

**UNIVERSITY OF EDUCATION, WINNEBA
SCHOOL OF BUSINESS**

**SUSTAINABLE PROCUREMENT ADOPTION AND
SUSTAINABLE PERFORMANCE: THE ROLE OF ISOMORPHIC
PRESSURES**

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PERFORMANCE: THE ROLE OF ISOMORPHIC PRESSURES**



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NOVEMBER, 2023

DECLARATION

Candidates Declaration

I hereby declare that this thesis is the result of my original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate: Afful Nyarkoh Joyce

Signature.....

Date.....

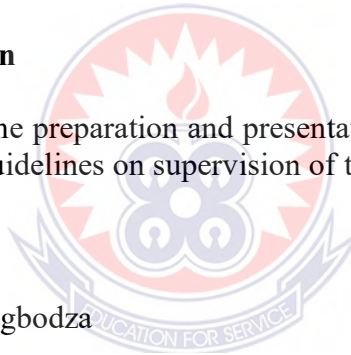
Supervisors' Declaration

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Education, Winneba.

Supervisor: Ms. Mavis Agbodza

Signature.....

Date.....



DEDICATION

I dedicate this study to Almighty God for all His protection and guidance. Also, to my family especially Mr. Moses Adomako and Madam Hannah Otemah for their emotional and financial support in realizing this beautiful dream.



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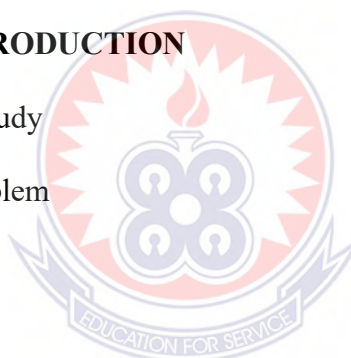
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TABLE OF CONTENTS

Content	Page
DECLARATION	iii
DEDICATION	iv
ACKNOWLEDGEMENTS	v
TABLE OF CONTENTS	vi
LIST OF TABLES	ix
LIST OF FIGURES	x
LIST OF ACRONYMS	xi
ABSTRACT	xii
CHAPTER ONE: INTRODUCTION	1
1.0 Background to the Study	1
1.1 Statement of the Problem	4
1.2 Purpose of the Study	6
1.3 Research Objectives	6
1.4 Research Questions	7
1.5 Significance of the Study	7
1.6 Delimitations	8
1.7 Limitations	8
1.8 Definition of Terms	9
1.9 Organisation of the Study	10
CHAPTER TWO: LITRATURE REVIEW	11
2.0 Introduction	11
2.1.0 Conceptual Review	11
2.2 Empirical Review	17



2.3 Theoretical Review and Hypothesis Development	25
2.4 Hypothesis Development	29
2.5 Conceptual Framework	32
2.6 Chapter Summary	33
CHAPTER THREE: RESEARCH METHODS	35
3.0 Introduction	35
3.1 Research Philosophy	35
3.2 Research Approach	36
3.3 Research Design	37
3.4 Study Area	38
3.5 Study Population	38
3.6 Sample and Sampling Procedure	39
3.7 Data Collection Instruments	40
3.8 Ethical Consideration	41
3.9 Operationalisation of Key Variables	41
3.10 Data collection Procedure	42
3.11 Data Processing and Analysis	43
3.12 Chapter Summary	46
CHAPTER FOUR: RESULTS AND DISCUSSION	47
4.0 Introduction	47
4.1 Response Rate	47
4.2 Demographic Characteristics of Respondents	47
4.3 Measurement Model Assessment	50
4.4 Reflective measurement Model Evaluation	51
4.5 Indicator Factor Loadings	51

4.6 Reliability and Convergent Validity	53
4.7 Discriminant Validity	55
4.5 Assessment of Structural Model	56
4.6 Multicollinearity Statistics	56
4.7 R-Squared	57
4.8 F-Square	58
4.9 Hypothesis Testing	58
4.10 Discussion of findings	61
4.11 Chapter Summary	67
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	68
5.0 Introduction	68
5.1 Summary	68
5.2 Summary of Key Findings	69
5.3 Conclusion	70
5.4 Recommendations	70
5.5 Contribution to Knowledge	72
5.6 Suggestions for Future Studies	72
REFERENCES	74
APPENDIX	92



LIST OF TABLES

Table	Page
1 Measurement of Variables and Sources	42
2 Demographic Characteristics of Respondents	48
3 Reliability and convergent validity	54
4 HTMT Correlation	56
5 Collinearity statistics	57
6 R-Squared	57
7 F-square	58
8 Hypothesis testing	59



LIST OF FIGURES

Figure	Page
1: Conceptual Framework	33
2: Indicator loadings	52
3:T-Values	52



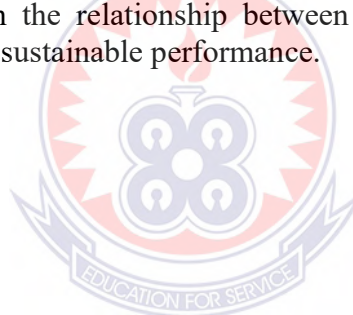
LIST OF ACRONYMS

SPPA	Sustainable Public Procurement Adoption
COE	Coercive Pressures
MIM	Mimetic Pressures
NORM	Normative Pressures
SP	Sustainable Performance
PPA	Public Procurement Authority
EPA	Environmental Protection Agency
SDG	Sustainable Development Goals



ABSTRACT

The study examined the relationship between isomorphic pressures, sustainable procurement adoption and performance of public entities in Ghana. The study used an explanatory research design and a quantitative research approach. Relying on institutional and stakeholder theories, data from 307 public entities were gathered using structured questionnaires and analysed with frequencies, means, standard deviation, partial least squares structural equation modelling (PLS-SEM). Simple random sampling technique was used to determine the sample size. The study proved that isomorphic (coercive, normative and mimetic) pressures influenced sustainable public procurement adoption. Similarly, sustainable procurement adoption mediated the relationship between isomorphic pressures and sustainable performance. The study recommended that institutional regulatory bodies like the Public Procurement Authority of Ghana should spearhead the sustainable operations of public procurement. The findings of the study proved that isomorphic pressures (normative, coercive and mimetic pressures) have a positive and significant effect on sustainable procurement adoption in Ghana. All the three hypotheses were supported. The second objective sought to examine the effect of sustainable procurement adoption on sustainable performance in Ghana. One hypothesis was formulated and tested at the end of the analysis, proving that sustainable public procurement adoption significantly influences sustainable performance. The third objective assessed the mediating role of sustainable procurement adoption in the relationship between isomorphic pressures (coercive, normative, mimetic) and sustainable performance.



CHAPTER ONE

INTRODUCTION

1.0 Background to the Study

The Sustainable Development Goals (SDGs), which span environmental, social, and economic development components, are currently seen as a way to ensure the continuation of the world's development objectives beyond the Millennium Development Goals (MDGs) (Adjei-Bamfo, 2019). This has significantly increased scholars' and practitioners' concentration on investigating the topic of sustainability (Mani et al., 2020; Yong et al., 2020). To accomplish SDGs, it is vital to implement sustainable practices throughout the entire scope of corporate activity (Marujo & Casais, 2021). Since adopting the United Nations (UN) SDGs in 2015, Members have tried to enhance Sustainable Public Procurement (SPP) under SDG Goal 12 and Target 7.

SPP incorporates environmental, social, and economic issues in procuring goods, works, and services by government agencies or public institutions (Walker et al., 2008; Brammer & Walker, 2011). Government acquires public goods, works and services for national development (Public Procurement Authority, 2013; World Bank, 2015). The global pursuit for sustainable consumption and production (SDG 12) has put public entities now under the scrutiny of a wide range of industry stakeholders who are aware of the sectors' continuous impact on carbon footprints, climate change, resources and energy use as well as inequality issues when it comes contract awards (Harland et al., 2021). These advancements happen as governments procure goods and contract works and services from domestic and foreign enterprises to benefit their citizens (Baah et al., 2021).

Public procurement is a substantial government activity that financial records nearly 15-20% globally, and national revenue of 20-70% in developing economies (Adjei, 2010; Adjei-Bamfo et al., 2019), indicating that public procurement is gradually recognized as a tool of government policy and a conduit for broader economic, social, and environmental changes (Raj et al., 2020; Edman, 2021; Fuertes Giné, 2022). Thus, public procurement institutions are positioned to contribute to the sustainable use of resources in all sectors (Acquah et al., 2021; Baah et al., 2021). With SGD goals in mind, suppliers, customers, competitors, associations, trade unions, the media, other social entities, and corporations are keenly interested in sustainable adoption and implementation by public entities worldwide (Rob et al., 2019).

Public procurement institutions behaviour in acquiring goods, contracts of works, and service consultations must be improved and redesigned to consider sustainability objectives rather than the traditional procurement method (Adjei-Bamfo et al., 2019). Since the traditional function of procurement has been to emphasize price and simply economic advantages, environmental and social considerations must be merged into the procurement process (Dza et al., 2019; Raj et al., 2020; Acquah et al., 2021). Institutional isomorphism theory was employed to explain changes in organizational behaviour in terms of practice and structure. Businesses and organisations are susceptible to pressures from external forces like governments, customers, suppliers, trade unions, professional bodies, and associations. The stakeholder theory (Freeman et al. 2010; Freeman, 2015; Gray, 1995) compliments the institutional theory in this study on the need to meet stakeholders' expectations through pressures exerted on public entities. An entity's performance is determined not only by meeting the expectations of its shareholders but also by stakeholders who may be affected or affect the firm's operations (Lokuwaduge & Heenetigala, 2017).

Institutional isomorphism is defined in this research as institutional pressures that cause changes in a firm's internal behaviours toward convergence to sustainable procurement implementation and adoption by public procurement bodies (Hsu et al., 2013). Despite the significance of SPP promotion in sustainable development, scholars such as Perez-Batres et al. (2011); Cao et al. (2014); Raj et al. (2020); Acquah et al. (2021) have identified mimetic isomorphism as one in which firm conform to a new practice imposed by an external authority through adopting the legitimate practices of leading firms, and coercive isomorphism as firm conformance to a new practice imposed by an external authority, due to the power the external authority wields. Normative isomorphism arises from firms' desire to adhere to the standards, norms, and values of permitted systems and processes established by appropriate professional associations.

Integrating sustainable mechanisms into procurement has the added benefit of improving the ethical behaviour of public entities, invariably improving the same, for suppliers and contractors in particular as well as the general public, by improving air and water quality, reducing harmful emissions and waste generation; increasing society's wealth and health (thus raising standards of living); improving working conditions health and safety, responsible consumption, and labour standards; and decreasing labour agitation (Sethi, Martell & Demir, 2017). Consolidating the achievement of SDG 1, 3, 8, 10, 12, and 13 through Ghana's public procurement, organisations operate through actors like staff and managers to produce the expected outcome (Meyer & Rowan, 1977).

Almost all of the challenges in implementing SPP in Ghana are related to the internal capabilities of public entities (Adusei & Awunyo-Vito, 2015), such as knowledge and skills on sustainability (Asare & Prempeh, 2016), financial constraints

(Grandia, 2016), resistance to change (Brammer & Walker, 2011; Grandia, 2016), civil servant commitment (Adjei-Bamfo, 2019), omission of organizational targets (Gidigah et al., 2021), and lack of procurement professionalism (Kyeremeh, 2022) constrains the effort to adhere to SPP policies. Hence, there is a need for institutional isomorphic pressure on sustainable public procurement adoption. In public procurement, political, environmental, social, and citizen pressure toward sustainability is significant in adopting new rules and practices (Raj, Agrahari, & Srivastava, 2020). The study examines the role of isomorphic pressure on sustainable procurement adoption and performance of public entities in Ghana via the lens of institutional and stakeholder theory.

1.1 Statement of the Problem

The global public procurement market is approximately \$ 13 trillion annually (World Bank, 2016). Developed economies account for more than \$ 12 trillion while developing economies account for approximately \$ 1 trillion annually. Ghana spent \$5,330,916,384 on public procurement, approximately 9% of the country's overall GDP (Auditor General report, 2021). The cost-intensity nature of public procurement can be a lever to encourage sustainability and a circular economy in the procurement of goods, works and services in Ghana. It is against this driver of SDG Goals and circular economy that the Government of Ghana amended its sustainable public procurement Act 663 to Act 914 so that sustainability would be featured in the procurement process of Ghana. With the dynamics in modern procurement practices, there is a need to manage the various risks that arise from environmental and social factors.

Despite support and reinforcement from governments, procurement agencies, and authorities, the importance of SPP in promoting SDG is yet to become part of established practices (Ibrahim et al., 2017; Adjei-Bamfo, 2019; Harland et al., 2019;

Kyeremeh, 2022). Evidence of the consequences of public procurement to this inaction has been witnessed and felt in various government corporations and public entities. For example, Between 2010 and 2017, the government of Ghana lost over GHS 12 billion (\$2.96 billion in nominal terms) in procurement contracts on sole or restrictive tendering (Danquah Institute, 2016). The government could have saved an estimated \$1.93 billion if a more competitive approach encouraging SME participation and local entrepreneurship was used to select suppliers (Hatch, 2017).

On social issues, insight from Open Contracting Scoping Study Report (2017) indicated an estimated value of about GHS 298 million spent by the government on international tendering against GHS 24 million in national competitive tendering in public procurement contracts. Out of the \$11 trillion spent annually on public procurement, only 1% is awarded to women-owned businesses (World bank, 2021). In Ghana, only 30% of contracts are mandatorily allocated to women, youth, and persons with disability-based firms, which is relatively low for the three categories of marginalised firms. Again, in 2021, Ghana's procurement irregularities amounted to a cost of GHS306,769,261.45, and these irregularities occurred as a result of public entities' non-compliance with the provisions of the Public Procurement Act, 2003 (Act 663) as amended (Auditor General report, 2021).

These consequences and losses resulting from sustainable procurement inaction severely ripple the sector's overall sustainable adoption and performance (Ryu & Sueyosh, 2021). The inability of businesses owned by local, women, youth and persons with disability to access contracts and huge financial losses from procurement irregularities is a bane to achieving SDG goals, 1, 2, 5, 8 and 10 (Treviño-Lozano, 2021). It is in the interest of these goals that stakeholders and institutions have been exerting pressures on public procurement entities to adopt and implement sustainable

procurement to increase transparency and cost control through a broader approach to whole-life costing, environmental and social legislation, risk management, and incorporating the local business community in its operations and activities (Agyekum et al., 2022; Adjei-Bamfo et al., 2022).

