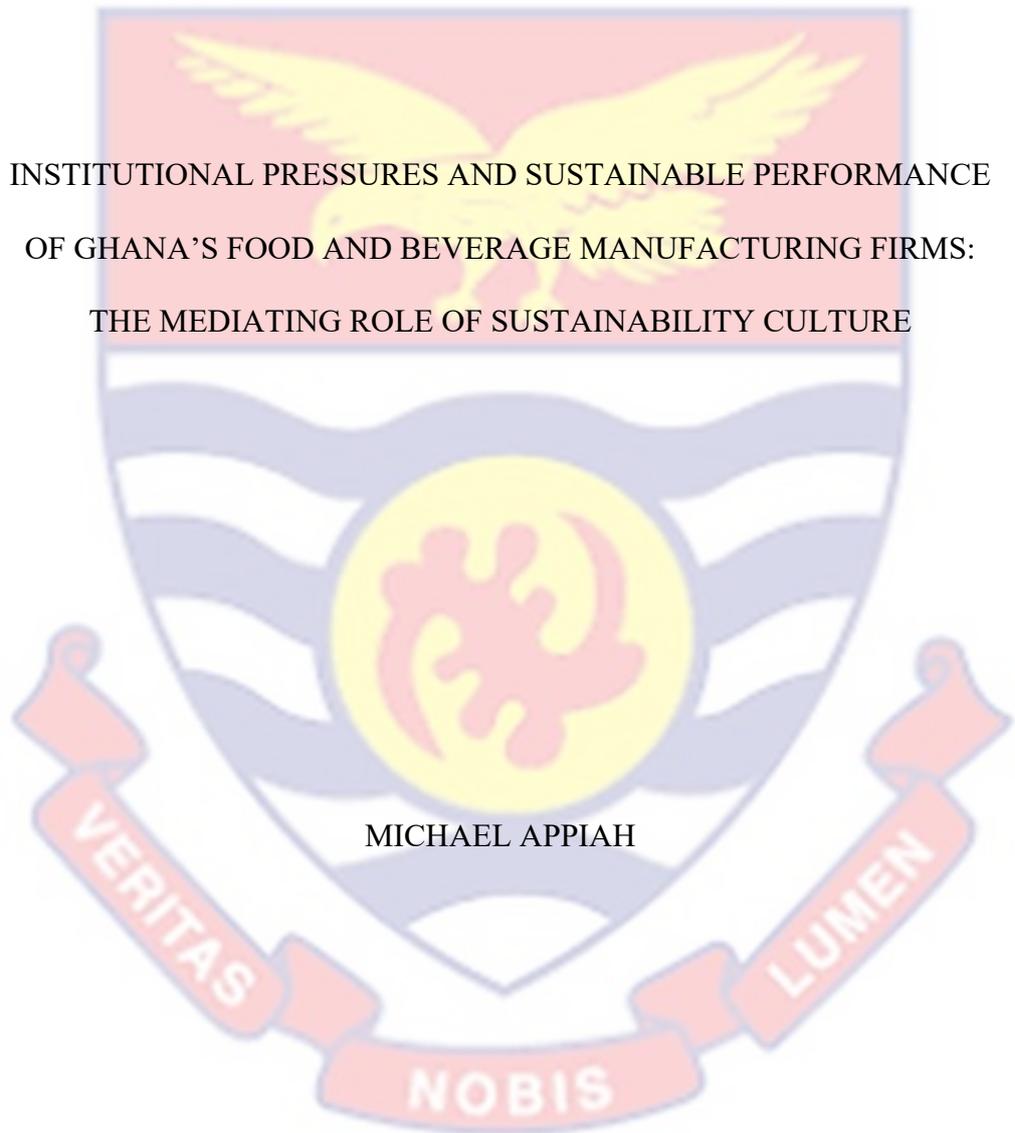


UNIVERSITY OF CAPE COAST

INSTITUTIONAL PRESSURES AND SUSTAINABLE PERFORMANCE  
OF GHANA'S FOOD AND BEVERAGE MANUFACTURING FIRMS:  
THE MEDIATING ROLE OF SUSTAINABILITY CULTURE



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2022

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THE MEDIATING ROLE OF SUSTAINABILITY CULTURE

By  
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Thesis submitted to the Department of Marketing and Supply Chain  
Management, School of Business, College of Humanities and Legal Studies,  
University of Cape Coast in partial fulfillment of the requirements for the  
award Master of Commerce in Procurement and Supply Chain Management

APRIL 2022

## DECLARATION

### Candidate's Declaration

I, at this moment, declare that this thesis report is the result of my original research and that no part of it has been presented for another degree at the University or elsewhere.

Candidate's Signature..... Date.....

Name: Michael Appiah

### Supervisors' Declaration

I, at this moment, declare that the preparation and presentation of the thesis were supervised per the guidelines on supervision of thesis laid down by the University of Cape Coast.

Supervisor's Signature ..... Date.....

Name: Dr Innocent Senyo Kwasi Acquah

## ABSTRACT

In recent years, business stakeholders have been worried about Ghana's food and beverage firms' operational quality and presence owing to unsustainable practices such as high greenhouse gas emissions, an increase in foodborne infections, biodiversity loss, and consumer discontent. Scholars have failed to question whether Ghana's food and beverage businesses follow institutional pressures and have a sustainable culture. This study examines the effect of institutional pressures on the sustainable performance of Ghana's Food and Beverage manufacturing firms with mediating role of sustainability culture. The Institutional and Resource-Based view theories underpinned the study and it employed both a quantitative approach and an explanatory design. A randomly sampled respondents from 216 registered Ghanaian Food and Beverage manufacturing firms were used for the study. Data were processed using PLS-SEM version 3.2 and SPSS version 26. The study found that mimetic pressures influenced the sustainable performance of Ghana's Food and Beverage manufacturing enterprises. Normative and coercive pressures did not significantly affect sustainable performance. Normative pressure did not affect sustainability culture, whereas coercive and mimetic pressures did. Also, sustainability culture was found to have a significant impact on the sustainable performance of Ghanaian food and beverage firms. Sustainability culture mediated the predictive relationships between coercive (full) and mimetic (partial) pressures and sustainable performance. It was concluded that a sustainability culture improves the tendency of Food and Beverage firms to comply with external business pressures to improve sustainable outcomes. Management of food and beverage firms should invest to make sustainable considerations critical to their business operations.

## KEYWORDS

Coercive Pressures

Institutional Pressures

Mimetic Pressures

Normative Pressures

Sustainability Culture

Sustainable Performance



## ACKNOWLEDGEMENT

I am eternally grateful to God for making this masterpiece a success. I want to express my heartfelt gratitude to my supervisor, Dr Innocent Senyo Kwasi Acquah, of the Department of Marketing and Supply Chain Management, School of Business, for your professional guidance, advice, and encouragement.



## DEDICATION

To my lovely and ever sacrificing mum and siblings.



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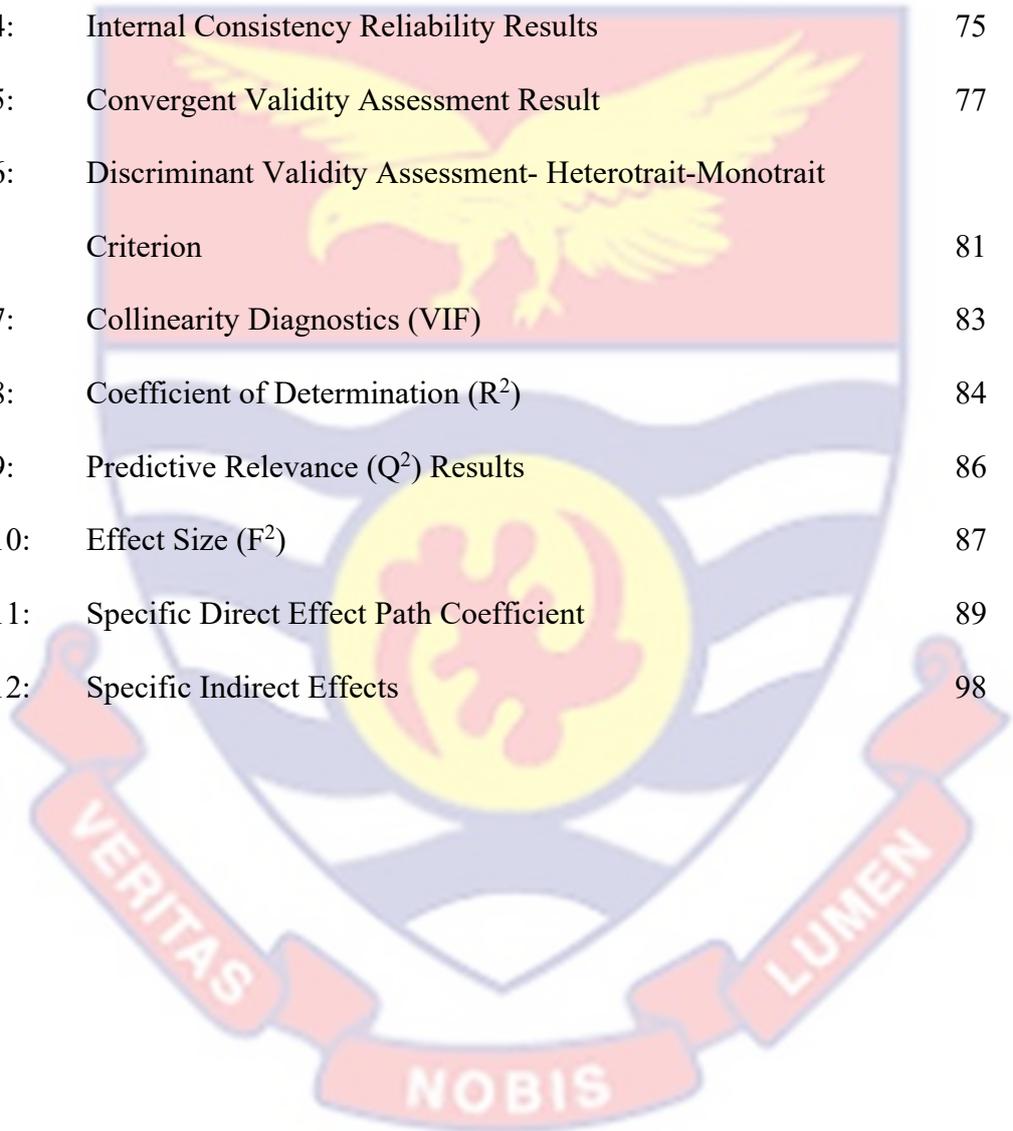
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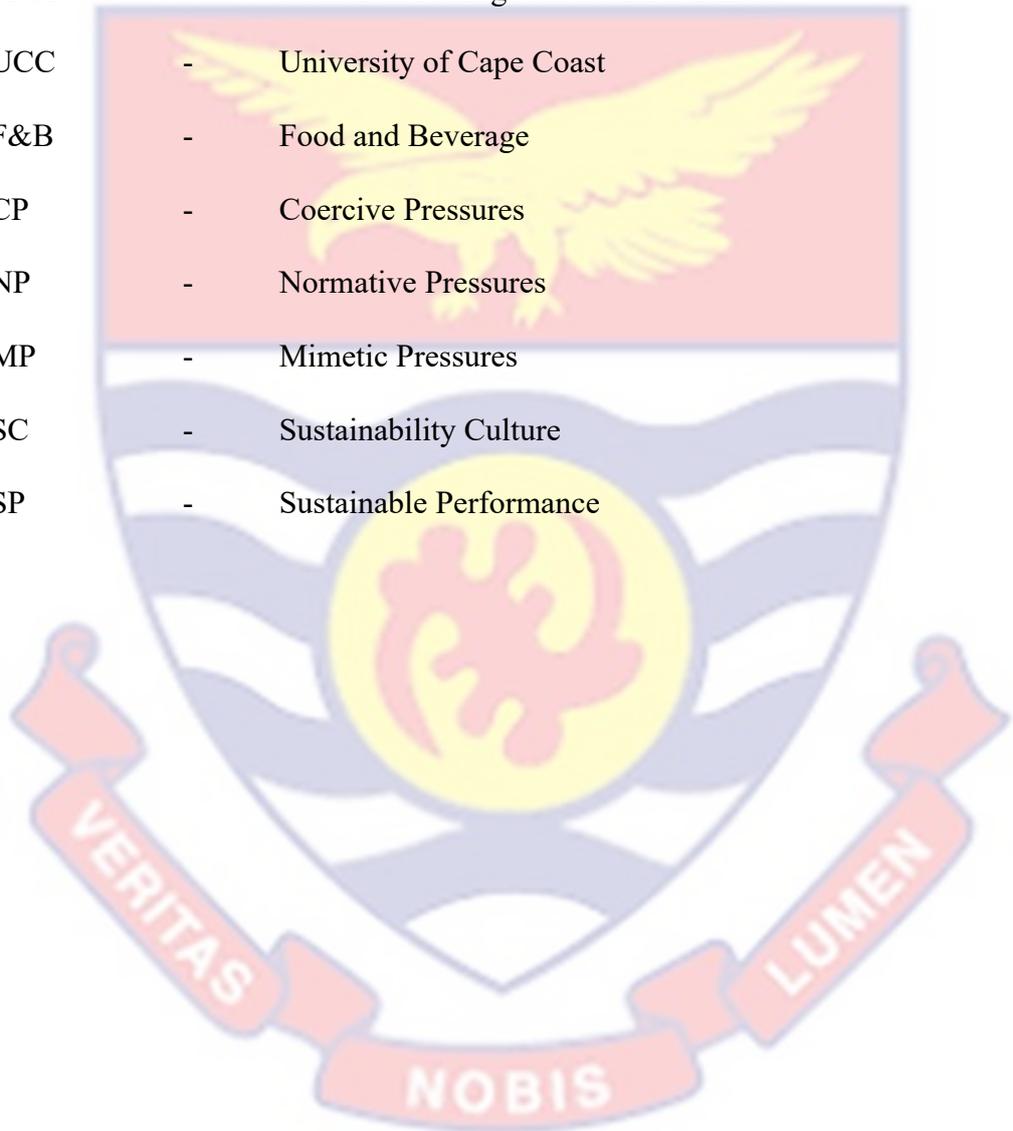
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## ACRONYMS

HTMT	-	Heterotrait-Monotrait
PLS-SEM	-	Partial Least Square- Structural Equation Modelling
RBV	-	Resource-based View
SPSS	-	Statistical Package for Social Sciences
UCC	-	University of Cape Coast
F&B	-	Food and Beverage
CP	-	Coercive Pressures
NP	-	Normative Pressures
MP	-	Mimetic Pressures
SC	-	Sustainability Culture
SP	-	Sustainable Performance



## CHAPTER ONE

### INTRODUCTION

In recent times, the concern for corporate manufacturing firms to operate under sustainable mechanisms in their quest to satisfy the varying needs of their consumers has been the call of the day. This has resulted from the radical competitive approach to manufacturing inputs acquisition and transformation process adopted by manufacturing firms worldwide. Thus, Food and Beverage manufacturing firms are working to attain sustainability along their whole supply chain, which includes all operational processes through the movement and transformation of goods and knowledge of customer and competition criteria. Hence, this study examines the effects of institutional pressure and the sustainability culture of Food and Beverage manufacturing firms' sustainable performance in Ghana. The study shall employ the institutional theory and Resource-Based View theory.

#### **Background to the Study**

Over the past decades, the environment has been under scrutiny by key actors in the business environment (Vanalle, Ganga, Godinho & Lucato, 2017). These environmental concerns are global warming, ozone loss, solid waste, and air pollution (Nakajima, Ohara, Masui, Takemura, Yoshimura, Goto & Zhao, 2020). Rosati and Faria (2019) asserted that business organisations play a crucial part in the negative environmental issues exposed by governmental agencies, corporate firms, and individuals. These business organisation's production, storage, transportation, and marketing operations have negatively affected the climate (Ghadge, Abhijeet & Seuring, 2020). Environmental problems such as overexploitation of natural resources,

destruction of biodiversity, climate change, and issues in recycling have drawn the attention of numerous organisations, especially those working for more sustainable practices (Batjargal & Enkhjargal, 2013). Tate, Ellram and Dooley (2012) opined that there had been a significant rise in environmental consciousness by consumers of these business organisations.

In Ghana, the operations of manufacturing firms' have contributed to numerous negative environmental impacts on the socioeconomic conditions of the people living in firms-influenced communities. The environmental disintegration brought about by manufacturing firms in Ghana happens chiefly because of inappropriate wasteful working practices, rehabilitation measures physical degradation, or pollution-related issues (Bansah, Dumakor-Dupey, Stemn & Galecki, 2018). Manufacturing firms in Ghana are stood up with the test of controlling a wide scope of possibly genuine ecological issues.

Manufacturing firms' debacles in Ghana with few setbacks that happened earlier have brought acumen up in the public assessment of manufacturing firms being an unsafe activity for the environment, workers, and public health due to the carbon monoxide discharged into the air (Omari, Ampadu-Ameyaw, Baah-Tuahene, Tetteh, Karbo, Abdulai & Jumpah, 2020). The activities of the manufacturing firms are prejudicial to air, land, water, and human well-being. Because of that, manufacturing firms in Ghana have been gaining more attention because of their environmental and social impacts of their activities on the environment (Tutu & Anfu, 2021). People living in the manufacturing sector are exposed to several institutional pressures (Agyabeng-Mensah, Ahenkorah, Afum, Agyemang, Agnikpe & Rogers, 2020).

In developing this damaging surge in business environmental issues, business organisations have been exposed to external pressures from various institutions (Moser, Winkler, Narayanamurthy & Pereira, 2020, p 18). And these institutions are collectively making up the institutional environment within which the business organisations find themselves and operate (Batjargal & Emkhjargal, 2013). Examples of such institutions are government agencies such as Environmental Protection Agency, Food and Drug Authority, Global Green Growth Institute etc.

According to Holmes, Miller, Hitt and Salmador (2013), the institutional environment of business organisations may consist of institutions that manifest their influences on the business organisation at the territorial level (state, national, international, sub-region, continental etc.), of different kinds (i.e. political, economic, environmental, social, etc.) and or domains (sector/ industry, product etc.). According to Moser, Winkler, Narayanamurthy and Pereira (2020), the influence exhibited by the institutional environment is widely known as Institutional Pressure; and they collectively described it as “an unfavourable influence on business organisations that are exerted by such institutions and limit the choice of organisations concerning their structures and conduct”.

Business organisations such as manufacturing firms have been recipients of increasing pressures from key actors of the business environment obligating business organisations to strictly exercise environmental-friendly and social practices across their operations in the bid to promote sustainability of manufacturing processes (Dubey, Gunasekaran & Ali, 2015; Kauppi & Hannibal, 2017; Charan & Murty, 2018). Hoejmore, Grosvold and Millington

(2014) stressed the need to break down institutional pressures; coercive isomorphism, normative isomorphism and mimetic isomorphism. The isomorphic pressure levelled against business organisations pushes them to adopt environmental, social and economic practices that drive sustainability within the focal organisation and their supply chain (Foo, Kanapathy, Zailani & Shaharudin, 2019). Since companies are expected to impact the environment and eco-design, the isomorphism perspective drives them to improve. (Wu et al., 2012)

Sustainable culture is when corporate participants maintain common assumptions and principles, such as optimising economic productivity, social justice, and environmental responsibilities (Bertels, Papania & Papania, 2010). Studies have demonstrated how effective organisations promote sustainability, with positive communities leading to superior environmental results (Liebowitz, 2010; SHRM, BSR & Aurosoorya, 2011). Some companies have recognised the value of greening their workplace to benefit from a healthier environment (Bertels et al., 2010). However, developing a culture whose cornerstone is sustainability is a dynamic undertaking, and the creation of such a culture is dependent upon a variety of core values (Harris & Crane, 2002).

The longitudinal study of Harris and Crane (2002) discovered that a sustainable culture is achieved when such a culture provides a structure for the depth, degree, and dissemination of sustainability values within organisations. The depth of cultural sustainability shows how deeply a manager trusts programs that promote sustainability. The degree to which managers assume green ideas and sensibilities are manifested in the designs and products they create as market offerings. The dissemination of cultural greening refers to

how managers believe this activity to be displayed in the company (Harris & Crane, 2002). These three main aspects were further differentiated into the results of a sustainable cultural transition. The strength of success values, systemic barriers, institutional fragmentation, opposition to change, symbolic events, alternative ideologies, and business meta culture are taken into account. These three aspects impact a firm's food and beverage industry activities.

Performance is typically calculated based on the work done (Moore, 2017; Farrukh, Irshad, Shams-Khakwani, Ishaque & Ansari, 2017). Firm performance is a multidimensional organisational indicator (Richard et al., 2009). And these multidimensional indicators could be financial and non-financial, marketing performance, operational performance, sustainable performance, etc. Richard et al. further posited that performance serves as the yardstick for assessing the effectiveness or efficiency of business processes or systems. Organisational researchers are increasingly turning to performance as a dependent variable, although it is one of the field's most ill-defined concepts. The biggest challenge to corporate performance is the external environment. All organisations operate within some external environment.

According to Lee and Wu (2014), companies must achieve sustainable performance that balances economic, environmental, and social goals to deliver core business operations at maximum value. Also, sustainable performance was posited to be that dimension of firms' performance that considers the effective and efficient utilisation of the triple bottom line concept during productive operations (Agyabeng-Mensah, Ahenkorah, Afum, Agyemang, Agnikpe & Rogers, 2020). Hence, the success of firms depends on

their strict adherence to the environmental, economic and social aspects of the concept of sustainability.

Over the years, there has been an uncompromising focus on firms' operational activities by some business and environmental stakeholders regarding the sustainability of operations of such firms. Sustainable Performance has the enshrined potencies to help minimise land and air pollution and solid waste and reduce the use of environmentally unfriendly materials (Abdul-Rashid, Sakundarini, Ghazilla & Thurasamy, 2017; Singh, Chen, Del-Giudice & El-Kassar, 2019).

Undisputedly, the food and beverage manufacturing industry has been of great importance to both developed and developing economies (Bayraktar, Gunasekaran, Koh, Tatoglu, Demirbag & Zaim, 2010). The food and beverage industry has supported economies by creating employment opportunities; for instance, the Food and Beverage industry accounts for about 10% of total US employment (Bayona-Saez, Cruz-Cazares, Garcia-Marco and Garcia, 2017), affordability of foods and beverages through long-run innovations that have increased and diversified food and beverage supplies (Chen & Voigt, 2020), a significant contributor to the Gross Domestic Product of both developed and developing economies (Akinboade & Braimoh, 2010).

### **Statement of the Problem**

It was evaluated that, the Food and Beverage manufacturing industry contributed just 7% of the \$694,970,543 revenue to the government in 2018 (Omari, Ampadu-Ameyaw, Baah-Tuahene, Tetteh, Karbo, Abdulai, Asabo, Owusu-Arthur & Jumpah, 2020). The Food and Beverage manufacturing industry has contributed to 29.3% of Ghana's total exports (Ampofo, 2020),

6% of the gross domestic product (GDP) (Omari et al., 2020), 1.5 billion Ghana cedis to the Ghana Revenue Authority (GRA) in 2020 (Ghana Statistical Service, 2020), 46% Ghana's gross export revenue in 2020, GH¢1.24 billion, to the national government and employed 12,148 Ghanaians (Amoako, Dzogbenuku & Abubakari, 2020).

Despite the essential contributions by the Food and Beverage manufacturing firms to developing economies such as Ghana, their manufacturing operations are bated with some operational flaws which do not promote sustainability of their operations and, as such, do not connote such firms complying with operational regulations instituted by relevant key actors in the business environment (Mensah, 2014; Veleva, Todorova, Lowitt, Angus & Neely, 2015; Welbeck, 2017; Long, Looijen & Blok, 2018; Dressler & Paunovic, 2019; Amoako, Dzogbenuku & Abubakari, 2020; Weber & Saunders-Hogberg, 2020). As a result, this has impacted their operational and financial performance (Nyamah, Opoku & Kaku, 2022).

