriers to adopting and implementing sustainable procurement practices.

2.2 Defining Public Procurement

The concept of “public procurement” speaks for itself: “public” refers to the government or any state organ, including parastatals, local governments, and public universities; “procurement” refers to “buying” or “purchasing” (Brammer & Walker, 2011). Therefore, the process or means by which public bodies purchase products or services, or often both, can be characterised as public procurement (Siyal & Xin, 2019). It can also mean engaging in the assessment, acquisition, and receipt of products and services (OECD, 2023). This is called “public procurement” when it is done by or on behalf of public entities or receives funding from them (Ambe & Badenhorst-Weiss, 2012). The government and state-owned organisations often outsource various tasks to the private sector, such as providing basic computer hardware to create and maintain public infrastructure (OECD, 2016). When making these outsourcing decisions. Selecting the service provider based on the lowest quoted price is a common practice after obtaining multiple quotations (OECD, 2016). Currently, many organisations view procurement as a strategic activity with the strategic importance of achieving sustainable development and its impact on its long-term performance (Touboulic & Walker, 2015). Instead of being involved at the departmental level, the procurement function is now an integral component of the board (Tukuta & Saruchera, 2015). According to Witjes and Lozano (2016), external business factors like customer expectations, competitiveness, and rising environmental awareness are the causes of this shift. Since the customer is now valued, expectations should be exceeded (OECD, 2020). The procurement function is impacted by recycling, the specification of renewable raw materials, increased concern over waste and by-products, a broader focus on the usage of returnable packaging, and other related issues (Witjes & Lozano, 2016).

2.3 The Evolution of Sustainable Procurement

Sustainable procurement was first introduced in 2002 at the United Nations World Summit on Sustainable Development in Johannesburg (UNEP, 2021). At this conference, different participants agreed to commit to sustainable development, and sustainable procurement was one of the tools identified to help reach sustainable development (Young et al., 2016). The concept arose from understanding the strategic importance of achieving sustainable development and its impact on its long-term performance (Touboulic & Walker, 2015). Although there is no single agreed-upon definition for the concept, which is still in its infancy, most authors concur that sustainable procurement procedures should align with the definition of sustainable development above (Walker & Phillips, 2008; Brammer & Walker, 2009; Brammer & Walker, 2011).

Sustainable procurement is defined as "a process whereby public authorities seek to procure goods, services, and works with a reduced environmental impact throughout their life cycle when compared to goods, services, and works with the same primary function that would otherwise be procured" (OECD, 2017: p.154). The most common definition defines sustainable procurement as "a process whereby organisations meet their needs for goods, services, works, and utilities in a way that achieves value for money on a whole-life basis in terms of generating benefits not only to the organisation but also to society and the economy while minimising damage to the environment" (UNEP, 2021:p.6). Based on these definitions, sustainable procurement is a policy that can assist in achieving targeted societal results and is crucial in advancing the sustainability agenda (Brammer & Walker, 2011). Sustainable procurement post-pandemic refers to the process of purchasing goods, services, and works while considering social, environmental, and financial factors, with a focus on resilience and adaptability in the face of future disruptions (Renukappa, Akintoye, Egbu & Suresh, 2016).

Organisations should adopt sustainable procurement practices and incorporate these into the organisational culture to ensure sustainability and protection of the environment (Kalubanga, 2012). The culture referred to benefits the environment and helps the business's competitiveness, innovativeness, and resilience (Carter & Easton, 2011). Furthermore, Sustainable purchasing (2015) states organisations seek sustainable goods and services and only purchase from vendors who show enterprise-level, ethical, social, and governance (ESG) standards.

According to Witjes and Lozano (2016), the closeness of a procurer and a supplier is one of the key distinctions between sustainable procurement and public procurement. This connection results from a continuous partnership process that begins with planning rather than award decisions. This role

change necessitates an extended period of cooperative supplier, procure debate, and development of technical, non-technical, and socioeconomic criteria (OECD, 2016). Additionally, sustainable procurement would shift the usual negotiation strategy from price per unit to the best value for money, allowing for the easy inclusion of several sustainability standards in a tender (OECD, 2012).

2.4 Procurement in Higher Education Institutions

Procurement in higher education institutions plays a vital role in ensuring the efficient acquisition of goods, services, and construction projects (Young et al., 2016). According to Cortese (2003), procurement for HEIs involves procuring products and services from third parties, including all non-pay expenditures made by HEIs. Although HEIs are predominantly public institutions, their mission and priorities often differ from typical government entities (OECD, 2020). Consequently, the procurement priorities within these institutions and the challenges they encounter may vary (Leal Filho et al., 2019). Therefore, it covers the definition of requirements, specification, risk assessment, administration of the tendering process, ordering, contract award, management, and supervision of providers' performance (OECD, 2016).

According to Weisser (2017), the cost of the product or service over its whole lifespan and the quality required to satisfy customer needs are considered during the procurement process. In order to support and enable short and long-term teaching, research, and commercial objectives, the procurement process function for HEI is to establish, secure, and maintain optimal value for money, efficiency, and risk management to meet institutional needs through resource allocation and external expenditures (Velazquez, Mungunia & Sanchez, 2005; Weisser, 2017).

Procurement tasks in some higher education institutions are carried out operationally (Leal Filho, et al, 2019). Some top managers consider procurement a low-level activity, and procurement teams merely provide a minor, tactical support role (Cortese, 2003). Procurement personnel, therefore, frequently solely participate in the contracting and tendering phases (Ambe & Badenhorst-Weiss, 2012). Agyepong and Nhamo (2017) argue that when used successfully, procurement may help an organisation achieve its academic financial and strategic goals while ensuring that the funds being spent are used efficiently. To harness the full potential of procurement, it is essential to incorporate it into the financial planning processes employed by HEIs, extending its influence from the operational to the strategic level (Agyepong and Nhamo, 2017). Moreover, it should be granted increased authority over all non-pay expenses within the institution, both recurring and capital (OECD, 2020). This adjustment will empower procurement staff across all HEIs to play a more

dynamic role in institutional strategy (Leal Filho et al., 2019). To provide better statistics on projected and actual institutional spending, the organisations would need to be backed by upgraded information systems (Borchers & Wolpe, 2012). Given that HEIs are primarily public service institutions, it can be reasonably assumed that studies examining the behaviour of public sector sustainable procurement (SP) would have relevance and applicability to HEIs on a broader scale (Leal Filho et al., 2019).

2.5 Implementation and Adoption of Sustainable Procurement

Higher Education Institutions (HEIs) implement sustainable procurement practices to ensure more suitable purchases that align with industry or company, guidelines, approaches and regulations (Leal Filho et al., 2019). According to Mont and Leire (2009), public authorities rely heavily on certificates when implementing sustainable procurement, where suppliers are expected to hold certifications from independent bodies. In contrast, sustainable procurement might necessitate compliance with a specific code of conduct formulated by public bodies, which suppliers are obligated to adhere to (Worrel & Nijaki, 2010). However, compliance goes beyond these certificates, and vendors must adhere to global norms regarding social criteria (Mont and Leire, 2009). As a result, public authorities attempt to establish diverse standards, certifications, and contractual provisions to enhance the incorporation and implementation of sustainable procurement practices.. For example, Article 18.2 of the European Union's Treaty on Contracts for the Supply of Goods and Services (sustainable procurement) specifies that contractual authority must adhere to particular "social and environmental norms, national European Union, and international labour regulations (European Commission, 2021). This Article implies that procurement officers are required to select the most cost-effective or economically favourable offer. The first suggests that several environmental, economic, and social factors are considered while evaluating eligible offers (European Commission, 2021).

According to Turley and Perera (2014), implementing sustainability standards and criteria through public procurement would result in more resource-efficient economies, improved environmental conditions, and higher societal well-being. The push from public authorities for sustainable alternatives enhances the overall market position of green and sustainable goods, resulting in a rise in demand for sustainable goods that would spur supplier innovation and development (Hasselbalch, Costa, & Blecken, 2012). However, the other side of this debate has highlighted that implementing sustainable procurement could face various barriers that limit the potential benefits (Brammer & Walker, 2011). The following section will review empirical research on the drivers and barriers of sustainable procurement implementation.

2.5.1 Drivers to the Adoption of Sustainable Procurement

The section below describes the factors that influence the adoption and implementation of sustainable procurement in organisations. This research defines drivers as anything encouraging organisations to adopt sustainable procurement practices. According to the literature, an organisation can be driven by the following drivers to implement sustainable procurement.

2.5.1.1 Government policies and regulations

A study on the policy variables influencing the adoption of sustainable procurement procedures was done by Brammer and Walker (2011). The results demonstrate that the driving force behind sustainable procurement originates from the collection of national policies that support it (Brammer & Walker, 2011). Compliance with governmental regulations is required of public bodies (Turley & Perera, 2012). Government programs usually use subsidies and tax breaks to encourage organisations to adopt sustainable buying practices (Lee, 2008). Similarly, a study conducted by Ramakrishnan, Haron, and Goh (2015) on the factors influencing green purchasing in Malaysia discovered a significant link between state regulations and the adoption of sustainable procurement in Small and Medium-sized Enterprises (SMEs), and it highlights funding and tax breaks as being particularly helpful in this regard. As such, through regulations, governments can drive the adoption of sustainable procurement practices (OECD, 2012). These research studies highlight that government-set regulations and legislations help encourage organisations to adopt environmentally friendly practices like sustainable procurement (Brammer & Walker, 2009). For example, China, Germany, Malaysia, Japan, and the United Kingdom, among others, have all implemented regulations to encourage corporate social responsibility (Huang, Tan & Ding, 2015). These initiatives also highlight the importance of ethical and sustainable practices, which can serve as a valuable precedent for promoting good organisational practices in the corporate world and other sectors, including higher education (Brammer & Walker, 2011). These regulations can encourage HE institutions to adopt sustainable practices and engage in corporate social responsibility, ultimately contributing to more responsible and eco-conscious organisational practices within academia (Hohnen & Potts, 2007). In a study on promoting sustainable development in higher education, which was done in a higher education institution in Free State South Africa by Awuzie and Emuze (2015) at Central University of Technology, they found that policies and declarations primarily drive the higher education sector's adoption of sustainable strategies.

2.5.1.2 Stakeholders

The university consists of various stakeholders, including academic staff, management personnel, support staff, student community members, researchers, and representatives from contractors and consultants (Glock & Broens, 2011; Leal Filho et al., 2019). However, it is anticipated that there may be divergent perspectives between student community members and management regarding the factors driving the adoption and implementation of sustainable practices in Higher Education Institutions (HEIs) (Leal Filho et al., 2019). The importance of stakeholder influence in promoting sustainable procurement practices has been emphasised (Hsu & Hu, 2008). Within HEIs, students, who can be seen as customers, have the potential to drive initiatives for sustainable procurement (Young et al., 2016). Moreover, customers, including students, possess significant financial leverage and can pressure suppliers to adopt sustainable procurement practices for long-term sustainability and environmental performance (Young et al., 2016). It should be noted that customers' modifications to procurement rules and practices, such as incorporating environmental requirements, directly influence supplier behavior and encourage them to prioritise environmental concerns (Lee, 2008). Additionally, Paço, Raposo, and Filho (2009) highlight that consumer demand for environmentally friendly and high-quality products impacts the entire manufacturing process, from product design to end-of-life considerations, and compels organisations to integrate sustainable techniques. Stakeholders in HEIs, particularly students, can potentially drive sustainable procurement practices (Leal Filho, et al., 2019). Their influence and consumer demand for sustainable products can motivate suppliers and organisations to prioritise environmental considerations throughout the procurement process (Young et al., 2016; Leal Filho, et al., 2019). Consequently, it becomes crucial to understand the degree and manner in which procurement choices address the distinct requirements of these stakeholders (Ambe & Badenhorst-Weiss, 2012).