Although, procurement irregularities in the public sector pose huge financial and social threats to developing economies' wellbeing and economic development (Nyantakyi, 2018; Adjei-Bamfo et al., 2019). Studies on sustainable public procurement are scanty in most developing economies, including Ghana. It is so because previous studies on public procurement have focused on the economic benefits of procurement (Quashie, 2019; Essel, 2021; Asare, 2022). Also, other authors have discussed the literature on sustainable public procurement more qualitatively (Adjei, 2010; Mensah & Ameyaw, 2012; Nyantakyi, 2018; Adjei-Bamfo et al., 2019). Limited studies have investigated the influence of isomorphic pressures, sustainable procurement adoption, and sustainable performance. The study addresses this gap by applying structural equation modeling to examine the influence of isomorphic pressures, sustainable procurement adoption, and sustainable performance of public procurement entities in Ghana.

1.2 Purpose of the Study

The research examined the influence of isomorphic pressures on sustainable public procurement adoption and performance in Ghana.

1.3 Research Objectives

The specific objectives of the study were to:

- i. examine how isomorphic pressures influence sustainable procurement adoption in Ghana.

- ii. examine the effect of sustainable procurement adoption on sustainable performance of public procurement entities in Ghana.
- iii. assess the mediating role of sustainable procurement adoption in the relationship between isomorphic pressures and sustainable performance in Ghana.

1.4 Research Questions

The following questions were formulated in relation to the objectives:

1. What is the relationship between isomorphic pressures and sustainable procurement adoption in Ghana?
2. What is the effect of sustainable procurement adoption on sustainable performance of public procurement entities in Ghana?
3. How does sustainable procurement adoption mediate the link between isomorphic pressures and sustainable performance in Ghana?

1.5 Significance of the Study

Policymakers, as well as public entities interested in the adoption and implementation of sustainable public procurement, will benefit from the study's findings. The results of this study will offer policymakers empirically-based insights, which could result in the creation or improvement of policies that promote sustainable procurement practises. Policymakers can determine the most impactful external forces and subsequently customise their methods to strengthen these pressures. The research findings offer valuable insights into implementing effective strategies for organisations operating in Ghana and similar socio-economic situations. This phenomenon encompasses significant environmental and social ramifications and holds the potential to yield enduring economic advantages for enterprises.

Additionally, the study findings can be utilized to supplement empirical and methodological research. Based on the study's findings, there is a link between isomorphism and sustainable public procurement adoption in developing countries, especially Ghana. Also, the utilisation of isomorphic pressures, namely coercive, mimetic, and normative, may be traced back to institutional theory. Examining these forces within the Ghanaian context can yield a deeper understanding of the applicability of global theories within different local environments.

1.6 Delimitations

The research is conducted within the procurement and supply chain setting. The study focused on how isomorphism can influence public procurement entities in Ghana's decision to adopt sustainable procurement practices. The study is based on public procurement entities in Ghana. The study surveyed public procurement entities in Ghana on sustainable public procurement adoption. The entire country was chosen because there are few public procurement entities and the need for a perfect representation of issues. In terms of methodology, the study used a quantitative approach, with data collected using questionnaires. Given each public procurement entity a chance to answer just one questionnaire.

1.7 Limitations

The study adopted the quantitative research approach therefore, questionnaires were used for data collection. This approach eschewed qualitative responses because structured questionnaires restricted the respondents to close-ended questions. The close-ended Likert-type scale statements restricted the quantity and quality of data from the respondents. In addition, there were difficulties in accessing information because some respondents were difficult to locate, as a sample frame of all public procurement

entities in Ghana was not appropriately readily available, but the total number given by the public procurement Authority.

1.8 Definition of Terms

1. *Isomorphic pressures*: pressures on organisations to conform to their institutional environment due to cohesion from political institution and regulatory bodies, norms of occupational and professional group, and mimicry of legitimized organisations within the industry.
2. *Coercive pressures*: pressure from dominant stakeholders that compel public entities to modify their behaviour and practice to those stakeholders applying the pressure.
3. *Mimetic pressures*: the pressure to copy legitimized sustainable practices of other public entities in other countries or sectors in Ghana in the face of uncertainties
4. *Normative pressures*: pressure from professional bodies, institutions, citizens and professional associations key personnel of public entities are associated with.
5. *Sustainable public procurement adoption*: Public procurement actions that result in better environmental outcomes, financial savings, increased consumer surplus, and good social benefits for suppliers and citizens.
6. *Sustainable performance*: The ability of public entities to meet the (social, environmental and economic) long-term needs and expectations of suppliers or customers, citizens, and other stakeholders, balanced by an effective management organization through appropriate reforms and innovation in public procurement activities.

7. *Public procurement entity*: procurement entity is defined as any entity conducting public procurement under Act 663 as amended (Section 98).

1.9 Organisation of the Study

There are five chapters that make up the research. Chapter one was all about the study's introduction, which includes the background, statement of the problem, objectives, and hypotheses scope of the study, the study's significance, and how it will be arranged. Chapter Two provides comprehensive reviews of relevant literature to the study. It provides a theoretical and empirical perspective of the study. Chapter Three presents the research method. This chapter provides a methodology that includes the research design, the population, sampling and sampling procedures, the research instrument, and the data collection instrument and data analysis. Also, the sample and data parameter estimates used were described. Chapter Four presents the result and discussion, which discusses the analysis of the findings and interpretation of the data produced or gathered. Chapter Five presents the summary, conclusions, and recommendations. Suggestions for further studies are also provided in the last chapter.

CHAPTER TWO

LITRATURE REVIEW

2.0 Introduction

This chapter contains a review that guides the study concerning the research problem. Views from this chapter are gathered from various writers and researchers on issues related to isomorphism and sustainable public procurement adoption in Ghana. It is organized under different sections; the theoretical review, the conceptual review, and a review of related studies empirically and presents the study's conceptual framework.

2.1.0 Conceptual Review

This session presents a review of the concepts under study. It focuses on the key constructs, including isomorphic pressures (coercive, mimetic and normative pressures), sustainable public procurement adoption and sustainable performance. Out of this review, the conceptual framework for the study was developed.

2.1.1 Isomorphic Pressures

Using the institutional approach, it has been shown that sustainable practices are remarkably similar across different businesses and industries. These practices have been brought to bear by external actors rather than organisational structures (Daddi et.al, 2016). In their paper, Shunbham et.al, (2018) and Raj et al., (2020) explained that these external forces may include; competitors, governments, investment agencies, professional bodies, trade association, society and consumers etc. All these forces place value on sustainability and best practices, which when adopted by firms and entities, promise sustainable performance and legitimacy with stakeholders.

Coercive, mimetic, and normative isomorphic forces influence the acceptance of industrial strategies, including sustainability, IoT, and digitisation. (Powell &

DiMaggio 1983; Li & Ding 2013). The three isomorphic forces of regulatory agency coercion, political influence, legislative rulings, and external player legitimacy. This pressure reflects regulators' demands for eco-friendly manufacturing and consumer behaviour. Influencing how public procurement organizations allocate items and contracts (Acquah et.al., 2021). Due to legislative support and consequences for not complying, many organizations have adopted best practices in public procurement, green manufacturing, and other areas.

Mimetic pressure is generated by organisations normal responses to uncertainty. Companies look to other noble and successful rivals in an uncertain commercial climate to obtain legitimacy; professionals generate normative pressure. In an effort to promote environmentally friendly and responsible behaviour, industry groups and professional bodies frequently implement their green standards and guidelines. This study explores the impact of three isomorphic forces on sustainable public procurement in Ghana.

2.1.2 Coercive Pressures

According to DiMaggio (1983), coercive pressures are present when dominant organisations coerce less powerful ones to follow operational directions. Coercive pressures include government demands, environmental and ethical concerns, cultural norms, dependency on financial resources, and tax law obligations. Organizations under the influence of coercive pressure are those that are dependent on other organisations or societies in the environment in which they operate, according to Somjai and Jermittiparsert (2019).

Pressure from activists, NGOs, and customers has significantly promoted CSR (Castka & Balzarova, 2008). Coercive pressure can come from governments, companies, and social movements (Kauppi & Hannibal, 2017). Haques (2020) claimed that international corporations may coerce individuals who rely on them to accept

global quality standards. Papadimitriou (2011) argues that organizations are compelled or choose to comply with institutional constraints because of their primary rationality to mobilise resources. This contradicts DiMaggio's (1983) claim that concentrated resources increase the possibility for coercive pressures. Coercive pressure in organizations is key to maintaining financial stability within an institutional framework (Powell & DiMaggio, 1991).

2.1.3 Normative Pressures

DiMaggio and Powell (1983) linked normative pressures to new rules, professionalism, and networking. Employee interactions with other organizations or specific training from a learning institution may impact an organization's structure, operations, and programs (i.e., university or college). In the context of appropriateness, isomorphism is linked to normative isomorphism, which encompasses trade organizations, professional groups, and certification authorities (Heugens & Lander, 2009).

Participation in other groups helps convey professional experience (Kauppi & Hannibal, 2017). According to Kauppi and Hannibal (2017), normative pressures concern organizational domains gaining shared responsibility over field and profession activity. These create acceptable norms of conduct, and stakeholder and institution requests to follow them can drive creative and best practices (Smelt, 2021). Toinpre, Mackee, and Gajendran (2018) postulated that, professional experiences build professional networks that span organizations and propagate new models. This means career chances can transfer professional experiences from one business to another. As long as they hire professionals, similar companies will have similar marketing strategies, policies, procedures, and strategic goals. This aligns organizations.

2.1.4 Mimetic Pressures

When one organization tries to gain legitimacy by copying another organization's behaviour, structure, and decisions, this is called "mimetic pressure" (DiMaggio & Powell, 1983; DiMaggio, 1983). Jaja et al. (2019) found that when an organization is under the same pressure, it builds the same structures, operations, and programs. Here, organizations try to get legitimacy by copying the operations and activities of other organizations. Legitimacy can make it easier for organizations to get more resources (Tsinopoulos et al., 2018; Acquah et al., 2021). This is especially important for non-profits, which means government organizations. Also, mimetic pressures can come about when the operations of focal organizations are unclear (Leiter, 2005).

Uncertainty could come about, for example, if your long-term and short-term goals are unclear. According to Leiter (2005) businesses in the same field tend to copy the operations, structures, and programs of other, more successful businesses in the same field. Galaskiewicz and Wasserman (1989) also found that social networks between businesses in the same area may be a factor in the rise of mimetic pressures. Social networks are made when people from different organizations talk to each other formally or informally. Let's say a manager doubts how or what their organization will do in a certain area. In these situations, the manager might officially ask for help from another organization's management that has solved the same problem.

2.1.5 Sustainable Public Procurement Adoption

Adoption of sustainable public procurement (SPP) has emerged as a key component of sustainability in recent years (Cheng et al., 2018). Green procurement and SPP can potentially address environmental and social concerns through public procurement efforts (Sonnichsen & Clement, 2019). SPP comprises incorporating

environmental, sociocultural, and economic concerns into government or private-sector purchases of commodities, works, and services (Walker & Brammer, 2012; Uttam & Roos, 2015). Sustainable public procurement is the process by which public institutions meet their needs for goods, services, and work to benefit the organization, society, and economy while avoiding environmental damage (Walker & Brammer, 2012; Dza et al., 2021). SPP evaluates design, non-renewable material consumption, manufacturing and production processes, logistics, service delivery, use, operation, maintenance, reuse, recycling choices, and disposal, and suppliers' ability to handle these issues. Core values are transparency, fairness (to the provider and society), long-term economic viability, and responsibility (from purchaser and supplier)

Isomorphism has emerged as a powerful tool in operations management for explaining what motivates organizations to adopt new practices (Dubey et al., 2017; Grob & Benn, 2014), particularly in the context of the environment and Corporate Social Responsibility (Zhu & Sarkis, 2007; Grob & Benn, 2014; Hsu et al., 2014; Seow et al., 2014). Similarly, several supply chain practices, such as electronic supply chain system adoption, green manufacturing adoption, supply chain security adoption, and supply chain performance measurement systems, have all been modelled through institutional isomorphism in recent years (Zhu & Sarkis, 2007; Grob & Benn, 2014; Blome et al., 2014; Hsu et al., 2014; Dubey et al., 2017; Liu et al., 2018; Amoako, 2021; Acquah et al., 2021).

2.1.6 Sustainable Performance

According to Badi and Murtagh (2019), sustainable performance is detailed research into challenges in both developing and developed countries, including the potential negative consequences of corporate activities on the environment. Meeting fundamental human needs, is a crucial component of defining societal well-being

(Kamble, Gunasekaran, & Gawankar, 2020), as is the preservation of environmental renewable and non-renewable resources for future generations (Gong, Simpson, Koh & Tan, 2018; Poltronieri, Ganga & Gerolamo, 2019). Economic, environmental, and social consequences can all be used to assess sustainability (Ding, Zhang, Li, Tang & Yang, 2018; Zaid, Jaaron & Bon, 2018; San Ong, Magsi & Burgess, 2019).

At an exponential rate, sustainable performance has grown. It is often used in supply chain management because of a more public awareness, strict government regulations, and pressure from the market (Repar, Jan, Nemecek, Dux & Doluschitz, 2018; De Nadae, Carvalho & Vieira, 2019). Many businesses plan their operations to be sustainable (Kusi-Sarpong, Sarkis & Wang, 2016; Bai, Kusi-Sarpong & Sarkis, 2017). Most academics who tried to understand sustainability performance and its meaning used the relationship between the firm and its stakeholders as a lens (Wood et al., 2021). Stakeholders are people or groups vested in a company's actions (Bai et al., 2017). They are made up of a number of more or less important groups (Wood et al., 2021).

Sustainability performance shows how much an entity cares about its stakeholders' well-being. Stakeholders track and evaluate how well a company does at being sustainable. Sustainability performance encourages stakeholder collaboration by ensuring that a business's and its stakeholders' interests are the same. This helps the business reach its goals (Yusliza et al., 2020). A business that can keep going for a long time has good pay systems, a lot of qualified workers, and creative management (San et al., 2020). It also makes it less likely that governments will take unwelcome regulatory actions and attract customers who care about social responsibility (Hillman & Keim, 2001; Kamble et al., 2020).

This claim has led to the conclusion that an enterprise's ability to handle stakeholder demands and the significance of its environmental and social stakeholders impacts its sustainability (Brammer & Walker, 2011; Roman, 2017). Sustainability initiatives can be seen as proactive responses to governmental restrictions (Giacomo et al., 2019), responses to interest group activity (Gouda & Saranga, 2020) or methods to differentiate your brand from competitors when marketing to consumers (Aragon-Correa et al., 2008; Lenox & Eesley, 2009; Hull & Rothenberg, 2008; Delmas, Russo, & Montes-Sancho, 2007).