According to Kayode and Folajinmi (2020), financial performance has decreased over the years in Ghana due to some operational flaws which do not promote sustainability of their operations. this has been evident by their decrease in sales from GHS 19331.5 in 2019 to GHS 19066.3 in 2020 (Ampofo, 2020) and contribution to the nation from 7% in 2018 to 4% in 2021 (Tutu & Anfu, 2021). Also, it is evident that operational problems such as excessive greenhouse gas emissions leading to acid rains, climate changes, a significant rise in foodborne diseases, depletion diversity, customer/consumers product dissatisfaction, unsustainable squeeze in supply chain profits, product recalls are observable within the Food and Beverage Industry (Ocloo, Akaba

& Worwui-Brown, 2014; Agyabeng-Mensah, Ahenkorah, Afum, Agyemang, Agnikpe & Rogers, 2020).

This has made stakeholders/ commentators argue that the economic benefits of the food and beverages industry have come at a cost, both environmentally and socially. The food and beverage industry in Ghana has been seen as industries that destroy the environment (Omari et al., 2020). Their activities are soiled with severe environmental and social risks (Mukherjee & Nunez, 2019; Vandenbrink, Pauze & Potvin-Kent, 2020; Eng & Fikru, 2020; Omari et al., 2020; Tutu & Anfu, 2021).

Upon review of extant works of literature, it was evident that there are some pieces of literature on institutional pressure and performance (Zhu & Sarkis, 2007; Hoejmose, Grosvold & Millington, 2014; Chu, Yang, Lee & Park, 2017; Saeed, Ayertey-Nubuor, Priyankara & Jayasuriya, 2018). All these studies concluded that institutional pressure positively affects a firm's performance. However, all these studies examined institutional pressures either on environmental performance or economic performance or both but none included social performance as a dimension of sustainable performance. Thus, creating a gap that undermines a holistic view of sustainable performance as a measure for firm performance. This study seeks to fill such a gap.

According to Denison, Hooijberg, Lane, and Lief (2012), a critical element for steady organisational growth in a constantly changing business environment is a culture of sustainability. Sustainability culture breeds a high degree of innovativeness in business processes to achieve pre-determined business goals or objectives which has environmental, social, and economic

objectives stringently integrated into its core (Galpim, Whittington & Bell, 2015; Greene, Crumbleholme & Myerson, 2014; Tata & Prasad, 2014; Marshall, McCarthy, McGrath & Claudy, 2015; Porter, Gallagher & Lawong, 2016).

Despite the claims of sustainability culture aiding business organisations to improve overall corporate performance, its enabling capacity to help business organisations to foster operational practices that imply compliance with institutional pressures in the business environment is not far-fetched (Marshall, McCarthy, McGrath & Claudy, 2015; Porter, Gallagher & Lawong, 2016). Previous studies on sustainability culture investigated how the phenomenon help business units foster green manufacturing practice to improve organisation performance (Marshall, McCarthy, McGrath & Claudy, 2015).

Lagrosen and Lagrosen (2019), in their study, advanced that a culture of sustainability is an enabling means of achieving sustained organisational success. Institutional pressures may improve sustainable performance, but a sustainability culture can improve it further. Sustainability culture creates a sustainable atmosphere. In line with the above argument, Marshall, McCarthy, McGrath, and Claudy (2015) recommended that sustainability culture be used in a mediating capacity to evaluate whether or not it can help business enterprises attain improved sustainable outcomes.

Firms' performances represent an organisational metric used by corporate organisations to assess organisational efficiency in business processes (Taouab & Issor, 2019). According to Badawy, Abd El-Aziz, Idress, Hefny, and Hossam (2016), evaluating the performances of business

enterprises is an objective means of determining whether the goals and objectives set by the business are being met or not met. Thus, the feedback of measuring the performances of business enterprises gives direction on whether firms need to improve upon business-oriented activities or processes or maintain a known level of operational efficiency (Wójcik, Obłój, & Buono, 2022).

Moreover, according to Nigri and Del Baldo (2018), measuring firm performance from a sustainable perspective to business operation allows businesses to assess their overall business process by assuming a holistic performance measurement approach. Thus, measuring the performance of business enterprises based on the triple bottom line dimension helps business establishments assess the business's success based on how the firm's operations on the environment, society and economy. And these three measurement indicators play a crucial role in assessing the end-to-end business process of business establishment. Thus, based on the operational importance of assessing firm performance from a sustainable perspective, Ahmed, Aizgool and Shah (2019) recommended that a different view of firms' performance be investigated, considering the triple bottom line of sustainability to assess how business practices influence sustainable business outcomes.

Hence, the study sought to examine the effect of Institutional pressures (coercive, normative and mimetic pressures) and sustainability culture on the sustainable performance of Ghana's Food and Beverage manufacturing firms.

### **Purpose of the Study**

The study examined the effects of institutional pressures on the sustainable performance of Ghana's Food and Beverage manufacturing firms: the mediation role of sustainability culture.

### **Research Objectives**

In the quest to accomplish the purpose of the study, the following specific objectives were pursued to:

1. examine the effect of institutional pressures on the sustainable performance of Ghana's Food and Beverage manufacturing firms.
2. examine the effect of institutional pressures on the sustainability culture of Ghana's Food and Beverage manufacturing firms.
3. analyse the effect of sustainability culture on the sustainable performance of Ghana's Food and Beverage manufacturing firms.
4. examine the mediating effect of sustainability culture on the relationship between institutional pressures and sustainable performance of Ghana's food and Beverage manufacturing firms.

### **Research Hypotheses**

Based on the specific research objectives, the following research hypotheses were established to be tested;

*H<sub>1a</sub>: There is a positive effect of coercive pressures on the sustainable performance of Ghana's Food and Beverage manufacturing firms.*

*H<sub>1b</sub>: There is a positive effect of normative pressures on the sustainable performance of Ghana's Food and Beverage manufacturing firms.*

*H<sub>1c</sub>: There is a positive effect of mimetic pressures on the sustainable performance of Ghana's Food and Beverage manufacturing firms.*

*H<sub>2a</sub>: There is a positive effect of coercive pressures on the sustainability culture of Ghana's Food and Beverage manufacturing firms.*

*H<sub>2b</sub>: There is a positive effect of normative pressures on the sustainability culture of Ghana's Food and Beverage manufacturing firms.*

*H<sub>2c</sub>: There is a positive effect of mimetic pressures on the sustainability culture of Ghana's Food and Beverage manufacturing firms.*

*H<sub>3</sub>: There is a positive effect of sustainability culture on the sustainable performance of Ghana's Food and Beverage manufacturing firms.*

*H<sub>4a</sub>: Sustainability culture mediates the predictive relationship between coercive pressures and the sustainable performance of Ghana's Food and Beverage manufacturing firms.*

*H<sub>4b</sub>: Sustainability culture mediates the relationship between normative pressures and sustainable performance of Ghana's Food and Beverage manufacturing firms.*

*H<sub>4c</sub>: Sustainability culture mediates the relationship between mimetic pressures and sustainable performance of Ghana's Food and Beverage manufacturing firms.*

### **Significance of the Study**

The findings generated from this study will be of immense support to different stakeholders. Primarily, the findings of the novel study will contribute to the rich base of literature. Thus, the findings of the study will help to unearth how business firms gain social legitimacy by relying on the institutional theory that brings to birth the various institutional isomorphisms

(coercive pressures, normative pressures and mimetic pressures) which are businesses comply with in the quest of attaining social and economic legitimacy. Also, the study also evidences how a culture of sustainability is relevant in an organisational context as an important resource that business firms can once again rely on to attain higher competitive height within the business environment.

Moreover, the findings of this study will serve as a masterpiece to the management of Food and Beverage manufacturing firms pinpointing the need to operate sustainably and ethically. Also, the findings of this study will once again provide the needed justifications needed by the management of Food and Beverage manufacturing firms to inculcate and champion green and sustainability-oriented programs or initiatives across their supply chain. Furthermore, findings from this study at an organisation level will help procurement practitioners identify critical areas within their operations that need to be restructured or attended to based on the recommendations and managerial implications proposed at the end of the study.

Similarly, findings from the study will give an echoing voice to reiterate environmental activists and also be of great help to students and researchers since it will add up to the archive of the rich literature on institutional pressures and sustainability culture evident within the manufacturing industry and the Food and Beverage manufacturing firms to be precise. Also, findings from this will be of immense help since they will present insights and some recommendations for future research, which they can pursue either for academic or industrial purposes.

### **Delimitations**

The study sought to examine the effects of institutional pressures and sustainability culture on the sustainable performance of Ghana's Food and Beverage manufacturing firms. The study was conducted in Ghana among only registered Food and Beverage manufacturing firms operating in Ghana. This study area was chosen as it provided a broad but accessible coverage of key Food and Beverage manufacturing firms. The study operationalised institutional pressures (coercive, normative and mimetic) as an exogenous variable, sustainability was also contextualised as a mediator whereas sustainable performance was also operationalised as the endogenous variable of the study. The study was quantitatively undertaken and underpinned by a positivism philosophy.

### **Limitations**

As a result of the study targeting only registered Food and Beverage manufacturing firms within the operational context of Ghana, the findings of this study can only be generalised to Food and Beverage manufacturing firms operating in Ghana. The study was limited to the predominant use of Partial Least Square- Structural Equation Modelling, where both measurement and structural models were statistically assessed. The study was grounded in the quantitative and explanatory research approaches by the nature of the study's philosophy, objectives, and hypotheses.

Moreover, during data collection, the study face the challenge of respondents withholding relevant information to the study undertaking and in an ethical manner, such key information was sought from the study respondents by taking time to brief them on the principal rationale and purpose

of the study while assuring the respondents that their identity and together with their responses and other suggestions are confidential and will anonymously be used in the study without causing any harm to them.

## **Definition of Terms**

### **Coercive Pressures**

Coercive pressure is the result of pressure from institutions, laws, rules and regulations which enforce compliance, ensuring organisations are operating in the environment legitimately (Rentizelas, de Sousa Jabbour, Al Balushi, & Tuni, 2020).

### **Normative Pressures**

Normative pressures concern organizational domains establishing joint control over how the field and/or profession operates (Rentizelas, de Sousa Jabbour, Al-Balush & Tuni, 2018). Thus, normative pressure is the result of organisations' professionalism and professional practices within their sectors

### **Mimetic Pressures**

Mimetic pressure is the process by which organisations imitate the practices, services and processes of their competitors, either well-established or first movers, in order to achieve similar environmental standards (Rentizelas, de Sousa Jabbour, Al-Balush & Tuni, 2018). In other words, mimetic pressures are the responses to uncertainty; when there is no clear course of action, it can be safer to imitate others' behaviours.

### **Sustainability Culture**

Sustainability culture refers to the corporate philosophy of undertaking business activities and functions both internally and externally geared towards

the attainment of the business' environmental, social and economic objectives (Schönborn, Berlin, Pinzone, Hanisch, Georgoulas & Lanz, 2019).

### **Sustainable Performance**

Sustainable performance refers to the process of ascertaining social well-being, which includes meeting and satisfying basic human needs (Kamble, Gunasekaran & Gawankar, 2020) and guaranteeing that environmental renewable and non-renewable resources are well-looked-after to make available for and support people in the future (Gong, Simpson, Koh & Tan, 2018).

### **Organisation of the Study**

The research is divided into five major chapters. Chapter one provided an introduction to the study, including the study's background, statement of the problem, aims of the investigation, research questions, relevance of the study, limitations of the study, and delimitation of the study's organisation. The second chapter examined the study's literature review. The third chapter concentrated on the study's research methods, which included the research paradigm, research design, research approach, study area, study population, sampling technique and sample size, data collection instruments and procedure, data analysis, validity and reliability, and ethical considerations. Chapter four examined the findings offered, analysed the findings, and responded to the questions sent out. The final chapter summarised the findings, conclusions, and recommendations based on the findings.

## CHAPTER TWO

### LITERATURE REVIEW

#### Introduction

This chapter of the study draws out a review of key literature regarding how institutional pressures and sustainability culture influence the sustainable performance of Ghana's Food and Beverage manufacturing firms. The chapter has been segregated into three parts: theoretical review, empirical review, and conceptual framework. Thus, this chapter provides a thorough analysis of the literature's philosophy, principles, and research findings. The theoretical analysis sets the study's theoretical foundation; the empirical review includes other researchers' work. This chapter collects facts to be reviewed to substantiate the study.

#### Theoretical Review

Theories are essential to academic success. Academic research involves theories to explain relationship dynamics and foresee scientific occurrences, and analyses to test ideas (Fernando, Jabbour & Wah, 2019). Ponte (2019) described a theory as a prism for explaining occurrences. Theories underpin study in many fields. Theories help explain phenomena and establish a clear philosophical structure (Gebre-Borojo & Yushi, 2020). This research uses institutional theory, the resource-based view theory and the Denison sustainability model.

#### Institutional Theory

The institutional theory is a renowned theory particularly associated with both social and organisational studies. The institutional theory has been highly recognised since Meyer and Rowan introduced it in the late 1970s.

According to the institutional theory, the institutional environment creates a set of implicit and explicit rules in domains such as organisational structure and behaviour, with conformity to the rules being a requirement for membership within that institutional field (Meyer & Rowan, 1977). In other words, the institutional theory states that external forces act as determinants of strategic actions firms undertake (Scott, 2018).

Furthermore, Scott (2018), stated that as a result of the demands of the institutional theory, firms in recent years do regard their social legitimacy as equally important as their economic activities. DiMaggio and Powell (1983) state that firms' actions to shape organisational structure are derived from institutional constraints enforced by professionals and state agencies. Organisations that conform to institutional rules and expectations come to be regarded as legitimate and secure the requisite resources for survival and growth (Meyer & Rowan, 1977) and, while organisations that resist institutional rules 'are more vulnerable to claims that they are negligent, irrational or unnecessary' (Meyer & Rowan, 2006).

The foundational proposition of institutional theory is that organisations tend to become increasingly isomorphic over time as they collectively incorporate templates for organising from their institutional environments in search of legitimacy (Heugens & Lander, 2009). The theory identifies three conceptually different mechanisms through which organisations come to reflect their institutional environments: coercive, mimetic and normative isomorphism (DiMaggio & Powell, 1983), with isomorphism being defined as a constraining process that forces one unit in a

population to resemble other units that face the same set of environmental conditions (DiMaggio & Powell, 1983).

Corporations institutionalise people and structures by adding values or limitations to their internal activities and procedures (Chu, Yang, Lee & Park, 2017). A focal business firm's function in the institutional process is central to the institutional theory's paradigmatic aim (Hwang, Colyvas & Drori, 2019). Institutional theory has three pillars: regulatory, cultural, and normative (DiMaggio & Powell, 1983). It provides institutional rules and regulations that promote sustainable economic growth, which gives institutions legitimacy to operate in the business environment (Scott, 2018). The cultural pillar of institutional theory is based on the idea that informal norms and regulations governing social behaviour are closely linked to the culture and subculture's macro-operating social system.

Inconclusive sense, the institutional theory plays a fundamental role in establishing the theoretical nexus between institutional pressures and the sustainable performance of Food and Beverage manufacturing firms. By featuring as the leading theory underpinning the study, the theory unearths how focal manufacturing firms trade on the three pillars (regulatory pillar, cultural pillar and normative pillar) of institutional theory to facilitate compliance with internal and external business environment pressures in search of operational legitimacy. In other words, the institutional theory advises that by complying with the mechanisms of the institutional theory (coercive, normative and mimetic pressures), manufacturing organisations such as Food and Beverage firms can attain a desired level of operational legitimacy, such as improved sustainable or general firm performance.

### **The Resource-Based View (RBV)**

According to RBV, a company's internal qualities and surroundings affect its performance (Famiola & Wulansari, 2019; Mishra & Yadav, 2021; Wong & Ngai, 2021). RBV theory says a company's various resources provide unique, hard-to-copy capabilities (Caldeira & Ward, 2003). RBV helps organisations obtain and maintain competitive advantage through a variety of resources (Thornhill & Amit, 2003). Strategic decisions rely on these inputs to the production process (Barney, 2011). These resources' large range of services creates heterogeneity (Caldeira & Ward, 2003).

Differentiation boosts productivity (Galera-Zarco, 2016). Edelman, Brush, and Manolova (2005) say the RBV explains disparities in business performance by how efficiently their resources are pooled. According to Maijanen (2020), valuable, uncommon, unique, and non-substitutable resources guarantee a long-term competitive edge. Alvarez and Barreto (2018) define semi-permanent resources as tangible and intangible assets. Intangible assets are knowledge-based, while physical assets are property-based. Intangible assets are more likely to provide a long-term competitive advantage than tangible assets due to their unidentifiability (Mrazkova, 2019).

Such companies can outperform rivals by relying heavily on internal resources. This study relies heavily on RBV. A company's sustainability culture can be compared to its intangible assets, which distinguish it from competitors. The firm's sustainability culture affects how resources are allocated to maintain or increase performance. Human resources interactions shape the firm's identity. Mrazkova (2019) says a company's most precious

resource is its employees, hence its sustainability culture is crucial for long-term competitiveness.

RBV theory enhances organisation autonomy while preparing to change business operations. RBV's approach characterises internal operational processes, rules, and philosophies as organisational resources, such as incorporating online networks into tendering. When improving focal manufacturing enterprises' sustainable performance, the organisation can easily achieve industry benchmark standards by introducing sustainable-driven operational policies and strategies that promote organisational behaviour to sustainable operations (Subramaniam, Iranmanesh, Kumar & Foroughi, 2019). RBV approach ensures organisations manage internal business processes with great sensitivity till they grasp processing efficiency might link to competitive advantage (Zhang, Pawar & Bhardwaj, 2017).

Human resource demographics provide non-imitable personal abilities that give the organisation a unique and sustainable identity and affect long-term success (Werner & Balkin, 2021). Multiple studies link gender, age, academic accomplishment, and experience to sustainable performance (Boohene, 2006; Werner & Balkin, 2021). RBV research has been criticised for not identifying a single resource crucial to corporate success (Iakovleva, 2004). The idea has helped us comprehend resource allocation, competitive advantage maintenance, and rents (Boohene, 2006). It also helped us grasp how to use resources creatively (Irava & Moores, 2010).

The Resource-based View Theory will assist establish a link between sustainable culture and sustainable performance. Thus, the RBV theory will help uncover how manufacturing firms can rely on internal competence, such

as a culture of sustainability, to drive or improve their sustainable performance, and how Food and Beverage manufacturing firms can leverage their internal resource competencies to adopt and pursue sustainable initiatives, policies, and strategies to influence their sustainable performance.

### **Denison's Model of Sustainability Culture**

As prior studies claimed, the sustainability culture in organisations has been subjectively debated (Hofstede, Hofstede & Minkov, 2010). Classical scholars in the late 1990s and early 2000s argued that a body corporate's culture of sustainability is mostly reliant on internally developed corporate values, philosophies, strategic directions, etc., rather than external commercial considerations. Adopting and implementing a sustainability culture in a company's operations depends completely on internal considerations. Recent pressures from external institutions and the external business environment on corporate establishments to act sustainably in all aspects of their business operations have lingered (Bag, Pretorious, Gupta & Dwibedi, 2021).

Gupta and Kumar (2013) argued that a company's culture's durability depends on internal and external business factors. This is true since industrial rules, government enactments, social and economic factors, etc. influence a company's sustainable culture. Similarly, a company's mission and vision have contributed to its longevity (Lagrosen & Lagrosen, 2019). Galpin, Whittington, and Bell (2015) adopted the balancing sustainability culture model by Denison, Hooijberg, Lane, and Lief, 2012. Metz, Ilies, and Nistor (2020) say Denison's model of corporate culture sustainability provides holistic components. Thus, Denison et al. (2012) propose a paradigm that examines both internal and external lenses to promote a culture of

sustainability in company operations. The approach emphasises mission, consistency, adaptation, and involvement in a sustainable organization's culture. Each feature has three sub-dimensions. The Denison model assumes the internal focus driving sustainability in a corporate institution and gives the audience the exterior focus going sustainability as a corporate culture.

Denison's model focuses on mission (strategic direction, goals, and vision) and consistency (core values, agreement and coordination and integration). Leleux and Van der Kaaij (2019) said the Denison model's internal focuses include a company's internal impositions and objectives for a sustainable culture. As such, these focuses are mostly within the control of the business establishment and are voluntary steps to functioning with sustainability ingrained in corporate culture. It was suggested that sustainability-inclined purpose and vision statements distinguish world-class sustainable corporate establishments from unsustainable corporate establishments in the recent decade in business (Sharma, Prakash, Kumar, Mussada, Antony & Luthra, 2021).

External concentration complements Denison's inward focus (Fatoki, 2019). The Denison model's external focus is adaptability (generating change, customer attention, and organisational learning), and involvement (empowerment, team orientation and capability development). The adaptability sub-dimension of the Denison model illustrates the actions corporate entities take to respond to genuine challenges from business stakeholders (Yang, Sun, Zhang & Wang, 2017). Wahyuningsih, Sudiro, Troena, and Irawanto (2019) noted that environmental regulatory authorities, customers, and other environmental stakeholders continue to compel

manufacturing-based entities to adhere to industrial performance and norms. This emphasises adaptability. Business units establish a culture of sustainability by encouraging upstream actors to follow sustainable practises or operational requirements (Bakhsh Magsi, Ong, Ho & Sheikh Hassan, 2018).

### **Conceptual Review**

Research is done by looking at and evaluating knowledge that is already out there on a particular theme. This is known as a conceptual review (Harrington, 2016). The conceptual review is presented in this portion of the literature review. In particular, the main constructs used in this research are institutional pressures (coercive normative and mimetic), sustainability culture and sustainable performance.

### **Institutional Pressures**

Institutional pressures can come in a variety of forms. Mbore (2021) described institutions as value-infused organisations. Institutions are not only organisational. Ideologies or states that represent a stable social order or pattern can also represent institutions (Silva & Figueiredo, 2017). Marriage, prejudice, the presidency, and academia are institutions without visible structures. These institutions are strengthened by supporting mechanisms and socially acknowledged value systems. Institutions are "common standards and typifications that designate social actor categories and their proper behaviours or relationships" (Kauppi & Hannibal, 2017, p13).

In an organisational field, organisations and institutions interact. Many credits DiMaggio and Powell's (1983) work on the 'iron cage' with introducing corporate sectors to organisation theory. Why are organisations so similar? Organizations undergo institutional pressures and adopt similar processes and

practices to survive. Increasing organisational similarity causes isomorphism. DiMaggio and Powell (1983) classified institutional forces as coercive, mimetic, and normative. These influences cause organisations to take on the formal and substantive qualities of organisations with which they interact and depend, according to DiMaggio and Powell (1983). Because of these influences, organisations adopt identical organisational elements, contributing to industry or economic homogeneity (DiMaggio & Powell, 1983).

### **Institutional Isomorphism**

As posited by D'Andreanmatteo, Ianni, Rangone, Paolone, and Sargiacomo (2019), institutional isomorphism refers to “a constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions”. Institutional theorists see organisational action as a result of exogenous sources that modify corporate decision-making (Heugens & Lander, 2009). The theory has been used to explain specific organisational structures and ideals (Weerakkody, Dwivedi & Irani, 2009). Adopting legitimated elements increases an organisation’s survival probability, as legitimacy is needed to gain support from one’s constituents (Lamin & Zaheer, 2012; Maclean & Benham, 2010). Conformance with what is legitimate simultaneously leads to an organisation’s isomorphism with its environment (Kauppi & Hannibal, 2017).

According to Zhang, Zhang and Chang (2021), isomorphic institutional pressures originate from regulatory structures, cultural practices, and the influence of dominant organisations and explain the cohesion of organisations, fields and industries (DiMaggio & Powell, 1983). Firms seek the approval of – and thus follow the guidelines from – these actors as they provide essential

support for firm legitimacy (Heugens & Lander, 2009). The institutional pressures that drive isomorphism and guide what is legitimate, as defined by DiMaggio and Powell (1983), take three forms: coercive, normative and mimetic.

### **Coercive Pressure**

Somjai and Jermittiparsert (2019) defined coercive pressure as official and informal pressures on an organisation from its environment. Coercive pressures occur when larger organisations force weaker ones to follow orders. Coercive pressures include government restrictions, ethics, cultural standards, and financial constraints. Companies detect a "forceful strategy, persuasion, or invitation to engage" when these attributes are used directly or indirectly (Chen, Fuller, & Zheng, 2018). Legal sources, governments, and influential enterprises can also exert coercive pressure (Kauppi & Hannibal, 2017). Multinational companies might force suppliers to adopt international quality standards (Haque, 2020). CSR is pushed by activists, NGOs, and consumers (Castka & Balzarova, 2008). International labour rules are low due to inadequate control, and activists want them raised.