2.5.1.3 Top Management Support

Leadership and management support were shown to be crucial in the implementation of sustainable procurement, according to a study by Brammer and Walker (2011). Project teams will use sustainable procurement if managers encourage and include it in their plans or goal-setting (OECD, 2012). According to Ramakrishnan et al. (2015), the senior management of an organisation can encourage and support workers in adopting sustainable procurement by giving them training and benefits or incentives. Witjes and Lozano (2016) assert that the role of leadership in fostering organisational commitment is essential for the successful adaptation of sustainable procurement. Buniamin, Ahmad, Rauf, Johari and Rashid (2016) noted that leaders' support is key to successful sustainable procurement implementation. Support from top management is a crucial factor in driving the adoption

of sustainable procurement (Grandia, Groeneveld, Kuipers, & Steijn, 2014). According to Ramakrishnan et al. (2015), the senior management of an organisation can encourage and support workers in adopting sustainable procurement by giving them training and benefits or incentives. Hsu and Hu (2008) state that an organisation oriented toward sustainability is often influenced by the top management's perspective on environmental issues and advocacy activities.

2.5.1.4 Economic benefit

Financial considerations are critical for organisations embracing sustainable procurement (Bhool & Narwal, 2013). Sustainable procurement signifies the capacity to lower unit costs of produced goods or rendered services without compromising the product's intended purpose or quality (Perera et al., 2009). Kamolkittiwong and Phruksaphanrat (2015) note that utilising less energy, water, and raw materials during production will also have a positive economic impact by protecting the environment and lowering production costs. The use of sustainable procurement is frequently viewed as a win-win situation because it lowers costs, increases operational efficiencies, and boosts the organisation's reputation (Brammer & Walker, 2011).

2.5.2 Barriers to the Adoption of Sustainable Procurement

The following section will discuss some of the barriers identified in the literature that can disrupt an institution's sustainable procurement and implementation practices. Barriers are considered anything that limits an organisation from adopting sustainable procurement practices.

2.5.2.1 Budget constraints

In study by Brammer and Walker (2009) investigated sustainable procurement practices within the public sector of the UK. Among the barriers identified by the researchers were financial constraints and the perception that sustainable products come with a higher cost. As per the findings of Komakech (2016) and Appiagyeyi, Ayarkwa, Agyekum and Opoku (2018), integrating sustainability considerations into established budgets can pose difficulties, particularly when applied to procurement procedures. This is because the primary aim of procurement is usually to obtain goods at the most economical price (Ambe & Badenhorst-Weiss, 2012). There is a common misconception that environmentally friendly goods and services are more expensive (Borchers & Wolpe, 2012). This belief stems from the notion that adopting green and socially responsible production methods is typically more expensive than conventional approaches (Blair & Wrigh, 2012).

According to Mont and Leire (2009), many vendors meet the sustainability requirements of public procurers. However, these characteristics are frequently undervalued because of the need for more audit resources (Mont & Leire, 2009). Since almost all government institutions face stringent budget constraints, the cost-effectiveness of sustainable procurement is expected to play a critical role in decision-making (Brammer & Walker, 2009). Equally important are limitations with the distribution of financial resources that hinder the introduction of new elements for procurement-related processes (Appliagvei et al., 2018). Though sustainable practices are often seen to be more expensive, some situations are beneficial when financial and environmental goals are in line, such as waste removal (OECD, 2012). The fact is that finance remains a significant barrier due to budget constraints, while the public is set on the notion that public universities are unwilling to pay for resources (Brammer & Walker, 2011).

2.5.2.2 Organisational culture/attitude

Organisational attitudes refer to how individuals within an organisation respond to their surroundings, either positively or negatively, and collectively shape employees' overall disposition and outlook toward their work environment (Matar, 2014). On the other hand, organisational culture encompasses a shared set of assumptions, values, and beliefs that govern how an organisation treat its members, creating a unique social and psychological environment that influences employee behaviour (Bamidele, 2022). Research has indicated that public institutions, particularly, can have cultures resistant to change (Cox, Chicksand, & Ireland, 2005), which poses challenges to implementing sustainable procurement initiatives. Strong leadership is crucial in sustainable procurement in establishing legitimacy and driving knowledge and change within an organisation (Leal Filho et al., 2019). However, resistant organisational cultures can hinder the implementation of sustainable procurement practices (Brammer & Walker, 2009). Effective integration of sustainable procurement and development goals requires aligning institutional structures, funding pressures, and regulatory factors within the organisational culture (Brammer & Walker, 2011; Meehan & Bryde, 2011; Chari & Chiriseri, 2014). Universities, for example, play a significant role in creating an organisational drive for sustainable procurement, with factors such as transparency playing a crucial role in this process (Young et al., 2016).

2.5.2.3 Lack of knowledge and training

A study by Quayle and Quayle (2000) revealed several areas that require attention and improvement in procurement. These include the need for purchasing consortia, increased understanding and prioritisation of the procurement function, training programs for procurement personnel, and full life-

cycle management (Quayle & Quayle, 2000). In 2012, Mensah and Ameyaw studied the difficulties of sustainable procurement in the Ghanaian construction sector. The study found that only some individuals in the procurement department are aware of sustainable procurement, which includes environmental, economic, and social sustainability. The study highlights some of the biggest obstacles to sustainable procurement practice in the Ghanaian procurement landscape are related to the awareness of the concept and the higher initial costs of sustainable procurement (Mensah & Ameyaw, 2012).

The Sustainable Procurement Task Force (Defra, 2006) highlights a lack of professional procurement skills in the public sector due to environmental professionals conducting sustainable procurement training, hindering sustainable procurement adoption, reducing buyer motivation, and reducing sustainable results. Managers, staff, and procurement officers must better understand sustainable procurement practices to implement green purchasing goals as part of their commitment to sustainability (Pacheco-Blanco & Bastante-Ceca, 2016). Lack of knowledge and familiarity with government policies and guidelines, necessary tools, and support is an issue aggravated by limited guidance (Leal Filho et al., 2019).

2.5.2.4 Lack of support from top management

The effectiveness of sustainable procurement relies significantly on organisational cultures, structures, and procedures that support and promote sustainable solutions (Osei, Papadopoulos, Acquaye & Stamati, 2023). Hence, the involvement and support of senior management play a critical role in sustainable procurement endeavors. The absence of senior management support poses a substantial obstacle to adopting and effectively implementing sustainable procurement practices (Chari & Chiriseri, 2014). According to the Sustainable Procurement Task Force, high management needs to give clear instructions on how to prioritise achieving sustainable development goals through procurement (Defra, 2006). The effective implementation of strategies is likely to happen when top management supports sustainability and integrates sustainable procurement into planning (Brammer & Walker, 2011).

To implement sustainable procurement for any institution's needs, one must first assess the current situation and identify the drivers and barriers at the institution (Leal Filho et al., 2019). According to most authors, the organisational structure should be aligned with what is to be implemented, i.e., sustainable procurement (Kannan, 2021). The organisational structure is how the organisation's operations are structured. In addition to structure, organisation leadership is essential when

implementing sustainable procurement. The above means that an organisation requires managers to direct the implemented strategy and to provide staff with the necessary skills to follow the outlined strategy (Du Plooy, 2009). When putting a strategy into action, organisational culture is crucial. An organisation's culture determines the shared values that shape how individuals react to various situations. Because culture influences employees' opinions and actions, culture has sway over how a strategy is implemented (Brammer & Walker, 2011).

The discussion above demonstrates that there have been several research studies on sustainable procurement undertaken in various regions of the world. Unfortunately, not much has been done in a university institution's context, so the context may differ from the cited studies.

2.6 Theoretical underpinning: Resilience theory

The study's underpinning theory is the resilience theory. The theory posits that systems can effectively respond to disturbances, adapt to change, and maintain their core functions (Lengnick-Hall, Beck & Lengnick, 2011). Resilience theory emphasises the need for organisations to develop robust and adaptable procurement strategies to address sustainability challenges in the context of sustainable procurement (Pereira, Christopher & Da Silva, 2014). In the context of sustainable procurement, resilience theory recognises the need for organisations to develop robust and adaptable procurement strategies to address sustainability challenges (Pereira, Christopher & Da Silva, 2014). The concept of resilience has been particularly prominent and has various meanings ((Lengnick-Hall, Beck & Lengnick, 2011). To justify the need for a resilient organisation, one must first have a working definition of these concepts (Ponomarov & Holcomb, 2009). Resilience is defined as "a function of an organisation's situation awareness, management of keystone vulnerabilities and adaptive capacity" (Seville, Brunson, Dantas, Le Masurier, Wilkinson & Vargo, 2008:p.2). Supply chain resilience is defined as "the ability of a system to return to its original state or move to a new, more desirable state after being disturbed" (Christopher & Peck, 2004:p.4). In addition, a resilient organisation is an organisation that can undertake and maintain positive adjustment under challenging conditions (Boin & Eeten, 2011). Implementing sustainable procurement can lead to a resilient supply chain, which can assist in organisational resilience (Ponomarov & Holcomb, 2009).

2.6.1 Alignment of Resilience Theory and Sustainable Procurement

Resilience theory provides a framework for understanding and addressing sustainability's complex and interconnected challenges. Sustainable procurement, guided by resilience principles, supports the development of resilient supply chains (Brende & Sternfels, 2023). By embracing supplier diversity,

fostering redundancy in sourcing options, and promoting flexibility in procurement strategies, organisations can enhance their resilience and adaptability to changing sustainability requirements. Resilience theory emphasises the importance of diversification as a strategy for managing risks (Annarelli & Nonino, 2016). In sustainable procurement, diversifying suppliers is vital in reducing reliance on a single source and mitigating risks associated with environmental disruptions, social issues, or economic fluctuations. Engaging with diverse suppliers enables organisations to build resilience by having alternative options to ensure a sustainable supply of goods and services (Brende & Sternfels, 2023).

Resilience theory emphasises the importance of diversification as a strategy for managing risks. In sustainable procurement, diversifying suppliers helps reduce reliance on a single source and mitigates risks associated with environmental disruptions, social issues, or economic fluctuations (Ponomarov & Holcomb, 2009). By engaging a diverse range of suppliers, organisations can build resilience by having alternative options to ensure a sustainable supply of goods and services (Christopher & Peck, 2004). Resilience theory encourages the development of redundancy and contingency plans to address disruptions. Sustainable procurement can involve identifying alternative suppliers, establishing backup systems, and implementing contingency measures. By having redundancy in place, organisations can maintain their commitment to sustainability even in the face of unexpected events or supplier challenges (Van Breda, 2018).

Resilience theory emphasises the value of collaboration and learning from past experiences (Van Breda, 2018). COVID-19 highlighted weaknesses in international supply chains and forced organisations to reconsider and strengthen their resilience. Reducing risks and guaranteeing business continuity resulted in a greater emphasis on local procurement, supplier diversification, and transparency (Civil Service Worlde, 2020). Sustainable procurement encourages collaboration with suppliers, stakeholders, and industry partners to share best practices, knowledge, and innovations. Collaborative efforts enhance the resilience of procurement systems by fostering information exchange, joint problem-solving, and continuous improvement (Brende & Sternfels, 2023). Resilience theory and sustainable procurement are intertwined, offering a synergistic approach to building a sustainable future. By integrating resilience principles, organisations can develop procurement strategies that are robust, adaptable, and capable of effectively addressing sustainability challenges (Pereira, Christopher & Da Silva, 2014). Diversifying suppliers, establishing redundancy, fostering flexibility, and promoting collaboration are vital elements that align resilience theory with sustainable procurement practices. Together, they provide a framework for organisations to consider

sustainability challenges, improve their resilience, and contribute to a more sustainable and resilient future (Brende & Sternfels, 2023).