2.2 Empirical Review

In this section, the study's research objectivity is thoroughly assessed of linked literature, contributing to the goal of analysing current studies by comparing and contrasting respective findings.

2.2.1 Isomorphic Pressures (Coercive, Normative and Mimetic pressures) and Sustainable Public Procurement Adoption

2.2.1.2 Coercive pressure on Sustainable Public Procurement Adoption

Coercive pressure improves organizational processes (Lu et al., 2019). The extensive literature review established that coercive pressure is linked to novel manufacturing processes (Ketchen & Hult, 2007), performance assessment methodologies (Dubey et al., 2017), and social sustainability (Ketchen & Hult, 2018). Government regulations often necessitate sustainable purchasing (Dubey et al., 2015). Coercive pressure is recommended to force SPP adoption in public procurement. Multi-donor agencies may pressure beneficiaries to follow SPP.

Through an online survey, Zhang, Watson and Zhang (2016) also led a study that focused on the coercive pressures impact on the adoption of sustainable supply chain management methods. The investigation sought whether supply chain

management may lead to positive environmental and economic outcomes. With structured questionnaires, the study collected data from 146 UK manufacturing firms through convenience sampling, the study found that, an integration of government models pressures the adoption of sustainable supply chain management practices.

Other studies have looked at the isomorphic pressures on the construction industry to embrace best practices such as green procurement, sustainable procurement, and building information modelling (BIM) (Cao et al.,2014; Raj et al.,2020; Acquah et al.,2021; Amoako, 2021). A study by Cao et al. (2014) sought to analyse the impact of isomorphic pressures on BIM adoption in construction projects. As part of a quantitative investigation, 92 Chinese construction projects were studied. The partial least square structural equation modelling program was employed for data processing. The authors found a strong favourable influence of coercive pressures on building information modelling.

Furthermore, Acquah et al. (2020) investigated the effectiveness of isomorphic pressures on adopting green manufacturing. The study chose a Quantitative research design and the PLS-SEM approach for data analysis due to the applicability of predictive relevance. The study, one of the first to expose and discuss the isomorphic pressures on the adoption of best practices, green procurement, green product and process innovation, discovered that the combined impact of coercive, mimetic, and normative pressures strongly influences the adoption of green procurement practices. Another source of coercive pressure is citizen pressure based on their attitudes on sustainable public procurement (Raj, 2020). Public procurement produces artifacts with taxpayer funds that citizens ultimately consume. Chiarini et al. (2017) identified citizens who are concerned about SPPA. Citizens are considered crucial SPP drivers

(Michelsen and de Boer, 2009). Grandia et al. (2015) discovered that understanding customer perceptions of sustainability is important in private-sector procurement.

2.2.1.3 Normative Pressure on Sustainable Public Procurement Adoption

Organizational normative pressure is caused by group expectations (DiMaggio & Powell, 1983). These expectations are transmitted and gradually become organizational norms via a relational network (Berrone et al., 2013). Firms strive to retain procedural legitimacy by adhering to these criteria. According to Raj et al. (2020), several of India's largest public procurement entities, such as Hindustan Aeronautics Limited, publish integrated reports and annual accounts, including sustainability reporting. Many more have followed in their footsteps. Almost all significant companies worldwide, including central and local government procurement agencies, have documented sustainability efforts in their annual reports in recent years, and some are voluntarily adhering to Global Reporting Initiative (GRI) requirements.

Yank and Kang's (2020) examined the effects of normative pressure, quality management practices, and environmental management practices on corporate performance from an integrated framework viewpoint. The study applied the institutional theory. The study relied on the quantitative research approach. Upon critically assessing the structural interactions among the study's construct, the study found that normative pressure has a strong positive relationship with environmental management practices. However, quality management practices were deemed not to have any significant positive relationship with mimetic pressure. Hence, normative pressure was evidenced not to foster the adoption of quality management practices.

Further, in Acquah et al., (2020), the study aimed to investigate the efficacy of isomorphic pressures on the adoption of green manufacturing. The study adopted the survey research design with PLS-SEM technique for data analysis due to the suitability

of predictive relevance. It was found in the findings of the study that, the composite impact of coercive, mimetic and normative pressures robustly influences the adoption of green procurement practices. That is to say isomorphic factors influenced positively and significantly green procurement practices.

Abdul et al. (2019) analysed coercive, mimetic, and normative isomorphisms on environmental performance. GBS moderated the study. Pakistan researched. Utilized institutional theory. Cross-sectional. Eleven industries responded. They surveyed 219 CEOs. The validity of the research collection instrument examined. Two time periods were used to reduce methodological bias. The construct's reliability and validity were confirmed, allowing further research. The study used quantitative research using an explanatory research design and SEM to analyse the data. We tested hypotheses. The study found that coercive, normative, and mimetic institutional pressures positively affect environmentally friendly company tactics (EFBS). Institutional forces positively affect environmental performance, but the link is weak. Just as some studies are in support of normative pressures having a significant positive impact on best practices; sustainable procurement, green procurement, green supply chain, and environmental friendliness (Dubey et al., 2017; Abdul et al., 2019; Yank & Kang, 2020; Acquah et al., 2021), there are a few whose findings proved no significance impact of normative pressures of isomorphic pressures to BIM, green supply chain, Megaproject social responsibility (MSR) behaviour (Lin & Shen 2012; Jain et al., 2020; Xie et al., 2021). In their study, Xie et al., (2020) sought to analyse the impact of isomorphic pressures (coercive, mimetic and normative) on MSR behaviour, with pure altruistic values and relational behaviour as moderator and mediator variables respectively.

The study employed a sample size of 334 respondents in China, and with the limitation of sample, the study adopted smart PLS- SEM to test various hypothesized relationships. The study results showed an insignificant impact of normative pressure on MSR behaviour in the direct relationship but a significant impact on MSR behaviour through the mediator variable relational behaviour. Indicating a full mediation of relational behaviour in normative pressures and MSR behaviour. Due to different findings and exposition in the literature, the study relies on the institutional theory and the empirical review to hypothesise that;

2.2.1.4 Mimetic Pressure on Sustainable Public Procurement Adoption

Organizations mimic successful competitors to be successful (Zsidisin et al., 2005). In an uncertain environment, this imitation reduces risks and expenses. These countries' governments profit substantially. Mimetic pressure is positively associated with internet-based supply chains (Ke et al., 2009) and green supply chains (Zhu & Sarkis, 2007). Mimetic pressure has a mixed effect on practice adoption. According to certain research, medical pressures don't affect new practice adoption (Gholami et al., 2013). Coercive pressure dominates the early stages of inception, but normative and mimetic pressure take over later.

Zhu and Sarkis (2007) conducted research in China. Chinese manufacturing enterprises' green supply chain strategies and performance were examined for the moderating impacts of institutional pressures. The research was based on institutional theory. The study employed the quantitative approach to the papers' undertaken. The study used convenience sampling. A total of 341 sample sizes were used. The study's scales were adopted from empirical studies conducted over the years; hence their reliability and validity were assured.

The survey revealed the following after all statistical diagnoses and tests to verify the study's data. According to the report, Chinese manufacturers have been pressured to embrace Green Supply Chain Management methods. According to the study, coercive and normative pressures increase organizations' environmental performance. Mimetic pressure affects enterprises that use GSCM but not environmental performance. The study hypothesized that no institutional pressure isomorphisms generate "win-win" conditions for manufacturing enterprises.

Furthermore, Saeed et al. (2018) studied whether external and internal green supply chain management strategies face the same or distinct coercive, normative mimetic pressures. The institutional and resource dependence theories were used to guide the investigation. The study was conducted in Pakistan. The study employed a quantitative research technique and a standardized questionnaire to collect data. The data collection instruments for the study were all assessed on a 5-point Likert scale adapted from Zhu et al. (2013). The poll elicited 207 responses from management-level executives in Pakistani manufacturing firms at random. The paper employed Partial Least Squares-Structural Equation Modelling to analyse the study's data (PLS-SEM).

PLS-SEM analysis of the structural and measurement models produced some encouraging results once the study's credibility was established by cross-checking of the processed data's reliability and validity. Green Supply Chain Management techniques were shown to have a considerable influence on the study's internal and external normative pressures. Coercive and mimetic pressures significantly influence both internal and external GSCM practice, contrary to what was previously stated for normative pressures. Internal GSCM activities have less impact on environmental performance than external GSCM practice, similar to normative pressure. Finally, it was determined that manufacturing businesses' external GSCM procedures and internal

GSCM practice work in concert. The study relies on the institutional theory and the empirical review to hypothesise that;

2.2.1.5 Sustainable Public Procurement Adoption and Sustainable Performance

Sustainability implementation leads to environmental advantages, cost reduction, consumer surplus, social benefits, etc. (Brammer & Walker, 2011; Roman, 2017). SPPA activities are believed to improve economic, environmental, and social sustainability (Giacomo et al., 2019). Sustainable purchasing may seem more expensive initially, but maintenance and disposal costs are lower in the long run. Sustainability efforts improve performance, according to Gouda and Saranga (2020).

Zhu and Sarkis (2007) argue that adopting green purchasing has helped improve organisational performance in China. Similarly, Mani et al. (2018) show that adopting social sustainability enhances buyer's social reputation and supplier's social performance. Adebayo et al., (2020), using a case study of a company, looked for ways to embed sustainable practices within the company's context. The study's findings revealed that their organizational culture highly influences the environmental performance of Fast-Moving Consumer Goods (FMCGs) companies. Further, found that institutional pressures and significantly influenced internal sustainability capabilities. However, task performance as a subconstruct had the least significant level of environmental performance.

There is no proof that SPPA improves sustainable performance. If adoption increases, procurement groups would prefer suppliers engaged in sustainability initiatives and penalize suppliers for adopting methods that negatively affect the environment and social issues (Cheng et al., 2018; Johnsen et al., 2017). Because of this, customers are inclined to share information about their environmental sustainability efforts with their suppliers and would be prepared to share their suppliers'

sustainability adoption expenses. Witjes and Lozano (2016) suggest a collaborative model between supplier and buyer to boost SP. It may lead to higher sustainable performance. Improved sustainable performance will likely boost economic, environmental, and social performance. The study relies on the institutional theory and the empirical review to hypothesise that;

2.2.1.6 The role of Sustainable Procurement Adoption in the Relationship between Isomorphic Pressures and Sustainable performance

Pressures from stakeholders and institutions with a given regulation may vary considerably across organisations (Debroux, 2010; Gray & Silbey, 2014), and compliance reasons may also vary significantly. Some organisations may comply to avoid punitive sanctions, achieve legitimacy, or protect their license to operate (Barnett & Carroll, 1995; DiMaggio & Powell, 1983; Gunningham, 2010); others may comply because they believe compliance is the right thing to do (Gunningham, 2010). Conversely, some organisations may not comply if they perceive regulation as a threat to the realisation of organisational goals or corporate profitability (Gray & Silbey, 2014; Russell et al., 2008). Lack of awareness or knowledge of a given regulation may also affect compliance (Gray & Silbey, 2014; Zhu et al., 2018). Moreover, compliance with a given regulation may be negatively affected by an organisation's tendency and ability to exploit inherent legal loopholes in a given regulation (Parker et al., 2009).

K. çükoğlu and Pinar (2016) carried out a study to examine the relational effect of sustainability drivers on green innovation. The investigation subsequently assessed the relationship by mediating it with green organisational culture (sustainability culture). The study was undertaken within the Turkish economy and relied on 162 out of the top 500 companies published by the Istanbul Chamber of Industry from 2010 to 2012. It used a quantitative research approach and an explanatory research design.

Researchers found a strong correlation between green innovation and sustainability drivers. Sustainability drivers were shown to have a considerable influence on green innovation. On the other hand, green organizational leadership significantly influences innovation. Green corporate leadership also significantly impacted the statistical link between sustainability drivers and green innovation.

Etse et.al. (2022) noted that an organization's response to a regulation may depend on its nature. Este et al. (2011) studied the impact of rules on sustainable procurement using organizational culture and top management support as mediators. The PLS-SEM analysis of 322 Ghanaian organizations revealed a moderate sustainable procurement practice, a positive effect of regulation on related practices, a mediation effect of organisational top management support on regulation's relationship with sustainable procurement, and no mediation effect relative to organizational culture.

Sönnichsen et al. (2020) reviewed green sustainable public procurement literature spanning 2000-2020. Data classifications revealed three themes: organizational, individual, and behavioural. Circular public procurement relates to strategies, requirements, costs, size, and knowledge. Influence and knowledge in organizational leadership are functional prerequisites. (Khan & Aldenius, 2017). Without functional criteria, local governments can't support innovation in specialized technologies. Only the largest area can affect market development, which is significant because market expansion and innovation are key to the European Commission's circular economic strategy.

2.3 Theoretical Review and Hypothesis Development

The study was conducted through the lens of institutional and stakeholder theory due to their relevance to its objectives. This section, therefore, discusses the

institutional and stakeholder theories and how they extensively explain the study's objectives.

2.3.1 Institutional Theory

Institutional theory gives a multifaceted account of how organizations become homogeneity under social influences, sometimes from outside sources of the organisation and others from inside (Meyer & Rowan, 1977). These forces might shift an organization's focus away from just economic success and toward widely practiced features, such as environmental consciousness, professional certification and widespread activities in other businesses. The environmental behaviours of an organization have been studied using institutional theory (Mitchell, 2015; Bruton, Ahlstrom, & Li, 2010). It has been noted that institutional theoretical statements have one thing in common: anything discovered at a higher level is utilized to explain processes and outcomes at a lower level of study (Clemens & Cook 1999; Amenta, 2005).

Researchers in operations management have utilized institutional theory to explain why firms adopt new practices (Grob & Benn, 2014; Dubey et al., 2017), especially in the context of the environment and CSR (Zhu & Sarkis, 2007; Grob & Benn, 2014; Hsu et al., 2014; Seow et al., 2014). Researchers have used Institutional theory to examine the adoption of various supply chain practices, including electronic supply chain management system adoption (Ke et al., 2009), supply chain security practices (Liu et al., 2018), green supply chain practices (Blome et al., 2014; Zhu & Sarkis, 2007), and performance measurement systems (Dubey et al., 2017). According to this view, corporations are inevitably bent on following social norms and values (DiMaggio & Powell, 1983; Liu et al., 2010)

Unlike other public procurement theories investigated, such as economic quantitative theory (Lu et al., 2019), the institutional theory focuses on organizations' social efforts and how these efforts enhance an organization's reputation, performance, and ability to acquire social resources (Raj et al., 2020). As a result, many companies base their decisions on the social rationale, understanding that sustainability measures in public procurement may restrict short-term efficiency or incur additional expenses. Still, they are crucial in gaining stakeholders' respect in the long run. As a result, the use of Institutional Theory in the context of sustainable public procurement is permissible.