Centralized resources within a field increase the potential for coercive pressures, according to DiMaggio and Powell (1983). Papadimitriou (2011) said that because organisations depend on stakeholders for help, they are 'obligated or choose to conform to institutional pressures because of their dominant rationality to mobilise resources. Coercive pressure in organisations is characterised by reliance on resources to maintain financial stability (DiMaggio & Powell, 1983). Non-profits generally rely on government funding, indicating they function in a politically regulated atmosphere

(DiMaggio & Powell, 1983). The government can affect non-profit operations and programming in a politically controlled setting (DiMaggio & Powell, 1983). In a politically regulated environment, organisations face coercive pressures in the form of government requests.

### **Mimetic Pressures**

Mimetic pressures develop when an organisation duplicates another's behaviour, structure, and decisions for legitimacy (DiMaggio & Powell, 1983). Mimicry pressure causes organisations to establish similar structures, operations, and programmes, according to Jaja, Gabriel, and Wobodo (2019). To establish legitimacy, organisations replicate others' operations and initiatives. Legitimacy can boost a nonprofit's resource support (Tsinopoulos, Sousa, & Yan, 2018). Furthermore, mimetic pressures can stem from the lack of clarity within non-profit organisations (Leiter, 2005). An organisation with a problem may find a solution through informal networking (O'Brien & Slack, 2004). In this case, the solution comes from another organisation, not the contact. In both circumstances, the management would duplicate another organization's method to reduce ambiguity.

Ambiguous long- and short-term organisational goals might cause uncertainty. Leiter (2005) said that stress within an organisation causes a strong tendency to mimic successful organisations' operations, structure, and programmes. Galaskiewicz and Wasserman (1989) linked mimetic pressures to social networks between companies in the same industry. Informal or formal contact between organisations creates social networks. Suppose a manager is unsure about a company's operations or programmes. In that instance, the manager could ask another manager who has successfully fixed

the issue for help. Operational, structural, and programme elements will be similar. This creates a homogeneous organisation field.

### **Normative Pressures**

Kauppi and Hannibal (2017) argue that normative pressures involve organisational domains that influence the field and profession. Trade associations, professional associations, and accrediting bodies are normative institutions (Heugens & Lander, 2009). They develop ethical codes (Smelt, 2021). DiMaggio and Powell (1983) highlighted those normative pressures are connected to new rules and professionalisation. Employees' past experiences with other organisations or specific training from a learning institution might alter an organization's structure, operations, and programmes (i.e., university or college). An individual's affairs in other organisations can transmit professional experience from one organisation to another.

These experiences can come from other organisations, volunteer work, auditing, or board service. Organizations tend to hire professionals, which might put normative demands on organisational processes (Leiter, 2005; Wheeler, 2017; Smelt, 2021). Yang (2018) described professional training as "formal education legitimised by a specialist's cognitive base." Management, marketing, accounting, and economics can be taught to organisations. Toinpre, Mackee, and Gajendran (2018) defined professional experiences as the expansion and elaboration of professional networks across organisations, arguing that professional experiences from one organisation can be handed over to other organisations through job possibilities. By recruiting professionals, organisations within a field will typically have comparable

decision-making patterns, resulting in similar marketing strategies, policies, procedures, and strategic goals.

### **Sustainability Culture**

Galpin, Whittington and Bell (2015) define culture as a group's way of life. Soini and Dessein (2016) noted that, just as culture is important in traditional cultures, it is also crucial to an organization's success. Braithwaite, Herkes, Ludlow, Testa, and Lamprell (2017) said the culture in any social or organisational setting redefines or shapes behavioural conformity to accepted social values or corporate objectives. Turi, Sorooshian, and Javed (2019) agreed with Braithwaite et al. (2017) that organisational culture is goal-directed. Since Banerjee (2003) conceptualised sustainability culture, it has experienced conceptual changes. Originally called environmental orientation, then green organisational culture, and now sustainability culture (Braithwaite et al., 2017). The evolution of the triple bottom line approach over the years is the main reason for modifying the concept of sustainability. Thus, the idea needed to cut across the tripartite component of sustainability holistically: the environment, the people, and the economy of company operations.

According to Schönborn, Berlin, Pinzone, Hanisch, Georgoulas, and Lanz (2019), sustainability culture is the corporate concept of pursuing environmental, social, and economic goals internally and externally. Fraj-Andres et al. (2009) defined sustainability culture as an organisational culture that minimises the negative influence of a company's economic processes and activities on the three pillars of sustainability. Matinaro and Liu (2017) confirmed Fraj-Andres et al. (2009)'s definition of sustainability culture as an organisational behavioural philosophy. Due to its legitimate authority to

promote cultural and social discourse, it governs the strategic method employed to achieve organisational goals and objectives. Howard-Grenville and Bertels (2012) say a company's environmental and social actions depend on its culture. Manufacturing firms must operate for business continuity and success. Its desire to increase economic wealth does not sacrifice the environment and people.

### **Sustainable Performance**

Badi and Murtagh (2019) define sustainable performance as a comprehensive look at issues like the environmental impact of corporate activities in emerging and developed economies. Sustainable performance ensures societal well-being by fulfilling human needs and caring for renewable and nonrenewable resources (Kamble, Gunasekaran, & Gawankar, 2020). It is widely used in supply chain management (De Nadae, Carvalho & Vieira, 2019). Many companies coordinate sustainability due to public awareness, legislation, and market pressure (Badi & Murtagh, 2019). Most scholars describe sustainability performance through the firm-stakeholder relationship (Wood & Jones, 1995). Stakeholders care about a company's activity (Ponte, 2018).

They include notable groups (Wood, Mitchell, Agle, & Bryan, 2021). From employees, shareholders, or customers to governments, NGOs, local communities, or interest groups, all can effect business aims (Wood et al., 2021). Employees can diminish productivity, suppliers can deliver lower-quality materials, NGOs can lobby for or against a firm, and governments can enact laws that promote or hinder a firm's activities. A company needs stakeholder support to fulfil its aims (Wood & Jones, 1995). A corporation

expects and promotes employee contracting. It wants a licence and favourable laws.

Sustainability shows stakeholder engagement. Sustainability is evaluated by stakeholders. Sustainability performance links this firm's interests with its stakeholders', helping it achieve its aims (Wood & Jones, 1995). A sustainable company has cheaper salaries, better employees, and creative managers (Badi and Murtagh, 2019). It reduces regulation and attracts socially conscious consumers. The literature explains companies' sustainability performance by their environmental and social stakeholders (Brammer & Millington, 2004), the effect on the natural and social environment (Bansal & Roth, 2000), and readiness to minimise stakeholders' pressures (Delmas & Toffel, 2008). Sustainability initiatives can be proactive responses to government legislation (Aragon-Correa, Hurtado-Torres, Sharma, & Garcia-Morales, 2008) or interest group activism (Baron, Harjoto, & Jo, 2009).

### **Empirical Review**

This empirical review section is developed according to the study's specific objectives. The review will help provide arguments and findings of prior researchers and outline areas of consensus and disagreement, thereby helping avoid previous errors committed by the earlier scholars. The review will also guide refining the problem statement and developing hypotheses.

### **Coercive Pressure and Sustainable Performance**

Masocha and Fatoki (2018) examined the role of coercive isomorphic pressures on the sustainable development practices of SMEs at Capricorn District Municipality in Limpopo Province of South Africa. The institutional theory underpinned the paper and adopted a quantitative approach. The paper

used a self-administered questionnaire to survey study responses from 222 SME owners and managers. Survey data for the study were analysed using Structural Equation Modelling (PLS) and SPSS version 24. Results of the paper posited that coercive forces as an element of institutional pressure isomorphism positively influence the sustainable practices of SMEs in the Limpopo Province. The report further evidenced that coercive pressures trigger intentions to adopt economic and environmental practices much more than it does the social practices of SMEs. Thus, it was claimed that coercive pressures such as government rules and regulations and consumer and trade supplier pressures are predominantly key to attaining sustainable practices by SMEs. Finally, the paper also directly affirmed the findings of past studies, which asserted that coercive pressure as an isomorphic institutional pressure positively influences environment management practices

Also, Esfahbodi, Zhang, Watson and Zhang (2016) examined the role of governance coercive pressure on the adoption of Sustainable Supply Chain Management practices in the United Kingdom. Secondly, the study examined whether Sustainable Supply Chain Management can yield favourable environmental and economic returns. The institutional theory underpinned the study and made use of structured questionnaires to collect study data. An online-based survey collated responses from 146 managers of selected manufacturing firms. The study adopted Structural Equation Modelling as an analytical processing tool. The study reveals a favourable link between coercive pressures and environmental performance, a component of sustainable performance, and Sustainable Supply Chain Management techniques among UK manufacturing businesses. The study indicated a

weaker link between Sustainable Supply Chain Management and economic performance. Coercive demands, SCM methods, and environmental and economic performance were linked. Coercive forces push firms to implement SSCM, underlining the significance of governance. Anchored on these observed empirical and theoretically based findings, the study proposes that;

*H1a: There is a positive effect of coercive pressures on the sustainable performance of Ghana's Food and Beverage manufacturing firms.*

### **Normative Pressure and Sustainable Performance**

A study that assessed the influence of institutional pressures (coercive, mimetic and normative) on environmental performance in Pakistan was conducted by Abdul, Muhammad, Muhammad and Asad (2019). Environmentally Friendly Business Strategies were used in a mediating capacity in the study. The institutional theory underpinned the study and a cross-sectional design was used for the study's undertaken. The study sampled 219 CEOs to be the respondents to the survey. The study found that coercive, normative, and mimetic institutional pressures positively affect environmentally friendly business strategies (EFBS). EFBS has a positive association with Environmental Performance. Institutional forces positively enhance environmental performance, but the association is weak. EFBS mediates the link between institutional demands and environmental performance.

A study was conducted by Ajibike, Adeleke, Mohamad, Nawi, Bamgbade, Riazi and Fauzi (2020). The study sought to examine and draw inferences on the effect of institutional pressures (coercive, normative and mimetic) on the environmental performance of construction firms in Malaysia.

The study drew its theoretical foundation from the institutional theory. They adopted a systematic literature review since a qualitative approach was employed. Institutional pressures are directly associated to environmental performance, according to the research review. Both coercive and normative constraints were found to have a positive and strong link with environmental performance. Coercive demands from government and other regulatory organisations are considered as a catalyst for adopting environmentally-conscious practices. Institutional training and professionalism can also boost environmental performance. The link between mimetic pressures and environmental performance was poor. Based on these observed empirical and theoretical foundations, the study proposes that;

*H1b: There is a positive effect of normative pressures on the sustainable performance of Ghana's Food and Beverage manufacturing firms.*

### **Mimetic Pressure and Sustainable Performance**

Acquah, Essel, Baah, Agyabeng-Mensah, and Afum (2021) studied the effect of isomorphic pressures on the adoption of green procurement, product, and process innovations in emerging countries from the perspective of Ghanaian manufacturing enterprises. The quantitative analysis used stakeholder and institutional theories. The study used survey research. From the Ghana Manufacturing Association's database of 2000, 322 respondents were chosen. Data were analysed using PLS-SEM. The study found that institutional pressures drive green procurement. Institutional pressures have a positive link with green product and process innovation among Ghanaian manufacturing businesses. Green procurement, process innovation, and product innovation were positively connected with financial performance and

organisational legitimacy, according to the poll. Green process innovation and economic performance were unrelated in the study. The report recommended green manufacturing to boost business sustainability.

A study was undertaken by Zhu and Sarkis (2007) in China. The study sought to examine the moderating effects of institutional pressures on emergent green supply chain practices and performances among Chinese manufacturing companies. The institutional theory underpinned the study. The study employed the quantitative approach to the papers' undertaken. A total of 341 sample sizes were used. Chinese manufacturers have been under pressure to embrace Green Supply Chain Management methods, according to the report. Coercive and normative pressures increase organisations' environmental performance, according to the study. High coercion propels manufacturing enterprises to implement green purchasing and investment recovery. Mimetic pressure affects GSCM adoption but not environmental performance. The study hypothesised that none of the institutional pressure isomorphisms generates "win-win" conditions for manufacturing enterprises. Based on these observed empirical discoveries, the study proposes that;

*H1c: There is a positive effect of mimetic pressures on the sustainable performance of Ghana's Food and Beverage manufacturing firms.*

### **Institutional Pressures (Coercive, Normative and Mimetic Pressures) and Sustainability Culture**

Dai, Xie and Chu (2021) examined the impact of internal supply chain capabilities and institutional pressures on sustainable supply chain management in China. The Institutional and RBV theories underpinned the

study and adopted both a quantitative research approach and an explanatory research design. Structured questionnaires were used to collect study data. Random sampling was significantly employed to sample 172 study respondents. The study adopted the use of Smart PLS to process the study data. The study concluded that institutional pressures and internal sustainability capabilities simultaneously and jointly influenced the implementation of sustainable supply chain management practices. Interestingly, the study found that institutional pressures positively and significantly influenced internal sustainability capabilities. Based on these observable empirical discoveries, the study proposes that;

*H2a: There is a positive effect of coercive pressures on the sustainability culture of Ghana's Food and Beverage manufacturing firms.*

Dubey, Gunasekaran, Childe, Papadopoulos, Hazen, Giannakis and Roubaud (2017) assessed how institutional pressures (coercive, normative and mimetic) motivate organisations to shape Performance Measurement Systems (PMS) for sustainability benchmarking in India. Also, the study tried to reveal how such investigated effects are moderated by organisational culture. The study was anchored on institutional theory and adopted a quantitative approach. Credence was given to use a survey design with 277 responses sampled. Issues of non-response Bias tests were undertaken and statistically addressed. The study revealed positive and significant relationships between the various distinctive institutional pressures and social performance, environmental performance and economic performance of the performance measurement system for sustainability benchmarking. However, flexible orientation did not significantly moderate the relationship between mimetic

pressures and the triple dimension of PMS. Meanwhile, control orientation significantly moderated the relationship between institutional pressures and PMS. Based on these observable empirical discoveries, the study proposes that;

*H2b: There is a positive effect of normative pressures on the sustainability culture of Ghana's Food and Beverage manufacturing firms.*

Martinez-Ferrero and Garcia-Sanchez (2016) examined how country and industry-specific effects of institutional pressures (coercive, normative and mimetic pressures) on the implementation of sustainability reporting. The study was undertaken among multinational companies on Forbes' list of top 2000 firms. The neo-institutional theory underpinned the study and adopted both a quantitative research approach and an explanatory research design. 696 firms were randomly sampled and used to collate responses. Results from the study established a positive relationship between the respective institutional pressures (coercive, normative and mimetic) and sustainable reporting. Furthermore, the study advanced that firms who operate in countries that have robust legal systems and cultural development or industries which highly ascribe to sustainability issues, such firms are very likely to explain sustainability reporting. Based on these observable empirical discoveries, the study proposes that;

*H2c: There is a positive effect of mimetic pressures on the sustainability culture of Ghana's Food and Beverage manufacturing firms.*

### **Sustainability Culture and Sustainable Performance**

Galpin, Whittington and Bell (2015) conducted a study to present a multidisciplinary model that can be used as a road map for practicing

managers to create a sustainability-focused culture within their organisations and guide future research into the relationship between organisational culture and sustainability. The study was undertaken in the United States of America. The study adopted an exploratory research design and a qualitatively approach. A systematic literature review of sustainability and organisational culture outcomes was reviewed. By the nature of the study, since it was undertaken qualitatively, there was no relevant need to assess the preliminary statistical credence such as data normality, reliability, and common method biases. The systematic review findings direct that building an organisational system/ philosophy that fosters a culture of sustainability results in positive employee- and organisational-level sustainability performance.

Adebayo, Worlu, Moses, and Ogunnaike (2020) evaluated an organization's processes to ensure a sustainable working environment in Nigeria. The study operationalized sustainability culture (core values, reporting system, task performance, clarity of responsibilities, thoughtful considerations, and distinctive identity) as an exogenous construct and environmental performance as an endogenous construct. The study used the RBV theory and a quantitative and explanatory research design. The study used structured questionnaires. Randomly picked were 358 participants. Data were processed using Smart PLS. The study found that organisational culture favourably affects FMCGs' environmental performance. Institutional pressures greatly affected internal sustainability; the study revealed. Environmental task performance was the least important subconstruct. Based on these observable empirical discoveries, the study proposes that;

*H3: There is a positive effect of sustainability culture on the sustainable performance of Ghana's Food and Beverage manufacturing firms.*

### **Mediating effect of Sustainability Culture on the relationship between Institutional Pressures and Sustainable Performance**

Marshall, McCarthy, McGrath and Claudy (2015) investigated what drives the adoption of different social sustainability supply chain practices in Ireland. The study adopted a mixed-method research approach. A total of 156 study respondents were sampled for the undertaking of this study. Results of the study evident that; sustainability culture had a positive and significant relationship with both basic sustainability practices and advanced sustainability practices. The study also identified a positive relationship between entrepreneurial orientations and advanced social sustainability supply chain practices implementation and sustainability culture. A positive and significant moderation effect of entrepreneurial orientation was evident between the relationship of sustainability culture and socially sustainable supply chain adoption.

Küçükoğlu and Pinar (2016) examined the effect of sustainability drivers on green innovation in Turkey; the mediating role of green organisational culture (sustainability culture). The study sampled 162 out of the top 500 companies published by the Istanbul Chamber of Industry from 2010 to 2012. The study adopted a quantitative approach and an explanatory research design. A cross-sectional survey was used to collate study responses. Statistical Package for Social Sciences version 20 analysed the study's data. Sustainability drivers positively impacted green innovation, according to the study. Sustainability drivers were also linked to green innovation. Green

organisational culture was also linked to green innovation. Green company culture mediated the statistical association between sustainability drivers and green innovation, the study found.

Roscoe, Subramanian, Jabbour and Chong (2019) examined the relationship between Green Human Resource Management, Green Organisational Culture, and Environmental Performance among manufacturing firms in China. The classic Human Resource Management theory underpinned the study and adopted a quantitative approach together with an explanatory design. The study randomly sampled 204 respondents. The study adopted the Covariance structural equation approach to analysing study data. Results of the study evidence that Green HRM has a significant relationship with Green organisational culture and environmental performance. Furthermore, green corporate culture statistically regressed environmental performance. Lastly, a mediating influence of green organisational culture was observed between the relationship of Green HRM and environmental performances. Anchoring on the observed empirical and theoretical precedence, the study proposes that;

*H4a: Sustainability culture mediates the relationship between coercive pressures and sustainable performance of Ghana's food and Beverage manufacturing firms.*

*H4b: Sustainability culture mediates the relationship between normative pressures and sustainable performance of Ghana's food and Beverage manufacturing firms.*

*H4c: Sustainability culture mediates the relationship between mimetic pressures and sustainable performance of Ghana's food and Beverage manufacturing firms.*

#### **Lessons Learnt from Empirical Studies.**

Due to the need to push sustainable business practices, studies on institutional pressures continue to receive attention in social settings. The empirically reviewed studies on institutional pressures among social entities for this study were largely conducted in Europe, Asia, and the Americas (Zhu & Sarkis, 2007; Esfahbodi, Zhang, Watson & Zhang, 2016; Dubey, Gunasekaran, Childe, Papadopoulus, Hazen, Giannakis & Roubaud, 2017; Ajibike, Adeleke, Mohamad, Nawi, Bamgbade, Riazi & Fauzi, 2020). The socio-economic factors and systems in Pakistan, Europe, the Americas, and Africa differ or are different. Therefore, F&B enterprises in Africa must assess institutional pressures on sustainable goals.

Most empirical research evaluated for this study used a quantitative method (Zhu & Sarkis, 2007; Esfahbodi, Zhang, Watson & Zhang, 2016; Dubey, Gunasekaran, Childe, Papadopoulus, Hazen, Giannakis & Roubaud, 2017; Masocha & Fatoki, 2018; Abdul, Muhammad, Muhammed & Asad, 2019; Acquah, Essel, Baah, Agyabeng-Mensah & Afum, 2020). This exonerated approach to scientific-based research allowed the writers to perform objective experiments and provide objective data for an epistemological study. This study will employ quantitative data to disclose facts.

To obtain objective and statistically sound findings, almost all empirical studies reviewed for this study used a research questionnaire to

collect primary data (Zhu & Sarkis, 2007; Esfahbodi, Zhang, Watson & Zhang, 2016; Dubey, Gunasekaran, Childe, Papadopoulos, Hazen, Giannakis & Roubaud, 2017; Masocha & Fatoki, 2018; Abdul, Muhammad, Muhammed & Asad, 2019; Acquah, Essel, Baah, Agyabeng-Mensah & Afum, 2020). To ensure the reliability and validity of these structured questionnaires, measurement scales from prior empirical studies with good Cronbach alphas and GMOs were used. This study used current empirical measuring scales to establish reliability and validity.

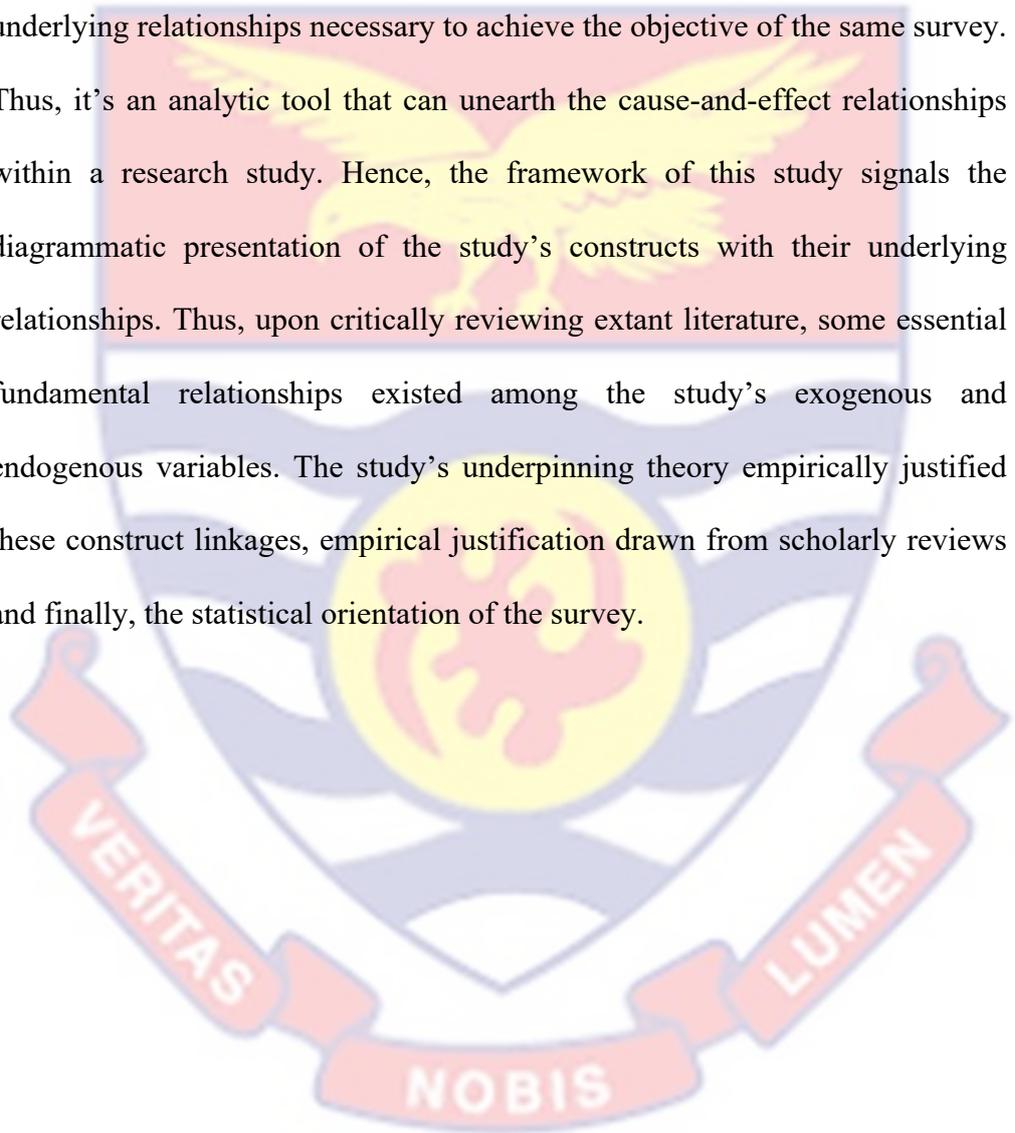
The empirical research assessed used the PLS-SEM data processing method (Esfahbodi, Zhang, Watson & Zhang, 2016; Dubey, Gunasekaran, Childe, Papadopoulos, Hazen, Giannakis & Roubaud, 2017; Masocha & Fatoki, 2018; Abdul, Muhammad, Muhammed & Asad, 2019; Acquah, Essel, Baah, Agyabeng-Mensah & Afum, 2020). Statistical acceptability and increasing use of Partial Least Square-Structural Equation Modeling indicate its robustness. To analyse the study's primary data, PLS-SEM will be used.