2.7 Conclusion

In conclusion, Chapter 2 looked at sustainable procurement in higher education institutions, highlighting its importance, development, drivers, and barriers. The chapter additionally covered the foundations of resilience theory, highlighting its importance in developing resilient and flexible procurement strategies. This chapter provided an analysis of sustainable procurement methods, highlighting the vital significance that these methods play in academic settings. Analysing the components of growth, drivers and barriers offered an understanding of the topic. Moreover, the resilience theory conversation provided a solid theoretical foundation, highlighting its relevance in developing procurement strategies that can survive difficulties and adjust to changing conditions. The chapter highlighted the importance of the resilience theory is vital to sustainable procurement.

The following parts will focus on how sustainable procurement is integrated and implemented within the higher education institution context, using this information as a foundation upon which to expand. Furthermore, it will take a more practical approach, focusing on the practical application and execution of sustainable procurement principles within the unique environment of higher education institutions. This groundwork of knowledge established here will serve as a solid platform for subsequent discussions and analyses.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

The methods and techniques that will be used to gather the information required to address this study's "how" and "what" are described in the present chapter. This chapter's purpose is to review the methodology for answering the research questions. The research design and the selected research paradigm will be explained in this chapter. The main goal is to summarise the approach used to answer the research questions. This research used a systematic sampling technique that included the university's procurement division employees to gather data. The primary method used for data collection was semi-structured telephone interviews, providing opportunities for follow-up questions. These interviews were transcribed using transcription software called Otter AI. All participants got consent letters informing them that their answers would be kept private before participation. Additionally, this chapter will thoroughly explain the research plan and selected paradigm.

3.2 Research Paradigm

According to Saunders, Lewis, Thornhill and Bristow 2019 a research paradigm is a method for obtaining and interpreting knowledge about a phenomenon. Consequently, a research paradigm gives the researcher a set of presumptions and beliefs upon which the selected methodologies must be founded (Reham & Alharti, 2016). The research adopted a post-positivism approach based on deductive logic (Gale, Heath, Cameron, Rashid & Redwood, 2013). According to Parka, Konge, and Artino (2019), the post-positivist paradigm starts with the idea that reality is complicated, subjective, and made by people's ideas. Politics, values, and emotions are more important in post-positive research than truth and evidence, which are fundamental to positivist research. Post-positivist researchers develop and seek reliable and valid evidence of a phenomenon's existence instead of concentrating on generalisation (Bonache & Festing, 2020). Post-positivism was helpful for this study because it allowed the research to quantify the barriers and drivers of sustainable procurement adoption at the chosen university while at the same time providing room to understand the subjective meanings related to sustainable procurement for the procurement officers.

3.3 Research Design

A research design refers to the strategy or plans that were used for conducting the research (Singh, 2023). The research was conducted at a public university in the South African province of the Eastern Cape and used a qualitative methodology. Qualitative research places greater emphasis on understanding the organisation's functioning as opposed to making predictive forecasts. It is

conducted within the particular context in which the subject of the research is situated (Hammesley, 2013). This methodology aligned with the study's objective of assessing the determinants impacting the execution of sustainable procurement. Qualitative research analyses and documents the ways in which people interpret and construct meaning from their experiences (Azungah, 2018).

3.4 Population and Sampling

A popular non-probability sampling technique in research is convenience sampling, which chooses participants based on their accessibility and convenience (Kallio, Pietila, Johnson, and Kangasniemi, 2016). In convenience sampling, researchers select individuals or elements that are readily available and easy to reach (Patton, 2002). The Eastern Cape has four public universities; the researcher initially approached via email requesting a gatekeeper on all four universities in the Eastern Cape. However, only one university could assist with the gatekeeper permission, two universities did not respond, and one declined participation due to its size. Hence, this research used the convenience sampling approach (Patton, 2002) to select a university willing to participate, and it would be practical to collect the required data (the researcher is based in the Eastern Cape). The qualitative research strategy known as "purposeful sampling" is often used to choose instances with the greatest amount of information feasible and to best use the limited resources available (Patton, 2002). This entails locating and choosing individuals or groups with expertise or experience with a topic of interest (Palinkas, Horwitz, Green, Wisdom, Duan, & Hoagwood, 2015). In addition to knowledge and experience, essential factors include the availability and ability to express and articulate, the willingness to participate, and the ability to reflect on views and ideas effectively (Palinkas, et al., 2015).

Inclusion and exclusion criteria are essential in qualitative research to determine the inclusion or exclusion of participants. Inclusion criteria "are defined as the essential features of the target population that the investigators will use to answer their research question" (Patino & Ferreira, 2018; p. 84). The inclusion criteria included participants in the study who were university procurement department employees with expertise in procurement, willing to participate, available for interviews, able to share their understanding of sustainable procurement, and not part of a vulnerable research group.

Exclusion criteria "are defined as features of the potential study participants who meet the inclusion criteria but present with additional characteristics that could interfere with the study's success or increase their risk for an unfavorable outcome" (Patino & Ferreira, 2018; p. 84). The study excluded

individuals lacking knowledge of the university's procurement procedure. Even if they matched the inclusion requirements, participants in vulnerable research groups and those staying outside the research area were excluded from participating. These requirements were implemented to ensure that the study participants could participate and were directly relevant to the research context.

Since this research is only interested in people with expertise in the university's procurement process, purposive sampling was the most appropriate method for this research. This research approached individuals who work in the procurement department at the university because they would have the expertise and knowledge required for this study. The research targeted fourteen participants, and only seven agreed to participate and from the top management, only one participated due to time constraints.

It is important to note that the sample size in qualitative research can vary significantly, ranging from a single participant to over a hundred, depending on the research question and methodology (Mills, Wiebe, and Durepos, 2010). In qualitative research, the primary emphasis is on gaining a deep understanding of a select group of participants' points of view and experiences rather than attempting to generalise findings to a larger population (Sutton & Austin, 2015). In academic interview-based qualitative research, especially when access to the study population is limited, Adler and Adler (2012) recommend using a smaller sample size (typically 6–12 participants).

Participants were provided with explanations of the research objectives, methodology, and associated risks, and the study questions were clear and straightforward. Continuous communication was maintained with participants, ensuring confidentiality and anonymity. Follow-up correspondence was sent to non-respondents to address any issues and encourage involvement. These were done to promote engagement, increase participation, and overcome the non-response limitation.

Additionally, the participants provided information regarding their years of employment at the university, and it is noteworthy that they possess extensive experience within the procurement department. The research issued a consent declaration form to the willing participants (as attached in Annexure B). The participants received assurance that responses would be recorded anonymously and that privacy and confidentiality would be maintained. During the study, the participants were invited to a 30- to 45-minute discussion, and 5-10-minute follow-up interviews were held with some participants. The procurement participants comprised procurement officers (buyers), accountants, deputy directors, and the chief financial officer.

3.5 Data Collection and Analysis

Structured, semi-structured, and unstructured interviews are the three popular forms of interviews that researchers may use, according to Kallio et al. (2016). As per the interview schedule in Annexure A, semi-structured interviews were used to gather data for this study. This allowed for the participant's vocal expressions as well as the ability to ask follow-up questions depending on their replies (Kallio et al., 2016). Aligned with the research objectives (and supported by relevant literature on sustainable procurement), an interview schedule with questions was developed, and respondents were required to answer each. The research organised the interview questions into three broad categories: the participants' conceptual knowledge, the motivations behind sustainable procurement, and the implementation challenges. The research conducted 30-45-minute telephone interviews with each participant and follow-up 5-10 minute interviews with some participants to clarify or expand on feedback. The interviews were recorded using the Otter application (Otter ai, 2023)

The recorded interviews were converted into text format (by the Otter-ai app (Otter ai, 2023) to facilitate analysis and then imported into Microsoft Excel for further examination. The research used the thematic analysis approach to analyse the data. Identifying, analysing, and presenting patterns or themes within the dataset expresses thematic analysis, an accepted qualitative research technique (Braun & Clarke, 2006). According to Braun and Clarke (2006), this methodology gives flexibility and fits the delicate character of qualitative research. Iterative reading and rereading allowed the research to identify the themes that had emerged from the literature, and this is in line with Fereday and Muir-Cochrane (2006), who emphasise that for the analysis to be effective, there is greater importance for the research to be familiar with the data.

Similarly, Fereday and Muir-Cochrane (2006) emphasise the need to identify and outline emergent themes essential to understanding the topic under study. Braun and Clarke (2006) state that thematic analysis is a tool for reflecting reality and understanding its outer layers. It sets itself apart from other analytical methods by looking for patterns in qualitative data, which makes it easier to understand people's experiences, and this understanding makes it easier to understand the topic that is being researched (Braun & Clarke, 2006). Based on these viewpoints, the thematic analysis best fits the research aims.

The research also collected data using document analysis and long-term strategy documents. According to Bailey (2008), document analysis allows researchers to explore and analyse existing texts and documents as primary data sources. It was essential to analyse the long-term plan document

and the university's present supply chain management policy in order to comprehend the elements impacting the adoption and use of sustainable procurement in a South African public university. Examining the main objectives, action plans, and policy provisions listed in both documents was part of this process.

3.7 Trustworthiness

“Credibility,” “transferability,” “dependability,” and “confirmability” are essential quality requirements for qualitative research (Korstjens & Moser, 2018: p.121). These quality requirements are important as they impact the usefulness and research integrity (Korstjens & Moser, 2018). The research used several strategies, such as continuous engagement with the participants, follow-up with participants, and documentation of the research to ensure a combination of data credibility and dependability (Tobin & Begley, 2004). The research was a low risk to the participants as it gathered data that is usually considered non-sensitive and not personal information. The targeted participants were adults and were not part of the vulnerable research group (Peter & Friedland, 2017).

3.8 Ethical considerations

Research ethics play an essential part in guaranteeing that research is conducted in a morally acceptable manner (Resnik, 2020). According to Resnik (2020), research ethics offers a framework of moral norms that researchers should go by to avoid misconduct and safeguard the rights and well-being of study participants. In this particular research project, ethical considerations were given priority. The research received approval from the Rhodes University Ethics Committee (Ethics Application reference: 2022-5486-7269), as per Annexure C, indicating that the research design and procedures met the ethical standards set by the institution. This approval meant a commitment to conduct the research ethically. Before participating in the study, written informed consent was obtained from all participants, ensuring an understanding of the research's objectives, processes, and potential risks or benefits. Informed consent stands as a fundamental element of ethical research (Denzin & Lincoln, 2011).

The research took measures throughout the data analysis and archiving process to protect the participant's and the institution's privacy through anonymity and confidentiality. To safeguard the institution's identity, the research did not disclose the name of the university where the research took place. The data collected from participants was anonymised, and pseudonyms such as Participant 1 were used to protect the participants' privacy. A "pseudonym" is a fictitious name that is not the same as an individual's actual name (also known as an orthonym) or a place (also known as a toponym)

(Heaton, 2022). This approach assured participants that their data would remain confidential and only accessible to the researcher and supervisor. This commitment to data security and limited access helps to maintain the confidentiality of participants' information. By adhering to research ethics and implementing measures to protect participants' privacy and well-being, this research project demonstrates a commitment to conducting research ethically. These ethical considerations are essential to maintain the research process's integrity and uphold the rights and dignity of the individuals involved.

3.9 Conclusion

This chapter of the research presented the methodological approach that the researcher picked to collect and analyse the necessary data. The study took on a qualitative approach in the form of in-depth semi-structured interviews. The following chapter will present the data and highlight the main findings.