According to the Institutional theory, pressures come from three sources: coercive, normative, and mimetic. Organizations obtain legitimacy, resources, and survival capacities by building structures or adopting isomorphic activities with institutional forces (DiMaggio et al., 1983; Meyer et al., 1977). The growth of institutional isomorphism occurs through three mechanisms: normative, mimetic, and coercive. Experimentally, the three processes are not always distinguishable (DiMaggio et al., 1983; Mizruchi et al., 1999). Compliance under normative pressures occurs when businesses feel required to respect specific cultural norms imposed by professional circles or society. Multilateral and dyadic networks can disseminate normative pressures. Mimetic isomorphism occurs when companies emulate other organizations for legitimacy or established processes. Coercive pressure refers to the pressures an organisation feels to comply with certain rules, norms, or expectations due to formal or informal demands imposed by other organisations or institutions on which it depends or by societal norms. (DiMaggio et al., 1983; Tolbert et al., 1983).

The institutional theory emphasizes the crucial importance of the institutional setting in compelling organizations to undertake changes in structure and behaviour to

obtain social legitimacy (DiMaggio & Powell 1983; Scott, 2001). Institutional theory has compellingly explained various organizational transformations and innovation diffusion in different industries by understanding organizations as open systems vulnerable to the effects of specific surroundings (Teo et al., 2003; Bhakoo & Choi, 2013). In the same way, because sustainable procurement adoption is a global goal linked to the SDGs. Organisations must be made to comply using different approaches. Implementing sustainable procurement practices can yield favourable outcomes by bolstering reputation, cultivating stakeholder relationships, and optimising operational efficiency. Hence, the institutional theory provides the right philosophical background for examining this compliance. Accordingly, in this study, the institutional approach might also give substantial insights into how sustainable public procurement is adopted and implemented in Ghana.

2.3.3 Stakeholder Theory

Every corporate entity lives in an ecosystem of related groups that it must satisfy to be successful (Friedman & Miles, 2006). According to Freeman (1984), a stakeholder is a person, group, or body affected by an entity's short- and long-term actions. According to this viewpoint, a company's success is determined not just by achieving the expectations of its shareholders but also by the people and organizations impacted by its operations. (Freeman, 1984; Gray, 1995). According to the stakeholder theory, a company's operations should be targeted to all its components (Hahn & Kuhnen, 2013; Freudenreich et al., 2020).

The theory recognizes the dynamic and complex nature of an organisation's relationship with its stakeholders, which requires the organization to participate in activities commensurate with stakeholder objectives (Gray et al., 1996). Freeman (1984) stressed that, when the business environment changes or new practices arise,

entities must consider the dynamic nature of stakeholders. Adopting sustainable procurement methods shows an entity's commitment to the SDGs (Brammer & Walker, 2011; Adjei-Bamfo et al., 2019; Grandia & Kruyen, 2020). The stakeholder theory drawing inference from the institutional theory and connotes that, adopting best practice with the desire to gain legitimacy originated from diverse stakeholder groups. Indicating that organisations and entities are inseparable from their stakeholders and society.

Stakeholder Theory emphasizes stakeholders' impact on the decision-making and performance of organisations. Within the context of public procurement, various stakeholders, including but not limited to customers, employees, investors, regulators, governments and the general societies, may express a desire or expectation of organizations to prioritize sustainability in their operations and consumptions. Organisations may opt to implement sustainable procurement practises in response to stakeholder demands. This approach can yield benefits such as fostering favourable stakeholder relationships, bolstering brand reputation, and mitigating potential risks to reputation. Adopting sustainable procurement practises by organisations can lead to improved performance, encompassing both financial performance and long-term sustainability, by meeting stakeholders' expectations.

2.4 Hypothesis Development

2.4.1 Isomorphic Pressures and Sustainable Public Procurement Adoption

The institutional theory suggests that organization's structures, routines, and behaviors are heavily influenced by the institutional environment in which they operate. This environment is characterized by the regulatory, normative, and cognitive structures that provide stability and meaning to social behaviors (DiMaggio & Powell, 1983). The Coercive pressure occurs when organizations adopt specific structures or

behaviors due to formal pressures, often from government or influential stakeholders (DiMaggio & Powell, 1983). With the increasing global concern for environmental sustainability, there's a surge in regulations and mandates related to sustainable business practices (Bansal & Roth, 2000). Governments and regulatory bodies are pushing organizations to adopt sustainable practices, including procurement (King & Lenox, 2000). Empirical research has shown that coercive pressure enhances adoptions (Zhang, Watson & Zhang, 2016). A study by Raj et al. (2020), Acquah et al. (2021) and Amoako (2021) proved that isomorphic pressure affects the attitudes of firms to adopt sustainability.

Similarly, normative pressure emerges from professionalization and the collective struggles of members of an occupation to define the conditions and methods of their work (DiMaggio & Powell, 1983). As the business world becomes more conscious about sustainability, professional networks, industry associations, and educational institutions emphasize sustainability's importance in procurement (Scott, 2001). As professionals in procurement roles are trained and socialized in this norm, they bring these values to their organizations, promoting sustainable procurement practices. Research by Yank and Kang (2020) revealed that normative pressure has a strong positive relationship with environmental management practices. Abdul et al. (2019) and Acquah et al. (2020) affirmed that normative pressure influences green procurement adoption practices.

Lastly, the mimetic pressure explains how organizations often model themselves after other successful organizations (DiMaggio & Powell, 1983). Suppose industry leaders or major competitors adopt sustainable procurement practices and gain competitive or reputational advantages. In that case, other organizations will likely imitate or emulate those practices to reduce uncertainty and gain similar benefits.

Adopting sustainable procurement becomes a benchmark for best practices, leading others to follow suit (Jennings & Zandbergen, 1995). Firms often adopt environmental management systems in response to competitors or industry leaders (Delmas & Toffel, 2008). Research on adopting environmental management systems has shown that firms often adopt these systems in response to the practices of their competitors or industry leaders. Extant literature reveals that mimetic pressure help firms to adopt green supply chain management practices. Abdul et al. (2019) and Acquah et al. (2020) affirmed that mimetic pressure influences green procurement adoption practices. Anchored on these observed empirical and theoretical (institutional theory) based findings, the study proposed that

H1a: Coercive pressures have a significant positive influence on sustainable procurement adoption in Ghana.

H1b: There is a significant positive influence of normative pressures on sustainable procurement adoption in Ghana.

H1c: Mimetic pressures have a significant positive influence on sustainable procurement adoption in Ghana.

2.4.2 Isomorphic Pressures, Sustainable Procurement Adoption and Sustainable performance

The stakeholder theory, as proposed by Freeman (1984), posits that the success of an organization depends on the extent to which it meets the needs and addresses the concerns of its stakeholders. In today's business environment, stakeholders increasingly expect organizations to prioritize sustainability. Sustainable procurement practices, which ensure that goods and services are sourced responsibly, address these expectations directly (Freeman et al., 2004). Organizations are better positioned to

achieve sustainable performance outcomes by aligning procurement practices with stakeholder values. Also, sustainable procurement offers a competitive advantage by reducing risks, ensuring long-term availability of resources, and meeting customer demands for ethically sourced products (Porter & Kramer, 2006). As organizations integrate sustainability into their procurement processes, they are more likely to enhance their reputation and gain stakeholder trust, leading to improved sustainable performance. Studies have shown that engaging with stakeholders and addressing their sustainability concerns positively affects organizational performance (Hillman & Keim, 2001; Wnager, 2011). Based on precedence, the study relies on the stakeholder theory and the empirical review to hypothesise that;

H3: Sustainable procurement adoption plays a significant role in Ghana's relationship between isomorphic pressure and sustainable performance.

2.5 Conceptual Framework

A conceptual framework is a collection of concepts assembled as a map for a study to demonstrate the link between the researcher's variables of interest (Mugenda & Mugenda, 2008). The framework was created expressly to explain the link between the study's independent and dependent variables. Figure 1 depicts the conceptual framework of the study.

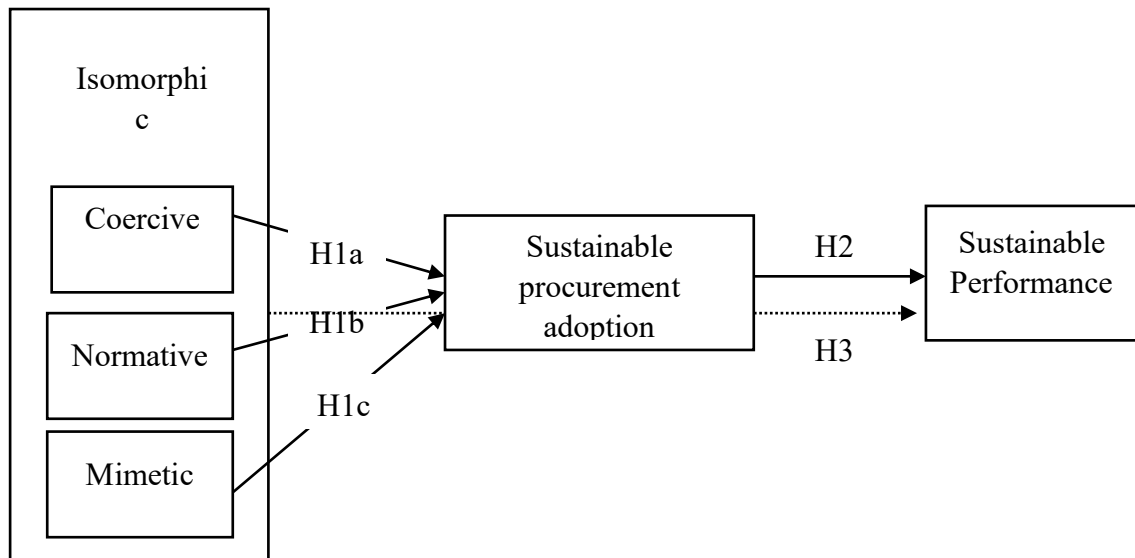


Figure 1: Conceptual Framework

Source: Author's Construct, (2023)

The independent variable (Isomorphic pressures) predicts the degree of variance in the dependent variable (Sustainable performance), as shown (Konthari, 2008). The value or degree of sustainable public procurement adoption is affected by changes in the isomorphic forces, which include coercive, normative, and mimetic pressures. Finally, an endogenous variable of sustainable performance was measured using all three aspects of sustainability: economic, environmental, and social. The framework was then created to visually represent the link between the various isomorphic forces and the adoption of sustainable public procurement in Ghana, from the diagram figure 1. The dotted lines depict a mediating relationship between isomorphic pressures and sustainable performance through sustainable procurement adoption.

2.6 Chapter Summary

This chapter carefully analysed relevant literature to support the study's theories: institutional theory and stakeholder theory. Additionally, the research conceptual framework was presented, as was a discussion of several concepts under the

conceptual review section and empirical findings of other researchers. The next chapter explains the research methods employed in the study.



CHAPTER THREE

RESEARCH METHODS

3.0 Introduction

This chapter discusses the research approach used to explore the research problem under consideration. According to Kothari (2004), a research methodology is a practical approach to discovering solutions to research questions. This chapter focuses on the methods employed in this investigation. The research design, population and sampling processes, sample size, data collection instruments, data collection procedures, and data processing and analysis were all discussed in this part.

3.1 Research Philosophy

Kuhn first used the term research paradigm in 1962. According to Kuhn, a research paradigm is a collection of scientifically agreed-upon principles for analysing and addressing problems (Kuhn, 1970). The research paradigm guides the decision of researchers. It helps researchers to define a research problem carefully, formulate objectives and research questions, and determine the research's reality, methodological approach, and knowledge base (Kivunja & Kuyini, 2017; Khatri, 2020). The paradigm consists of four components: ontology (what we think about the world), axiology (ethical implications to be considered when conducting research), methodology (a valid and very well approach to data collection), and epistemology (knowledge and how it is obtained and tested) (Kivunja & Kivunja, 2017; Aliyu *et al.*, 2015; Mertens, 2010).

Denzin & Licoln (2018) grouped the paradigms into seven categories: feminist, positivism/postpositivism, Marxist, ethnic, constructivism, queer theory, and cultural studies. The study's goal falls within the positivist approach because a hypothesis can be developed and tested objectively. The specific objective of this study requires gathering data to generalise the results to the entire population. The positivist paradigm

enables social scientists to present their research as experts in a detailed, systematic, and systematic way (Hasan, 2016; Benton & Craib, 2010). According to positivists, research is conducted independently of society, and phenomena are evaluated using objective standards. It originates from epistemological conventions that a "belief is an external reality constituted of facts structured in law-like manner" (Evered & Louis, 1991).

The ultimate focus of the positivist inquiry is to reveal causal relations or explanatory relationships that result in a prediction of a phenomenon being studied (Sciarra, 1999). The positivism paradigm holds that research is suitable if it has both internal and external validity and is objective and reliable (Rehman & Alharthi, 2016). In order to gather information, positivists typically employ quantitative research techniques. Under the positivist paradigm, the study's results can be extrapolated (Alharahsheh & Pius, 2020). The positivist research paradigm was used to assist the researcher in gathering data, analysing it, and presenting the results unbiasedly to establish a relationship between the variables. The study's findings can be generalised to the entire population under the positivist paradigm (Alharahsheh & Pius, 2020).

3.2 Research Approach

Research approach refers to the overall strategy against which specific designs are implemented. This study employed the quantitative research approach in line with the positivism paradigm. Quantitative research involves collecting and analysing numerical data and applying statistical text. It is a means for testing objectives and theories by examining the relationship among variables. Again, the quantitative approach is suitable for generalisation (Bresz & Creswell, 2017). If one wants to know the impact of an intervention or a policy on a larger population.

Quantitative data is scientific, fast and draws on logical conclusions from numerical values obtained from surveys and questionnaires. It is relevant for examining cause and effect relationships among variables (Creswell & Creswell, 2017). However, the quantitative approach has been criticised for its inability to gauge human behaviour (Crotty, 1998) effectively. Despite these weaknesses, the quantitative approach was adopted due to the research philosophy and nature of the research objectives, establishing cause and effect relationships among the variables among variables comprising isomorphic pressures such as coercive, normative, mimetic and sustainable procurement adoption.

3.3 Research Design

The research design could be exploratory, descriptive, or explanatory. Williams (2011) suggests choosing a study design based on the research environment, challenge, potential restrictions, and guiding paradigm. The study employed an explanatory research approach to analyse knowledge, beliefs, preferences, and concepts on the relationship between isomorphic pressures and sustainable public procurement adoption. Explanatory research improve comprehension of a subject and help generalize findings (Creswell, 2014). Explanatory studies provide social workers with various knowledge about subjects, contexts, and surroundings (Siedlecki, 2020).