A critical and in-depth literature review revealed that existing empirical studies on institutional pressures for sustainable performance focused on environmental performance and ignored other dimensions (Zhu a& Sarkis, 2007; Roscoe, Subramanian, Jabbour & Chong, 2019; Abdul, Muhammad, Muhammed & Asad, 2019; Ajibike, Adeleke, Mohamad, Nawi, Bamgbade, Riazi & Fauzi, 2020). Few research addressed environmental performance and another sustainable performance feature, but not the third (Esfahbodi, Zhang, Watson & Zhang, 2020). This gap in the literature warrants more research. So, they looked at institutional pressures on

sustainable performance holistically, considering social, environmental, and economic indices.

### **Conceptual Framework**

According to Steinert (2021), a conceptual framework presents a diagrammatic and analytical visualisation of a study's constructs and their underlying relationships necessary to achieve the objective of the same survey. Thus, it's an analytic tool that can unearth the cause-and-effect relationships within a research study. Hence, the framework of this study signals the diagrammatic presentation of the study's constructs with their underlying relationships. Thus, upon critically reviewing extant literature, some essential fundamental relationships existed among the study's exogenous and endogenous variables. The study's underpinning theory empirically justified these construct linkages, empirical justification drawn from scholarly reviews and finally, the statistical orientation of the survey.



Institutional Pressures

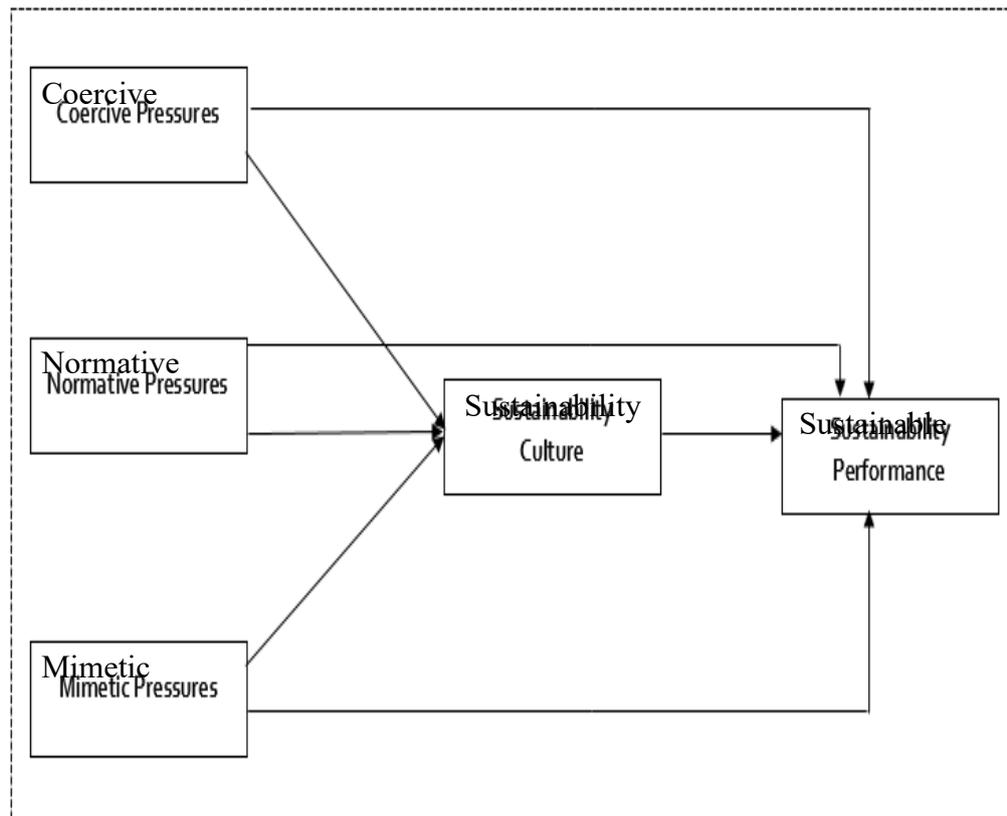


Figure 1: Conceptual Framework

Source: Field Survey, Appiah (2022)

The study's conceptual framework was constituted by some exogenous variables and an endogenous variable. Per the nature of the study, the exogenous variables were made up of the three forms of institution pressures: coercive pressures, normative pressures and mimetic pressures and sustainability culture. In contrast, the endogenous variable was sustainable performance.

The study's inclusion of coercive, normative, and mimetic pressures in the survey's conceptual framework as exogenous constructs against sustainable performance empirically justifies this study's institutional theory. Also, empirical findings for scholarly studies affirmed the positive influence

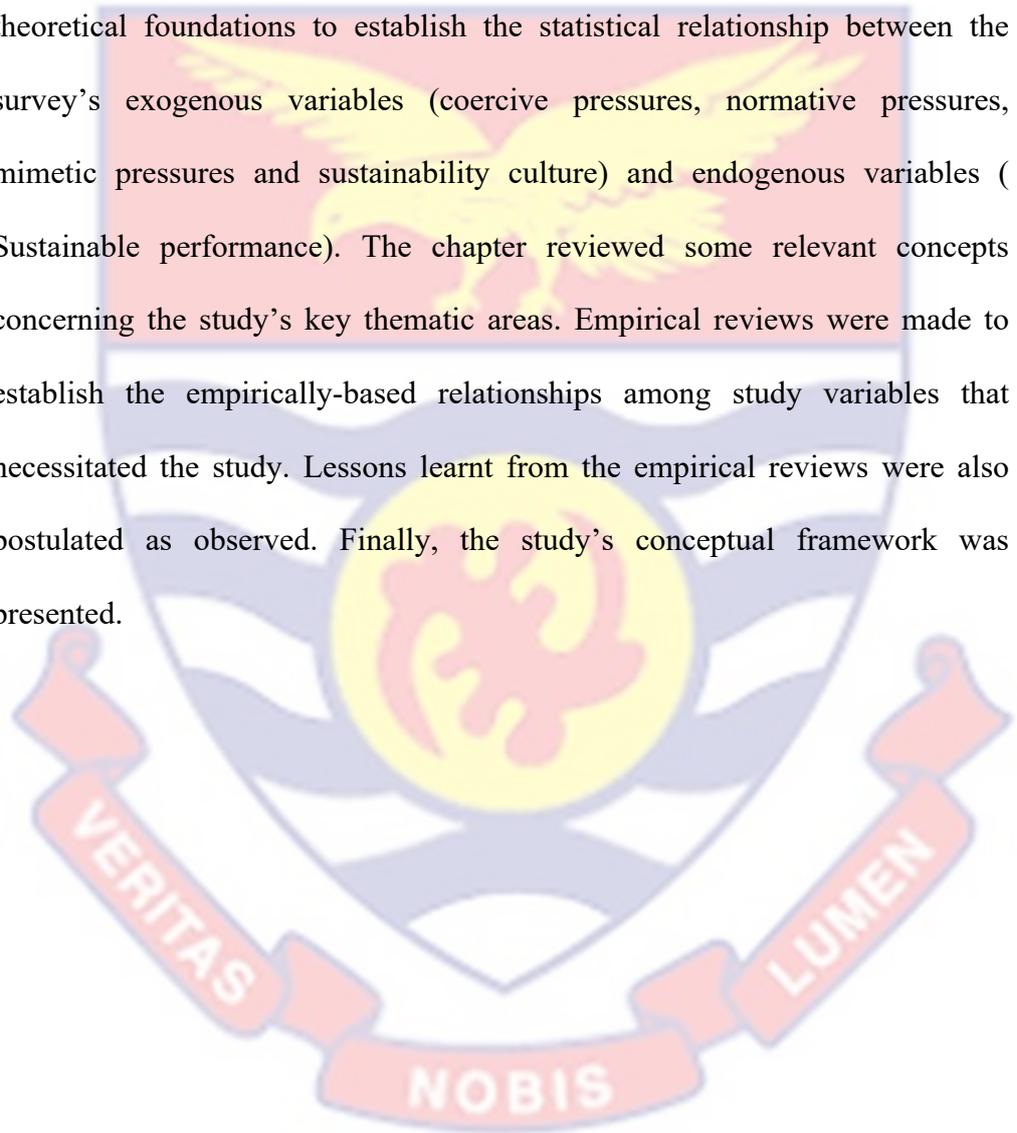
of the respective institutional pressures being able to harness sustainable outcomes such as improved sustainable performance when duly adhered to by focal business organisations (Dubey et al., 2017; Masocha & Fatoki, 2018; Abdul et al., 2019; Ajibike et al., 2020). All these underpinned by the institutional theory established a significant relationship between the respective institutional pressures and sustainable production outcomes such as sustainable performance.

Furthermore, the construct of sustainability culture was included in the survey's conceptual framework due to the theoretical underpinning of the Resource-based View theory. This theory asserted that, for a focal business organisation to achieve sustained competitive advantage or improved operational efficiencies, such firms need to rely on a rare, valuable and non-substitutable resource to build that sustained competitive advantage or outcome firms so desire. Additionally, the survey review of scholarly literature advanced some commendable statistical relationships between sustainability culture and sustainable operational outcomes, such as sustainable performance (Marshall, McCarthy, McGrath & Claudy, 2015; Roscoe et al., 2019).

Due to the nature of the study's conceptual framework, it was envisaged that the distinctive institutional pressures (coercive, normative and mimetic pressures) would positively affect the sustainable performance of Ghana's Food and Beverage manufacturing firms. Furthermore, sustainability culture among Ghana's Food and Beverage manufacturing firms is thought to enhance the ability of Ghana's Food and Beverage manufacturing firms to adhere to institutionalised pressures to attain sustainable performance standards.

## Chapter Summary

A brief introduction was given to the purpose of the study. The chapter subsequently divided this entire section into three main parts: theoretical review (and conceptual review), empirical review, and conceptual framework. Institutional theory and the Resource-Based View theory were used as theoretical foundations to establish the statistical relationship between the survey's exogenous variables (coercive pressures, normative pressures, mimetic pressures and sustainability culture) and endogenous variables (Sustainable performance). The chapter reviewed some relevant concepts concerning the study's key thematic areas. Empirical reviews were made to establish the empirically-based relationships among study variables that necessitated the study. Lessons learnt from the empirical reviews were also postulated as observed. Finally, the study's conceptual framework was presented.



## CHAPTER THREE

### RESEARCH METHODS

#### Introduction

This chapter concentrated on the methods used in the study. To address the research query, it presents processes, tools and techniques used to collect and analyse data. Thus, methodological issues such as research philosophy, research design, research approach, population, and sampling strategy were stringently discussed in this chapter. It also presented issues such as data processing, analysis, and ethical considerations.

#### Research Philosophy

The philosophical paradigm describes the creation of knowledge and the essence of knowledge. Specific ideas, attitudes, and worldviews influence every researcher during the study process (Marsonet, 2019). According to Saunders, Lewis, and Thornhill (2016), research philosophy is a set of ideas and assumptions about how knowledge develops. Individual researchers' ideas about these elements will often drive them to adopt a qualitative, quantitative, or mixed-methods approach to their study (Kivunja & Kuyini, 2017). Saunders et al. (2016) emphasized that “Positivism, critical realism, interpretivism, postmodernism, and pragmatism” are the five fundamental research ideologies. This study adopted the positivist philosophy. The positivist philosophy reflects the assumption that absolute truth can be applied to the study of phenomena through a scientific approach (Kivunja & Kuyini, 2017; Kamal, 2018; Kankam, 2019).

Therefore, the study assumes that objective results relating to the specific research objectives would be produced to inform scientific evidence-

based decision-making through the application of scientific research methodology. Empiricism is the main characteristic of positivism. It posits objective universal reality, regulated by universal laws and mechanisms; thus, it is factual sensed by human senses in the environment (Kankam, 2019). Objectivity is the focus of the positivist philosophy against the backdrop of testing hypotheses or theory and highlighting both the researcher and the research as separate structures through distancing (Taysum, 2017). The positivist paradigm helps in generating generalizable replicable findings (Saunders et al., 2016). On the other hand, positivism is criticized because it focuses on only observable phenomena at the expense of unobservable phenomena (Sekaran & Bougie, 2016).

According to Saunders et al. (2016), positivism is the philosophical framework that holds subjects that can be scientifically tested and generalise the results. Positivists, therefore, emphasise the processes of analysis that would contribute to the generation of facts that are not affected by human interpretation. The study is expected to establish hypotheses using the current theories. The theories were used to test and validate, in whole or in part, or debunked, leading to the further advancement of the hypothesis that further testing would then be undertaken (Creswell, 2009; Saunders et al., 2016). Positivism offers objective facts and has the objective of universal truth that deals with human activities in management sciences, according to Saunders et al. (2016) and Sekaran and Bougie (2016). The key aim of the philosophy of the positivist research model is to clarify the relationships between cause and effect. It is an apt guide for this research, provided that hypotheses will be

tested and relationships formed based on the theories of Institutional theory and Resource-based View theory.

### **Research Approach**

According to Saunders, Lewis and Thornhill (2016), there are three broad research approaches: quantitative, qualitative, and mixed methods. While the quantitative approach enables the researcher to examine associations between variables, the qualitative approach deals with minor aspects of social reality (Sekaran & Bougie, 2016). Saunders et al. (2016) advanced that the difference between quantitative and qualitative research methods may be influenced by the nature of data used for the study. Whereas numeric data is used in quantitative analysis, non-numeric information is utilized in qualitative research.

Neuman (2014) posited that the two approaches could also be differentiated regarding the data collection and analyses procedure. For example, whereas in quantitative research studies, a questionnaire is predominantly used by researchers for data collection, however, in qualitative research studies, an interview section or guide is used by researchers for data collection. Sekaran and Bougie (2016) and Saunders et al. (2016) indicated that the third approach, a mixed-method, is merely a combination of the earlier two techniques. The authors further asserted that whilst the quantitative research method permits the generalisation of the sample results to the entire population; the qualitative research method is not for the generality of the sample results for the whole population.

The study was grounded in the positivists' philosophy, which believes truth exists and can be verifiable through quantitative techniques (Saunders,

Lewis & Thornhill, 2019). Therefore, the study employed the quantitative research approach based on the nature of the study purpose, specific objectives, and the primary data collected and analysed. The constructs, by nature, are measurable and subjectable to statistical manipulation. This is due to the nature and purpose of the study under consideration. The current research demanded that the researcher collect numerical data that would be analysed quantitatively.

In spite of the quantitative approach being statistically prone to the drawback of not allowing follow-up answers asked of respondents, being costly as compared to qualitative approach studies, too much focusing on numerical values which might have the potency of being misleading and individual characteristics not generalisable, quantitatively executed surveys have the proven advantage of validating study data to eliminate subjective doubts, be undertaken on large sample size, quicken the decision making process, ensure the anonymity of study respondents and most importantly allows perceptions or feelings to be measured in quantifiable values which also eliminate the subjectivity of study findings Saunders et al., 2016).

The current study also demanded that the study's results be generalised to the entire population. Tashakkori and Teddlie (2010) averred that those quantitative methods are often considered deductive because inferences from tests of statistical hypotheses result in general inferences about the characteristics of a population. Lincoln, Lynham and Guba (2011) view that a quantitative approach to research is directed toward developing testable hypotheses and generalisable theories across settings. The factors raised earlier

are the reasons behind choosing a quantitative research approach against the qualitative research approach or a mixed method.

### **Research Design**

According to Sekaran and Bougie (2016) and Saunders, Lewis and Thornhill (2007), research design may be classified into three categories based on the study's goal: exploratory, descriptive, and explanatory. According to Creswell (2014), research designs are techniques of analysis used in qualitative, quantitative, and mixed methodologies research that offer precise instructions for processes. Saunders and Tosey (2013) stress the acceptability and application of three primary types of research designs, namely exploratory, descriptive, and widely utilised explanatory. It was emphasised that each study design had a specific application.

According to Sekaran and Bougie (2016), exploratory research designs are created expressly for studies in which an inquiry into nature is conducted to uncover new information and results. And such an exploratory strategy is often employed in qualitative research to elicit information about the unknown. Similarly, Nassaji (2015) bolstered the arguments of Dulock (1993), Lans and Van der Voordt (2002), and Sekaran and Bougie (2016) that the descriptive research method is primarily appropriate for investigations aimed at more effectively organising and summarising data. The descriptive nature often aids researchers in identifying, describing, and evaluating the qualities of a community of persons in any setting (Simon, 2011). Finally, the explanatory design is suited for investigations that attempt to establish causal links between study concepts or variables (Subedi, 2016).

Due to the nature of the research problems, study objectives, and research questions, and the study's rationale of examining the cause-and-effect relationship between the respective institutional pressures and sustainability culture on Ghana's Food and Beverage manufacturing firms' sustainable performance, the study adopted an explanatory research design. According to Hardy and Williams (2011), the research design should be determined in light of the research setting, research challenge, possible limits, and underlying paradigm of the study. This study used an explanatory design.

Despite the explanatory design being fallible to presenting mere coincidences among survey variables as a cause-and-effect relationship, causality is inferred making it stringently difficult to validate with a high degree of certainty, identifying the relationship but seemingly difficult to clearly substantiate which variable causes an effect on the other variable(s); the use of an explanatory research design will aid the easy replication of research if the evidence demands it to be, it will improve the internal validity of survey data as the study will applaud a systematic selection of study respondents (Kekeya, 2016).

### **Study Area**

The study was carried out among manufacturing firms operating within the Food and Beverage manufacturing industry. The Food and Beverage manufacturing industry is a fast-growing secondary industry that is partially embedded within the agricultural industry and the hospitality or tourism sector of the Ghana economy. The industry is widely stretched across the whole country. Thus, the industrial constituent of the Food and Beverage manufacturing industry are dispersed all over within the nation's jurisdictional

borders. In the past fifty to sixty (50-60) years, the Food and Beverage industry has been solely responsible for the manufacturing and provision of food and beverage items that are either produced within the local Ghanaian market or imported into the Ghanaian market.

The industry boasts of significant contribution to the economic growth of Ghana since it emerged as far as 1953. Key among the industry's contribution is the contribution it makes to Ghana's Gross Domestic Product in the past years which had served as one of the financial bedrocks sustaining the economic finances of the country (Ghana). Also, the industry doubles up as one of the active sectors employing huge numbers of the workforce being constituted by both nationals and expatriates.

However, the operations of the food and beverage firms across Ghana have come under questionable scope after it has been clearly evident that the industry in spite of its positive contributions to the Gross Domestic Product of the county, employment opportunities, improving the standard of living while providing nutritional food and beverage items, the Food and Beverage industry has been known as one of the key destroyers of the natural environment as a result of the negatives impacts of their radical business operations. This has amounted to significant concerns being raised about the operational legitimacy of the industry within the Ghanaian economy.

### **Study Population**

Kothari (2004) describes the population as a whole society with similar measurable features of individuals, events or artefacts. The population is the entire aggregation of causes that fulfil a designed set of criteria (Graneheim & Lundman, 2004). The study targeted all registered and licensed food and

beverage manufacturing in Ghana. These licensed firms were located within the sixteen regions of Ghana. As a result, the survey targeted all 456 registered and licensed Food and Beverage industries in Ghana (Food and Drug Authority, 2021). Out of the total population, 104 of the licensed Food and Beverage firms operated on a small/micro-scale while 71 operated on a medium-scale and the remaining 281 licensed firms operated on a large-scale basis (Food and Drug Authority, 2021). Due to the nature of the survey, operational managers and other functional managers who are well informed and exposed to the study's subject of interest from each licensed Ghana Food and Beverage manufacturing firm were used as a proxy. The survey focused on registered and licensed firms in the whole of Ghana.

### **Sampling Procedure**

According to Ofori and Dampson (2011) and Sekaran and Bougie (2016), a sample is the representative portion of the population selected for the study. Saunders et al. (2016) advanced that the rationale behind using sample surveys instead of the census by scholars is that complete coverage of the entire population is difficult when dealing with a large population. This means that sample surveys help researchers conduct studies most efficiently when a large population is involved. Sekaran and Bougie (2016) further advanced that sampling can be broadly categorised into two main designs: probability sampling and non-probability sampling.

According to Sekaran and Bougie (2019), whereas probability sampling design permits each element of the population to have a known and a non-zero chance of being selected to be included in the sample, non-probability design sampling design does not allow each of the elements of the

population to have a known case of being selected. In addition, rigorous quantitative studies usually utilise probability sampling designs because of their unbiasedness in choosing the sample for the research and their ability to grant the researcher the generalisation opportunity of the study results. In contrast, non-probability sampling designs are generally utilised in qualitative studies because of the subjectivity associated with selecting the sampling unit for a study (Saunders et al., 2016). Out of 456 licensed Ghana Food and Beverage manufacturing firms, the study sampled 216 licensed Food and Beverage manufacturing firms. This sample size is justifiable by Yamane's sample size determination formula (1967).

The formula is given as;

$$n = \frac{N}{[1+N(e)^2]}$$
$$n = \frac{456}{[1+456(.05)^2]}$$
$$n = 213$$

Where  $n$  = sample size;  $N$  = population frame; and  $e$  = margin of error. A margin of error of 5%, as suggested by Yamane (1967), was applied.

Based on the purpose of this study, a probability sampling design was deemed appropriate and was employed for the current study. Furthermore, a sampling technique used in the sampling design is the stratified sampling technique. A stratified random sampling technique was used to select the number of respondents from the sampling frame. Stratified sampling is a probability sampling procedure in which the target population is first separated into mutually exclusive, homogeneous segments (strata), and then a simple random sample is selected from each segment (stratum) (Sekaran & Bougie, 2016). The samples selected from the various strata are then combined into a single sample. This sampling procedure is sometimes referred to as "quota

random sampling (Saunders et al., 2016).

For all elements of the population, the target population was defined to start the stratified sampling procedure, the stratification variables were identified to determine the number of strata to be used for the study. The stratification variables were related to the purposes of the study. The study made subgroup estimates based on the stratification variables which were related to the subgroups. The availability of auxiliary information often determines the stratification variables that are used. More than one stratification variable was used for the study. However, in order for the study to provide expected benefits, the was related to the variables of interest and be independent of each other. The existing sampling frame was identified and developed which included information on the stratification variable(s) for each element in the target population. The sampling frame included all information on the stratification variables.

The sampling frame was evaluated for under coverage, over coverage, multiple coverage, and clustering to make adjustments where necessary. The sampling frame was divided into strata, categories of the stratification variable(s), to create a sampling frame for each stratum. Within-stratum differences were minimized, and between-strata differences were maximized. The strata constituted the entire population. The strata were independent and mutually exclusive subsets of the population. Every element of the population was in one and only one stratum. A unique number was assigned to each element in the strata. A sample size was determined for each stratum.

The numerical distribution of the sampled elements across the various strata determined the type of stratified sampling that is implemented. The

study used proportionate stratified sampling to select the sample size. In proportionate stratified sampling, the number of elements allocated to the various strata is proportional to the representation of the strata in the target population (Saunders et al., 2016). That is, the size of the sample drawn from each stratum is proportional to the relative size of that stratum in the target population. As such, it is a self-weighting and EPSEM sampling procedure (Sekaran & Bougie, 2016). The same sampling fraction is applied to each stratum, giving every element in the population an equal chance to be selected (Saunders et al., 2016).