CHAPTER 4: ANALYSIS AND FINDINGS

4.1 Introduction

This chapter aims to provide a comprehensive overview and analysis of the interview findings, addressing the research objectives and shedding light on the factors influencing the adoption and implementation of sustainable procurement practices in the university. The chapter is linked to the previous one in that it presents results collected through the qualitative research methods described above. This chapter is divided into two main themes based on the research goals: (1) identifying drivers influencing the adoption and implementation of sustainable procurement practices; (2) identifying barriers to sustainable procurement adoption and implementation.

4.2 Themes and Sub-themes

The research used thematic analysis and compared the general themes from the literature with the sub-themes identified from participant data. This process directly addressed all research questions and successfully achieved the research objectives. Therefore, the findings are discussed and presented based on the following format:

- Table summary indicating the interview themes (from literature) and thematic analysis data from interviews (see Table 1).
- A discussion of themes 1 to 6, and the sub-themes. It is worth noting that some of these themes, sub-themes, and discussions will overlap as they will, discussions will overlap as they will, and discussions will overlap as they will discuss the findings.

Table 1: Overview of the themes

Theme	Sub-theme
1. Understanding of Sustainable Procurement	<ol style="list-style-type: none"> 1. Understanding the general university procurement process, Sustainable Procurement and its environmental and social benefits 2. Understanding the concept of triple bottom line
2. Sustainable Procurement practices	<ol style="list-style-type: none"> 1. The use of the local content approach for community benefit 2. Alignment with the United Nations' Sustainable Development Goals (SDGs)
3. Drivers to the adoption of Sustainable Procurement	<ol style="list-style-type: none"> 1. Management 2. Pressure from stakeholders 3. Regulations
4. Barriers to Sustainable Procurement adoption and implementation	<ol style="list-style-type: none"> 1. Lack of managerial support 2. Trained staff 3. Financial constraints 4. Lack of awareness from suppliers 5. No policy support
5. Risks associated with the non-implementation and adoption of Sustainable Procurement	<ol style="list-style-type: none"> 1. Lack of local economic development 2. Contribution to climate change challenges 3. Reputational risks
6. Benefits of adopting and implementing Sustainable Procurement	<ol style="list-style-type: none"> 1. Local economic development 2. Saving on costs 3. Positive reputation for the university

4.3 Theme 1: Understanding of Sustainable Procurement

4.3.1 Sub-theme 1: Understanding the general university procurement process, Sustainable Procurement, and its environmental and social benefits

This research sought to understand how the participants understood the concept of sustainability within procurement before providing a standard definition—this question aimed to determine if the participants were familiar with sustainable procurement. Upon the initial interviews, the researcher needed to follow up with each participant to understand what they understood about SP because it was unclear in the initial interviews. The participants' dominant understanding of sustainable procurement was centred around the environmental and social benefits.

Sustainable procurement is more of a durability of procurement. It entails making the procurement system more self-sufficient, more accessible, and benefit the public. It can benefit the public in 4 distinctive areas: economic, social, political, and environmental.-

Participant 1

When the same participant 1 was asked during the follow-up interviews to explain this further, they added:

When I say making a procurement system that is more accessible and benefits the community, I mean sustainable procurement is about ensuring the community that the university is based on benefits. So, hiring workers from the surrounding area and awarding tenders to local SMMEs.

As indicated by the participant, it is clear that environmental and community advantages were central to their understanding of sustainable procurement. This claim was also echoed by other participants, such as Participants 4 and 5.

I think it has something to do with ensuring that resources are optimally utilised, not only for the present but also for the benefit of the future generation -Participant 4

The conservation of the environment and procurement to ensure resources are used to help the community around the university have something to do with sustainable procurement. – Participant 5

The idea of making decisions that benefit the public was further emphasised by Participants 4 and 5, who stressed the significance of conserving resources and considering future generations. The participants were given the following definition of Sustainable Procurement (SP):

“A process whereby organisations meet the needs for goods, services, and work utilities in a way that achieves value for money on a whole-life basis in terms of generating benefits not only to the organisation but also to society and the economy while minimising environmental damage.”

4.3.2 Sub-theme 2: Understanding the concept of triple bottom line

Some participants furthered the point of view held by Participants 4 and 5. Participant 6 referred to sustainability:

Sustainability as the concept is the taking care of the triple bottom, which are people, planet, and the profits. The triple bottom must be considered by management at all times when making business decisions – Participant 6

In the follow-up interviews, Participant 6 was asked to simplify what "triple bottom" meant in the context of a university. This participant highlighted that sustainable procurement means:

As opposed to just taking from the environment the university operates, the university considers its role in the development of the community for the use of future generations as well. For example, when the university is looking for a service provider for new or refurbished buildings, the university purposefully specifies that it would be appointing young people on its contract who reside within the communities that surround the campuses of the university and things like solar panels and water tanks are included in architectural specifications. –

Participant 6

The participants recurring themes on sustainable procurement and what it means were consistent with one another.

4.3.3 Sustainable Procurement Practices and policy/strategic Alignment

After evaluating each participant's understanding of sustainable procurement, the research asked about the existence of a sustainable procurement policy or a strategy within the university and the values that underpin it.

Yes, the university has a clear, sustainable procurement strategy. Right at the acquisition stage, a person uploading the specification on the procurement system has to be provided with such information by the end-user because the system requires it. When Supply Chain Management (SCM)¹ approves whatever requisition, they always verify if the goals of the purchase are identified, the local content has been declared by the end-user first, and if the purchase is locally produced. The same process advances to the stage of adjudication.-

Participant 1

A procurement policy is in place but not regularly workshopped or communicated with end users, causing endless bottlenecks.- Participant 2

In contrast, participant 6 indicated that:

The university lacks a policy on sustainable procurement; it just has a traditional procurement policy that covers basic procurement processes. - Participant 7 expressed uncertainty about the presence

¹ While the participant mentioned Supply Chain Management (SCM) and not SP, the person used these terms interchangeably.

of a sustainable procurement policy or strategy at the university, suggesting that they may need to be made aware of its existence.

4.4 Theme 2: Sustainable Procurement Practices

4.4.1 Sub-theme 1: The use of the local content approach for community benefit

Based on the definition of sustainable procurement, participants were asked whether the university engages in their procurement activities. Participant 1 stated that the university does engage in SP because of the following:

When a purchase is made, the buyer must ask each potential supplier if the product they will deliver contains any local content, which refers to the raw materials used in its production. – Participant 1

The explanation provided by Participant 1 implies that for the university, SP is considered in how their buying and selling benefit the local community within which it operates. This assertion about SP practices at the university was further highlighted by Participant 6, who stated:

When buying, we ensure that issues around water scarcity, electricity problems, and unemployment are always addressed. For example, the university has recently started building a water supply project which was awarded to local constructors. The project will improve the water security problem on campus and benefit the unemployed in our surrounding community. – Participant 6

This understanding of SP as a concept that is incorporated in other university policies was perhaps the reason why Participants 4 and 5 felt that the university does not entirely engage in sustainable procurement because Participant 4 felt that there is no executive mandate from the council or the executive management to consider sustainable procurement. These sentiments are better understood from the contradictory perspective of Participant 2, who stated:

It is unfortunate that the university is not explicit in its policies on the pronouncement that SP must ensure that communities around the university benefit – Participant 2

4.4.2 Sub-theme 2: Alignment with the United Nations' Sustainable Development Goals (SDGs)

The example provided by Participant 6 under sub-theme 1 of theme 2 entrenched a commitment by the university to service its community. Furthermore, the participant exerted that this commitment from the university is not random but located to the United Nation's SDGs. The participant asserted that:

My understanding is that our institution's supply chain management policy, though not explicit about SP, is committed to helping those around the university. I feel like it has something to do with the United Nation's SDGs since they refer to sustainability. – Participant 6

Participant 6 is the only respondent who related the university's policies concerning supply chain management and procurement to the UN SDGs. According to the participant, this is largely based on the fact that SP sounds like it has something to do with sustainable practices as entrenched in the SDGs.

4.5 Theme 3: Drivers to the Adoption of Sustainable Procurement

4.5.1 Sub-theme 1: Management

In trying to ascertain what the participants thought would influence the university to adopt sustainable procurement, participants 3 and 4 mentioned the important role of management as a driving factor. Participant 3 stated:

if management had clear initiatives to incorporate sustainable procurement into their procurement practices, this would help drive adoption. – Participant 3

Participant 4 explained that:

less red tape and a better understanding by the management of what a sustainable procurement strategy entails would promote the adoption of sustainable procurement strategy.

Participants 5 and 6 concurred with this claim. They emphasised that

if management had clear initiatives to incorporate sustainable procurement into their procurement practices, this would help drive adoption" and that "though sustainable procurement is not yet adopted, the council and the top management are always the driving force behind changes; if they can enforce sustainability goals and sustainable procurement into the broader business strategy, those goals are promoted throughout the entire university.

4.5.2 Sub-theme 2: Pressure from Stakeholders

According to some participants, one thing that would drive the university to adopt a sustainable procurement strategy would be its impact on how stakeholders view the university.

The pressure from the community to support local businesses resulted in the university using only local suppliers for some of its services. This shows you that for the university council and management, how people view it as being socially responsible and caring for the community it lives in is important to them. – Participant 2

The participant's response highlights that the university's public reputation is critical to implementing an SP strategy. This implies that customer pressure is one of the key drivers toward implementing sustainable procurement for the university. The results of other earlier investigations provided strong support for this finding.

4.5.3 Sub-theme 3: Regulations

Some of the participants indicated that since universities are public entities and are governed by some government legislation, such as the constitution, the lack of clear rules by the government for universities around sustainable procurement limits the implementation of SP strategies.

Since we are a public university, we must abide by what the government sets out as law for the university. So, our government does not have a set of laws around implementing sustainable procurement practices, so the university has no pressure by law to implement anything. I think this is one of the main reasons why we don't have a sustainable procurement strategy. – Participant 5

The assertions by Participant 5 were further expanded on by Participant 4, who stated that if the government were to create legislation that incentivises universities to follow sustainable procurement practices. The participant noted that:

The university gets most of its income from the government for every student it takes on and for publishing papers. If the government could create similar benefits for adopting sustainable procurement practices, every university would adopt those practices. – Participant 4

The response provided by Participant 4 thus views government regulations as a key driver for implementing sustainable procurement in the university. Participants 6 and 2 also agreed that the first standing point in ensuring the university implements sustainable procurement would be for the government to create clear regulations that advocate for more green practices and push universities to follow sustainable frameworks.

4.6 Theme 4: Barriers to Sustainable Procurement Adoption and Implementation

4.6.1 Sub-theme 1: Lack of managerial support

The participants stated that the primary barrier to adopting sustainable public procurement is the lack of information available to the procurement officers regarding the true environmental impact of the

products. Due to a lack of information, procurement officials find it difficult to write tender contracts and make purchases.

I cannot really say we are procuring according to the definition given. I think we do not have a clear definition of what sustainable procurement is for our university. To make matters worse, we also don't have clear standards of evaluation to measure if our processes are really meeting sustainable standards. – Participant 3

For Participants 1 and 4, the lack of knowledge about sustainable procurement also meant that management was unaware of the potential advantages that might result from its adoption; as a result, they did not commit to implementing a sustainable procurement strategy.

There are no clear directions from the top management about sustainable development. Therefore, procurement officials lack an explicit directive to implement ethical standards, which could result in higher overall prices. Hence, senior management may need to commit more to the triple bottom line concept in order to get a greater focus on total sustainability.
– Participant 6

This above-stated view from Participant 6 was not held by them only in highlighting the need for more engagement from management to implement SP. Participant 5 further explained that:

You know the university has committed to using local suppliers as much as possible, but you find that we don't have clear guidelines on how to evaluate if the local suppliers follow eco-friendly processes. So sometimes we procure local suppliers because they offer us the best price, not because they follow sustainable procurement practices – Participant 5

The participants' views highlight that the lack of management support for sustainable procurement is a barrier. Furthermore, the lack of clear guidelines and strategy from university management could be a key reason behind the inconsistency in defining sustainable procurement in the first section of this chapter.