Explanatory design explains the relationship between phenomena. Using descriptive and inferential statistical tools, the approach gathers and analyses massive volumes of data from a diverse target population (Tabachnick & Fidell, 2007). The explanatory design employed a structured questionnaire to collect data from respondents. The concept is suitable for gathering data from public procurement bodies nationwide. Again, the explanation uses statistical tools to analyse cause-and-effect links between variables (McCarthy, 2017). The design was used to establish a cause-

and-effect link between variables. Explanatory design is best for testing isomorphic pressures and sustainable public procurement adoption.

3.4 Study Area

The study was conducted focusing on public procurement entities in Ghana. The public procurement entities were selected because government entities are considered both centers of production and consumption (source). As a result, great contributors to greenhouse gas (GHG) emissions and non-renewable energy consumption. And there is a need to adopt and mainstream sustainability in the procurement process. The novelty nature of public procurement in Ghana and the aim of collecting data from procurement officers of each procurement entity warranted the study to focus on all public procurement entities in Ghana. The study focused on the procurement practitioners of public procurement entities in Ghana as its unit of observation and public procurement entities as its unit of analysis. Hence, every questionnaire was administered to a public procurement officer of every single procurement entity visited by the researcher.

3.5 Study Population

According to Leedy and Ormrod (2010), the population is the target group for which the researcher is seeking information and generating conclusions. A population is a group of people, events, or objects researchers study by observing certain qualities (Saunders et al., 2009). The study's target population was all public procurement entities in Ghana. Thus, the analysis unit was procurement practitioners of public procurement entities in Ghana. These key personnel were chosen due to their philosophies, values and direct involvement in procuring goods, works and services in their respective entities. Thus, their abilities to influence procurement decisions would help obtain relevant information to draw conclusions to the study's objectives.

According to the public procurement authority of Ghana PPA (2021), there are 660 public procurement entities in Ghana. This includes all Ministries, Departments and Agencies (MDAs), Metropolitan, Municipal and District Assemblies (MMDAs), State Owned Enterprises, Hospitals and Tertiary institutions.

3.6 Sample and Sampling Procedure

A sample represents the number of respondents in the population that will represent the entire group (Mugenda, 2003; Saunders et al., 2009). Samples are drawn to represent the entire population. (Saunders et al., 2009). The sample size is a subset of the population drawn to represent the entire population (Garson, 2012). The study used a simple random sampling technique. Simple random sampling ensures that every population element has an equal chance of selection. According to Fraenkel et al. (2012), simple random sampling is the most effective technique for extracting a representative sample applied to large samples.

The simple random was deemed appropriate because of the homogeneity of the entities and the availability of the sample frame (thus, the public entities). Three stages went into the selection of the sample. The study's first step identified and compiled a list of public entities in Ghana. In the second stage, numbers were assigned to the public entities. Finally, participants in the study were chosen randomly from a pool of applicants. These stages were followed to ensure that each candidate had an equal chance of being selected.

Smith (2010), suggests that the sample size is the amount of observation used to predict the entire population. The sample size is a larger population subgroup (Saunders, Lewis & Thornhill, 2012). The Krejcie and Morgan (1970) sample size estimation table suggested 249 respondents out of a population of 660 public procurement entities in Ghana as a minimum sample size. To ensure accuracy and

reliability, the study gathered data from one key representative of 330 public procurement entities out of 660 entities. The rationale for selecting key personnel as respondents was because their values, job positions and ideologies directly influence procurements, providing relatively accurate information to the study.

3.7 Data Collection Instruments

A primary data collection instrument, more precisely a structured questionnaire, was employed in this study. This was appropriate because of the research approach and research design used. Explanatory study designs are naturally structured. Therefore organised primary data collection procedures are required (Maxwell, 2012). A questionnaire is a tool for collecting data that consists of closed-ended and open-ended questions given to research respondents to acquire the respondents' objective thoughts on a subject (Singer & Couper, 2017). Similarly, Malhorta and Briks (2007) defined a questionnaire as a collection of questions approved for use by respondents in the process of data collection.

Questionnaires are the most common data-gathering tool in research and can measure issues crucial to business and growth (Malhotra & Birks, 2007). A questionnaire is suitable for gathering information from a large number of people. It aids in collecting objective data from a large group to ensure reliable and valid responses. The individual items on the questionnaire were carefully extracted from validated literature. The questions were adapted from extant literature as indicated in Table 1. The questions took 30 minutes to complete. All responders answered the same questions anonymously. The questionnaire was structured into five sections. The structure was based on the objectives of this study. Section "A" asked about coercive, normative, and mimetic pressures from stakeholders, governments, and consumers to embrace sustainable public procurement. Section "B" asked about sustainable public

procurement in Ghana. Section "C" asks about sustainable performance, considering environmental, social, and economic factors. Section "D" covered the respondents' demographics.

3.8 Ethical Consideration

Ethics are the norms or standards that impact moral behavior and relationships (Cooper & Schindler, 2008). Study ethics involves developing a moral and ethical research topic and communicating the findings. According to Malhotra and Birks (2007), research ethics involve respondents and the public. The researcher carefully followed the study and ethical guidelines to avoid causing any form of harm to the respondents. Public procurement entities received an introductory letter from the researcher from the Department of Procurement and Supply Chain Management. The researcher duly followed all ethical procedures in researching the influence of isomorphic pressures on sustainable public procurement adoption in Ghana.

In addition, the respondents were notified that their responses were voluntary and that they might opt out at any time. However, they were encouraged to complete the survey in its entirety. Consequently, confidentiality, subject autonomy, and anonymity were upheld throughout the study. In addition, the questionnaire was designed with respondent confidentiality in mind.

3.9 Operationalisation of Key Variables

This section described how the study variables were measured to fulfil research aims. All of the measuring items were based on sustainable public procurement literature reviews. Table 1 revealed all variable indicators were based on in-depth literature reviews. This is because the table shows the different places from which the indicators were taken. But it is still not clear how well these things are measured. As a result, a pre-test was done on a small number of Ghanaian public procurement entities.

This was done to see if the indicators of the different constructs were good quality measures in the context of isomorphic pressures and sustainable public procurement.

The measures are shown in table 1 below.

Table 1: Measurement of Variables and Sources

Variables	Measurement Items	Sources
Coercive pressures	Coercive pressure was defined as pressure exerted by dominant stakeholders on public entities to adjust their behaviour and practices to those acceptable to those applying the pressure.	(Liu et al., 2010; Roxas & Coetzer, 2012; Lu et al., 2019)
Normative pressures	Normative pressure was operationalized and defined as pressure from professional bodies, institutions, citizens and professional associations key personnel of public entities are associated with (eg. CIPS, ISM, CILT, ASCM)	(DiMaggio & Powell, 2002; Berrone et al., 2013; Latan et al., 2018)
Mimetic pressures	Mimetic isomorphism was operationally defined as the pressure to copy legitimized sustainable practices of other public entities in other countries or sectors in the face of uncertainties	(DiMaggio & Powell, 2002; Zsidisin et al., 2005; Latan et al., 2018;)
Sustainable public procurement Adoption	Public procurement activities that lead to favourable environmental outcomes, cost reduction, better consumer surplus and positive social benefits of suppliers and citizens	(Brammer & Walker, 2011; Walker, 2015; Witjes & Lozano, 2016; Leal-Filho et al., 2019)
Sustainable performance	The ability of public entities to meet the (social, environmental and economic) needs and expectations of suppliers or customers, citizens and other stakeholders.	(Carter & Jennings, 2004)

Sources: Field survey (2023)

3.10 Data collection Procedure

The Department of Procurement and Supply Chain Management provided an authority note, which was appended to the questionnaire distributed to all public procurement institutions. The data was collected via a self-administered questionnaire devised by the researcher to guarantee a high response rate. The data was standardized

so that each respondent received identical questions. Respondents were encouraged to answer the questions as thoroughly as possible. This provided respondents a certain amount of time to respond to the questions, and after a week, the researcher and field assistants returned to respondents and collected the completed questionnaire.

The data collection exercise had some associated challenges, including respondents' unwillingness to answer the questions. These challenges were, however minimised by providing introductory letters acquired from the department giving assurance of ethical clearance and the need for the activity for academic purposes only. Again, respondents who wanted to complete the questionnaire at their convenience were allowed to do so.

3.11 Data Processing and Analysis

Data processing and analysis reduce enormous amounts of data into meaningful information and reports for decision-making and policy formulation. Cooper and Schindler (2008) define data analysis as reducing and modifying acquired data, summarizing, seeking patterns, and utilizing statistical approaches. These approaches improve data analysis accuracy while guaranteeing assumptions are not broken (Tabachnick & Fidell, 2001; Hair et al., 2011). SPSS version 26 was used to code and process data. The processed data were analysed using descriptive and inferential techniques. The descriptive comprise, percentages, means, frequencies, standard deviations, kurtosis and skewness. Whereas the inferential technique employed was the Partial Least Squares- Structural Equation Modelling (PLS-SEM 4.0.9) to achieve all the research objectives.

PLS-SEM combines factor analysis and multiple regression by minimising the residual variances of the endogenous constructs (Hair et al., 2011). The technique

develops more precise estimates of factor scores because the PLS algorithm calculates latent variable scores as exact linear combinations of the observed indicator variables, which serve as proxies for latent variables, in order to estimate model relationship (Lowry & Gaskin, 2014). On this note, the hypothesized relationships, most notably between the latent variables, can only be meaningfully interpreted if construct validity was established (Peter & Churchill, 1986). Researchers ensure that the measurement models capture what they intend to measure (Campbell & Fiske, 1959). Specifically, the PLS-SEM algorithm first optimizes the measurement model parameters and then, in a second step, estimates the path coefficients in the structural model. Thus, researchers applying PLS-SEM must first examine the measurement models' characteristics by assessing the reliability and validity of the indicators and eliminating those that may fall out of the acceptable threshold. According to Hair et al. (2018), the key areas examined for reliability and validity include indicator reliability, internal consistency reliability, convergent and discriminant validity.

After meeting the fundamental assumptions of multicollinearity, indicator and construct reliability, discriminant and convergent validity, and outer model significance, the study hypotheses were assessed using PLS-SEM. PLS-SEM was used because it allows researchers to estimate complex models with multiple constructs, indicator variables, and structural paths without imposing distribution assumptions on the data, enabling the creation of inferential statistics such as hypothesis testing.

Purwanto and Sudargini (2021) believe examining indicator loadings are the first step in evaluating the reflective measurement model. Authors propose item loadings greater than 0.708 because they show that the structure explains more than half of the indicator's fluctuation and provides appropriate reliability. The second phase of PLS-SEM is to analyse internal consistency dependability, most typically using Joreskog's

(1971) composite reliability, with a larger value indicating a better level of reliability. Purwanto and Sudargini (2021) consider a 0.60 to 0.70 reliability rating acceptable, and 0.70 to 0.90 “excellent”. A 0.95 dependability grade suggests an undesirable or unwelcome reaction pattern. The third phase in evaluating the reflective measurement model, according to Hair et al., (2019), is a consideration of constructs convergent validity. Convergent validity was defined by Purwanto and Sudargini (2021) as the degree to which the constructs converge to explain the variance of the items. The (AVE) was also mentioned by the authors as the metric used by researchers to examine the convergent validity for items in each concept. In addition, Ramirez and Palos-Sánchez (2018) regarded the AVE as the most commonly used metric of analysing convergent validity in PLS-SEM. Hair et al. (2019) discovered that an AVE value of 0.50 or higher is acceptable, indicating that the construct explains or accounts for at least 50% of the variation of the items.

Fourth, evaluate the reflective measurement model's discriminant validity, suggest by Purwanto and Sudargini (2021) and Hair et al. (2019). Hair et al. (2019) argue discriminant validity reveals how different a model construct is from others. Henseler et al. (2015) found Fornell and Larcker's (1981) criterion to be unreliable over time. They used HTMT to measure discriminant validity. HTMT compares two latent variables (Henseler, 2017). The Henseler et al. (2015) HTMT cut-off is 90. The authors indicated discriminant validity exists if HTMT is high, >90, especially if the conceptions are conceptually dissimilar. To ensure unbiased regression results, collinearity is checked before assessing the structure of the relationships, and to examine the collinearity, the variance inflation factors (VIF) is calculated (Purwanto & Sudargini, 2021). VIFs measure the induced collinearity in the effects (Craney & Surlles, 2002). According to Purwanto and Sudargini (2021), an ideal VIF value should

be less than or equal to 3 ($VIF \leq 3$). VIF values above five (5) indicate that there is a possible collinearity problem among the predicting constructs (Purwanto & Sudargini (2021). Hair et al. (2019) specified that if the model is free from collinearity, the next step is to assess the endogenous construct's R Square (R^2).

Rigdon (2012) said the R^2 is the sample's prediction power. Purwanto and Sudargini (2021) found that the R^2 ranges from 0 to 1; higher values are thought to have more power to explain in the sample. Henseler et al. (2019) say that values of 0.75, 0.50, and 0.25 are strong, moderate, and weak, respectively. Hair et al. (2019) wrote that researchers can figure out how removing some predictor constructs affects the endogenous constructs' f Square (f^2) value. Cohen's (1988) rule of thumb says that values greater than 0.02, 0.15, and 0.35 mean the effect size is small, medium, or large.

3.12 Chapter Summary

The study examined the influence of isomorphic pressure on sustainable performance in Ghana and the role of sustainable procurement adoption as a mediator. Respondents were recruited via simple random sampling technique for an explanatory survey. Self-administered surveys were used to in gathering data. SMART PLS (Version 4) was used for data analysis. This chapter examined the experiment's measuring instrument's reliability and the researcher's ethics. It stipulates that respondents' identities were protected and results were only utilized academically.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.0 Introduction

This study examines the impact of isomorphic pressures on sustainable public procurement in Ghana. This chapter describes respondent demographics, data presentation, and the three research objectives analysed using structural equation modelling (SEM) via the partial least square (PLS) approach.

4.1 Response Rate

The Krejcie and Morgan (1970) sample size estimation table suggested a minimum of 249 public procurement entities in Ghana. To ensure accuracy and reliability, the researcher distributed 330 questionnaires to the entities. Out of the 330 questionnaires distributed, 311 were retrieved, but 4 (1.2%) were incomplete, hence were not included in the analysis. The study analysis relied on the 307 usable questionnaires, representing 93.0%.