The resulting sample is a self-weighting sample. This sampling procedure is used when the purpose of the research is to estimate a population’s parameters (Saunders et al., 2016). The study randomly selected the targeted number of elements from each stratum. At least one element was selected from each stratum for representation in the sample, and at least two elements were chosen from each stratum for the calculation of the margin of error of estimates computed from the data collected. This is also a necessary condition for predictive research (Creswell, 2014). Table 1 presents the proportional stratified sampling.

**Table 1: Proportional Stratified Sampling for Sample Size Used**

Category	Population (N)	Sample (%)	Sample (n)
Micro/Small	104	22.80	49
Medium	71	15.60	34
Large	281	61.60	133
Total	456	100.00	216

Source: Author’s Sample, (2022)

## Data Collection Instruments

For statistical analysis, the research utilised primary data. A standardised close-ended self-administered questionnaire was the data collection instrument used for the study data collection. In Social Science Research, this is very convenient (Lavrakas, 2008). A questionnaire is a structured collection of questions (Malhotra, Melville & Watson, 2013) to elicit information from respondents of a study to address the research hypotheses and achieve the goals set for this study; close-ended questions were used to produce the answers needed.

The close-ended questions asked the respondents to choose from a given set of solutions and to enable the respondent to independently of the other option to evaluate each possible response. After careful analysis of the literature relating to the particular objectives of the research, this instrument was chosen. Malhotra et al. (2013) said that if factual information is required from many people, the use of a questionnaire is a realistic way forward. Based on the literature review, the nature of the questionnaire was determined. Most of the questions used were adapted and updated from previous studies and were evaluated in the previous research by the author; thus, this study can be seen as relevant questions (Sekaran et al.,2016)

The close-ended questions adopted the checklist, a list of actions, attributes, or other individuals that the researcher is examining. It also used a Likert scale, which is more helpful if behaviour, attitude, or other phenomena of interest need to be evaluated in a continuum, according to Leedy and Ormrod (2010). Sekeran and Bougie (2016) clarified that questionnaires have multiple advantages over the approach of an interview. One such advantage is

that questionnaires are not tricky but easier to manage than interviews. Close-ended questions benefit from making analysis easy and efficient and have given the researcher the ability to monitor the study's data flow (Leedy & Ormrod, 2010). Saunders et al. (2016) suggest that, for instance, mailed surveys are incredibly resourceful in providing the researcher with information in a relatively short time at a low cost.

The questionnaire used for the study included four (4) sections with 46 items: A, B, C and D. Sections A, B and C were used to collect data on institutional pressures, sustainability culture, and sustainable performance. Section D was used to gather the respondents' data, and variables were calculated categorically. All items in sections A, B and C were measured on a seven-point Likert scale, with 1= "Never", 2= "Almost Never", 3= "Rarely", 4= "Sometimes", 5= "Often", 6= "Very Often" and 7= "Always". It was estimated that responding to the questionnaire survey demands thirty-five minutes. All respondents answered the same set of questions, and all the survey answers were viewed as fully anonymous individuals. However, some demographic information was requested at the beginning of the questionnaire. Dowson and McInerney (2011) warn that researchers should be mindful of collecting restricted and potentially skewed information using questionnaires as a data collection method.

## **Measurement of Variables**

### **Institutional Pressures**

Institutional Pressures (coercive, normative and mimetic pressures)

The study measured institutional pressures with sub-dimensions such as coercive, normative, and mimetic. These constructs as exogenous variables

employed for the undertaking of this study were calculated based on the itemisation used by Teo, Wei and Benbasat, 2003 and Bansal, 2005. Each construct measuring institutional pressures (i.e. coercive pressures, normative pressures and mimetic pressures) was measured with five (5) statistically validated indicators.

### **Sustainability Culture**

As illustrated and subsequently employed in this study, the exogenous construct of sustainability culture was measured as itemised by Denison's Model of sustainability culture. The model itemised twelve (12) indicators.

### **Sustainable Performance**

Statistically, sustainable performance for this study was considered an endogenous variable on which the other exogenous variables were investigated. The construct was measured in this study based on the itemisation from empirical studies undertaken by Hami, Muhamad and Ebrahim, 2015, Abdul-Rashid, Sakundarini, Ghazilla and Thurasamy, 2017 and Afum, Osei-Ahenkan, Agyabeng-Mensah, Owusu, Kusi and Ankomah (2020). This construct was conceptualised with fourteen (14) statistically reliable indicators.

### **Data Collection Procedure**

A formal writing ethical clearance was sought from the Internal Review Board section of the University of Cape Coast. This formal letter for data collection was subsequently approved on 8th October 2021. Later, an arrangement was made with the Department of Marketing and Supply Chain Management to draft an introductory letter furnished to the management of Food and Beverage Manufacturing firms to seek their general consent to

include their organisation as a participant organisation in this noble study. Such approval was solicited after the principal researcher had taken the time to explain the study's rationale in full detail. Upon organisation inclusion request being granted, a formal introduction was initiated between the principal researcher, research field assistants and the designated respondents authorised to participate in the study.

The principal once again sought the respondents' consent and assured them that under no circumstance would this academic study personalise their identity to a response or substantial contributions. Since not all respondents were literate, the language used throughout was English and local languages. Respondents were taken up with how to complete the questionnaire and instructed to respond well to the questions as much as possible. The principal researcher and his field assistants negotiated a favourable schedule for the data collection instrument administration and subsequent collection since the "drop-and-pick" survey approach was most proffered. The study data collection instrument was officially self-administered from 19th July 2021 to 4th August 2021. To ensure a total response rate to the study, the principal researcher and his field assistants graced the data collection period with an additional one (1) week ending 11th November 2021.

### **Data Processing and Analysis**

Before being transferred to the PLS-SEM format, the collected data were processed in Excel for inspection. The next step was to enter the data into a database so that the complete data file can be used for data analysis in light of the study's objectives. Due to the convenience of online data collecting, the research experienced fewer cases of missing information (Hair

et al., 2017). To prevent respondents from skipping over questions, online data might be set up to prevent them from moving on to the next one if they do not answer a certain one. As a result, fewer records are missing (Ringle et al., 2015). Mean value replacement was used to account for the small number of missing data that was seen during the study (Hair et al., 2017). In addition to statistical analysis, the study visually inspected the responses and analysed descriptive data for each responder to look for any out-of-the-ordinary patterns. There are several noteworthy findings, but no abnormal ones (Sharma, Shaikh, Bekoe & Ramasubramanian, 2021; Ringle et al., 2015).

Both IBM SPSS version 26 and Smart PLS version 3 were used in this analysis. The hypotheses of the study informed the choice of statistical software (SPSS for descriptive analysis and Smart PLS for structural equation modelling analysis). Descriptive statistics and percentages were utilised to describe the respondent's demographic characteristics. Earlier empirical research used analogous methods (Ringle et al., 2015). The following criteria were applied to each study objective:

1. Examine the effect of institutional pressures on the sustainable performance of Ghana's Food and Beverage manufacturing firms. This objective was analysed using structural equation modelling (Hair, Sarstedt, Matthews & Ringle, 2016).
2. Assess the effect of institutional pressures on the sustainability culture of Ghana's Food and Beverage manufacturing firms. This objective was analysed using structural equation modelling. (Hair, Sarstedt, Matthews & Ringle, 2016).

3. Analyse the effect of sustainability culture on the sustainable performance of Ghana's Food and Beverage manufacturing firms. This objective was analysed using structural equation modelling. (Hair, Sarstedt, Matthews & Ringle, 2016).
4. Examine the mediation effect of sustainability culture on the predictive effect of institutional pressures on the sustainable performance of Ghana's Food and Beverage manufacturing firms. This objective was analysed using structural equation modelling (Nitzl, Roldan & Cepeda, 2016).

### **Response Rate**

As postulated by Sekaran and Bougie (2016) in their study, the percentage proportion of total sampled study correspondents who actually participate in a given statistical study is referred to as the response rate. Ringle et al. (2015) also idealized an acceptable threshold for acceptance of a response rate for further analysis. The threshold commends that, a survey response rate between 70-100% is deemed as being excellent, while those between 60-69%, 50-59% and below 50% are thought to be very good, good and unsuitable for quantitative analysis respectively.

Based on the insight from the database of the Food and Drugs Authority (2021), the survey sampled and dispensed two hundred and fifty (250) online questionnaires to licensed Food and Beverage manufacturing firms in Ghana. Out of these 216 responses received (Google Form Questionnaire), two hundred and sixteen active responses were received from study correspondents signalling a survey response rate of 86.4 per cent.

Congruence to the idealized acceptable threshold for survey response rate, this survey's response rate was deemed appropriate.

### **Validity and Reliability**

In evaluating an instrument to obtain correct information from the respondents, data reliability and validity are fundamental principles to be considered. The Alpha value of Cronbach calculates the reliability level of a measuring instrument. According to Irvine, Drew, and Sainsbury (2013), according to the consistency of data gathering, three major weaknesses are a mistake of the subject or participant, bias, and observer error. Gerlach and Eriksson (2021) suggested that a measuring instrument's internal consistency includes correlating the answers to each question with other questions in the questionnaire. On the other hand, the validity of an instrument denotes how well an instrument tests the particular definition it is intended to measure (Gerlach & Eriksson, 2021). They added that an instrument must be accurate before it can be legitimate, which means that a measuring instrument must be reliably reproducible. After this has been done, the instrument can then be scrutinised to decide if it is what it claims to be.

The investigator critiqued other related literature, such as studies (Curtis, Carpenter & Hoffman, 2016), to ensure the validity of questionnaires, which served as proof and validated the answers found using the questionnaire, the importance of which was determined by the essence of their research question and their judgment (Saunders et al., 2016). This aligns with Zikmund, Babin, Carr and Griffin (2013) that explanatory studies are carried out, unlike exploratory research, after the researcher has obtained a firm understanding of the situation being examined. In addition, before distributing

it to the respondents, the crafted questionnaire was presented to the project supervisor for vetting, correction, and approval before subsequently pretesting the crafted questionnaire. With the internal consistency approach (Cronbach's Alpha), the constructs' reliability which made up the scale was calculated. Table 2 presents the pretested construct reliabilities for the study's variables;

**Table 2: Result of Constructs Reliabilities (Pre-test)**

No	Construct	Cronbach's Alpha	No. of items
1	Coercive Pressures	0.604	5
2	Normative Pressures	0.597	5
3	Mimetic Pressures	0.674	5
4	Sustainability Culture	0.730	12
5	Sustainable Performance	0.813	15

Source: Field Survey, Appiah (2022)

The Cronbach Alpha values of the pretest evident reliability scores above 0.700 for the study's constructs. Thus, reliability of the constructs is assured.

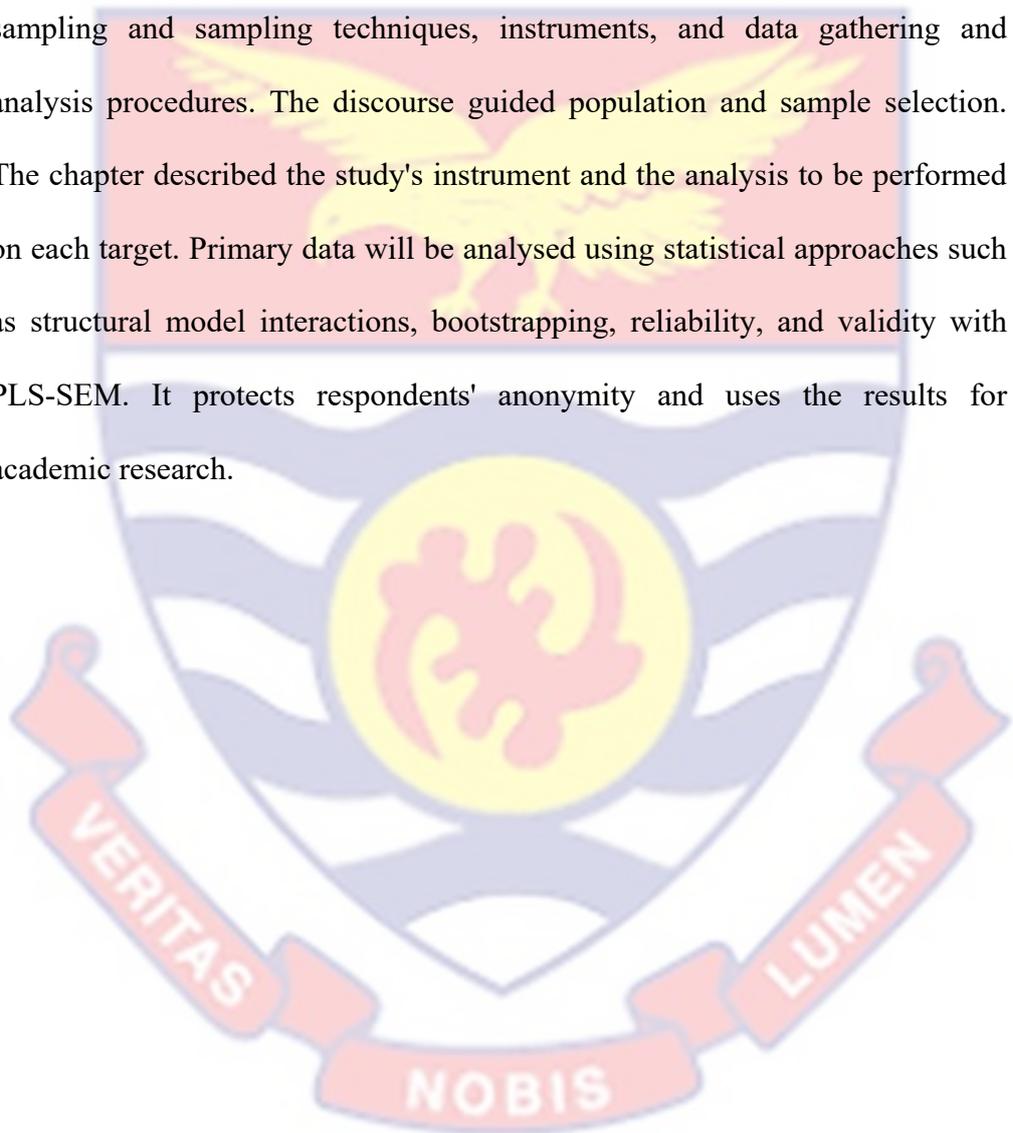
### **Ethical consideration**

Ethical concerns were strong, as the researcher was not known to most of the workers of all the selected Ghana's Food and Beverage manufacturing firms. This study was reviewed and accepted by the Ethical Clearance Committee of the University of Cape Coast before the questionnaires were circulated. The quality of responses depended on closed and objective responses, as the research study was intended to offer a deeper explanatory insight concerning the construct under investigative interest. It was important for participants to have a high bit of trust in the researcher's honesty. The researcher pledged anonymity and confidentiality to all participants and did

not assign comments to individuals. The researcher also made sure the responses generated from the field survey were not subjectively or objectively influenced from the researcher's end.

### **Chapter Summary**

This chapter describes the study's research setting, design, population, sampling and sampling techniques, instruments, and data gathering and analysis procedures. The discourse guided population and sample selection. The chapter described the study's instrument and the analysis to be performed on each target. Primary data will be analysed using statistical approaches such as structural model interactions, bootstrapping, reliability, and validity with PLS-SEM. It protects respondents' anonymity and uses the results for academic research.



## CHAPTER FOUR

### RESULTS AND DISCUSSION

#### Introduction

This chapter reports on the research findings derived from the study per the methods described in the previous chapter. The chapter addresses the demographic characteristics of the respondents, as well as descriptive statistics and surveys constructs descriptive statistics. The survey then gives the model specification of the study's constructs, followed by an analysis of the survey's findings of the measurement model and structural models following the statistical techniques adopted.

#### Demographic Characteristics of Respondents

Demographic characteristics of the respondents were descriptively measured with frequency and percentage (%) because these statistical tools are appropriate to measure categorical and ordinal data (Fisher & Marshall, 2009; George & Mallery, 2016). The analysis evaluated the demographic profiles of the gathered data from the respondents. The respondents were asked to state their gender, age, the highest level of education, years of experience, profession, or occupation rank in the Food and Beverage manufacturing sector. Table 3 presents the demographic characteristics of the survey's respondents.

**Table 3: Demographic Characteristics of Respondents**

Variable	Options	Frequency (N)	Percentage (%)
Gender	Male	136	63.00
	Female	80	37.00
Total		216	100.00
Educational Background	Senior High school	3	1.40
	High National Diploma	35	16.20
	Bachelor's Degree	110	50.90
	Post Graduate	59	27.30
	Others	9	4.20
Total		216	100.00
Year of Experience	1-5years	52	24.10
	6-10years	68	31.50
	11-15years	64	29.60
	16-20years	21	9.70
	21years & above	11	5.10
Total		216	100.00
Profession/Occupation	Operations Manager	167	77.30
	Others	49	22.70
Total		216	100.00

Source: Field Survey, Appiah (2022)

The demographic analysis revealed that men made up the majority of the research group (63.00 per cent), while females made up 37.00 per cent. This reflects the nature of male domination in the Food and Beverage manufacturing business and reinforces the assumption that males outweigh women in paid work in most developing nations, including Ghana (Lattof, Coast, Leone & Nyarko, 2018).

Similarly, all respondents have some level of education, with a postgraduate degree is the most significant qualification and a certificate (SSCE/WASSCE) being the lowest. As a result, 27.30% of the 216 respondents claimed a postgraduate degree. Furthermore, around 50.90 per cent have a first degree, while the remainder has a senior high school diploma (1.40 %), an HND (16.20%), or other qualifications (4.20%). Education is a

critical development tool. It ensures that people put theory into practice and improves their reaction in coping with adversity. Furthermore, most respondents hold either a bachelor's or a master's degree, implying that employees have had postsecondary education. This adds value to the industry's employees and raises Ghana's value on the worldwide market.

Finally, 68 of the 216 survey respondents had 6-10 years of job experience. In addition, 64 of the respondents worked for 11 to 15 years in the industry. In addition, 52 of those respondents had worked in the Food and Beverage business for 1 to 5 years. Furthermore, 21 respondents claimed to have worked in the Food and Beverage business for 16-20 years. Finally, 11 respondents said they have worked in the Food and Beverage business for more than 21 years. Work experience is one of the essential cornerstones of any company or sector. Workers with more excellent job experience are more valuable to the organisation for which they work. This is because they are more potent at problem-solving, innovative and possess a firm grasp of specific attributes essential in the workplace. They serve as an information centre for any company or organisation, making their knowledge vital.

Lastly, most respondents held the operations manager position, with a few holding other management portfolios. The preference for the role of operations manager may be attributed to the benefits associated with the position instead of others. Many people are drawn to this position because of the supervisory role, the financial help they receive, and the nature of the work.

### **Model Specification**

To begin analysis in PLS-SEM, the model must be specified. This is accomplished in two steps: first, by defining the measurement model, and second, by defining the structural model (Hair, Sarstedt, Matthews, & Ringle, 2016). The measurement model depicts the link between constructs and their associated indicators or measurements, while the structural model depicts the hypothesised relationships between constructs (Hair, Risher, Sarstedt, & Ringle, 2019). The survey vividly specified the measurement and structural models in the proceeding sections in light of the above discovery.

### **Measurement Model Specification**

The measuring model relates to the indicators used to assess each construct. Thirty-three indicators were utilised in this model to determine the five constructs (coercive pressures, normative pressures, mimetic pressures, sustainability culture and sustainable performance) under consideration. Little rectangles with a yellow backdrop represent these indicators (see Figure 2). Hence, the survey specifies the measurement model: Coercive Pressures: To measure coercive pressure as a critical dimension of institutional pressure, the construct was measured with five (5) indicators. These five indicators were adopted from empirically validated by Teo et al. (2003) and Bansal (2005). To measure the construct coercive pressure, adopted scaled were itemised as CP1, CP2, CP3, CP4 and CP5.

Normative Pressures: This construct also constitutes a critical structural dimension of institutional pressure in the institutionalised business environment. These pressures emanate from the institution of professional standards, vibrant trade unions or associations, and a high level of customer

interaction. The construct was also measured with five (5) indicators and was itemised as NP1, NP2, NP3, NP4 and NP5. Similarly, Teo et al. (2003) and Bansal (2005) adopted the construct normative pressures indicators.

Mimetic Pressures: The last dimension of institutional pressure consider in this survey is mimetic pressures. This kind of institutional pressure is manifested when other business entities mimic desirable practices of successful business rivals to mimic such practices to attain the same operational status as successful business rivals. Mimetic pressures were measured with five (5) indicators similar to normative and coercive pressures. The adopted and empirically validated scales of mimetic pressures were itemised as MP1, MP2, MP3, MP4 and MP5. Teo et al. (2003) and Bansal (2005) used these validated measurement scales.

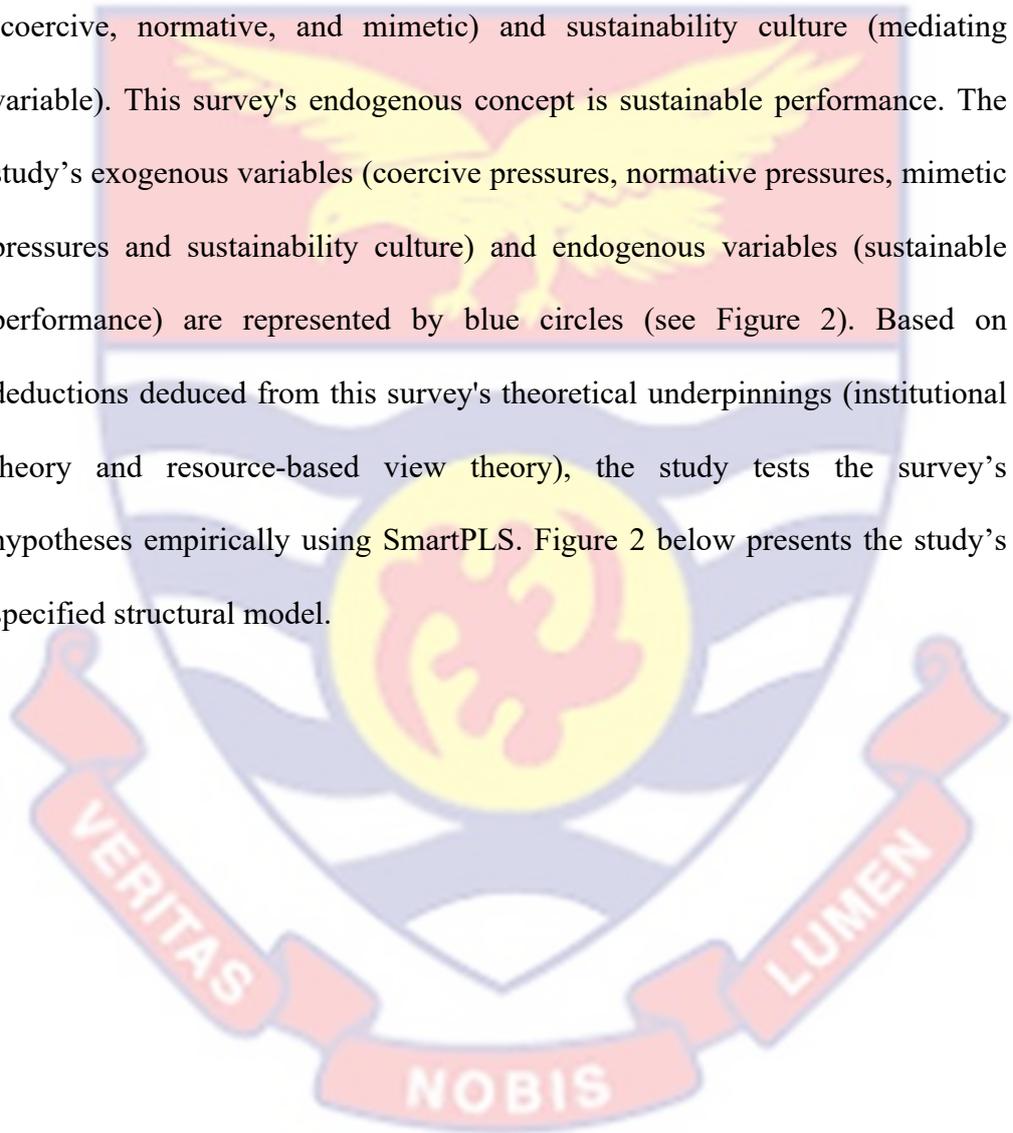
Sustainability Culture: This construct was operationalised in this survey as mediating exogenous variable. The construct of sustainability culture was measured with twelve (12) empirically validated indicators. These itemised scales measuring sustainability culture were adopted from the Denison Model of Green organisations culture 2012. The construct was enumerated as SC1, SC2, SC3, SC4, SC5, SC6, SC7, SC8, SC9, SC10, SC11 and SC12.