4.6.2 Sub-theme 2: Staff Development

The Participants stated that a lack of adequately trained staff members in how to implement SP was a key barrier for the university. Some of the participants felt if the procurement officers are not fully aware of the nature and impact of sustainable procurement, it will be implemented properly. Participants 3 and 7 stated that as buyers, they were not fully aware of the alternative green products that might be in the market. So sometimes, they opt for the product that will save the university

money without checking if it meets sustainable requirements. The two participants both explained that:

Employees should get training on sustainable procurement and keep giving them updates to understand how it works. And when we're training them, let's have a tool that helps us pick suppliers who are into sustainability, too. It's about making things better in the long run. To help, we should set up rules for selecting suppliers that care about being green and not wasting stuff. – Participant 3

There should be training for staff so that there is a thorough understanding of the concept and the rationale, and clearly define the role each staff member is expected to play. – Participant 7

The above responses highlight that while the traditional methods of procurement may have required little training of staff, sustainable procurement requires training of staff for them to feel empowered to effectively apply these practices.

4.6.3 Sub-theme 3: Financial Constraints

Participants 4, 5, and 7 stated that the university, like many public sector entities, receives many of its funds from the government, in line with student allocation. The participants felt as though sustainable procurement practices might cost more and thus strain an already limited funding system.

You find that some environmentally friendly products are more expensive than the normal ones. In some cases, there's a specific amount set for purchasing a certain product, and the more environmentally friendly one goes above the university budget. So, the budget limitations make it impossible for management to buy into sustainable procurement; it's too costly, and they have a very limited budget. – Participant 5

The idea that sustainable procurement practices are more expensive than conventional products was the most shared barrier by some participants. Participant 3 felt as though the main goal of a procurement officer is to ensure that the university gets the products that it needs without 'breaking the bank,' which, for these participants, sustainable methods do.

As a publicly funded university, it's not easy to spend extra money on eco-friendly choices because those options are usually pricier. This happens because we've got other important things to spend on and different expenses to consider. So, because of money limits and the

higher cost of environmentally friendly stuff, it's hard to always go for the greener choice.

– Participant 3

This view highlighted the contradictory perspectives of the participants when it comes to the implementation of SP versus the budgetary constraints that universities are faced with.

4.6.4 Sub-theme 4: Lack of Awareness from Suppliers

The participants were asked about the role of the university's suppliers in sustainable procurement. The responses from some of the participants agreed that their suppliers may not fully understand sustainable procurement.

Our location means that even some of our suppliers are not really exposed to things like sustainable procurement. For them, saving money might be more important than following the sustainable route. – Participant 6

Participant 4 further argued that it would be difficult for them to convince their construction suppliers to change their current infrastructure to adopt more sustainable processes, for example. This assertion seemed to summarise the university suppliers' lack of awareness concerning SP.

4.6.5 Sub-theme 5: Regulation

The participants were asked about the university's sustainable procurement policy or strategy. According to the participants, one of the main reasons for the university's lack of a clear sustainable procurement framework is the government's failure to outline strict regulations for achieving sustainability in procurement.

The university gets most of its income from the government for every student it takes on and for publishing papers. If the government could create similar benefits for adopting sustainable procurement practices, every university would adopt those practices- Participant 4

Additionally, Participant 4 stated that if the university as a public entity operates under government regulations when it comes to accepting students and funding, the government should also regulate the procurement process.

Since we are a public university, we must abide by what the government sets out as law for the university. Our government does not have a set of laws around implementing sustainable procurement practices, so I think the university has no pressure by law to implement anything,

and I think this is one of the main reasons why we don't have a sustainable procurement strategy. – Participant 5

My understanding is that our institution's supply chain management policy, though not explicit about sustainable procurement, is committed to helping those around the university.

– Participant 6

The sentiments held by these participants could explain why the university has not created clear guidelines for sustainable procurement.

4.7 Theme 5: Risks associated with the non-implementation and adoption of Sustainable Procurement

4.7.1 Sub-theme 1: Lack of local economic development

Some of the participants indicated that there were possible risks associated with not adopting and implementing sustainable procurement. When asked about these possible risks, most of them associated these risks with local economic development.

Not engaging in sustainable procurement will mean that we are not developing the local service providers and not investing in the development of the local communities, and the risk to this is that these communities will continue to have a high rate of unemployment, crime, and poverty – Participant 3

The risks of excluding local communities in the process of doing business. Reputational risks, especially dealing with incompetent suppliers. – Participant 6

Participants 1 and 5 also echoed the same sentiments concerning these potential risks and their association with developing the local communities where the university is located. They indicated the role of local suppliers in local economic development.

Small-scale suppliers will not have any involvement in procurement processes should sustainable procurement not be practiced.– Participant 1

Lack of local economic development and black-owned businesses closing down. – Participant 5

These responses showed a consistent view held by the participants concerning the risks and their association with local development.

4.7.2 Sub-theme 2: Contribution to climate change challenges

Some of the participants noted that another potential risk would be the university inadvertently contributing to climate change challenges already in existence globally. The following views were highlighted by participants 5 and 6.

There will be an increase in the severe climate changes we are currently experiencing with no fair circulation of suppliers. – Participant 5

The risks will not only be on getting savings from this but the impact on the environment where the university deals with suppliers that continue to damage the environment.
– Participant 6

These participants concurred with one another that not implementing sustainable procurement has potential indirect consequences for the environment.

4.7.3 Sub-theme 3: Institutional reputational risks

One of the participants further highlighted the risk associated with the university's reputational damage if it does not implement sustainable procurement. The following is the view held by the participant.

Reputational risks, especially dealing with incompetent suppliers – Participant 6

Participant 6 indicated that a lack of knowledge from suppliers concerning sustainable procurement may cause reputational risk for the institution.

4.8 Theme 6: Benefits of adopting and implementing Sustainable Procurement

4.8.1 Sub-theme 1: Local Economic Development

The adoption and implementation of sustainable procurement is not without its advantages or benefits. According to the participants, one of the main benefits of implementing sustainable procurement is proper local economic development. Participants 3 and 7 explained as follows:

Most of the students at the university are from the local communities, and most of their parents are unemployed. This means that the students are dependent on government funding, and some are using the money to assist their homes. So when, for example, the university gives a tender to a local service provider, the service provider appoints people from the local community; this benefits the university, as some of the students benefit. The university can also benefit from the electricity bill when buying renewable energy. – Participant 3

Yes, as to me, this is more similar to BBBEE and benefits local communities, service providers, and the environment – Participant 7

These views were additionally supported by participants 1 and 5, who further exerted the same point of local economic development being one of the advantages that can be derived from the successful implementation of sustainable procurement. They claimed the following:

Yes, it will benefit from sustainable procurement, it will be able to build and contribute to the local economic development, it will build trust and transparency [in] supplier relationship, it will increase entrepreneurship as the purchases are more into locally produced products, the procurement process will take place in a very reasonable time. – Participant 1

Yes, they will. I mean, we all benefit from responsible environmental practices. Encouraging black economic empowerment and localisation will have a desirable impact [on] local economic development. – Participant 5

All four of these participants hold the same viewpoint concerning local economic development being an advantage that can be exploited from the adoption and implementation of sustainable procurement.

4.8.2 Sub-theme 2: Saving on Costs

Two of the participants cited that savings on costs, albeit perhaps small, were also another benefit that is inherent to the implementation of sustainable procurement. Participants 7 and 2 offered the following assertions:

I also think there are benefits such as saving on costs, as when you buy something that lasts, you tend to save in the long run. – Participant 7

There would be improvement [in] risk management. Some costs will be reduced.–Participant 2

However, one of the participants provided a different perspective about costs being saved because of sustainable procurement. Participant 5 claimed that environmentally friendly products tend to lean towards being expensive. The participant claimed the following:

You find that some environmentally friendly products are more expensive than the normal ones. In some cases, there's a specific amount set for purchasing a certain product, and the more environmentally friendly one goes above the university budget. So, the budget limitations make it impossible for management to buy into sustainable procurement; it's too costly, and they have a very limited budget. – Participant 5

These views held by the participants provide different dimensions about the matter of saving costs through the implementation of SP.

4.8.3 Sub-theme 3: Positive reputation for the university

Some of the participants highlighted that the university could derive a good reputation or image because of the sustainable procurement implementation. Participants 4 and 6 were the two proponents of this view. Their assertions are explained as follows:

It will definitely benefit; the university is already mandated to include the sustainability report [in] its annual year report, so the use of this concept may come in handy. Secondly, the surrounding communities will be uplifted, making the university the university of choice for the residents who refrain from wanting to study in universities that are out of the eastern cape. And finally, set a good example of how to preserve the environment and continue to teach the rest of the communities how to be environmentally friendly. – Participant 6

Yes, there will be fewer tourist complaints and refund requests, leading to more positive reviews for the organisation. – Participant 4

Additionally, Participant 5 further indicated that an increase in the university's reputation would likely enhance the university's research output and play a part in the development of green initiatives. Participant 5 explained as follows:

The sustainable procurement concept opens a door for further research for the university to enhance research output. Environmental Scientists/academics employed in the Natural Science Faculty may play a part in developing a greener economy and perhaps initiate projects in that respect. The university has a Centre for business incubation, which may produce entrepreneurs who thoroughly understand the concept of sustainable procurement and further supply the university. – Participant 5

4.8.4 Sub-theme 4: The university Supply Chain Management Policy and strategic document

The research examined the university's current supply chain management policy and the long-term strategy document, to gain a deeper understanding of the university's perspective on sustainable procurement findings. The research found that:

- The university's current supply chain management policy prioritises meeting regulatory requirements, notably BBBEE compliance.

- The long-term strategic document recognises the effects on the environment and society and calls for a gradual transition towards sustainability. Reducing carbon footprint, supporting circular economy ideas, and encouraging supplier diversity are important components.

4.9 Conclusion

This chapter discussed research findings into the understanding and practices of sustainable procurement within a university context. The findings showed that participants primarily associated sustainable procurement with its environmental and social benefits. It was emphasised that sustainable procurement is about creating a more self-sufficient and community-benefitting procurement system. The participants also recognised the importance of considering the triple bottom line—people, planet, and profits—when making procurement decisions. Regarding sustainable procurement practices, the study highlighted the use of the local content approach for community benefit. This approach aims to ensure that procurement activities contribute to the local community's development. Additionally, participants acknowledged the alignment of sustainable procurement with the United Nations' Sustainable Development Goals (SDGs), emphasising the need for universities to play a role in achieving global sustainability targets. The drivers to the adoption of sustainable procurement were identified as management support, pressure from stakeholders, and government regulations. Management's commitment and understanding were seen as crucial in driving the adoption of sustainable procurement. Pressure from stakeholders, including the community and students, also played a significant role. Participants recognised the need for clear government regulations to incentivise universities to embrace sustainable procurement practices. However, several barriers to the adoption and implementation of sustainable procurement were identified. These included the lack of managerial support, staff development, financial constraints, lack of awareness from suppliers, and inadequate government regulations. Notably, the participants expressed a need for more comprehensive training and support for staff to implement sustainable procurement practices effectively.