4.2 Demographic Characteristics of Respondents

The demographic characteristics of the respondents were presented using frequency and percentage. The analysis looked at respondents' demographics, where they were asked about their gender, position in the organization where they worked, number of years they had been there, highest degree of education, professional bodies to which they belonged, and sector in which they worked.

Table 2: Demographic Characteristics of Respondents

Characteristic	Category	Frequency (N)	Percentages (%)
Sex	Male	203	66.1
	Female	104	33.9
Position	Procurement officer	141	45.9
	Assist. Procurement officer	95	31.0
	Store Keeper	71	23.1
Years of Experience	1-10 years	129	42.0
	11-20 years	145	47.2
	21-30 years	32	10.4
	Above 30 Years	1	.3
Educational Qualification	Diploma/HND	93	30.3
	Bachelor	135	44.0
	Masters	74	24.1
	PhD	5	1.6
	Other		
Professional Affiliation	CIPS	166	54.1
	CILT	82	26.7
	GIPS	16	5.2
	ACCA	1	.3
	ICAG	2	.7
	Other	40	13.0
Sector	MDAs	16	5.2
	MMDAs	119	38.8
	State Owned Enterprises	69	22.5
	Hospital	82	26.7
	Tertiary Institutions	21	6.8
	Total	307	100

Source: Field survey (2023)

The demographic analysis revealed that men (203) made up the majority of the research group (66.1%), while females (104) made up 33.9%. This reflects the nature of male domination in public procurement entities in Ghana and reinforces the assumption that males outweigh women in paid work in most developing nations, including Ghana. Most respondents held the procurement officer position, with 141

representing (45%), followed by the assistant procurement officer position with 95 respondents (31%). Further, 71 out of the 307 respondents (23.1%) were in the position of storekeepers. Similarly, 145 (47.2%) survey respondents had 11-20 years of job experience in the public procurement entity. In addition, 129 respondents (42%) worked in public procurement entities for 1 to 10 years. In addition, 32 respondents had worked for 21-30 years in public entities representing (10.4%). Finally, 1 respondent indicated they have worked in the public procurement entity for 30 years and more. According to the data, pressure from stakeholders and industry actors could lead to sustainable public procurement. Public officials with 1-10 years of experience are more likely to adopt innovative procurement procedures. People with this much experience are open to change and eager to challenge customary procurement.

Again, all respondents have some level of education, with a Bachelor's degree being the most significant and a Doctorate (PhD) being the lowest rating. As a result, 135 of the 307 respondents (44%) claimed to have a Bachelor's degree. Furthermore, 93 of the respondents (30.3 %) claimed to have a Diploma/HND degree, 74 (24.1%) claimed to have a Master' degree, and the remaining 5 claimed to have a Doctoral (Ph.D.) (1.6%). Most respondents have a bachelor's or diploma, signifying post-secondary education on average. This increases Ghana's value on the global market for sustainable development contributions through public procurement. Again, Table 4 obtained information in relation to the professional affiliations of respondents. It was revealed that, 166 (54.1%) of respondents had CIPS certification. In the same vein, 82(26.7%) of respondents had certification in CILT, 16(5.2%) also had certification in GIPS, while 40(13%) of the respondents claimed to have other professional certifications as well. Further, ICAG and ACCA professional certificates recorded the least responses, with 2(.7%) and 1(.3), respectively. This indicates that survey

respondents were public procurement experts directly involved in buying goods, works, and services for their organizations.

Finally, respondents were asked to indicate which sector their procurement entity belonged to: ministries, departments, and agencies (MDAs), metropolitan, municipal and district assemblies (MMDAs), state-owned enterprises, hospitals and tertiary institutions. From table 4 above, it was revealed that respondents working in the MDAs recorded the least number of respondents with 16(5.2%) responses and MMDAs recorded the highest number of responses 119(38.8%). Further, 82 (26.7%) of responses out of the 307 indicated that, they worked in the various hospitals, and 69(22.5%) worked in the state-owned enterprises while 21(6.8%) worked in the tertiary institutions. Metropolitan, municipal, and district assembly received the most responses because it provides government services to the country's residents by purchasing goods, works, and services, such as road construction and social amenities.

4.3 Measurement Model Assessment

The partial least squares structural equation modelling (PLS-SEM) estimator was employed to model the effect of isomorphic pressures on sustainable public procurement adoption and performance. The software employed in processing and analysing the data used in this study was Version 4.0 of Smart-PLS. The usage of PLS-SEM requires two investigations: the investigation of the measurement model and the structural model. The measurement model assessment ensures that all the criteria are valid and reliable. Also, the structural model assessment helps test the hypothesis (explaining the relationship between variables). The results were generated using 5,000 consistent bootstrap samples, and the hypotheses were tested under a 5% significance level.

4.4 Reflective measurement Model Evaluation

A reflective measurement model evaluates the nexuses among the indicators and their measurement models (constructs) and between the latent constructs (Hair, Hult, Ringle, & Sarstedt, 2017). Thus, the indicators of a reflective model are well-connected to each construct via loadings and indicate bivariate relationships between the indicator and the construct. The reflective measurement model aimed to ensure the construct measures' reliability and validity to authenticate the appropriateness of their presence in the path model (Hair, Sarstedt, Hopkins, & Kuppelwieser, 2014). The criteria employed to evaluate the psychometric properties of the model are the factor loadings, indicator and construct reliability, convergent and discriminant validity, and collinearity.

4.5 Indicator Factor Loadings

Indicator factor loadings illustrate how each indicator item effectively describes the main construct within the study's context. Analysis of the indicator loadings of a reflectively measured latent construct is the first stage of determining the indicator's quality in the study. Hair, Sarstedt, Hopkins, and Kuppelwieser (2014) recommended that factor loadings be at least 0.70 and higher. Similarly, Hair, Hult, Ringle, Sarstedt, Danks, and Ray (2021) suggested a minimum desired threshold of 0.708 for an indicator factor loading. Therefore, for an item loading to be considered an acceptable measure of the quality of its latent construct, it must be higher than the 0.708 threshold with a corresponding T-value greater than 1.96. The final model presented in Figure 2 and 3 shows that all the indicators are valid.

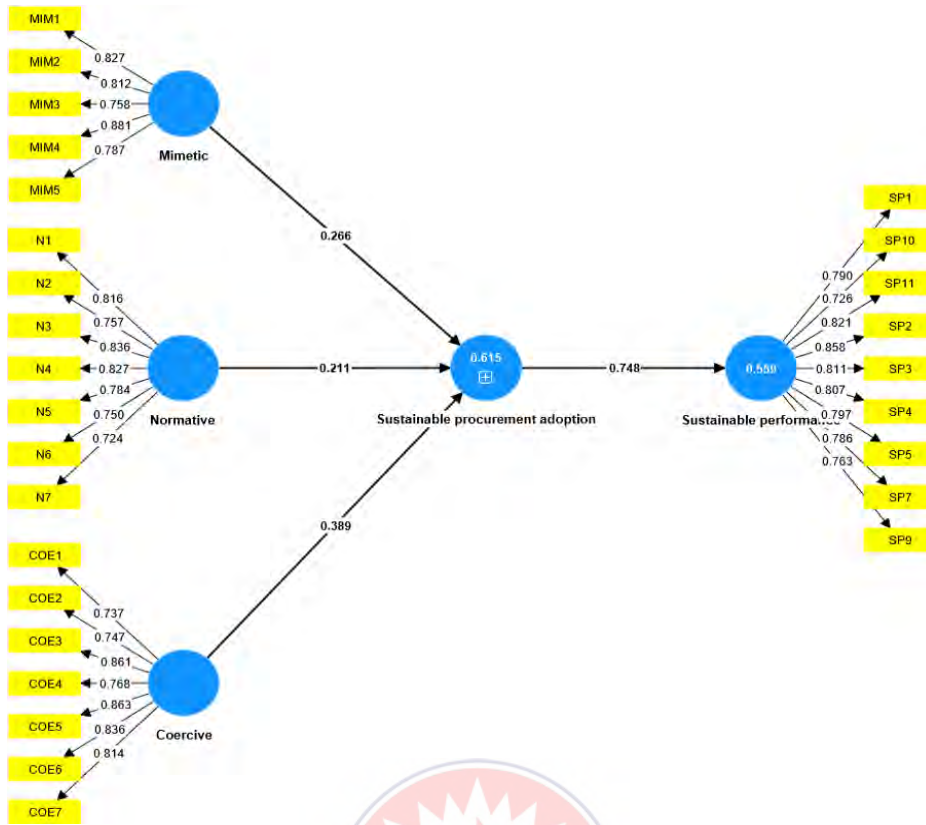


Figure 2: Indicator loadings

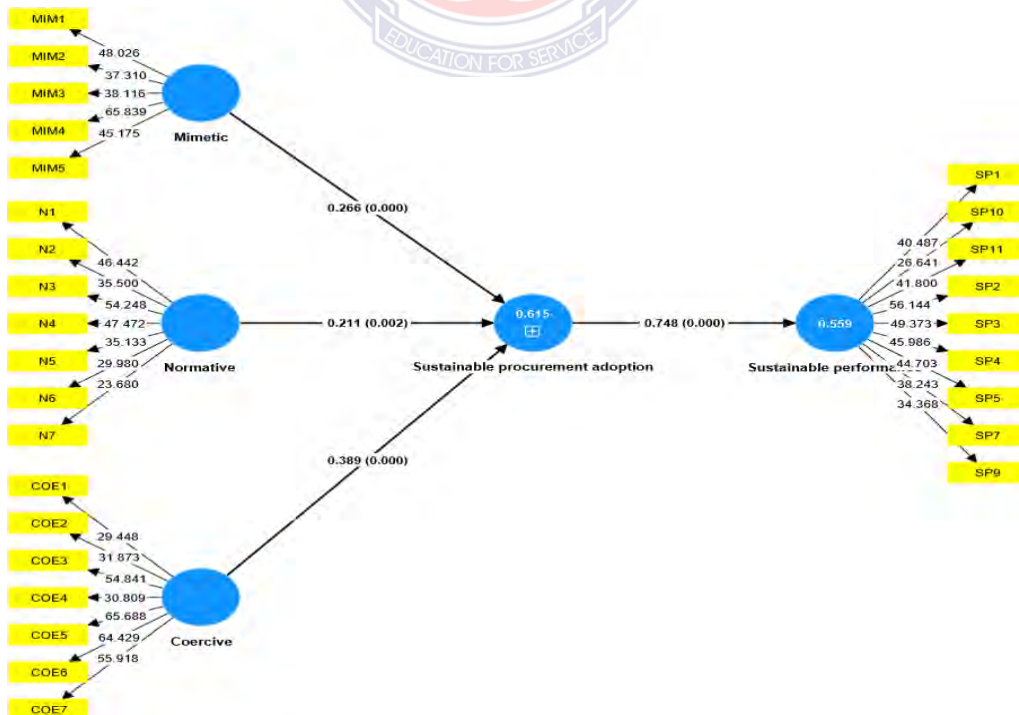


Figure 3: T-Values

4.6 Reliability and Convergent Validity

Internal consistency reliability was assessed after the factor loadings. An indicator is reliable if it has the potency to be replicated in different contexts and is certain for a similar or invariably the same outcome. The reliability of an indicator is measured using Cronbach Alpha (CA), Rho_A, and the composite reliability (CR). In order to ensure that there is no issue with construct reliability, composite reliability must be greater or equal to 0.70. Similarly, Cronbach alpha and Rho_A values must be greater than 0.70 to ensure that the constructs are valid.

Similarly, convergent validity is the extent to which a measure correlates positively with alternative measures of the same construct (Hair et al., 2016). Hair *et al.* (2022) proposed a minimum extracted average variance (AVE) of 0.5 to demonstrate convergent validity. An AVE value of “0.50” or greater indicates that “the definition represents more than half the variance of its indicators”. Lastly, the collinearity procedure involves examining the variance inflation factors to ensure no bias in the regression estimate. It tests whether correlations among constructs are not substantial. Latent variable scores of the endogenous variables are used to calculate variance inflated factors (VIF) values. The study applied the recommended threshold of <3.3 (Kock, 2015). The findings of the reliability and convergent validity are presented in Table 3.

Table 3: Reliability and convergent validity

	Loadings	Inner VIF	Cronbach's alpha	Rho_A	Composite reliability	Average variance extracted (AVE)
Coercive			0.910	0.920	0.928	0.649
COE1	0.737	1.873				
COE2	0.747	2.019				
COE3	0.861	3.011				
COE4	0.768	2.589				
COE5	0.863	3.518				
COE6	0.836	2.734				
COE7	0.814	2.591				
Mimetic			0.872	0.879	0.907	0.663
MIM1	0.827	2.474				
MIM2	0.812	2.118				
MIM3	0.758	1.634				
MIM4	0.881	2.843				
MIM5	0.787	1.714				
Normative			0.897	0.904	0.919	0.618
N1	0.816	2.679				
N2	0.757	2.258				
N3	0.836	2.530				
N4	0.827	3.519				
N5	0.784	3.673				
N6	0.750	2.202				
N7	0.724	2.122				
Sustainable performance			0.928	0.932	0.940	0.634
SP1	0.790	2.549				
SP10	0.726	2.178				
SP11	0.821	2.874				
SP2	0.858	3.106				
SP3	0.811	3.080				
SP4	0.807	2.512				
SP5	0.797	2.301				
SP7	0.786	2.959				
SP9	0.763	2.620				
Sustainable procurement adoption			0.896	0.896	0.918	0.616
SPPA1	0.732	1.986				
SPPA2	0.787	2.216				
SPPA3	0.796	2.319				
SPPA4	0.812	2.521				
SPPA5	0.772	2.282				
SPPA6	0.835	2.865				
SPPA7	0.753	2.273				

Source: Field survey (2023)

The findings presented in Table 1 show that all the constructs are valid and reliable. The Cronbach Alpha, composite reliability, and the average variance extracted (AVE) values are greater than the recommended threshold of 0.70 for Cronbach Alpha and composite reliability. The Cronbach Alpha values ranged from 0.872 to 0.928, while Composite reliability (CR) ranged from 0.907 to 0.940, all of which fell between the threshold of 0.70 or more proposed by Hair et al., (2014). Similarly, the AVE values are greater than the recommended threshold of 0.50, and all the Outer VIFs are less than 3.3. The findings imply that the constructs are valid, reliable, and free from common method bias.