Sustainable Performance: Sustainable performance in this survey has been operationalised as the state of manufacturing firms optimising their operational efficiency while not guaranteeing the environment's safety, profit and people. It is the endogenous variable and was measured with fifteen indicators from empirically validated studies (Hami et al., 2015; Abdul-Rashid et al., 2017; Afum et al., 2020). Sustainable performance was

operationalised in the model as SP1, SP2, SP3, SP4, SP5, SP6, SP7, SP8, SP9, SP10, SP11, SP12, SP13, SP14 and SP15.

### **Structural Model Specification**

This study's structural model has four exogenous and one endogenous construct. The study's exogenous constructs include institutional pressures (coercive, normative, and mimetic) and sustainability culture (mediating variable). This survey's endogenous concept is sustainable performance. The study's exogenous variables (coercive pressures, normative pressures, mimetic pressures and sustainability culture) and endogenous variables (sustainable performance) are represented by blue circles (see Figure 2). Based on deductions deduced from this survey's theoretical underpinnings (institutional theory and resource-based view theory), the study tests the survey's hypotheses empirically using SmartPLS. Figure 2 below presents the study's specified structural model.



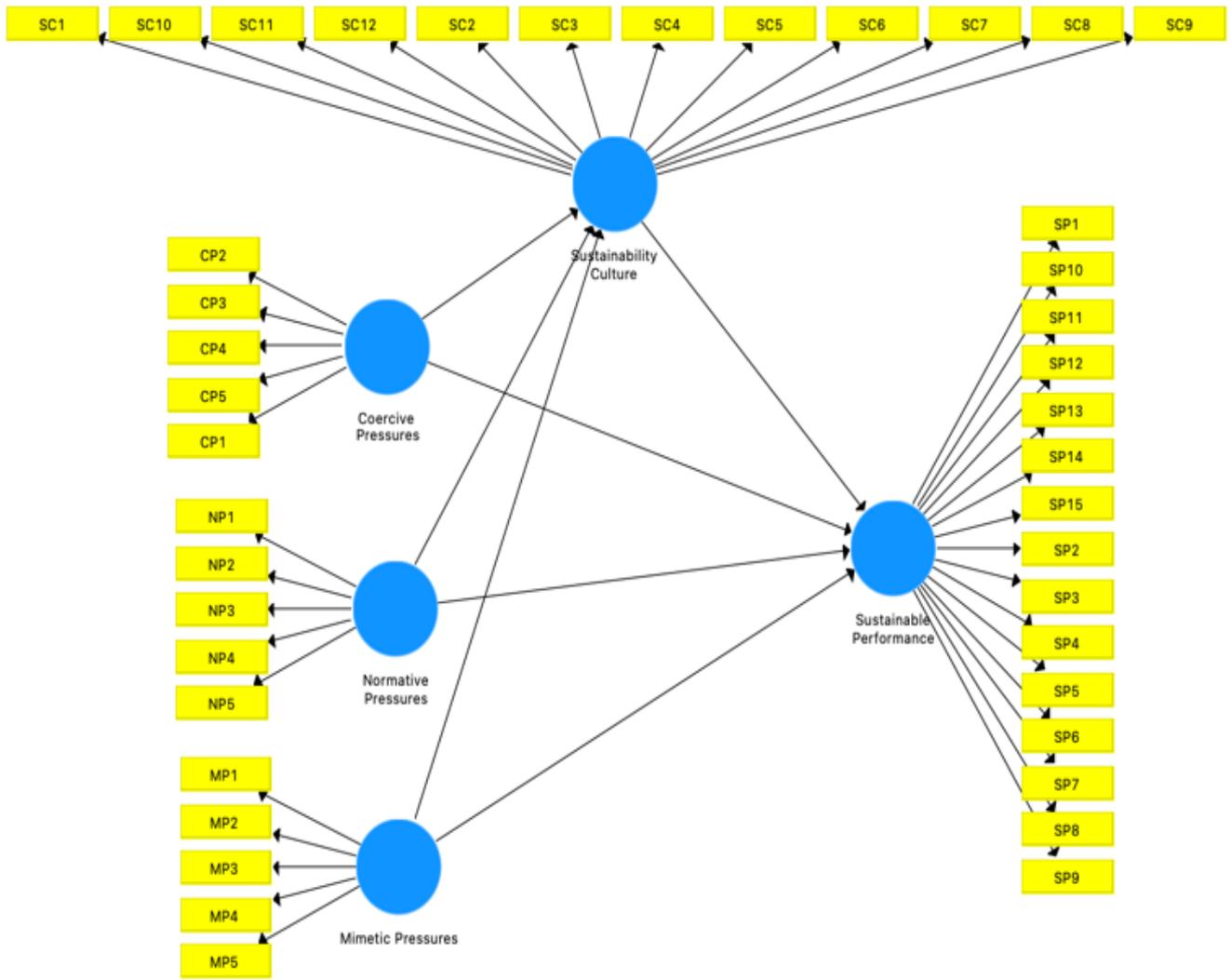


Figure 2: Specified measurement and structural model  
Source: Field Survey, Appiah (2022)

### Measurement Model Assessment

According to Hair et al. (2016), the assessment of the measurement model of a reflective PLS model is a statistical procedure performed to assess the statistical credence of the survey's measurement model before further structural analysis can be undertaken. A study's measurement model should have satisfactory internal consistency reliability, convergent validity, and discriminant validity by attaining statistical credence. Hence, this process is undertaken in a systematic order via SmartPLS.

Cronbach's alpha and composite reliability are used to measure internal consistency. By employing the factor loadings (indicators) and the Average Variance Extracted (AVE), convergent validity is evaluated (Hair et al., 2016). According to Henseler, Ringle and Sarstedt (2015), the Fornell-Larcker criterion, cross-loadings and Heterotrait-Monotrait Ratio criterion are the three statistical tools for assessing discriminant validity. However, for this study, the Heterotrait-Monotrait Ratio criterion was overly relied on to evaluate discriminant validity among the study's constructs.

The HTMT criteria are the almost criterion for measuring discriminant validity since it reflects the upper limit of discriminant validity (Henseler et al., 2015; Hair et al., 2016). Thus, the HTMT represents the most robust means of assessing discriminant validity other than the Fornell-Larcker criterion and cross-loadings criterion, which are also used to determine the discriminant validity of survey constructs. After having specified the survey's model in both structural and measurement terms, the next section of the survey seeks to assess the internal consistency reliability of the study's construct.

### **Internal Consistency Reliability Assessment**

According to Hair et al. (2016), there is satisfactory internal consistency among a study's construct (measurement model as a matter of fact) when such constructs have composite reliability and Cronbach Alpha score above the minimum acceptability threshold of 0.700. Also, Henseler et al. (2015) opined that the composite is deemed the most robust or upper bound assessment for internal consistency reliability in assessing the measurement model for internal consistency reliability. The Cronbach alpha is the lowest

bound assessor of internal consistency reliability. Thus, the constructs' internal consistency reliability is presented in Table 4.

**Table 4: Internal Consistency Reliability Results**

Constructs	Cronbach		Rho_A		Composite	
	Alpha				Reliability	
	Value	T Stat	Value	T Stat	Value	T Stat
Coercive Pressures	0.832	31.967	0.842	36.910	0.888	58.167
Mimetic Pressures	0.962	155.754	0.964	169.765	0.971	210.407
Normative Pressures	0.851	48.195	0.852	49.085	0.900	83.626
Sustainability Culture	0.929	107.745	0.931	115.466	0.941	140.835
Sustainable Performance	0.938	139.485	0.939	145.226	0.947	173.471

Source: Field Survey, Appiah (2022)

The Cronbach's Alpha value (Table 4) showed that the internal consistency was suitable. The Cronbach Alpha value for all the items surpassed the minimal 0.700 cut-off point, observed closely (Hair, Hult, Ringle & Sarstedt, 2016). Considering the Cronbach Alpha acceptability threshold, this survey's constructs per results in Table 4 are suitable and acceptable for further statistical analysis (Hair et al., 2016).

Moreover, the results, as presented in Table 4 of internal consistency with regards to the rho\_A, were satisfactory. The rho\_A value for each item was higher than the threshold of 0.700, which was carefully monitored (Hair,

Hult, Ringle & Sarstedt, 2016). According to Table 4, the constructs used in this survey meet the criteria set by rho\_A and can be used in future statistical analysis (Hair et al., 2016).

Furthermore, the result in Table 4 of the Internal Consistency Reliability also evidenced that all five constructs of interest per this survey attained a composite reliability value above the 0.700 thresholds for composite reliability acceptability as advanced by Hair et al. (2016). In other words, Hair et al. (2019) postulated that when a construct's composite reliability is above 0.700, the construct is deemed to be reliable for further statistical analysis. Thus, based on the results of Table 4 of the survey, the study sanctions that its constructs are reliable since all-composite reliability scores are above 0.7. Having concluded this section by assessing the internal consistency reliability of the study's constructs, the next section shall focus on evaluating the Convergent validity of the study's constructs and their respective indicators.

### **Convergent Validity Assessment**

Convergent validity can only be established if two essential requirements are met: indicator loadings and the average variance retrieved from the data (AVE). Based on their contribution to content validity, Hair et al. (2019) recommends that indications with an outer loading of 0.700 or more be maintained, while those with an outer loading of less than 0.700 should be eliminated. According to the authors, as long as the composite reliability and AVE values fall below the specified minimum value, indications should be evaluated for deletion (Hair et al., 2016). Building on the argument to guarantee the measurement credence of the study's measurement model, Table

5 presents the convergent validity assessment considering the outer loadings and Average Variance Extracted (AVE).

**Table 5: Convergent Validity Assessment Result**

Construct	Items	Loadings	Std. Error	T Statistics	AVE
Coercive Pressures	CP2	0.722	0.053	13.723	0.666
	CP3	0.842	0.027	31.465	
	CP4	0.850	0.026	33.287	
	CP5	0.842	0.028	30.320	
Mimetic Pressures	MP1	0.937	0.011	85.827	0.869
	MP2	0.917	0.021	43.540	
	MP3	0.904	0.021	42.317	
	MP4	0.953	0.009	111.647	
	MP5	0.950	0.009	105.734	
Normative Pressures	NP1	0.785	0.024	32.990	0.692
	NP3	0.830	0.024	34.850	
	NP4	0.848	0.023	37.024	
	NP5	0.862	0.020	42.207	
Sustainability Culture	SC1	0.737	0.042	17.349	0.640
	SC10	0.837	0.028	29.416	
	SC11	0.850	0.024	35.109	
	SC12	0.750	0.041	18.420	
	SC4	0.821	0.031	26.701	
	SC5	0.828	0.027	31.115	
	SC7	0.844	0.023	36.811	
	SC8	0.765	0.038	20.179	
	SC9	0.755	0.049	15.553	
	Sustainable Performance	SP1	0.748	0.036	
SP10		0.828	0.020	41.512	
SP11		0.805	0.025	32.338	
SP15		0.740	0.034	21.627	
SP2		0.829	0.022	37.929	
SP3		0.819	0.023	35.488	
SP4		0.770	0.035	21.830	
SP6		0.781	0.032	24.683	
SP7		0.743	0.036	20.870	
SP8		0.747	0.035	21.349	
SP9	0.823	0.024	34.271		

Source: Field Survey, Appiah (2022)

Figure 3 presents the structural model with the respective indicator item loadings.

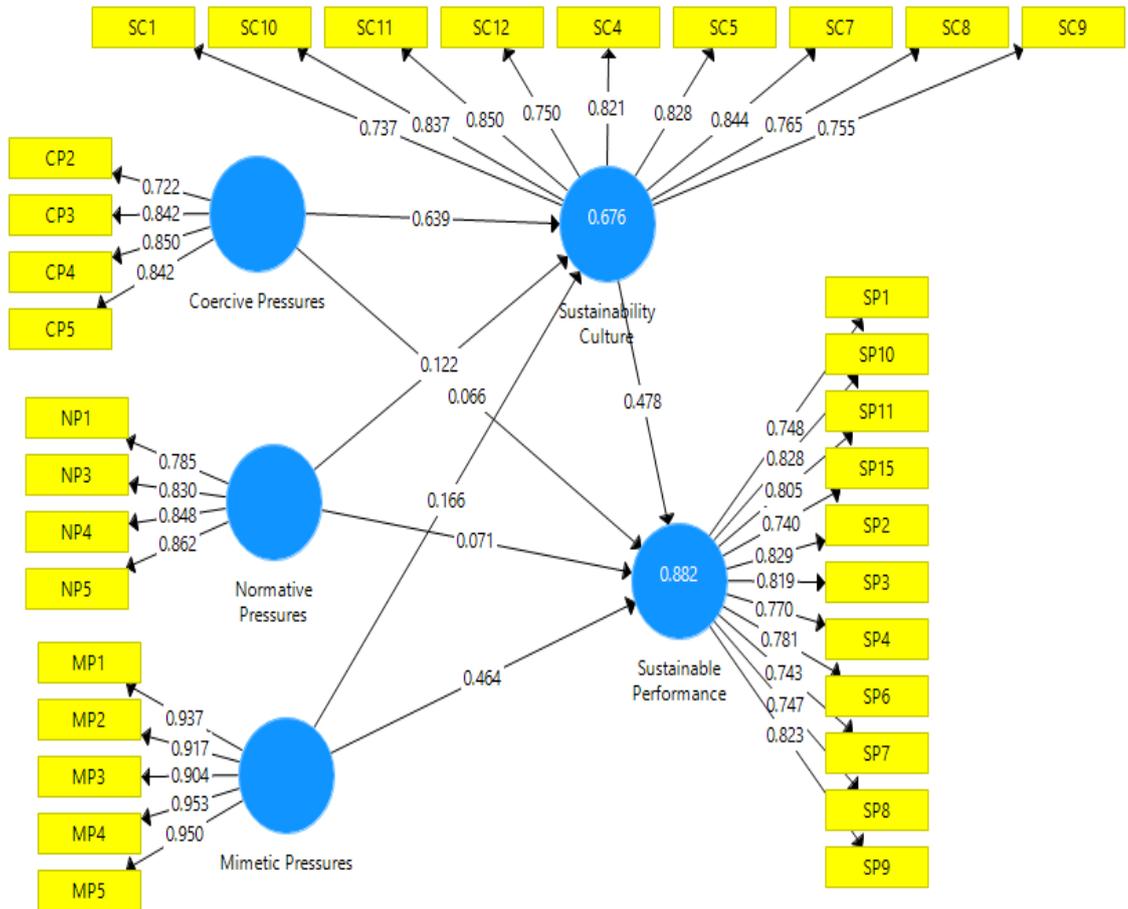


Figure 3: Measurement Model Results  
Source: Field Survey, Appiah (2022)

To attain statistical credence for the survey’s measurement model results, Table 5 presents computed Convergent validities significantly expressed in terms of Average Variance Extracted (AVE). The survey’s respective constructs’ convergent validities were critically assessed upon being calculated. Furthermore, hinging on the various indicator loading to determine the convergent validity of the different study constructs, all indicators assumed indicator loadings above 0.700 except CP1, NP2, SC2, SC3, SC6, SP5, SP12, SP13 and SP14. Thus, all these indicators with loadings below 0.7 were eliminated to improve the construct’s reliabilities. The study, therefore, sanctions that there is convergent validity for the survey’s

constructs' indicators as an AVE score above 0.500 was assumed by all the study's constructs.

Having statistically affirmed that the study's constructs' indicators have convergent validity after each construct attaining an Average Variance Extracted score above 0.500, the study subsequently proceeds to assess the discriminant validity of the study's construct.

### **Discriminant Validity Assessment**

According to Hair et al. (2016), discriminant validity indicates how constructs are empirically and distinct from the other constructs in a given model. Discriminant validity can be determined using three different criteria as the cross-loadings, the Fornell-Larcker criteria, and the HTMT ratio assessment (Hair et al., 2019).

**Cross Loading Criteria:** The cross-loadings criteria require that an indicator's loading on the construct it is measuring must be higher than any of its cross-loadings (Hair et al., 2019). In other words, an indicator should load more heavily on the construct it measures than on any other construct in the model. Cross-loadings are believed to be the lower limit of discriminant validity (Henseler et al., 2015). Though the survey did not rely on a cross-loading criterion to assess discriminant validity among study constructs, the survey presents its' results in the appendix section of this survey.

**Fornell-Larcker Criteria:** The Fornell-Larcker criteria, the second criterion for determining discriminant validity in reflective measurement models, states that "the square root of the AVE of each construct in the model should be greater than the construct's correlation with every other construct in the model" (Hair et al., 2016). Though the survey did not rely on the Fornell-

Larcker criterion to assess discriminant validity among study construct, it nevertheless presents its' results in the appendix section of this survey.

Heterotrait-Monotrait Ratio Criteria: The HTMT criteria are the last but the most robust criterion for measuring discriminant validity since it reflects the upper limit of discriminant validity (Henseler et al., 2015; Hair et al., 2016). Ideally, for a construct's discriminant validity to be deemed satisfactory, its' Heterotrait-Monotrait value should be below 0.85 (Kline, 2011) and 0.9 (Gold, Malhotra & Segars, 2001; Teo, Srivastara & Jiang, 2008; Henseler et al., 2015). However, when the Heterotrait-Monotrait value is still above 0.9 but closer to 0.9 than it is closer to 1.0, the Heterotrait-Monotrait score is marginally acceptable for further statistical analysis (Benitez, Henseler, Castillo & Schuberth, 2020; Gaskin, Godfrey & Vance, 2018). With the overriding statistical merits of the HTMT ratio of being a more contemporary and robust measure of discriminant validity than both the Fornell-Larcker and cross-loading criterion as a result of representing the upper bound criterion for assessing the discriminant validity of constructs, the study deems it prudent to employ the use of the Heterotrait-Monotrait Ratio criteria to determine the discriminant validity of the study's constructs in Table 6.

**Table 6: Discriminant Validity Assessment- Heterotrait-Monotrait Criterion**

Item	Coercive Pressures	Mimetic Pressures	Normative Pressures	Sustainability Culture	Sustainable performance
Coercive Pressures					
Mimetic Pressures	.491				
Normative Pressures	.730	.926			
Sustainability Culture	.896	.583	.735		
Sustainable Performance	.786	.851	.907	.898	

Source: Field Survey, Appiah (2022)

Critical assessment of the discriminant validity results, as depicted in Table 6, evidenced that there is no problem with discriminant validity as none of the survey’s constructs’ discriminant validity score per the Heterotrait-Monotrait Ratio criterion is above 0.950 (Benitez, Henseler, Castillo & Schuberth, 2020; Gaskin, Godfrey & Vance, 2018). Thus, the survey advances that the discriminant validity of the survey’s constructs is satisfactory and valid for further statistical analysis. Finally, the findings of the measurement model reveal that the requirements of PLS-SEM are supported in terms of internal consistency reliability, convergent validity, and discriminant validity. In the next section, the study shall assess the structural model.

**Structural Model Assessment**

After establishing the measurement model's reliability (internal consistency) and validity (convergent and discriminant), the next step is to evaluate the structural model's fitness in predicting the predicted interaction

between exogenous and endogenous constructs. Hair et al. (2016) advocates a systematic strategy for analysing structural model findings in PLS-SEM when investigating the structural model's prediction abilities and the correlations between components.

This method begins with an examination of the structural model for collinearity issues, followed by an assessment of the significance and relevance of the structural model relationships, followed by an analysis of the coefficient of determination ( $R^2$ ), an evaluation of the effect size ( $F^2$ ), and an assessment of the predictive relevance ( $Q^2$ ) effect size. Consequently, for clarity and consistency, the discussion of findings is organised following the process mentioned above. The study commences the structural model assessment by considering the evaluation of collinearity among the study's data. This assessment was necessary to assess if there exists any form of collinearity in the study's data or not.

### **Collinearity Assessment**

According to Hair et al. (2016), tolerance values below 0.200 (or a Variance Inflation Factor value of more than 5) should be viewed as crucial levels of collinearity in the construct itself. It is important to note that evidence of this critical level of collinearity indicates significant multicollinearity among predictor variables, which makes it challenging to estimate functional and robust PLS-SEM models. The survey's constructs' measures of collinearity statistics are presented in Table 7.

**Table 7: Collinearity Diagnostics (VIF)**

Exogenous Constructs	Sustainability Culture		Sustainable Performance	
	Tolerance	VIF	Tolerance	VIF
Coercive Pressures	0.586	1.706	0.337	2.966
Normative Pressures	0.223	4.484	0.221	4.530
Mimetic Pressures	0.295	3.389	0.288	3.474
Sustainability Culture			0.324	3.089

Source: Field Survey, Appiah (2022)

Per the results in Table 7, it is observed that there were no issues of collinearity among the survey’s constructs. This stance was taken as the VIF values recorded, as shown in Table 7, showcase that none of the constructs used for the study recorded a VIF value above 4.999. None of the tolerance scores was less than 0.200, which is deemed the minimum acceptable score/value for no collinearity issues or biases (Hair et al., 2016).

Having ruled that the study has no collinearity issue after both VIF scores and Tolerance scores have been critically assessed, the following section proceeds as the coefficient of determination of the study’s endogenous construct.

**Coefficient of Determination (R<sup>2</sup>)**

PLS-SEM uses structural models to predict the link between latent constructs. The model's R<sup>2</sup> value is the most often used metric for evaluating the predictive ability of a structural model. The R Square value represents the variation experienced in the exogenous construct being explained by the variations evident in the exogenous constructs. The predictive power of exogenous construct(s) on endogenous construct runs from 0 to 1, with higher values indicating more predictive power. According to Hair et al. (2016) and

Yuliansyah and Razimi (2015), the smallest permissible coefficient of determination is 10%. This model contains endogenous variables such as sustainability culture and sustainable performance and exogenous constructions such as coercive, normative, and mimetic pressure. Table 8 presents the coefficient of determination for the study’s endogenous construct and the mediating variable (sustainable performance and sustainability culture).

**Table 8: Coefficient of Determination (R<sup>2</sup>)**

Endogenous Construct	R Square	Standard Error	T Statistics	R Square Adjusted
Sustainability Culture	0.676	0.042	16.137	0.672
Sustainable Performance	0.882	0.018	48.371	0.880

Source: Field Survey, Appiah (2022)

Table 8 presents the coefficient of determination results for this survey. It was further investigated how much and what sort of variance in sustainable performance could be attributed to changes in institutional pressures (coercive pressures, normative pressures, mimetic pressures) and sustainability culture. Mimetic pressures and sustainability culture together explain a considerable variation in the sustainable performance of Ghana’s Food and Beverage manufacturing firms (R<sup>2</sup>=0.882). At the same time, other characteristics are not included in this research but influence the sustainable performance of Ghana’s Food and Beverage manufacturing firms are statistically adjusted for in Table 8. Thus, 88.200 per cent of the variations observed in the sustainable performance of Ghana’s Food and Beverage manufacturing firms is due to variations in mimetic pressures and sustainability culture. However, coercive and normative pressures were not significant enough to contribute to a positive

variance in the sustainable performance of Ghana's Food and Beverage manufacturing firms.

Among the operations of Ghana's Food and Beverage manufacturing firms, mimetic pressures accounted for a moderate positive variance in sustainability culture ( $R^2=0.676$ ). Hence, the survey advanced that institutional pressures (coercive and mimetic) are responsible for positive variance in sustainability culture. This shows that corporate enterprises employ a sustainability culture to enhance compliance with coercive pressures and mimetic pressures among Ghana's Food and Beverage manufacturing firms (Kusi, 2020). Thus, adopting and implementing a culture of sustainability within the operational jurisdiction of Food and Beverage manufacturing firms facilitate adherence to institutionalised pressures to improve sustainable outcomes in the operations of Ghana's Food and Beverage manufacturing firms. Having objectively assessed the coefficient of determination in this section, the proceeding section evaluates the model's predictive relevance ( $Q^2$ ).