Furthermore, the study outlined the risks associated with the non-implementation of sustainable procurement. These risks included a lack of local economic development, contributing to climate change challenges, and reputational risks for the university. Participants emphasised the importance of sustainable procurement in promoting local economic growth, mitigating environmental impacts, and safeguarding the institution's reputation. The benefits of adopting and implementing sustainable procurement were highlighted on the positive side. These included local economic development, potential cost savings, a positive reputation for the university, and operationalising sustainable

procurement for holistic university sustainability. The participants recognised that sustainable procurement practices not only benefit the environment and society but also contribute to the overall success and reputation of the university. Therefore, this research emphasises the importance of understanding, embracing, and effectively implementing sustainable procurement practices within a university setting. It calls for a comprehensive approach that involves managerial support, staff training, stakeholder engagement, and clear government regulations to bridge the gap between policy intentions and operational realities. By doing so, universities can not only contribute to local and global sustainability goals but also enhance their own reputation and long-term success.

CHAPTER 5: DISCUSSION

5.1 Introduction

The previous chapter discussed the findings from the collected data about SP. Six (6) themes, with sub-themes, detailing the responses from the seven interviewed participants, were presented. In this study, the researcher planned to investigate the factors that drive the implementation and adoption of SP in a South African university. The findings presented were made considering the study's research goals as outlined in Chapter 1.

The results are in line with the goals of the research, as stated in Chapter 1. In order to reaffirm the following study aims and to offer direction for the discussion that follows in this chapter:

5.2 Drivers that influence the adoption and implementation of sustainable procurement

This study's first objective was to understand the key factors that could drive the university to implement sustainable procurement practices. As seen in Sections 4.5.1, 4.5.2, and 4.5.3, the findings suggest that the participants felt that management support, pressure from stakeholders, and government regulation were some of the factors that would drive sustainable procurement within their university.

5.2.1 Management Support of Sustainable Procurement

As indicated in section 4.5.1, the collected data from participants highlights that information about sustainable procurement originates from top management and then cascades down to be executed by officers. These findings align with existing literature on the drivers of sustainable procurement, which emphasises the crucial role of management support in effectively implementing SP practices (Grandia et al., 2014). One participant echoed this sentiment, stressing that management should take the lead in establishing clear guidelines. According to Messah, Wirahadikusumah, and Abduh (2022), top management continues to possess the most significant knowledge and understanding of sustainable procurement. Consequently, the lack of knowledge and support surrounding SP is closely tied to managers' uncertainties about how to sustainably source supplies or best evaluate the eco-friendliness of current processes. This observation aligns with the assertions of Brammer and Walker (2009), who identified that the commitment of top management positively influences the implementation of environmental policies. It becomes evident that the university management's commitment to sustainability will play a pivotal role in driving the adoption and implementation of sustainable procurement.

Similarly, Leal Filho et al. (2019) support this view, noting that top-level management support is a vital driving force due to the resource-intensive nature of environmental development programs. Hence, if participants received a well-defined definition and clear guidelines from management, they would potentially understand sustainable procurement, its implications, and how best to integrate it into their daily procurement tasks. The resounding need for support and the establishment of clear guidelines for institutions of higher learning aligns with the argument that the implementation and subsequent success of sustainable procurement in such settings hinge on top management's endorsement (Mendonça, Pedrosa & Camara, 2021). These results also support the conclusions of the UK-based Sustainable Procurement Task Force (Defra, 2006), which stated that the implementation of SP is not feasible if there is a lack of clear orders from upper management. This perspective aligns with participants' assertions that if top management shows enthusiasm for implementing sustainable procurement within the institution, participants would be motivated to adopt it as a comprehensive institutional initiative. When universities embrace sustainability as a core value and strategic priority, they foster an organisational culture that encourages sustainable practices across all operations, including procurement. Leadership commitment, sustainability strategies, and integrating sustainability goals into the university's mission statement collectively establish the foundation for SP initiatives. Similarly, Chari and Chiriseri (2014), Ramakrishnan et al. (2015), and Grandia et al. (2014) argue that management serves as a motivator for employees to engage in sustainable procurement practices. Furthermore, top management commitment impacts supplier environmental collaboration, illustrating how such support influences an organisation's adoption of SP (Yen & Yen, 2012).

5.2.2 Pressure from Stakeholders

As highlighted in section 4.5.2 of the research findings, the study participants highlight the significance of stakeholders as drivers for implementing SP. This observation aligns with the insights of Mont and Leire (2009), who emphasise that a notable external driving force emerges from the expectations of key stakeholders. These elements collectively contribute to the university's strong emphasis on upholding a positive public image. Consequently, the university would likely be compelled to integrate such practices if stakeholders advocate for a more robust SP process. The importance of stakeholders is frequently emphasised by stakeholder theory, as noted by Touboulic and Walker (2015), particularly in sustainable supply chain management. Stakeholders have more influence in the institutional context because of societal norms and expectations that give them greater power (Young et al., 2016). These norms and expectations demand that universities function with a commitment to social and environmental responsibility. Meeting these expectations and safeguarding

the university's reputation are powerful incentives for embracing sustainable procurement practices (Leal Filho et al., 2019). When procurement entities experience pressure from stakeholders, this pressure can often cascade to suppliers, encouraging them to provide environmentally friendly products (Marculetiu, Ataseven & Mackelprang, 2021). In such scenarios, stakeholders within the public sector, particularly external ones, play a crucial role as driving forces (Haleem, Farooq, Cheng & Waehrens, 2022). This perspective has also been recognised and explored in related research (Brammer & Walker, 2009; Young et al. (2016) add to this argument. In this case, students can use their influence to promote sustainable practices and maintain long-term sustainability to improve environmental performance.

5.2.3 Regulations

As highlighted in section 4.5.3 of the research findings, participants stressed how much emphasis regulators and governing bodies place on sustainable practices in public institutions, such as universities. Regulations and policies are some of the drivers in sustainable procurement in universities (Young et al., 2016). Universities must establish sustainable buying procedures to comply with legislation governing environmental preservation and social responsibility. Awuzie and Emuze (2015) agree with this idea and argue that organisational strategies in the higher education sector are adopted and carried out because of policies and pronouncements. National policy rules, such as a carbon tax policy, are mentioned as possible implementation catalysts (Awuzie & Emuze, 2015). Participants also pointed out that colleges functioning within the government framework may gain compliance incentives for complying with SP standards and procedures. These ideas were mirrored by Participant 5, who proposed that government legislation supporting SP would hasten its adoption in academic institutions. This finding is consistent with earlier research by Leal Filho et al. (2019), which emphasises that the availability of policies that provide direction is a critical element impacting the execution of SP. Universities would then be encouraged to implement an SP strategy. Agyepong and Nhamo (2017) contend that although some South African public municipalities have procurement policies, incorporating SP regulations remains a barrier due to insufficient regulatory support from the government. The same argument could be made for the higher education sector.

According to research by Lee (2008), Huang et al. (2015), and Ramakrishnan et al. (2015), countries including China, Germany, Japan, and the United Kingdom have put in place policies to encourage organisations to use sustainable buying practices. Government programs like tax incentives and subsidies serve as an example of how government action can encourage the adoption of SP methods (Ramakrishnan et al., 2015). The drivers, as previously mentioned, clarify the elements that influence

the adoption and implementation of SP methods within universities. The driving forces behind SP are regulations, institutional commitment, stakeholder expectations, cost reduction, educational mandates, collaborative networks, and supplier participation (Brammer & Walker, 2011; Awuzie & Emuze, 2015; Young et al., 2016; Leal Filho et al., 2019). Embracing these factors could place universities in a leadership position, allowing them to incorporate their fundamental principles into purchasing decisions smoothly and produce favourable effects on the environment, society, and overall sustainability goals (Brammer & Walker, 2011; Awuzie & Emuze, 2015; Young et al., 2016; Leal Filho et al., 2019).

5.3 Barriers to sustainable procurement adoption and implementation

The study's second objective was to understand the barriers that prevent the adoption and implementation of SP in the university. As seen in Sections 4.8.1 to 4.8.6, the findings under this theme included the perceived financial costs, a lack of managerial support, no trained staff, and no policy support.

5.3.1 Financial Constraints

Financial constraints to develop, adopt, and implement SP strategies were cited as deterrents. They further cited concerns in Section 4.6.3 regarding the limited budget, which presently accommodates a large number of students population. Budget constraints are a common challenge for higher education institutions, resulting from fluctuating funding sources, capped tuition fees, and competing financial demands (Awuzie & Emuze, 2015). In this context, making procurement decisions that balance cost-effectiveness and sustainability proves challenging (Brammer & Walker, 2009). Financial pressures stand out as the most significant impediment to the implementation of SP (Brammer & Walker, 2009). In the university setting, procurement plays a pivotal role in acquiring optimum products and services to meet the evolving demands for advanced facilities, contemporary equipment, and high-performing personnel, all within the constraints of tighter budgets (Glock & Broens, 2011). The university might interpret adopting an SP strategy as an added financial strain to its already stretched budget (Awuzie & Emuze, 2015). This is consistent with participants' expressions that environmentally friendly products carry higher costs, potentially straining the university's financial resources. Chari and Chiriseri (2014) and Appiagyei et al. (2018) note that a key barrier to adopting SP is the belief that environmentally friendly products come at a higher price than conventional ones. This viewpoint could explain why sustainability considerations are often side-lined when budget limitations are in play despite the possibility of attaining long-term savings through practices. Organisations, including universities, often prioritise urgent spending over

sustainability when grappling with limited funds (Chari & Chiriseri, 2014). However, it is vital to recognise that this perception may be misleading. Research like Brammer and Walker (2011) suggests that although the initial costs of purchasing green products may be higher, long-term savings are achievable through reduced operation, maintenance, and disposal expenses. Sustainable products often boast enhanced durability, energy efficiency, and reduced environmental impacts, culminating in long-term financial benefits (Mensah & Ameyaw, 2012)..

5.3.2 Staff Development

The study highlighted that implementing and adopting SP practices require new working methods, necessitating capacity building in the subject matter to align with the new way of doing business, as seen in Section 4.6.2. Procurement professionals and suppliers often require training to understand the relevant elements of implementing environmentally sustainable procurement, a point highlighted by Green Public Procurement in Europe (2006). Therefore, providing appropriate training to these individuals is essential to ensure their effectiveness and impactful involvement (Pacheco-Blanco & Bastante-Ceca, 2016). The research findings indicate that the absence of well-trained personnel hinders the effective implementation of sustainable procurement. The current strategy aligns with Sustainable Development Goals (SDGs), which can be seen as a driver to implement sustainable procurement.

Furthermore, Singh and Chan (2022) demonstrated that proficient buyers play a significant role in financial performance and operational efficiency. Their study indicated improvements in lead time reduction, quality enhancement, and design. Challenges arise when knowledge, accountability, and training are insufficiently addressed, posing barriers to adopting SP practices. Quayle and Quayle (2000) emphasised the potential of universities as agents of change, promoting sustainability and creating opportunities. Nevertheless, the participants' limited grasp of sustainable procurement's holistic aspects highlights the persisting gap in adequate training. Brammer and Walker (2011) observed that knowledge or awareness from training and development improved employee engagement in SP. Some participants associated sustainability primarily with cost-saving and local procurement measures, revealing a restricted view of SP's broader environmental, economic, and social dimensions. This echoes the views of Brammer & Walker (2011) who also stress the importance of training and integration with suppliers and sectors. This issue resonates with the findings of Chari and Chiriseri (2014) and Leal Filho et al. (2019), who emphasised the challenges procurement professionals face due to limited skills and understanding of SP's multifaceted nature. Effective implementation within the university context hinges on the proper training and

empowerment of procurement staff to embrace SP practices. The university's Supply Chain Management policy acknowledges the significance of adequately trained personnel for procurement functions. However, potential gaps in practice become evident through the findings. Procurement officers need proper knowledge to ensure the effective execution of practices is maintained. This aligns with observations from the Sustainable Procurement Task Force (Defra, 2006) about deficiencies in procurement competence within the public sector. Consequently, the absence of comprehensive training for procurement staff remains a barrier to executing an SP strategy within the university.