4.7 Discriminant Validity

Discriminant validity is the extent to which a construct is truly distinct from other constructs by empirical standards. Thus, establishing discriminant validity implies that a construct is unique and captures phenomena not represented by other constructs in the model (Hair et al., 2016). The discriminant validity was primarily tested using the Heterotrait-Monotrait (HTMT) ratio. It is noted that, the HTMT ratio is regarded as a better and quality measure of discriminant validity as compared to Fornell and Larcker's (1981) criterion (Hair et al., 2014), thus recommended for testing discriminant validity by Sarstedt et al. (2014). Hair *et al.* (2020) recommend a threshold of 0.90 for HTMT correlation values. The correlation between and across individual constructs must be less than 0.90, particularly when the constructs are similar (Henseler *et al.*, 2015). The result presented in Table 4 shows that all HTMT correlation values are within the 0.90 range. This implies that there is no discriminant validity issue in this study.

Table 4: HTMT Correlation

	1	3	3	4	5
Coercive (1)					
Mimetic (2)	0.805				
Normative (3)	0.825	0.796			
Sustainable performance (4)	0.845	0.899	0.839		
Sustainable procurement adoption (5)	0.794	0.770	0.746	0.808	

Source: Field survey (2023)

4.5 Assessment of Structural Model

When all criteria to assess the measurement model have been satisfied and results meet the required thresholds, the next step is to evaluate the structural model. The structural model shows the hypothesized relationship between constructs. Before the significance of the structural relationships is assessed, some fit indices were first examined. According to Hair et al. (2018), the structural model was assessed for collinearity issues. This was followed by an examination of the model's predictive power through the coefficient of determination, R^2 and the effect size (f^2). All endogenous constructs were assessed for collinearity in the structural model.

4.6 Multicollinearity Statistics

As posited by Hair et al. (2014), “collinearity diagnostic is first examined to ensure that the path coefficients are free from bias and reduce significant levels of collinearity among the predictor constructs” The outcomes of the VIF from Table 5 show that the paths are devoid of multicollinearity with maximum VIF of 2.651, which is below the threshold of 3.3 as suggested by Kock, (2015).

Table 5: Collinearity statistics

	Sustainable performance	Sustainable procurement adoption
Coercive		2.649
Mimetic		2.353
Normative		2.651
Sustainable performance		
Sustainable procurement adoption	1.00	

Source: Field survey (2023)

4.7 R-Squared

The coefficient of determination (R^2) measures a model's predictive accuracy and joint significance. It represents the variance in the endogenous construct explained by all the exogenous constructs. R^2 values range from 0 to 1, where higher values indicate high predictive accuracy. Since R^2 values increase with a number of predictors, adjusted R^2 is recommended because it controls for complexity in the model and is useful when comparing models. The findings show that the R^2 values for sustainable performance and sustainable procurement adoption are 0.559 and 0.615, respectively. 61.5% of sustainable procurement adoption variance was explained jointly by coercive, mimetic, and normative pressures. Similarly, sustainable public procurement adoption explained 55.9% of the variance in sustainable performance.

Table 6: R-Squared

	R-square	R-square adjusted
Sustainable performance	0.559	0.558
Sustainable procurement adoption	0.615	0.611

Source: Field survey (2023)

4.8 F-Square

F-square (f^2) is the change in R^2 when an exogenous variable is removed from the model. With the threshold of Small ($0.0 < \text{effect size} < 0.15$); Medium ($0.15 < \text{effect size} < 0.35$); Large ($\text{effect size} > 0.35$). The findings indicates that removing the exogenous variable of coercive, mimetic, and normative pressure will have a small or weak effect on the R^2 value for the endogenous value of sustainable public procurement adoption (0.148), (0.078) and (0.044) respectively. Similarly, removing the exogenous variable of sustainable public procurement adoption from the model will substantially or largely affect the R^2 value for the endogenous value of sustainable performance (1.268).

Table 7:F-square

	Sustainable performance	Sustainable procurement adoption
Coercive		0.148
Mimetic		0.078
Normative		0.044
Sustainable performance		
Sustainable procurement adoption	1.268	

Source: Field survey (2023)

4.9 Hypothesis Testing

The individual research hypothesis was examined after determining whether or not the measurement model satisfies the PLS-SEM criteria. The hypotheses were examined by looking at the direction and strength of the relationship using the path coefficient. The significance level was determined using t-statistics produced from

5000 consistent bootstraps, a 2-tailed test suggested by Hair *et al.* (2014). According to Hair *et al.* (2014), the t-statistics must be greater than 1.96, and the p-values must be lower than 0.05 for the hypothesis to be statistically significant. Table 8 presents the findings obtained from applying the PLS-SEM test to the hypothesis in light of the research objectives.

Table 8: Hypothesis testing

Hypothesis	β	M	T stat	P values	Decision
H1a: Coercive -> Sustainable procurement adoption	0.389	0.388	5.564	0.000	Accepted
H1b: Normative -> Sustainable procurement adoption	0.211	0.213	3.134	0.002	Accepted
H1c: Mimetic -> Sustainable procurement adoption	0.266	0.266	5.650	0.000	Accepted
H2: Sustainable procurement adoption -> Sustainable performance	0.748	0.749	30.254	0.000	Accepted
Specific indirect effect					
H3a: Coercive -> Sustainable procurement adoption -> Sustainable performance	0.291	0.291	5.374	0.000	Accepted
H3b: Normative -> Sustainable procurement adoption -> Sustainable performance	0.158	0.160	3.198	0.001	Accepted
H3c: Mimetic -> Sustainable procurement adoption -> Sustainable performance	0.199	0.200	5.091	0.000	Accepted

Source: Field survey (2023)

Objective 1: To examine the relationship between isomorphic pressures and sustainable procurement adoption in Ghana.

The first objective examined the relationship between isomorphic pressures (coercive, normative and mimetic) on sustainable procurement adoption. The study's findings revealed that isomorphic pressures positively and significantly affected sustainable procurement adoption. Particularly, the hypotheses indicated that sustainable public procurement adoption is influenced by coercive pressures (*H1a*) ($\beta = 0.389$, $t = 5.564$, $p = 0.000$), normative pressure (*H1b*) ($\beta = 0.211$, $t = 3.134$, $p = 0.002$) and mimetic pressure (*H1c*) ($\beta = 0.266$, $t = 5.650$, $p = 0.000$). All three hypotheses were supported. The findings imply that a percentage change in coercive, normative and mimetic pressure will enhance sustainable procurement adoption by 38.9%, 21.1% and 26.6%, respectively. A careful analysis of the findings indicates that coercive pressure affects sustainable procurement adoption more than normative and mimetic pressure. The findings conclude that; isomorphic pressures positively enhance the adoption of sustainable procurement in the public sector of Ghana.

Objective 2: To examine the effect of sustainable procurement adoption on the sustainable performance of public procurement entities in Ghana

The second objective examined the effect of sustainable procurement adoption on sustainable performance. The study's findings revealed a positive and significant effect between sustainable procurement adoption and sustainable performance with ($\beta = 0.748$, $t = 30.254$, $p = 0.000$). The study's findings imply that; a unit change in sustainable procurement adoption will enhance sustainable performance by 74.8%. The findings mean that when public entities adopt and practice sustainable procurement effectively, it will enhance sustainable performance.

Objective 3: To assess the mediating role of sustainable procurement adoption in the relationship between isomorphic pressures and sustainable performance in Ghana

The third objective assessed the mediating effect of sustainable procurement adoption on the relationship between isomorphic pressures and sustainable performance. The mediating effect was assessed using the specific indirect effect. The specific indirect effect of sustainable procurement adoption was assessed on three pressures (coercive, normative, and mimetic) and sustainable performance. The findings revealed a positive and significant mediating effect of sustainable procurement adoption on isomorphic pressures and sustainable performance. The specific findings revealed that sustainable procurement adoption mediates the relationship between coercive ($\beta = 0.291$, $t = 5.374$, $p = 0.000$), normative ($\beta = 0.158$, $t = 3.198$, $p = 0.001$), and mimetic ($\beta = 0.199$, $t = 5.091$, $p = 0.000$) on sustainable performance. The direct and specific indirect effects between the variables were positive and significant, indicating a partial mediation. The findings conclude that sustainable procurement adoption partially mediates the relationship between isomorphic pressures and sustainable performance.

4.10 Discussion of findings

The study generally sought to examine the influence of isomorphic pressures (coercive, normative, and mimetic) on sustainable public procurement adoption and performance in Ghana. Three main objectives guided the general objective of the study. This section of the chapter discusses the objectives of the study.

Effect of Isomorphic Pressures on Sustainable Public Procurement Adoption in Ghana.

The discussion presented below is based on the study's analysis and results on the effect of isomorphic pressures on sustainable public procurement adoption. From this objective, three hypotheses were formulated to test the isomorphic pressures on sustainable public procurement adoption. These hypotheses were:

H1a: Coercive pressures have a significant positive influence on sustainable public procurement adoption in Ghana.

The results and analysis from the survey confirm the hypothesized statement that coercive pressures have a significant positive influence on sustainable public procurement adoption in Ghana. One possible reason could be that Ghana, as a developing country, has a definite framework for SPP, which promotes sustainable public procurement in Ghana. According to Adjei-Bamfo et al., (2019), governments of developed economies enact rules and regulations using coercive pressure more effectively and as a result, most public procurement entities of developing countries have had some coercion being exerted on suppliers and customers by regulatory bodies like the Public Procurement Authority PPA. Public procurement entities believe that once non-compliance to coercive pressures warrants operational sanctions or legal suits against them, such entities rationalise their operations to conform to the desired standards to avoid being alleged to be operationally wayward, which mainly comes with some regulatory sanctions. Hence, entities tend to comply with coercive pressures by harnessing sustainable public procurement to attain social, economic and environmental legitimacy.

The findings of the study on coercive pressures having a significant positive influence on sustainable public procurement adoption are in line with results from empirical studies undertaken by some authors (Cao et al.,2014; Zhang et al., 2016; Mosocha & Fatoki, 2018; Raj et al.,2020; Latif et al.,2020; Amoako, 2021; Acquah et al.,2021) as identified in the literature review. The studies mentioned above collectively and unanimously asserted and confirmed that coercive pressures of the isomorphic pressures significantly and positively influence green practices adoption, sustainable public procurement adoption, and green procurement adoption. Therefore, the study's findings affirm hypothesis H1a as coercive pressures significantly positively influence sustainable public procurement adoption in Ghana.

H1b: There is a significant positive influence of normative pressures on sustainable public procurement adoption in Ghana.

The study's findings confirmed that normative pressures significantly and positively affect sustainable public procurement adoption in Ghana. Ghana's organizations can adopt sustainable procurement as a normative expectation by adhering to international standards, complying with government policies and regulations, and addressing the concerns of civil society and the general public. In the long run, this can help the nation achieve its sustainable development goals by enhancing its reputation, enhancing social and environmental outcomes, and increasing access to global markets. The findings from H1b aligns with a number of scholarly work Cao et al., (2014); Zhang et.al., (2016); Al-Balush and Tuni, (2018); Amoako, (2021) and Acquah et al., (2021) as all findings from empirical evidence prove that normative pressures of the isomorphic pressures positively and significantly influence sustainable procurement adoption. Yank and Kang's (2020) findings revealed that normative pressure has a strong positive relationship with environmental management

practices. Similarly, Acquah et al. (2020) findings revealed that normative pressures robustly influence the adoption of green procurement practices. That is to say, normative pressure positively influences green procurement practices.

H1c: Mimetic pressures have a significant positive influence on sustainable public procurement adoption in Ghana.

The findings of the study found mimetic pressure to have a positive significant impact on sustainable procurement adoption. The reason for the findings can be attributed to the fact that sustainable procurement practices are a complex phenomenon where multiple agents operate simultaneously, and as result, entities in developing countries like Ghana mimic the good practices of their counterparts from developed economies in order to build a good reputation in the world market (Guler et al., 2002; Keulemans & Van de Walle, 2017). Ghana's organizations may be motivated to adopt sustainable procurement practises through various factors, including observing successful peers, recognizing sustainability as a potential competitive advantage, mitigating risks, utilizing professional networks, and responding to supplier influence.

This phenomenon has the potential to result in enhanced environmental and social outcomes, increased competitiveness, and alignment with global sustainability trends, thereby significantly contributing to achieving Ghana's sustainable development goals. The findings of H1c corroborate with the findings of other empirical studies in literature (Cao et al., 2014; Dubey et al., 2017; Mosocha & Fatoki, 2018; Yang & Kang, 2019; Abdul et al., 2019; Latif et al., 2020; Raj et al., 2020; Ajibike et al., 2020; Amoako, 2021; Acquah et al., 2021). Findings from all these scholars proved convincing that mimetic pressures of isomorphic pressures influence the adoption of green and sustainable practices. The findings of the study support and affirms H1c,

thus, there is a significant positive influence of mimetic pressures on sustainable public procurement adoption in Ghana.

H2: Effect of sustainable public procurement adoption on sustainable performance in Ghana

The second objective sought to examine the effect of sustainable procurement adoption on sustainable performance in Ghana. One hypothesis was formulated and tested at the end of the analysis, proving that sustainable public procurement adoption significantly influences sustainable performance. The findings imply that when public procurement entities adopt sustainable procurement, entities are invariably bound to obtain a desirable outcome of sustainable performance. Like all other 193 United Nations member countries, Ghana is trying to prioritise sustainable outcomes as a critical end product of every item purchased or procured. The findings align with the study of Grob, and Benn, (2014); Adjei-Bamfo, (2017); Roman, (2017); Mani et al., (2018); Giacomo et al., (2019); Gouda and Saranga, (2020); Pudjijono et al., (2022).

The findings show that adopting sustainable public procurement tends to increase Ghana's sustainable performance index. Implementing sustainability results in various organizational benefits such as improved environmental outcomes, cost savings, increased consumer surplus, positive social benefits, and so on (Brammer & Walker, 2011; Roman, 2017). Authors like Giacomo et al. (2019) argued that sustainable procurement practices initiatives could lead to better economic, environmental, and social sustainability. This is because sustainable purchasing may seem more expensive than traditional purchasing. Still, it could be cheaper in the long run because of lower costs for maintenance and disposal. Gouda and Saranga (2020) also posited that activities related to sustainable public procurement help the performance of sustainability. Using "green purchasing" in China has improved the

performance of organizations (Zhu & Sarkis, 2007). Similarly, Mani et al. (2018) show that when social sustainability is adopted in public procurement, both the buyer's social reputation and the supplier's social performance improve. The study affirms and supports the hypotheses 2 (H₂).

H3: The mediating role of sustainable procurement adoption in the relationship between isomorphic pressures and sustainable performance.