#### **Predictive Relevance ( $Q^2$ ) Assessment**

The  $Q^2$  statistic is used in PLS-SEM to measure the predictive relevance of a structural model.  $Q^2$  values greater than 0 implies that the exogenous constructions have predictive importance for the endogenous construct, according to Hair et al. (2016; 2019). A blindfolding approach was used with an omission distance of 7 to estimate the cross-validated redundancy values from the structural and measurement model scores. For the endogenous construct in the model, these cross-validated redundancy values indicate the  $Q^2$  (predictive relevance) values. Table 9 presents the  $Q^2$  values of the model.

**Table 9: Predictive Relevance (Q<sup>2</sup>) Results**

Construct	SSO	SSE	Q <sup>2</sup> (=1-SSE/SSO)
Sustainability Culture	873.000	514.571	0.411
Sustainable Performance	1164.000	867.119	0.255

Source: Field Survey, Appiah (2022)

Results from Table 9 signal that sustainable performance and sustainability culture for this survey have predictive relevance considering the respective forms of institutional pressures or isomorphisms. Predictive relevance was attained as both sustainable performance, and sustainability culture in the survey model evident a Q<sup>2</sup> Construct Cross validated Redundancy scores above zero (0), signifying the presence of predictive relevance from the exogenous constructs (institutional pressures and sustainability culture) to the endogenous constructs (sustainable performance). This means that all the study’s exogenous constructs together are able to explain the model. Hence, institutional pressures (coercive and mimetic pressures) accounted for a large predictive relevance in sustainability culture while a medium predictive relevance was observed of institutional pressures (mimetic pressures) on sustainable performance.

The study proceeds to evaluate the effect sizes of each structural path after this section, objectively assessing the predictive relevance (Q<sup>2</sup>) of the study’s model.

**Effect Size (F<sup>2</sup>) Assessment**

It is necessary to include the F<sup>2</sup> effect size when determining the contribution of each exogenous construct to the R<sup>2</sup> value of the endogenous construct. F<sup>2</sup> (Cohen, 1992) may be calculated to assess the effect of each exogenous latent variable on the model’s endogenous variable. Also, the

importance of the significant impact that can be achieved by evaluating their effect size  $F^2$  is to be quantified (Henseler, 2017). To be deemed a strong, moderate, or mild impact size, the  $F^2$  should attain a value of at least 0.350, 0.150, or 0.020, respectively (Cohen, 1988). Table 10 presents the effect sizes ( $F^2$ ) of the various structural paths observed in this study.

**Table 10: Effect Size ( $F^2$ )**

Structural Path	Effect Size ( $F^2$ )	Std. Error	T-Statistics	P -Value
Coercive Pressures -> Sustainability Culture	0.739	0.193	3.827	0.000
Coercive Pressures -> Sustainable Performance	0.013	0.021	0.583	0.560
Mimetic Pressures -> Sustainability Culture	0.025	0.024	1.031	0.303
Mimetic Pressures -> Sustainable Performance	0.525	0.169	3.106	0.002
Normative Pressures -> Sustainability Culture	0.010	0.017	0.617	0.538
Normative Pressures -> Sustainable Performance	0.009	0.016	0.590	0.556
Sustainability Culture -> Sustainable Performance	0.626	0.154	4.070	0.000

Source: Field Survey, Appiah (2022)

As presented in Table 10, the survey results show that the  $F^2$  statistics of the respective study's exogenous construct are directed to the endogenous variable via structural path analysis. As shown in Table 10, the results showcase the distinctive effect size of the survey's variables of interest. The result from Table 10 points out that the structural path of coercive pressures and sustainability culture evident a substantial effect size with an  $F^2$  value of 0.739. Similarly, the predictive structural paths of mimetic pressures and

sustainable performance and sustainability culture also experienced a considerable effect size in the survey's model, recording a corresponding  $F^2$  value of 0.525 and 0.626, respectively.

Furthermore, the results of the survey's structural model, as depicted in Table 10, a signal that the following predictive structural paths; coercive pressures and sustainable performance; mimetic pressures and sustainability culture; normative pressures and sustainability culture; and finally, normative pressures and sustainable performance attained a mild effect size in the survey's structural model with corresponding  $F^2$  values of 0.013, 0.025, 0.010 and 0.009 respectively. After assessing the various effect sizes ( $F^2$ ) of the model's structural paths, the study subsequently proceeded to the size and significance of the Structural Model Path Coefficients.

#### **Specific Direct Effect Model Path Coefficient and Decision on Hypotheses**

Table 11 shows the results of the PLS-SEM analysis, which were evaluated using the path coefficient, t statistics, and p-value. To determine the importance of path coefficients, there are three criteria to follow: a statistic more significant or equal to (a p-value less or equal to) 1.65 (10 %), 1.96 (5%), and 2.57 (1%). Conventional decision guidelines were used to find significant path coefficients between exogenous and endogenous constructs in this investigation, including a statistic larger or equal to 1.96 or a p-value less than or equal to 5%, respectively. Table 11 of the survey presents the Specific Direct Effect Model Path Coefficients.

Per the nature of the survey's objectives and statistical prepositions, hypotheses 1a, 1b, and 1c of the survey sought to assess the direct effects of coercive pressures, normative pressures and mimetic pressures on the

sustainable performance of Ghana’s Food and Beverage manufacturing firms. Furthermore, the subsequent hypotheses 2a, 2b and 2c also sought to assess the effects of coercive, normative and mimetic pressures on sustainability culture. In contrast, hypothesis 3 was established to examine the impact of sustainability culture on sustainable performance.

**Table 11: Specific Direct Effect Path Coefficient**

Structural Path	Beta	Std. Error	T Stat	P Values	Decision Rule
H1a - CP -> SP	0.066	0.050	1.334	0.183	Reject
H2a - CP -> SC	0.639	0.054	11.727	0.000	Accept
H1b - NP -> SP	0.071	0.051	1.396	0.163	Reject
H2b - NP -> SC	0.122	0.091	1.336	0.182	Reject
H1c - MP -> SP	0.464	0.053	8.683	0.000	Accept
H2c - MP -> SC	0.166	0.074	2.238	0.026	Accept
H3 - SC -> SP	0.478	0.051	9.324	0.000	Accept

Source: Field Survey, Appiah (2022)

Per the result exhibited in Table 11 of this survey, it is evident that coercive pressure is a significant positive predictor of sustainability culture (Beta=0.639; t-stat=11.727; p=0.000; p<0.050). This finding of the study supports hypothesis H2a. Thus, it could be inferred that a unit increase in the values of coercive pressure will lead to a 0.639 increase in the variations in the sustainability culture of Ghana’s Food and Beverage manufacturing firms. Likewise, a unit decrease in coercive pressures will amount to a 0.639 reduction in the variations being experienced in the sustainability culture of Ghana’s Food and Beverage firms. Thus, the survey advances that coercive pressure as a pillar of institutional pressure could be used to harness a culture

of sustainability among Ghana's Food and Beverage manufacturing firms. In a practical sense, firms in Ghana's Food and Beverage industry are of the view that once non-compliance to coercive pressures warrants operational sanctions or legal suits against them, such firms rationalise their operations to conform to the desired standards to avoid being alleged to being operationally wayward which mainly comes with some regulatory sanctions. Thus, they tend to comply with coercive pressures by harnessing a culture of sustainability to attain social, economic and environmental legitimacy in their business operation.

This hypothesis corroborates with findings of other empirical studies (Martinez-Ferrero & Garcia-Sanchez, 2016; Dubey, Gunasekaran, Childe, Papadopoulus, Hazen, Giannakis & Roubaud, 2017; Dai, Xie & Chu, 2021). These scholars claimed that business enterprises tend to foster or inculcate an atmospheric culture of sustainability in the operation when many regulatory pressures from varied stakeholders are mounted on them. They also advanced similarly that, in economic systems, when regulatory systems, laws, or vehicles are not so active but passive, the objectives of coercive pressures being mounted on business enterprises to conform to idealised regulatory practices would not be achieved as there exists no intriguing operational catalyst such as robust regulatory laws or agencies to enforce such. Hence findings of the study support hypothesis 2a.

Furthermore, in terms of the relationship between coercive pressures and sustainable performance of Ghana's Food and Beverage manufacturing firms; Table 11 advances that coercive pressures could not contribute significantly to the variance in the sustainable performance of Ghana's Food

and Beverage manufacturing firms (Beta=0.066; t-stat=1.334; p=0.183; p>0.050). This finding of the study does not support hypothesis H1a.

Coercive pressures not warranting a positive and significant variance in Ghana's food and beverage manufacturing firms can be linked to numerous operational issues negatively influencing coercive institutions or food and beverage manufacturers. Poor or inadequate allocation of productive resources such as financial aid, human labour, operational facilities, equipment, etc. continues to be a factor in the inactive or dormant status of institutions mandated to exert coercive pressures on manufacturers. Despite fines for non-compliance with environmental, social, and economic requirements, loss of operating licences, unfavourable corporate reputations, mandated product recall, etc., Food and Beverage manufacturers in Ghana reluctantly adopt sustainable measures. Such corporations prioritise commercial gains over environmental and social ones. This hampers industrial organisations' ability to protect the business environment and other organisational resources.

Findings on coercive pressure not accounting for considerable and positive variance in the sustainable performance of Ghana's Food and Beverage manufacturing firms contradict empirical studies (Esfahbodi, Zhang, Watson & Zhang, 2016; Masocha & Fatoki, 2018; Rentizelas, Jabbour, Al-Balush & Tuni, 2018). All these researchers found that coercive pressures of an institutionalised business environment positively affect manufacturing enterprises' sustainable performance. Ajibike et al. (2020) argued that coercive forces in institutionalised business environments generate operational conformity among manufacturing industry actors. So, this hypothesis does not support 1a. Coercive pressures have no significant effect on Ghana's food and

beverage manufacturers' sustainable performance. So, the survey does not support H1a.

Moreover, the survey's results in Table 11 showcased that mimetic pressure significantly contributes to the positive variance observed in sustainability culture (Beta=0.166; t-stat=2.238; p=0.026; p<0.050). This finding of the study supports hypothesis H2c. In more practical terms, a unit increase in the value of mimetic pressures will lead to a 0.166 increase in the variations experienced in the sustainability culture of Ghana's Food and Beverage manufacturing firms. On the other hand, a unit decrease in mimetic pressures will also warrant a 0.166 reduction in the variations experienced in the sustainability culture of Ghana's Food and Beverage manufacturing firms. Firms in Ghana's Food and Beverage industry see mimicry pressures as a reliable tool to improve the sustainable organisational culture since mimicry pressures help such firms to imitate or mimic similar operational culture practices by rival firms that tend to improve their sustainable practices, which, when the repeated amount to the building of a culture of sustainability in their operations.

The findings of this study's hypothesis are in line with affirmed empirical postulations by some scholars (Martinez-Ferrero & Garcia-Sanchez, 2016; Dubey, Gunasekaran, Childe, Papadopoulos, Hazen, Giannakis & Roubaud, 2017; Dai, Xie & Chu, 2021). Once again, focal manufacturing firms in the Food and Beverage industry trying to mimic the sustainable practices of the best (sustainable) performing firms in the sector will unintentionally lead to creating a sustainability culture. Thus, the constant mimicking of desirable sustainable practices will become a routine or activity

that will transgress into a sustainable organisational culture. Hence the findings of the survey support hypothesis 2c.

Similarly, the results in Table 11 advanced that mimetic pressures significantly contribute to the positive variance observed in the sustainable performance of Ghana's Food and Beverage manufacturing firms (Beta=0.464; t-stat=8.683; p=0.000; p<0.050). This finding of the study supports hypothesis H1c. Thus, a unit increase in mimetic pressures will lead to a 0.464 increase in variations being observed in the sustainable performance of Ghana's Food and Beverage manufacturing firms. The reverse also holds.

In building the argument for the importance of mimetic pressures to foster sustainable performance among Ghana's Food and Beverage manufacturing firms, Food and Beverage firms see the industry as a very competitive environment and for other firms within the same sector to thrive and continue to command a significant market share, such firms need to attain a competitive edge over their rival competitors in the industry. Companies without the proper blueprints to gain a competitive edge look to Food and Beverage industry leaders for inspiration. By mimicking the operations of "competitive or idolised" industrial players in the Food and Beverage industry, other food and beverage manufacturing rival firms adopt sustainable practices of this high-performing industry player and implement them in their operations in the hope that such practices will enable such firms to achieve a sustainable competitive edge in their operations.

Mimetic pressures are a substantial and beneficial contributor to Ghana's Food and Beverage manufacturing enterprises' sustainable performance, according to this survey and other empirical investigations

(Dubey et al., 2017; Masocha & Fatoki, 2018; Abdul, Muhammad, Muhammad & Asad, 2019; Ajibike et al., 2020). All these scholars were empirically convinced that mimetic pressures can increase manufacturing firms' sustainable performance. With hypothesis 1c, this purpose is met. Thus, mimetic pressures affect Ghana's food and beverage manufacturers' sustainability. The survey results support 1c (H1c).

On the contrary, the survey's result in Table 11 advances that normative pressures are insignificant in causing a positive variance in sustainability culture (Beta=0.122; t-stat=1.336; p=0.182; p>0.050). This finding of the study does not support hypothesis H2b. Thus, a unit increase or decrease in normative pressures will fail to warrant a positive growth in the variations observed in the sustainability culture of Ghana's Food and Beverage manufacturing firms. Also, concerning normative pressures, the absence of solidarity among industry players in the Food and Beverage industry limits the harnessing of a uniform industrial code of conduct, improved professionalism as well as frequent training that is geared towards improving the sustainable objectives that are meant to drive the operations of Ghana's Food and Beverage manufacturing firms. Once these are not available, firms in the Food and Beverage industry find it difficult to enhance their sustainable outcomes by harnessing a culture of sustainability among Ghana's Food and Beverage manufacturing firms.

Invalidating sense, the findings of this study contradict empirical claims made by some scholars (Martinez-Ferrero & Garcia-Sanchez, 2016; Dubey, Gunasekaran, Childe, Papadopoulos, Hazen, Giannakis & Roubaud, 2017; Dai, Xie & Chu, 2021). These scholars advanced that professional codes

of conduct, training and the high level of industrial interaction among industry players (producers and consumers) help businesses adopt and implement an operational culture of sustainability. Thus, the insignificance of the normative pressure on sustainability culture alleviates the operational lapses in Ghana's Food and Beverage manufacturing firms. Hence the findings of the survey do not support hypothesis 2b.

Subsequently, the survey proved that normative pressures do not significantly contribute to the positive variance accounted for by sustainable performance (Beta=0.071; t-stat=1.396; p=0.163; p>0.050). This finding of the study does not support hypothesis H1b. Similarly, a unit increase or decrease in normative pressures will fail to warrant a positive growth in the variations observed in the sustainable performance of Ghana's Food and Beverage manufacturing firms. Thus, the normative pressures in this study context do not act as an effective tool to improve the sustainable outcomes of Food and beverage firms via sustainability culture and sustainable performance.

Low industrial cohesion or collectivism among Food and Beverage firms and customers in Ghana may explain the insignificance of normative forces to account for positive variation in the sustainable performance of such manufacturing firms. Thus, Ghana's food and beverage manufacturers have little industrial connection, resulting in poor professionalism. This development may have occurred because Food and Beverage manufacturing enterprises thought of themselves as independent units of the micro-industry and believed there was no idealised method of food and beverage production.

Also, the lack of vibrant industrial trade unions, professional associations, etc. to train and nurture professionals for the Food and Beverage

industry in Ghana can only lead to individualism between manufacturing units of the industry rather than these manufacturing firms coming together as a collective unit to influence how every member of the Food and Beverage manufacturing industry is to operate. The lack of professional norms and operational rules among Ghana's Food and Beverage manufacturing enterprises may explain why normative constraints do not substantially affect their sustainable performance.

Food and beverage customers have little social legitimacy power since the business is controlled by push marketing rather than pull. This reduces the capacity of even unhappy Food and Beverage customers to urge companies align their operations with approved industrial norms that legitimise firms' operational behaviours. The findings of this survey contradict the empirically validated claim that normative pressure may influence manufacturing firms' sustainable performance (Zhu & Sarkis, 2007; Dubey, Gunasekaran, Childe, Papadopoulos, Hazen, Giannakis & Roubaud, 2017; Saeed, Jun, Nubour, Priyankara & Jayasuriya, 2018; Abdul, Muhammad, Muhammad & Asad, 2019; Ajibike et al., 2020). The study's objective result contradicts hypothesis 1b. Thus, normative constraints have no beneficial influence on Ghana's food and beverage manufacturers' sustainability. The survey does not support hypothesis two (H1b).

Also, concerning the relationship between sustainability culture and sustainable performance, the survey's result in Table 11 proves sustainability culture made a significant positive contribution to causing positive variance in sustainable performance of Ghana's Food and Beverage manufacturing firms (Beta=0.478; t-stat=9.324; p=0.000; p<0.050). Thus, a unit increase in

sustainability culture will lead to a 0.478 increase in the variations experienced in the sustainable performance of Ghana's Food and Beverage firms. In an argumentative sense, when firms in a focal industry integrate a culture of sustainability in their operation, firms in such an industry are bound to reap the operational results of improved sustainable outcomes such as enhanced sustainable performance and warrant a competitive advantage for such firms. As a result, firms in Ghana's Food and Beverage manufacturing industry are trying to prioritise sustainable outcomes as a critical end product of their respective individual operations; such firms have become more loyal to building an organisational culture that has sustainability stem as its core composition.

The survey findings corroborate empirical studies by other scholars (Galpin, Whittington & Bell, 2013; Adebayo, Worlu, Moses & Ogunnaike, 2020). It was averred that a culture of sustainability implemented in a focal firm when adequately resourced leads to improved firm performance. Thus, manufacturing firms in the Food and Beverage industry tend to boost their sustainable performance by actively investing in creating or harnessing a rich organisational culture of sustainability through regular sustainability creation awareness seminars and workshops, making sustainable requirements key to procurement procedures or procurement procedures activities. Hence the findings of the survey support hypothesis 3.

### **Mediating Effect and Decision on Hypotheses**

This section assessed the fourth objective of the study, which sought to investigate the mediating role of sustainability culture in the predictive relationships between the respective institutional pressures (coercive,

normative and mimetic pressures) and the sustainable performance of Ghana’s Food and Beverage manufacturing firms. The study followed the parameters and guidelines set out by Nitzl, Roldan and Cepeda (2016) for mediation analysis.

Furthermore, hypotheses 4a, 4b and 4c were also established to investigate the mediating effect of sustainability culture on the predictive relationships between the respective institutional pressures (coercive, normative and mimetic) and the sustainable performance of Ghana’s Food and Beverage manufacturing firms. The assessment of the PLS-SEM models is illustrated in Table 12.

**Table 12: Specific Indirect Effects**

	Beta	Std. Error	T Statistics	P Value	Decision Rule
H4a: CP -> SC -> SP	0.305	0.048	6.317	0.000	Accepted
H4b: NP -> SC -> SP	0.058	0.044	1.312	0.190	Rejected
H4c: MP -> SC -> SP	0.079	0.037	2.167	0.031	Accepted

Source: Field Survey, Appiah (2022)

Critical assessment of the specific indirect effect output, as presented in Table 12, asserts that the relationship between coercive pressures and sustainable performance of Food and Beverage manufacturing firms is indirectly significant. Thus, the survey confirms that sustainability culture significantly and positively mediates (full mediation) the relationship between coercive pressures and sustainable performance (Beta=0.305; t-stat=6.317 p=0.000: p<0.050). Thus, hypothesis 4a was accepted/supported as there was a full mediation. Findings on sustainability culture positively and significantly mediating (fully) the predictive relationship between coercive pressures and

sustainable performance simply mean that when Food and Beverage manufacturing firms adopt and integrate a culture of sustainability in their manufacturing operations, the atmosphere of sustainable culture allows such firms to comply with external business pressures such as coercive pressures easily.

Once such a culture is idealised and implemented in a company's manufacturing operations, it reorients the operational mindset of the company to push for sustainable operation outcomes including improved sustainable performance, positive corporate reputation, and competitive advantages (low-cost production, responsiveness, first-mover advantages, highly skilled intellectual assets or human resource etc.). Thus, the changing operational attitude centered on sustainability, resulting in the organization's desire to comply with external business environment and linked stakeholders to enhance the sustainable performance of their individual company operations.

Sustainability culture mediates the predictive association between coercive pressure and sustainable performance of Ghana's Food and Beverage manufacturing enterprises. This is the first empirical research to establish this impact. Triangulation of an empirical study by Roscoe, Subramanian, Jabbour, and Chong (2019) found that corporate culture built on sustainable business objectives improves the environmental, social, and economic performance of manufacturing firms by incentivizing focal manufacturing firms to make conscious commitments to external stakeholders' concerns. The results support 4a.

Furthermore, the survey hypothesised whether sustainability culture positively and significantly mediates (partial mediation) the predictive

relationship between mimetic pressures and sustainable performance of Ghana's Food and Beverage manufacturing firms. As presented in Table 12, the results affirm the testable claim that the indirect relationship between mimetic pressures and sustainable performance of Ghana's Food and Beverage manufacturing firms is positive and significant. In concrete terms, the result as depicted in Table 12 confirms sustainability culture as a positive and significant mediator of the relationship between mimetic pressures and sustainable performance of Ghana's Food and Beverage manufacturing firms (Beta=0.079; t-stat=2.167 p=0.031: p<0.050). Hypothesis 4c was also accepted and a partial mediation was observed in the predictive relationship.

Focal manufacturing firms in the Food and Beverage industry who desire competitive excellence in their operation and industry can quickly achieve such business goals with the adoption of a sustainable culture in their business operation; it will be easy to mimic competitive firms operating at a high-level sustainable performance. Thus, a sustainable culture acts as a catalyst for unsustainable manufacturing firms to mimic the sustainable practices of sustainable competitors and replicate the same or modify the same to improve their sustainable performance level to attain a competitive edge in business, which will also translate to improved market shares and profitability.

Sustainability culture mediates the predictive relationship between mimetic pressures and the sustainable performance of Ghana's Food and Beverage manufacturing firms, according to the survey (Masocha & Fatoki, 2019; Roscoe, Subramanian, Jabbour & Chong 2019; Adebayo, Worlu, Moses & Ogunnaike, 2020; Abdulaziz-Al-Humaidan, 2021). Literature suggests that manufacturing companies prosper in an inventive and competitive

environment. In an organised competitive environment, corporations learn from one another to improve and expand on their strategic success. Similarly, this study suggests that adopting and implementing a culture of sustainability helps Ghana's Food and Beverage manufacturing enterprises emulate good, sustainable practices of competitive competitors to enhance their sustainable performances. This supports 4c.

Unlike the predictive relationships between coercive pressures and sustainable performance, as well as that of mimetic pressures and sustainable performance of Food and Beverage manufacturing firms being mediated by sustainability Culture, the survey results presented in Table 12 suggest that sustainability culture does not mediate the predictive relationship between normative pressures and sustainable performance of Ghana's Food and Beverage manufacturing firms (Beta=0.058; t-stat=1.312; p=0.190:  $p > 0.050$ ). Thus, this survey affirms that sustainability culture does not mediate the relationship between normative pressures and the sustainable performance of Ghana's food and Beverage manufacturing firms. It was observed that, there is no mediation evident between the predictive relationship, hence, no full or partial mediation effect.

Simply put, even if manufacturing firms in the Food and Beverage industry do adopt or already have a sustainable culture inculcated in their business activities, such firms cannot ascribe to a high level of operational excellence such as improving the sustainable performance of their operations since enabling mechanisms that orchestrate normative pressures such as professional codes, training, industrial interaction among manufacturers and consumers of food and beverage products, incentivised trade unions do not

exist or are lacking. Hence, firms in the Food and Beverage are incapacitated in their quest to improve the sustainable performance of their operations with or without a culture of sustainability.

Contrary to the triangulated findings of Roscoe et al. (2019), Abdul et al. (2019) and Ajibike et al. (2020), this august study discovered that sustainability culture does not significantly mediate the predictive relationship between normative pressures and sustainable performance of Ghana's Food and Beverage manufacturing firms. Thus, the discovery of sustainability culture not mediating the relationship between normative pressures and sustainable performance of Ghana's Food and Beverage manufacturing firms is not in tandem with the survey's hypothesis 4b.