5.3.3 Unclear internal policy guidelines

The above finding is closely related to the university's absence of clear policy guidelines. This lack of a clearly defined internal regulatory policy was further evident when participants were questioned about the existing procurement practices. As highlighted in Section 4.6.5 of the findings, procurement officers need a structured framework for reference, potentially impacting the adoption and implementation of sustainable procurement. This aligns with Chari and Chiriseri (2014), who argue that the absence of an SP policy within an organisation significantly hampers the adoption of SP practices. Brammer and Walker (2009) highlight the significance of adequate and consistent internal policies and the absence of leadership commitment as primary contributors to the need for more sustainable practices.

The strategic document highlights procurement policies that favour local sourcing, small and black-owned enterprises, competitive bidding, and sustainable and local product procurement. This lowers carbon footprints and supports regional economies, all consistent with sustainable procurement guidelines. The program also supports small and minority-owned businesses' expansion and viability, focusing on social and economic sustainability. Alignment with regional and national programs, such as the 'Proudly South African' campaign, promotes cooperation and the achievement of common sustainability-related objectives. However, measures and strategies are needed to implement sustainable procurement practices effectively beyond aligning with the SDGs. This observation aligns with Tassabehji and Moorhouse (2008), who critically assessed the skill requirements for procurement professionals in light of evolving procurement functions. The current Supply Chain Management policy mainly focuses on encouraging competitive bidding, local sourcing, and inclusive business development, and there is a potential to integrate sustainability considerations into the procurement processes. This is in line with Brammer and Walker's (2009) observation that, although practitioners seem to be putting some aspects of sustainable procurement policy into

practice, there seems to be more of an emphasis on “buying small and local”. Future revisions to the procedure might be necessary to address this disparity. This gap in regulatory policy poses challenges not only for suppliers attempting to align with the university's needs but also for the effective and efficient operations of the university. Leal Filho et al. (2019) suggest that ineffective SP policies may arise from limited engagement, both internally and externally, and a narrow focus on a restricted set of aspects.

Similarly, the absence of a clear university policy connects to inconsistent government regulations that do not mandate comprehensive adoption of SP. Brammer and Walker (2011) acknowledge that consistent and effective policies are necessary to promote SP practices. Brammer and Walker (2011) further acknowledge that the influence of the national policy context on shaping decisions regarding SP priorities in universities is vital for successfully implementing these policies. From a resilience theory perspective, analysing the drivers and barriers of SP within the university emphasises the importance of collaborative efforts among suppliers, stakeholders, and industry partners. Bhamra, Dani and Burnard (2011) state that collaborative endeavours enhance procurement systems' resilience through information sharing, joint problem-solving, and continuous improvement. These insights highlight the intricate interaction of policy, regulatory environment, and collaborative efforts in shaping the adoption and implementation of SP practices within higher education institutions.

5.4 Conclusion

This chapter's objective was to discuss the findings highlighted in the preceding chapter and reconcile them with the reviewed literature as discussed in the second chapter. The essence of the study's findings was discussed in line with the identified research goals for this study. The study aimed to identify the drivers influencing the adoption and implementation of SP practices and make recommendations for adopting and implementing SP. The main findings showed that most research findings were consistent with the reviewed literature. The main theme discussed concerning the drivers influencing the adoption of SP, and sub-themes, 1) management support of sustainable procurement, 2) pressure from stakeholders, and 3) Government regulations, were discussed. Furthermore, the barriers to adopting and implementing SP were discussed under the following sub-themes: 1) financial constraints, 2) trained staff, and 3) unclear internal policy guidelines. Therefore, the next chapter will conclude the study's main findings and provide recommendations on how the institution can adopt and implement SP into its procurement activities.

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This chapter wraps up the research and discussions in the previous chapter. The research aimed to investigate the factors that influence the implementation and adoption of sustainable procurement (SP) at an Eastern Cape higher education institution. The research found that there can sometimes be an overlap between drivers and barriers, with certain elements having more than one function. Drivers can sometimes become barriers, showing the multifaceted interactions in the SP adoption environment. The study found that support from management, stakeholder pressure, and advantageous government legislation are recognised as crucial drivers in promoting and pressuring sustainable practices. Financial constraints, Staff Development, and Unclear internal policy guidelines were found to be barriers. The study highlights the necessity for comprehensive guidelines, emphasising suggestions to strengthen resilience through the adoption of SP. Implementing SP successfully depends on following these principles, which are meant to be communicated to all procurement stakeholders effectively. It is also important to acknowledge the limitations of our study.

The findings may not be universally applicable to other universities, given the unique contextual factors inherent to each institution. In terms of contributions, our research provides valuable insights for procurement officers in South Africa and serves as a reference for developing SP strategies and practices. The recommendations, from policy development to stakeholder engagement and government support, aim to guide universities in adopting and implementing sustainable procurement effectively.

6.2 Main findings

This research examined the drivers and barriers that influence the adoption and implementation of SP in a university in the Eastern Cape. The analysis of university documents and the interviews allowed the research to identify key drivers and barriers in the university's procurement process. The consistent and recurring theme of key drivers revolved around three main issues: management support for sustainable procurement, concerted pressure from stakeholders to adopt and implement SP, and favourable government regulations. It was highlighted that management support motivates officials to implement SP initiatives to benefit the university community and the society within which the university operates. The study further highlighted that pressure from stakeholders could force the university to change its strategies and incorporate sustainable practices that harbour environmental benefits. Government regulation was another driver for adopting SP since it provides a favourable climate for the university to implement SP with minimal challenges. It was also noted that the

university needed to construct guidelines that would allow them to implement SP effectively. The specific and comprehensive guidelines are important as they outline the university's expectations and processes related to sustainable procurement. This alignment ensures that SP is integrated into the university's broader sustainability goals and objectives. The guidelines should be communicated effectively to all stakeholders involved in the procurement process. The findings highlighted that the misalignment between the university's strategic document and procurement practices causes a barrier to adopting and implementing the SP. The study found that the university's strategy needed to be communicated to all employees, leading to a need for more awareness among individuals working at the same levels. It is essential to improve communication channels and knowledge-sharing practices to ensure that all stakeholders understand the importance of SP and their roles in implementing it.

This study focused on a single university; as a result, its findings may not be generalisable to other universities. However, the study's findings can be helpful for other HEIs and serve as a reference or starting point for other HEIs when developing their SP strategies or initiatives. The other HEIs can also apply the lessons learned from this study to improve their SP practices.

6.3 Recommendations for adopting and implementing Sustainable Procurement in alignment with Existing Literature.

The adoption of sustainable procurement practices offers the university opportunities to enhance its competitiveness and reputation (Ojijo, 2023). Through the implementation of sustainable procurement practices the university can potentially reduce operational costs, address stakeholder demands and legal requirements, and safeguard or enhance its reputation, thereby gaining a competitive advantage (Renukappa, Akintoye, Egbu & Suresh, 2016). Based on the literature review and the six main research findings, the research recommends that the university adopts sustainable procurement, taking the following into account:

a) Regulatory Compliance

The university should develop and strengthen legislation and regulations that promote sustainable procurement practices (Chari & Chiseri, 2014). The well-defined policies will guide procurement officers and suppliers, ensuring compliance with environmental and social responsibility regulations. They will serve as a framework for procurement practitioners to execute their functions (Leal Fihlo et al., 2019).

b) Management Support

To effectively implement Sustainable Procurement (SP), the university should begin by understanding the SP concept and staying updated on relevant government regulations (Brammer & Walker, 2009). This knowledge is important for executing SP activities (Brammer & Walker, 2011). Additionally, the university should launch training programs to improve senior management's understanding of sustainable procurement principles (Young et al., 2016). This will enable top management to promote sustainable practices and offer clear recommendations, recognising that strong leadership is crucial in advancing knowledge and driving change (Brammer & Walker, 2011). Furthermore, the university should prioritise sustainability (SP) as a core and strategic value, necessitating leadership commitment to foster an organisational culture that promotes sustainable practices across all operations (Witjies & Lozano, 2016).

c) Stakeholder Engagement

For SP to be implemented successfully, stakeholders must be ready to adopt its practices and principles (Appiagyei et al., 2018). The university's framework should be adaptable, acknowledge that adopting SP is a developmental process, and involve all relevant internal and external stakeholders, such as suppliers and workers (Leal Filho et al., 2019).

d) Financial Planning and Innovation

The university should have enough financial flexibility to allow it to invest in SP policies and set aside money specifically for projects related to sustainable procurement (Chari & Chiseri, 2014). The institution should consider the potential for financial incentives from the government to ease budget constraints. Brammer and Walker (2009) and Leal Filho et al. (2019) emphasise that the adoption of these incentives is crucial in encouraging Higher Education Institutions (HEIs) to overcome challenges and successfully implement SP.

e) Staff Development

The institution should implement comprehensive training programs for procurement workers (Quayle & Quayle 2000). According to Oyebanjo and Robertson (2020) the employees' level of knowledge plays a significant role in implementing sustainable procurement. However, it is important to note that the impact of training is limited without the formal integration of SP into organisational policies and strategies. Therefore, it is crucial to prioritise capacity building to improve understanding and awareness of the legal framework and its requirements (Akenroye, Oyegoke, A. & Eyo, 2018). Ensure formal integration of SP into organisational policies and strategies. Prioritise capacity

building to improve understanding and awareness of the legal framework and its requirements, aligning with Akenroye, Oyegoke, and Eyo's (2018) recommendations.

f) Internal Policy Framework

The university should develop and clarify internal policy guidelines for sustainable procurement (Young et al., 2016). This will provide procurement officers with a structured framework for reference, eliminating ambiguity and fostering effective implementation (Leal Filho et al., 2019). This framework should define clear targets, assign responsibilities, and emphasise continuous improvement throughout a product's entire lifecycle, from design to disposal. This approach enables well-informed purchasing decisions (Leal Filho et al., 2019).

6.4 Limitations of the Study

The study focused solely on one university in the Eastern Cape province, which may limit the generalisability of the findings to other institutions or regions. Future research should consider conducting multi-site studies involving a diverse range of universities to provide a more comprehensive understanding of SP practices across different contexts. SP in higher education, particularly in South Africa, is gradually increasing. Some of the participants in the study had limited knowledge and understanding of the basics of sustainable procurement. This highlights the need for more extensive education and training initiatives to enhance procurement professionals' knowledge and awareness of SP practices. The lack of understanding contributed to their reluctance to participate in the study, resulting in their inability to answer in-depth questions. It became evident that more work must be done to address this issue and further explore the topic of SP in higher education, particularly regarding South African universities. Future studies can contribute to advancing knowledge on sustainable procurement practices in higher education and inform evidence-based decision-making for building more resilient and sustainable institutions

6.5 Contribution of the study and opportunities for future research

Providing a South African HEI perspective on the adoption and implementation of SP is the contribution of this study to the current body of knowledge. Furthermore, it aims to inform policy on how HEIs can implement SP to derive the benefits offered by its implementation. Current knowledge predominantly focuses on the European context (Brammer & Walker, 2009; Brammer & Walker, 2011; Young et al., 2016; Leal Filho et al., 2019), and this study aims to contribute to the already existing literature. The study highlighted that successful implementation and adoption of SP could result in several benefits, contributing to the resilience of organisations, and this is supported by Leal

Filho et al. (2019), who discovered that integrating SP practices within HEIs can enhance their ability to navigate challenges, such as environmental uncertainties and social responsibilities, resulting in increased organisational resilience. However, the study was limited to assessing SP implementation and adoption in one South African university. This opens opportunities for possible future research.