The last and final objective guiding the study was to assess the mediating role of sustainable procurement adoption in the relationship between isomorphic pressures (coercive, normative, mimetic) and sustainable performance. The study's findings revealed that sustainable procurement adoption partially mediates the relationship between isomorphic pressures and sustainable performance. The presence of sustainable procurement adoption serves as a mediator, indicating that organisations implementing sustainable procurement practises are more inclined to demonstrate enhanced sustainable performance (Song et al., 2017). Organisations can aptly address isomorphic pressures by incorporating sustainability factors into procurement procedures, resulting in improved environmental, social, and economic results. For example, organisations that adhere to regulatory mandates by implementing sustainable procurement practises are more inclined to mitigate their ecological footprint and advance societal well-being. Likewise, organisations that conform to industry standards and adhere to best practises in sustainable procurement are more inclined to attain industry recognition and enhance their sustainable performance (Ghosh, 2019).

In conclusion, organisations that effectively address institutional pressures by implementing sustainable procurement practises have the potential to improve their legitimacy and engage stakeholders, thereby positively influencing their sustainable

performance. Organisations can enhance their sustainable performance outcomes by implementing sustainable procurement practises, which enable them to effectively address regulatory requirements, industry norms, and institutional pressures (Khodaparastiet al., 2020). The findings of the study align with the study of Acquah et al. (2023); Acquah et al. (2021); Zhu and Sarkis (2006); Song et al. (2017); Blome et al. (2014); Grob and Benn (2014). The study affirms and supports the hypotheses 3 (H₃).

4.11 Chapter Summary

The chapter mainly focused on the survey and analysis of the data gathered. Firstly, describe the demographic characteristics of respondents, including their gender, academic qualifications, years of experience in public entities position, a professional affiliation of respondents, and sectors in which respondents belong. And finally, the study statistical findings of direct and specific indirect relationships were analysed with the PLS-SEM approach. The findings revealed that coercive, normative and mimetic pressures positively influenced sustainable public procurement adoption. Also, the findings revealed that, sustainable procurement adoption positively enhances sustainable performance. Lastly, a mediator variable of sustainable procurement adoption partially mediated the relationship between isomorphic pressures (coercive, normative and mimetic pressures) and sustainable performance.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter of the study consists of the presentation of key findings, conclusions and some recommendations made based on the conclusions drawn from the study. The conclusion from the various hypothesis tested was discussed in this chapter. Based on the study's limitations and conclusions, recommendations were suggested for future research.

5.1 Summary

The study's goal was to examine the impact of isomorphic pressures on sustainable public procurement adoption and performance in Ghana. This study was prompted by the need to inculcate sustainability in procurement of commodities, works and services to improve sustainable development. The increasing concerns of environmental, economic and social impacts of public procurements in contracts and purchases of public organisations have prompted the need to inculcate sustainability in the purchasing and contracting activities of public organisations. From this point of view, sustainable procurement will only be useful and efficient if it can lead to changes in how public organizations usually buy and contract for goods, works, and services. According to the study's objectives, 3 hypotheses were tested to accomplish the study's objectives. The hypotheses, derived from three objectives of the study were used to guide the direction of the literature review of the study in a systematic order. The literature review section of the study was divided into three parts; theoretical, the empirical investigation and a review of concepts which depicts the pictorial or diagrammatical view of the various concepts and constructs of the study. The review of

literature was carried out, using a theory base approach, adopting the institutional theory and the stakeholder theory which aided in the empirical links between the various variable of interest of the study; coercive pressures, normative pressures, mimetic pressures, sustainable public procurement adoption and sustainable performance.

Quantitative based approach was employed in the research, with the positivism philosophical paradigm backing the quantitative justification of study. An explanatory design was employed to explain the relationships and causal effects of the exogenous variables and endogenous variables chosen for the study. The survey was then conducted in Ghanaian public procurement institutions using a convenience sampling technique to sample respondents for the study. The study questioned 307 public procurement entities, including Metropolitan, Municipal, and District Assemblies, Ministries, Departments, and Agencies, State Owned Enterprises, Hospitals, and Tertiary Institutions. According to the Public Procurement Authority, there are 660 public procurement entities in Ghana (PPA).

In addition, a closed-ended questionnaire was distributed and collected from study participants. Data for the study were gathered using measurement scales that have been validated and proven to be reliable. The study used the Statistical Package for Social Sciences (SPSS version 26) to analyze and collate data. The process data was analysed using the Partial Least Squares-Structural Equation Modelling (PLS-SEM).

5.2 Summary of Key Findings

The Study analysed three objectives. The first objective examined the relationship between isomorphic pressures and sustainable procurement adoption in Ghana. The study analysed the individual items (thus normative, coercive and mimetic pressures) on sustainable procurement adoption in Ghana. The findings of the study

proved that isomorphic pressures (normative, coercive and mimetic pressures) have a positive and significant effect on sustainable procurement adoption in Ghana. All the three hypotheses were supported.

The second objective sought to examine the effect of sustainable procurement adoption on sustainable performance in Ghana. One hypothesis was formulated and tested at the end of the analysis, proving that sustainable public procurement adoption significantly influences sustainable performance.

The third objective assessed the mediating role of sustainable procurement adoption in the relationship between isomorphic pressures (coercive, normative, mimetic) and sustainable performance. The study's findings revealed that sustainable procurement adoption partially mediates the relationship between isomorphic pressures and sustainable performance. The presence of sustainable procurement adoption serves as a mediator, indicating that organisations implementing sustainable procurement practises are more inclined to demonstrate enhanced sustainable performance.

5.3 Conclusion

From the findings of the study, it was conclusively established that isomorphic (coercive, mimetic and normative) pressures accounts for a positive significant influence in sustainable public procurement adoption. Again, the study proved that sustainable procurement adoption enhances sustainable performance. Lastly, the findings proved that sustainable procurement adoption partially mediates the relationship between isomorphic factors and sustainable performance

5.4 Recommendations

Based on the findings of the study, the following recommendations are made to public procurement entities, government and the public procurement authority, Ghana in order to improve sustainable public procurement and performance in Ghana.

It is recommended that; institutional regulatory bodies should spearhead the sustainable operations of public procurement. By cohesion and giving stringent rules and regulations governing the procurement of goods, works and service, suppliers and contractors alike who would bid for public procurements would be very much aware of sustainable criteria in the selection process and as such will adhere to all regulations regarding sustainability in public procurement. Despite institutionalised regulatory bodies spearheading the sustainable operations of public entities, by exercising their legitimate responsibilities, the study recommends that management of regulatory bodies such as the Public Procurement Authority (PPA), Environmental Protection Agency (EPA), Ghana Standards Authority (GSA), Public Utilities and Regulatory Commission (PURC), should continue to positively engage public entities to undertake procurements while promoting sustainable manufacturing operations.

Thus, these regulatory bodies should incentivise manufacturer firms (suppliers or contractors) by involving or granting them a representative during stakeholder meetings and conferences to promote sustainability across the business environment. Lastly, to ensure such regulatory institutions live up to the core mandate, the government and other key stakeholders should actively allocate adequate resources (financial, human and statutory) for the effective and efficient management of such regulatory organisations since their vibrancy status depends on how adequately they are catered for by their sponsors' such government and other international regulatory institutions.

Further, it is recommended that the public entities should continue to comply with external pressures in mimetic pressures. The adherence to these pressures enables them to operate under sustainable parameters. Again, public entities should ensure that sustainable outcomes are stringently ascribed as core elements of their strategic

business objectives. Also, the public procurement authority in collaboration with the government and public entities, should establish a harmonious working relationship with other procurement authorities from other countries. By harmonising the operational interactions among such organisations will help foster positive standards of sustainable public procurement adoption and performance in the procurement system in Ghana. Through these operational interactions, the authority would invest more into productive resource offerings like specialised trainings for employees, workshops on sustainability in procurement as well as the need for change from a traditional procurement system into a more sustainable one.

5.5 Contribution to Knowledge

The study's findings represent a significant and valuable contribution to existing body of literature. The research contributed to the existing body of knowledge by establishing the relationship between isomorphic pressures and sustainable performance. Similarly, the research findings supported the premise that sustainable procurement adoption mediates the relationship between isomorphic pressure on sustainable performance.

5.6 Suggestions for Future Studies

Future research was suggested based on the study's results and limitations.; firstly, the survey adopted a cross sectional survey, which can statistically limit findings of a study and hence it is suggested for future comparative studies to adopt a more longitudinal survey. Again, the study's model focused the isomorphic pressure and its influence on sustainable public procurement adoption in Ghana, ignoring the antecedents of these pressures. Understanding these antecedents can drive public procurement sustainability, hence future studies are advised to look at the antecedents of the isomorphic pressures and its influence on sustainability in procurement. Finally,

the role of other possible mediator variables can be employed in future studies to explore the influence of isomorphic pressures through (these mediator variable) on sustainable procurement adoption.



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APPENDIX

QUESTIONNAIRE UNIVERSITY OF EDUCATION, WINNEBA SCHOOL OF BUSINESS DEPARTMENT OF PROCUREMENT AND SUPPLY CHAIN MANAGEMENT

Dear Sir/Madam,

The questionnaire is to solicit information on the **“influence of isomorphic pressures on sustainable public procurement adoption and performance in Ghana”** The researcher is a student at the School of Business, Department of Procurement and Supply Chain Management, University of Education, Winneba. You are hereby invited to share your views on the issue under investigation. The responses would be used for purely academic purposes and as part of the requirement for the award of a Master’s degree in Procurement and Supply Chain Management. Your confidentiality is greatly assured. Therefore, no information provided will be identifiable to you or your organisation since only aggregated data will be reported in this study. You are kindly required to answer the questions as frankly as possible since you will be contributing to knowledge. Thanks for your time and accepting to participate in the study.

SECTION A: ISORMORPHIC PRESSURES

Please indicate the degree of your agreement with the following statements by ticking or clicking (√) the appropriate number 5= Strong Agreement 1=Least Agreement

Coercive Pressures						
Statements		1	2	3	4	5
COE1	If public procurement entities commit a sustainable infraction, the consequence would include negative reports by the public procurement Authority/stock market analysts	1	2	3	4	5
COE2	There are well-defined fines and penalties for unsustainable behaviours in public procurement	1	2	3	4	5
COE3	Entities that do not meet regulatory standards are threatened with legal prosecution.	1	2	3	4	5
COE4	There are negative consequences for procurement entities that do not comply with government sustainability policies.	1	2	3	4	5
COE5	Our major suppliers believe that we should adopt sustainable practices when procuring.	1	2	3	4	5
COE6	We are likely to lose major suppliers if we do not adopt sustainable practices when procuring	1	2	3	4	5

COE7	Our entity's success greatly depends on our participation in sustainable supply chain management	1	2	3	4	5
Mimetic pressures		1	2	3	4	5
MIM 1	Public entities in other developing countries that have adopted sustainable public procurement have benefited greatly	1	2	3	4	5
MIM 2	Public entities in other developing countries that have adopted sustainable public procurement are more competitive with high sustainable indexes	1	2	3	4	5
MIM 3	Leading organizations have set examples for social sustainability in public procurement for goods, works and services	1	2	3	4	5
MIM 4	Leading organizations have set examples for environmental sustainability in public procurement for goods, works and services	1	2	3	4	5
MIM 5	Leading organisations in the public sector are known for their practices that promoted environmental preservation	1	2	3	4	5
Normative Pressures		1	2	3	4	5
NOR 1	Nongovernmental organizations expect our entity to implement sustainable procurement	1	2	3	4	5
NOR 2	Stakeholders may not support our entity if our entity does not implement sustainable procurement	1	2	3	4	5
NOR 3	It is expected that all public procurement entities are environmentally, socially and economically responsible	1	2	3	4	5
NOR 4	Professional associations like CIPS, CILT etc. encourages entities and professionals to become more responsible in sustainable procurement	1	2	3	4	5
NOR 5	Being environmentally, socially and economically responsible is a requirement for public procurement entities to be accepted by citizens.	1	2	3	4	5
NOR 6	We actively participate in industry, trade, or professional associations that promote environmental and social supply chain management	1	2	3	4	5
NOR 7	Significant pressure to engage in sustainability procurements is placed on us from industry and professional sources that support sustainable supply chain management	1	2	3	4	5

SECTION B: SUSTAINABLE PUBLIC PROCUREMENT ADOPTION

Please indicate the level of degree of your agreement with the following statement by ticking or clicking (√) the appropriate number 5= Strong Agreement 1=Least Agreement

Sustainable public procurement Adoption						
Statements		1	2	3	4	5
SPA1	Our organisation evaluates whole of life environmental friendliness of products before procuring	1	2	3	4	5
SPA2	Our organisation visits suppliers' operational sites to ensure sweatshop labour is not used	1	2	3	4	5
SPA3	Our organisation buys from Minority and Women Based Enterprises	1	2	3	4	5
SPA4	We purchase products with biodegradable packages or containers	1	2	3	4	5
SPA5	Our organisation commits its suppliers to waste reduction goals	1	2	3	4	5
SPA6	We buy products with eco-labels like energy consumption rating	1	2	3	4	5
SPA7	We make sure that our purchases do not lead to accumulation of unnecessary things	1	2	3	4	5

SECTION C: SUSTAINABLE PERFORMANCE

Please indicate the level of degree of your agreement with the following statement by ticking or clicking (√) the appropriate number 5= Strong Agreement 1=Least Agreement

Sustainable Performance						
Economic Performance		1	2	3	4	5
SP1	The entity endeavours to reduce consumption of electricity	1	2	3	4	5
SP2	The entity's cost of operations has reduced due to continuous improvement	1	2	3	4	5
SP3	The entity's economic objectives are achieved due to sustainable procurement practices.	1	2	3	4	5
Social Performance		1	2	3	4	5
SP4	The image and reputation of entity has improved according to awards and recognitions	1	2	3	4	5
SP5	The level of satisfaction of society with the entity's actions has improved according to complaints and acknowledgements received.	1	2	3	4	5
SP6	Contribution to local prosperity (employment of local labour, using local suppliers) has increased	1	2	3	4	5
Environmental Performance		1	2	3	4	5

SP7	There is improvement in the entity’s reputation due to its environmental effort	1	2	3	4	5
SP8	The entity’s environmental effort has reduced air and water pollution	1	2	3	4	5
SP9	Our entity procures only eco-labelled goods	1	2	3	4	5

SECTION D: DEMOGRAPHICS

1. Gender of respondents?

Male Female

2. What is your position in the entity?

Procurement officer Assistant Procurement officer Stores keeper

3. Please indicate the number of years of experience worked in public procurement.

1-10 Years 11-20 Years 21-30 Years Above 30 Years

4. Please specify your educational qualification.

Diploma Bachelor’s degree Master’s degree Doctorate degree

Others

5. Indicate (✓) your affiliations with any of the following professional bodies.

CIPs	CILT	GIPS	ACCA	ICAG	PMI	Other
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Which sector does your Entity belong?

MDAs MMDAs State Owned Enterprises Hospitals

Tertiary institutions

Thank You!!!