6.6 Conclusion

The research has contributed to expanding the existing body of knowledge on SP in higher education, particularly in the context of South African universities, and understanding sustainable procurement's challenges, practices, and benefits, leading to resilience. The study has highlighted the limited knowledge and understanding of SP among procurement officers, at least in one South African university, highlighting the importance of raising awareness and providing education and training on SP practices. By shedding light on these obstacles, such as the lack of understanding and reluctance to participate, the study provides valuable insights for developing strategies to overcome these barriers and capitalise on opportunities for SP in higher education.

6.7 Implication of the study

The implications of the study highlight the importance of proactive measures to promote sustainable procurement in higher education institutions, including policy development, leadership support, stakeholder engagement, financial planning, staff development, and the establishment of internal policy frameworks. These recommendations can guide universities in enhancing their sustainability efforts through procurement practices and contribute to building a more resilient and sustainable future.

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1. ANNEXURE A: INTERVIEW SCHEDULE



Interview schedule and questions

Topic: Factors that influence the adoption and implementation of sustainable procurement: A case study of a South African public university

Opening

My name is Sive Mpapha, and I'm a Rhodes University MBA student. I'm interested in learning more about sustainable procurement in higher education. The study's goal is to establish where the challenges and opportunities are in terms of sustainable procurement for enhanced social inclusion, governance, and environmental responsibility. This study aims to assist the institution by exploring the barriers and drivers that affect sustainable procurement and making recommendations for improvement to achieve resilience. It will also add value to the university's supply chain management and build resilience into internal systems to avoid and mitigate disruptions related to procurement matters.

The interview should last between 30- and 45 minutes.

SECTION A

General questions

1. Could you describe your position within the institution?
2. How long have you worked in the procurement section?

Years	
0 - 5	
5 - 10	
10 - 15	
15 - 20	
20 years and above	

3. What does general procurement process within the university entail?
4. What is your understanding of sustainable procurement?

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SECTION B

Sustainable procurement

Sustainable procurement is defined as "a process whereby organizations meet their needs for goods, services, works and utilities in a way that achieves value for money on a whole life basis in terms of generating benefits not only to the organization but also to society and the economy while minimizing damage to the environment (UNEP, 2021)". Sustainable procurement helps develop a resilient, healthy, and just society; we can achieve a just society by operating within a safe operating space defined by the planet's boundaries and promoting good governance (Leal Filho et al., 2019). Sustainable procurement covers black economic empowerment initiatives and other policy objectives such as localization, greening, and ethical labour practices.

1. Does the institution engage in sustainable procurement, according to the definition given above?
2. If so, how has the university incorporated sustainable procurement practices in its processes?
3. If not, how can sustainable procurement practices be included in the university's procurement process?
4. Does the university have a clear sustainable procurement policy or strategy? Is it regularly reviewed, updated, and communicated to staff and stakeholders?
5. What do you think are the drivers that would influence the university to adopt sustainable procurement?
6. What do you think are the main barriers for the university to adopt and implement sustainable procurement?
7. In your view, what do you think will be the risks of not engaging in sustainable procurement?
8. Do you think that the university will benefit from sustainable procurement and if so, how will the university benefit? If not, how can sustainable procurement be used to benefit the university?
9. Do you think that stakeholders such as students, suppliers, and the local community will benefit from sustainable procurement? if so, how? If not, how can sustainable procurement be used as a catalyst to benefit stakeholders?

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SECTION C

Adopting and implementing of sustainable procurement

Implementation refers to the processes involved in integrating sustainable procurement into the institution, and adoption refers to when an institution decides to use sustainable procurement practices (Fernandez,2019).

1. How do you think the adoption of sustainable procurement improve the attainment of the university's strategic objectives?
2. What steps should be considered when adopting sustainable procurement?
3. Can you describe how executives have shown commitment in support of sustainable procurement implementation?
4. Which resources, in your opinion, will be needed by the university for sustainable procurement to be implemented?
5. How would the appointment of a designated individual (s) within the university support sustainable procurement?
6. Would you recommend training for staff members insofar as sustainable procurement is concerned? Provide motivation to your response.
7. How will the university's approach to sustainable procurement practices impact the society and the environment?

SECTION D

Conclusion

Do you have any relevant points for the study that have not come up during the interview so far?

Can we contact you in the near future if the researcher has any further questions?

The researcher would like to thank the participant for the participating on the research.

Rhodes University, Research Office, Ethical Review
Ethics Coordinator ethics-committee@ru.ac.za
t: +27 (0) 46 603 7727 f: +27 (0) 86 616 7707
Room 204, Main Admin Building, Drosty Road, Grahamstown, 6139

2. ANNEXURE B: PARTICIPANT CONSENT FORM



PARTICIPANT INFORMED CONSENT DECLARATION (To be signed by research participant/s)

Project Title: Factors that influence the adoption and implementation of sustainable procurement: A case study of a South African public university.

Ms Sive Mpapha (student number: 20m2189) from the Department of Rhodes Business School, Rhodes University has requested my permission to participate in the above-mentioned research project.

The nature and the purpose of the research project and of this informed consent declaration have been explained to me in a language that I understand.

I am aware that:

1. The purpose of the research project is to investigate key factors to adopting and implementing sustainable procurement in higher education using the case study at a South African public university in the Eastern Cape
2. Rhodes University has given ethical clearance to this research project **Rhodes University Ethics Committee 2022-5486-7269** and I have seen/may request to see the clearance certificate by contacting the Ethics Coordinator (ethics-committee@ru.ac.za)
3. By participating in this research project I will be contributing towards information and assist decision-makers when developing or reviewing policies around the issue of implementing sustainable procurement in higher education institutions.
4. I will participate in the project by Ms. Sive Mpapha and Ms. Leticia Greyling, in a 30-45 telephonic interview which will be recorded using the Otter application and transcribed into text format for analysis. The data will be exported to ~~microsoft~~ excel and the researcher will use a thematic analysis.
5. My participation is entirely voluntary and should I at any stage wish to withdraw from participating further, I may do so without any negative consequences.
6. I will not be compensated for participating in the research, but my out-of-pocket expenses will be reimbursed.
7. The following risks are associated with my participation: The research is a low risk to the participants as the study will gather data that is usually considered non-sensitive and not personal information. The targeted participants are adults and are not part of the vulnerable research group.

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Block 204, Main Administration, Grahamstown, 6170

8. The Researcher intends to publish the research results in the form of written communication via email. However, confidentiality and anonymity of records will be maintained and my name and identity will not be revealed to anyone who has not been involved in the conducting of the research, *unless I indicate to the contrary/recognize that as a public figure my identity will inevitably be/become known, in which case I agree to accept the loss of anonymity.*
9. In terms of the Protection of Personal Information Act (No. 4 of 2013) it remains my right to request the Researcher to provide me with a detailed explanation of exactly how confidentiality and anonymity of the data I provide will be achieved. I may also request to know exactly how my personal information will be stored securely, for how long it will be stored.
10. If any data collected from me for this research project is to be used by the Researcher for any further study, I am to be informed in writing and my written consent requested again. I need not give consent for the new research if it is incompatible with the initial purpose of the present study (POPIA, s15(3)). Equally, I can simply reject the request. In such cases, a formal request needs to be made to me by the researcher via the Ethics Coordinator (ethics-committee@ru.ac.za).
11. In terms of the Protection of Personal Information Act, I possess the right to receive feedback about this research. This will take the form of written communication via email via the researcher Sive Mpapha (g20m2189@campus.ru.ac.za), *unless I elect not to receive feedback.*
12. In terms of the Protection of Personal Information Act, I possess the right to receive feedback about this research. This will take the form of written communication via email via the researcher Sive Mpapha (g20m2189@campus.ru.ac.za), *unless I elect not to receive feedback.*
13. By signing this informed consent declaration, I am not waiving any legal claims, rights, or remedies. A copy of this informed consent declaration will be given to me, and the original will be kept on record by the Researcher.
14. I *agree/disagree* (delete inapplicable) to the Researcher's request to take photographs, or videoing me as part of this research project, recognizing that agreement here is likely to raise the risk of compromising my anonymity and that steps will be taken to ensure this will not happen if my consent is given.
15. I *agree/disagree* (delete inapplicable) to the Researcher's use of voice recording of my comments and opinions during interviews, the purpose of which is to ensure the accurate recording of my views/responses. Furthermore, I have the right to request a copy of the interview transcriptions to confirm that my opinions are accurately recorded



RHODES UNIVERSITY
1928-2028

I,, have read the above information / confirm that the above information has been explained to me in a language that I understand and I am aware of this document's contents. I have asked all questions that I wished to ask, and these have been answered to my satisfaction. I fully understand what is expected of me during the research.

I have not been pressurised in any way and I voluntarily agree to participate in the above-mentioned project.

.....
Participants signature

.....
Witness

.....
Date

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t: +27 (0) 46 863 7727 f: +27 (0) 86 616 7707
Room 204, Main Admin Building, ~~Osaka~~ Road, Grahamstown, 6119

8. The Researcher intends to publish the research results in the form of written communication via email. However, confidentiality and anonymity of records will be maintained, and my name and identity will not be revealed to anyone who has not been involved in conducting the research, *unless I indicate to the contrary/recognise that as a public figure, my identity will inevitably be/become known in which case I agree to and accept the loss of confidentiality*
9. In terms of the Protection of Personal Information Act (No. 4, 2013), it remains my right to request the Researcher to provide me with a detailed explanation of exactly how confidentiality and anonymity will be achieved. I may request to know how my personal information will be stored securely, and for how long it will be stored.
10. If any data collected from me for this research project is to be used by the researcher for any further project, I am to be informed in writing, and my written consent requested again. I need not give consent if such further research is incompatible with the initial data presented for this study (POPIA, s15(3)). Equally, I can simply reject the request. In such cases a formal request needs to be made by the researcher via the Ethics Coordinator (ethics-committee@ru.ac.za).
11. In terms of the Protection of Personal Information Act, I possess the right to receive feedback about this research. This will take the form of written communication via email via the researcher Sive Mpapha (kwezilumi@gmail.com), *unless I elect not to receive feedback*.
12. Any further questions that I might have regarding the research, or my participation will be answered by Sive Mpapha (email address: kwezilumi@gmail.com).
13. By signing this informed consent declaration, I am not waiving any legal claims, rights or remedies.
14. I **agree/disagree** with the Researcher's request to voice record my comments and opinions during interviews, the purpose of which is to ensure the accurate recording of my views. Furthermore, I have the right to request a copy of interview transcriptions to confirm that my opinions are accurately recorded.
15. A copy of this informed consent declaration will be given to me, and the original will be kept on record by the researcher.



I,, have read the above information / confirm that the above information has been explained to me in a language that I understand and I am aware of this document's contents. I have asked all the questions that I wished to ask and these have been answered to my satisfaction. I fully understand what is expected of me during the research.

I have not been pressurized in any way and I voluntarily agree to participate in the above-mentioned project.

.....
Participants signature

.....
Date

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3. ANNEXURE C: ETHICS APPROVAL



Rhodes University Human Research Ethics Committee
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<https://www.ru.ac.za/researchgateway/ethics/>

10 February 2023

Sive MPAPHA

Email: g20m2189@campus.ru.ac.za kwenzilumi@gmail.com

Review Reference: 2022-5486-7269

Dear Sive MPAPHA

Title: Factors that influence the adoption and implementation of sustainable procurement: A case study of a South African public university

Researcher: Sive MPAPHA

Supervisor: Miss Lofisa Greyling

This letter confirms that the above research proposal has been reviewed and **APPROVED** by the Rhodes University Human Research Ethics Committee (RU-HREC). Your Approval number is: 2022-5486-7269

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

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

Sincerely,

Dr Janet Hayward

Chair: Rhodes University Human Research Ethics Committee, RU-HREC

cc: Ethics Coordinator