### **Chapter Summary**

The findings relating to the specific objectives of the study were presented chronologically in Tables and Figures in this chapter. From the first objective, it was revealed that institutional pressures (mimetic pressures) accounted for substantial positive variance in the sustainable performance of Ghana's Food and Beverage firms. Secondly, from the second objective, it was revealed that institutional pressures (coercive and mimetic pressures) accounted for positive variance in the sustainability culture of F&B firms. Moreover, from the third objective, it was discovered that sustainability culture accounted for positive variance in sustainable performance. Furthermore, sustainability culture fully mediates the predictive relationship between coercive pressures and the sustainable performance of Ghana's F&B firms. Lastly, a partial mediation of sustainability culture was evident in the

predictive relationship between mimetic pressures and the sustainable performance of Ghana's F&B firms.

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### Introduction

This session of this empirical research study presents the summary of the study. The principal objective of this novel study was to examine the effects of institutional pressures on the sustainable performance of Ghana's Food and Beverage manufacturing firms: the mediating role of sustainability culture. This chapter summarises the key findings, conclusions, and suggestions for further research by concluding this study. The recommendations based on significant results are provided for stakeholders such as the management of Ghana's Food and Beverage manufacturing firms and regulatory bodies.

#### Summary Key Findings

Based on the specific research objectives considered in the study, these key findings were found;

The first objective of the survey examined the effect of institutional pressures (coercive, normative and mimetic pressures) on the sustainable performance of Ghana's Food and Beverage manufacturing firms. The study found that institutional pressures (mimetic pressures) positively and significantly accounted for an improvement in the sustainable performance of Ghana's Food and Beverage manufacturing firms. However, both normative pressures and coercive pressures did not warrant any positive and significant influence on the sustainable performance of Ghana's Food and Beverage manufacturing firms. Thus, the sustainable performance of Ghana's Food and Beverage firms has seen considerable and substantial improvement after Food

and Beverage firms in Ghana continue to adopt or mimic the operational behaviours of their industrial competitors who are operating sustainably. A large effect size was observed in the relation between mimetic pressures and sustainable performance. Hence, hypothesis 1c was accepted.

Moreover, the second objective of the survey examined the effect of institutional pressures on the sustainability culture of Ghana's Food and Beverage manufacturing firms. The result of the study found that institutional pressures (coercive pressures and mimetic pressures) were responsible for positive and significant effects on the sustainability culture of Ghana's Food and Beverage manufacturing firms. In terms of effect size, coercive pressures and mimetic pressures evidenced a large and small effect size on sustainability culture. However, normative pressure as a dimension of institutional pressures did not have a significant influence on the sustainability culture of Ghana's Food and Beverage manufacturing firms. The ability of Ghana's Food and Beverage manufacturing firms to foster a culture of sustainability was significantly enhanced when Food and Beverage manufacturing firms complied with institutional pressures such as coercive and mimetic pressures. Hence, hypotheses 2a and 2c (H2a and H2c) were statistically and objectively accepted.

Furthermore, the study's third objective assessed the effect of sustainability culture on the sustainable performance of Ghana's Food and Beverage manufacturing firms. The result of the study found sustainability culture as an indispensable operational practice that account for a significant and positive influence on the sustainable performance of Ghana's Food and Beverage manufacturing firms. With respect to the effect size accounted for by

sustainability culture on the sustainable performance of Ghana's Food and Beverage manufacturing firms, the survey found a large effect size on the examined predictive relationship between sustainability culture and the sustainable performance of Ghana's Food and Beverage manufacturing firms. Hence, the study's hypothesis 3 (H3) was accepted.

Lastly, the survey's fourth objective also examined the mediation effect of sustainability culture on the predictive relationship between institutional pressures (coercive, normative and mimetic pressures) and the sustainable performance of Ghana's Food and Beverage manufacturing firms. After analysis of the survey's data, the study found that sustainability culture fully mediates the predictive effect of coercive pressures on the sustainable performance of Ghana's Food and Beverage manufacturing firms. Similarly, a partial mediation effect of sustainability culture was witnessed as a finding of this study on the predictive effect of mimetic pressures on the sustainable performance of Ghana's Food and Beverage manufacturing firms. However, sustainability culture did not mediate the predictive effect of normative pressures on sustainable performance. Hence, the study's hypotheses 4a and 4c (H4a and H4c) were statistically and objectively accepted.

### **Conclusion**

Congruent to the critical findings achieved in this survey, the study, therefore, makes the following objective conclusions;

With respect to objective one, the study concludes that institutional pressures (mimetic pressures) account for significant positive variance in the sustainable performance of Ghana's Food and Beverage manufacturing firms. Thus, sustainable performance among Food and Beverage manufacturing

firms has observed an immense improvement as sustainable practices of overperforming firms are constantly being mimicked by other rival competitors whose level of sustainability of manufacturing operations falls short of that of their leading sustainable competitors. The rationale behind mimicking sustainable practices of leading firms in the Food and Beverage industry is that firms who are highly sustainable enjoy some level of competitive advantages such as improved corporate reputation, high market share, increased sales or profits, customer loyalty, and reduced production cost etc. over their rival competitors. Thus, mimicking these sustainable practices to harness competitiveness by underperforming Food and Beverage manufacturing firms improves sustainable performance.

However, both coercive pressures and normative pressures do not influence the sustainable performance of Ghana's Food and Beverage manufacturing firms. Some plausible reasons behind the inability of coercive pressures to account for a significant influence on sustainable performance are as a result of firms in the industry not committing conscious efforts to comply with legislative standards, regulations, and other laws instituted by the government and other regulatory bodies. Also, the lack of an industrial code of conduct, ethics, professionalism etc among Food and Beverage manufacturing firms are some observed logic behind the insignificance of the normative pressures on the sustainable performance of Ghana's Food and beverage manufacturing firms. Hence, committing organisational resources to the compliance of normative and coercive pressures might lead to wasting of resources as these pressures do not lead to improvement in the sustainable performance of the Food and Beverage manufacturing firms in Ghana.

Based on the findings of the study's second objective, the survey advances that institutional pressures (coercive and mimetic pressures) have a positive and significant effect on Food and Beverage manufacturing firms fostering a culture of sustainability (sustainability culture). Because Food and Beverage manufacturing firms operate with the conviction that regulatory institutions such as the Food and Drugs Authority, Environmental Protection Agency, Ghana Standard Authority etc have the necessary mandate to sanction them when they (F & B firms) fail to operate under sustainable conditions, such Food and Beverage firms tend to operate in a sustainable manner so as to avoid the social and environmental repercussions of this institutional bodies and in effect end up building a culture of sustainability through a continuous and persistent operational process.

Also, once focal firms within the food and beverage industry are not satisfied with their current appalling state of sustainable practices and wish to improve through the adherence to mimetic pressures, such organisations can turn mimicked practices into daily activities or routines which when they continue practicing for a long time transgresses into a sort of an organisational philosophy or culture. This gradually helps foster a culture of sustainability which helps to improve sustainable outcomes such as improved operational performance and improved sustainable performance or even harness a sustained competitive advantage.

Although ordinarily, normative pressures should have encouraged focal firms in the food and beverage industry to foster a sustainable culture for their operations, it is sadly the reverse in the Ghanaian industry. This is because the absence of an industrial code of conduct, professionalism and

industrial coherence limits the ability to comply with normative pressures to foster a culture of sustainability. This is attributed to the individualism or isolation of firms in such sectors in Ghana. Since firms in the industry lack the longevity focus to work harmoniously to improve operations via professionalism, training and workshops, and improved industrial cohesion between both producers and consumers of food and beverage products, it becomes practically impossible for such pressures to help foster a culture of sustainability within the food and beverage industry. Each food and beverage manufacturing firm tends to operate anyhow it deems fit and profitable while undermining the sustainability of its business operations and the business environment.

Furthermore, the findings of the study's third objective advanced that sustainability culture has a significant and positive influence on the sustainable performance of Ghana's Food and Beverage manufacturing firms. With sustainability deeply enshrined in the organisational culture of Ghana's Food and Beverage manufacturing firms, operations of such business entities are bound to be undertaken in a sustainable manner such that limited or no negative impact on business operation will be significantly felt within the business environment. Moreover, with increasing adoption and implementation of a culture of sustainability within the operations of focal firms in the Food and Beverage manufacturing industry in Ghana, such corporate culture serves as a conducive operational catalyst to undertake sustainable driven initiatives or activities that tend to improve overall sustainable outcomes of such business entities.

The findings of objective four of the survey advance that sustainability culture significantly mediates fully the predictive effect of institutional pressures (coercive and mimetic pressures) on the sustainable performance of Food and Beverage manufacturing firms. In terms of coercive pressures, a full mediation of sustainability culture was evidenced in the predictive effect of coercive pressures on sustainable performance. Thus, the adoption and practice of a culture of sustainability among Food and Beverage manufacturing firms ease the ability to comply with regulatory stipulations such as environmental protection laws by regulatory bodies such as Environmental Protection Agency, Food and Drugs Authority etc. Thus, sustainability culture act as a catalyst for Food and Beverage manufacturing firms to abide by national and industrial regulations that seek to improve the conscious management of the environment, society and profits. Thereby helping to improve the sustainable performance of these firms.

In line with objective four, the survey's findings conclude that the predictive effect of mimetic pressures on the sustainable performance of Food and Beverage manufacturing firms is significantly partially mediated by sustainability culture. Once again, adopting and inculcating a culture of sustainability across the entire operations of Food and Beverage manufacturing firms triggers the ability to identify and mimic sustainable practices of competitors within the Food and Beverage manufacturing industry that tends to harness sustainable performance to build competitive advantage. This is because pursuing a culture of sustainability in operations of Food and Beverage manufacturing firms creates a conducive corporate environment that is highly receptive to organisational growth through sustainable business

initiatives and benchmarks. This transgresses into improving the sustainable performance of Ghana's Food and Beverage manufacturing firms.

Contrary to the results of objective four, the survey however sanctioned that there is no mediating effect of sustainability culture on the predictive effect of normative pressures on the sustainable performance of Ghana's Food and Beverage manufacturing firms. Even though some of such manufacturing firms might have adopted a culture of sustainability to enhance their operations, the low-level industrial interaction among manufacturers of food and beverage products and consumers of such products would not warrant such organisations to achieve their operational sustainability goals set. Metaphorically, having in place a culture of sustainability without enabling parameters like a high level of professionalism, industrial standards, trade unions, frequent workshops, and capacity-building seminars is like having an energy source such as fuel but no automotive engine to make use of the available fuel to function correctly.

### **Recommendations**

Based on the findings of the study, the following recommendations are offered for their immediate implementation;

It is recommended that the management of Food and Beverage manufacturing firms continue to comply with institutional pressures (mimetic pressures) so as to be able to significantly improve the sustainable outcomes of their business operations. By this, the management of Food and Beverage firms should continue to allocate more funds to comply with mimicry pressures since adherence to these pressures enables Ghana's Food and Beverage manufacturing firms to operate under sustainable parameters. Also,

the management of Food and Beverage manufacturing firms should ensure that sustainable outcomes are stringently ascribed as core elements of their strategic business objectives and values, since these can help shape and direct their firms' operations in a positive sustainable regard.

With respect to the study's objective two, the management of Ghana's Food and Beverage manufacturing firms should continue to devote active resources to compliance with both coercive pressures and mimetic pressures within the industry. This is because adhering to these pressures will enable the food and beverage firms to foster a sustainable culture that will be applied to all aspects of their business processes. Realigning business processes by complying with coercive pressures and mimetic pressures will aid food and beverage manufacturing firms in Ghana to escape some operational inconsistencies such as production floor lockage, high litigation fines, increased product recalls cost, frequent confiscation of market products etc. Also, the management of Ghana's Food and Beverage manufacturing firms should invest more productive resources by offering specialised training and workshops to build the capacity of their human resources and external trade partners towards attaining sustainable outcomes such as improved sustainable performance and sustained competitive advantage.

The survey further recommends that to ensure the continued adoption and implementation of a culture of sustainability within the operations of Ghana's Food and Beverage manufacturing firms indefinitely, the management of such firms should formalise sustainable-driven initiatives by formally drafting operational policies that promote sustainability of business processes while aspiring to meet other long-term and short-term operational

goals. This will change the state of discretionary practices of a culture of sustainability within the business operation to a much more philosophic operational orientation across the entire organisation.

With regard to the study's fourth objective, the management of food and beverage manufacturing firms should idealise and explore a sustainable culture as an effective and integral operational mechanism that will help position the operations of food and beverage firms to a level where it will be operationally easy to aspire and achieve sustainable ends in their business operations. To be able to implement this recommendation, the management of the food and beverage manufacturing firms should anchor sustainable considerations in all organisational proceedings. Thus, when a culture of sustainability is deeply enshrined in the operational procedures of food and beverage manufacturing firms in Ghana, it will allow such firms to comply with external business pressures that manifest themselves in the form of institutional pressures (coercive and mimetic pressures). And adherence to these pressures will enable the food and beverage manufacturing firms to achieve the necessary operational legitimacy and improved sustainable performance.

Despite institutionalised regulatory bodies spearheading the sustainable operations of some of Ghana's Food and Beverage manufacturing firms by exercising their legitimate responsibilities, the study recommends that management of regulatory bodies such as the Food and Drugs Authority (FDA), Environmental Protection Agency (EPA), Ghana Free Zones Board (GFZB), Public Utilities and Regulatory Commission (PURC), Ghana Standards Authority (GSA) continue to positively influence the industry.

These regulatory agencies should incentivize Food and Beverage manufacturing enterprises by including them in stakeholder meetings and conferences to promote sustainability in the business environment.

To ensure regulatory institutions live up to their core mandate, the government and other key stakeholders should allocate adequate resources (financial, human, and statutory) for their effective and efficient management. Their vibrancy status depends on how well they are cared for by their sponsors, such as the government and international regulatory institutions.

### **Suggestions for Future Studies**

The findings of this study present an avenue for the undertaking of future scholarly studies with regard to institutional pressures, sustainability culture and sustainable performances of other manufacturing firms. It is believed that the survey adopting a cross-sectional survey can statistically limit the findings of a causal study. Hence, it's recommended that future comparative studies should be undertaken concerning institutional pressures on sustainability culture on the sustainable performance of Food and Beverage manufacturing firms, considering the time scale for data collection and adopting a longitudinal survey.

Also, the study proposes that a future study should be undertaken in a different sector, such as the mining sector. Observing the mining sector of Ghana, the practice of large and medium-scale mining continues to be on the rise and enriching growing economies. Nevertheless, such operations negatively impact the business and social environment, such as endangering human settlements, polluting water bodies, extinction of ecosystems, etc. Thus, a study in this regard will help discover objective findings and

recommendations that can be pursued to ensure sustainable operations of mining firms in Ghana.



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**APPENDIXES**  
 UNIVERSITY OF CAPE COAST  
 SCHOOL OF BUSINESS  
 DEPARTMENT OF MARKETING AND SUPPLY CHAIN  
 MANAGEMENT

Dear sir/madam,

I am a postgraduate student undertaking research on **Institutional Pressures and Sustainable Performance of Ghana’s Food and Beverage manufacturing firms: the mediating role of sustainability Culture**. This is purely an academic exercise, and you are assured of concealment of the information you will provide. Your candid opinion is keenly needed; therefore, you are entreated to complete this questionnaire to promote the success of this exercise. Your responses will be treated confidentially. Thank you.

**SECTION A**  
**INSTITUTIONAL PRESSURES**

On a scale of 1 to 7, indicate the level of agreement to the following statements; where 1= “Never”, 2= “Almost Never”, 3= “Rarely”, 4= “Sometimes”, 5= “Often”, 6= “Very Often” and 7= “Always”.

RESPONDENT	1	2	3	4	5	6	7
Please to what extent do you agree with the following statements; indicate your level of agreement by tick the appropriate check box.							
<b>COERCIVE ISOMORPHISM</b> (Teo et al, 2003; Bansal, 2005)							
1. Firms in our industry that did not meet the legislated standards for pollution control							

faced a significant threat of legal prosecution							
2. Firms in our industry were aware of the fines and penalties potentially associated with environmentally irresponsible behavior							
3. If firms in our industry committed an environmental infraction, the consequence would likely have included negative reports by industry/stock market analysts							
4. There were negative consequences for companies that failed to comply with the federal and provincial environmental laws							
5. Our firm's success depends significantly upon our participation in environmental and social supply chain management							
<b>NORMATIVE ISOMORPHISM (Teo et al, 2003; Bansal, 2005)</b>							
1. Our industry had trade associations (or professional associations) that encouraged organisations within the industry to become more environmentally responsible							
2. Our industry expected all firms in the industry to be environmentally responsible							
3. Being environmentally responsible was a requirement for firms to be part of this industry							
4. We actively participate in industry, trade, or professional associations that promote environmental and social supply chain management							
5. Significant pressure to engage in environmental supply chain management is placed upon us from industry and professional sources that support environmental and social supply chain management							
<b>MIMETIC ISOMORPHISM (Teo et al, 2003; Bansal, 2005)</b>							
1. The leading companies in our industry worked on ways to reduce their impact on the environment							
2. The leading companies in our industry set an example for environmentally responsible conduct							

3. The leading companies in our industry were known for their practices that promoted environmental preservation							
4. Our competitors have used environmental and social supply chain management to their advantage							
5. Competitors with well-developed environmental and social supply chain management programs are perceived favorably by others in our industry							

**SECTION B**

**SUSTAINABILITY CULTURE**

On a scale of 1 to 7, indicate the level of agreement to the following statements; where 1= “Never”, 2= “Almost Never”, 3= “Rarely”, 4= “Sometimes”, 5= “Often”, 6= “Very Often” and 7= “Always”.

RESPONDENT	1	2	3	4	5	6	7
Please to what extent do you agree with the following statements; indicate your level of agreement by tick the appropriate check box.							
<b>SUSTAINABILITY CULTURE</b>	<b>Denison’s Model (2012)</b>						
1. Our firm is always poised in integrating innovative and harm free changes to its operations.							
2. Our firm’s production is customer focus driven.							
3. Organisational Learning Our firm support organisational wide learning and application.							
4. Our firm empowers its’ employees, suppliers as well as organisational management with the requisite authorities, resources and responsibilities.							

5. Our firm endorse team working and orientation.							
6. Our firm undertakes capability development at all levels of the organisation and even including its suppliers.							
7. Our firm ascribe to core operation values such as Green Citizen, Integrity, Accountability							
8. Our firm follows a laid down agreement when dealing with stakeholders of its operations							
9. Our firm coordinate and integrate with other interesting parties to solve both organisational and industrial issues							
10. Our firms' strategic direction and intent are aligned with the firms' desire to ensure sustainability of its' environment, social and economic							
11. Our firm coordinates economic, social and environmental objectives in ensuring organisation wide efficiency							
12. Our firm visualizes to become the lead ethical industrialist							

**SECTION C**

**SUSTAINABLE PERFORMANCE**

On a scale of 1 to 7, indicate the level of agreement to the following statements; where 1= “Never”, 2= “Almost Never”, 3= “Rarely”, 4= “Sometimes”, 5= “Often”, 6= “Very Often” and 7= “Always”.

RESPONDENT	1	2	3	4	5	6	7
Please to what extent do you agree with the following statements; indicate your							

level of agreement by tick the appropriate check box.							
<b>SUSTAINABLE PERFORMANCE (Hami et al., 2015; Abdul- Rashid et al., 2017; Afum et al., 2020)</b>							
1. Energy consumption considering the volume of production has decreased							
2. Consumption for hazardous materials considering the volume of production has decreased							
3. Conduct regular environmental audits							
4. Minimizes the environmental impact of our activities							
5. The firm relevantly decreases the frequency of environmental accidents							
6. Reduction of smell/odour emissions and solid waste							
7. Considering the economic situation, our profit has increased							
8. Considering the economic situation, our sales growth is higher							
9. The return assets have been higher, relative to competitors							
10. Considering the economic situation, our market share has increased							
11. The return on investment has increased							
12. Improved work environment							
13. Improved relationship with the community and stakeholders							
14. Improved living quality of surrounding community							
15. Improved work safety							

Instructions: Kindly tick (✓) or write where appropriate

**SECTION E: DEMOGRAPHICS DATA**

1. Gender

Male  Female

2. Educational Background

Senior High School  High National Diploma  Bachelor's Degree

Post graduate

Others (please specify).....

3. Years of experience

1-5  6-10  11-15  16-20  Above 20

4. Profession/Occupation

Operation Manager  Others (please specify).....

THANK YOU FOR YOUR PARTICIPATION



APPENDIX C

UNIVERSITY OF CAPE COAST  
COLLEGE OF HUMANITIES AND LEGAL STUDIES  
SCHOOL OF BUSINESS

**DEPARTMENT OF MARKETING AND SUPPLY CHAIN MANAGEMENT**

Telephone: +233-(0)3321 32440-4 / 32483  
Direct: 03321-91110  
Telex: 2552, UCC, GH.  
Telegrams & Cabels: University, Cape Coast



5<sup>th</sup> July, 2021  
UNIVERSITY POST OFFICE  
CAPE COAST, GHANA

Our Ref: **SB/PST/19/0010**

Your Ref:  
The Director  
Institutional Review Board  
University of Cape Coast  
Cape Coast

Dear Sir,

**APPLICATION FOR ETHICAL CLEARANCE - MR. MICHAEL APPIAH**

We write to introduce **Mr. Michael Appiah**, a final year student of the department and to kindly request that you grant him ethical clearance for his research.

Mr. Appiah is currently working on the topic; "*Institutional Pressures, Sustainability Culture and Sustainable Performance of Food and Beverage Manufacturing Firm in Ghana*" under the supervision of Dr. Innocent Senyo Kwasi Acquah who has granted him permission for data collection.

We hope our request would receive your kindest reconsideration.

Yours faithfully,

Prof. Daniel Agyapong  
**HEAD**

APPENDIX D

UNIVERSITY OF CAPE COAST  
COLLEGE OF HUMANITIES AND LEGAL STUDIES  
SCHOOL OF BUSINESS

**DEPARTMENT OF MARKETING AND SUPPLY CHAIN MANAGEMENT**

Telephone: +233-(0)3321 32440-4 / 32483  
Direct: 03321-91110  
Telax: 2552,UCC, GH.  
Telegrams & Cabels: University, Cape Coast



UNIVERSITY POST OFFICE  
CAPE COAST, GHANA

Our Ref:

Your Ref:

30<sup>th</sup> March, 2021

The Chairman,  
Institutional Review Board  
University of Cape Coast  
Cape Coast

Dear Sir,

**LETTER OF SUPPORT- MR. MICHAEL APPIAH**

I write to give recommendation on Mr. Michael Appiah who was my student at the undergraduate level and now my post graduate research student whom I'm supervising on the thesis Topic "**Institutional Pressures, Sustainability culture and Sustainable Performance of Food and Beverage manufacturing firms in Ghana**" which he has so far exhibited sound knowledge and skills in the research process.

He is a serious person, committed to academic work and determined to reach the highest level in academia. He has the requisite academic background and capability to complete the thesis within the stipulated time.

I recommend him without any reservations to you for consideration for the ethical clearance to aid him to collect his research data as it will aid him to accomplish his thesis on time.

Yours faithfully,

Dr. Innocent Senyo Kwasi Acquah  
Email: [iaquah@ucc.edu.gh](mailto:iaquah@ucc.edu.gh)  
Tel: 0249539547

APPENDIX E

UNIVERSITY OF CAPE COAST

INSTITUTIONAL REVIEW BOARD SECRETARIAT

TEL: 0558093143 / 0508878309  
E-MAIL: [irb@ucc.edu.gh](mailto:irb@ucc.edu.gh)  
OUR REF: UCC/IRB/A/2016/1125  
YOUR REF:  
OMB NO: 0990-0279  
IORG #: IORG0009096



7<sup>TH</sup> OCTOBER 2021

Mr. Michael Appiah  
Department of Marketing and Supply Chain Management  
University of Cape Coast

Dear Mr. Appiah,

**ETHICAL CLEARANCE – ID (UCCIRB/CHLS/2021/49)**

The University of Cape Coast Institutional Review Board (UCCIRB) has granted Provisional Approval for the implementation of your research titled *Institutional Pressures, Sustainability Culture and Sustainable Performance of Food and Beverage manufacturing firms in Ghana*. This approval is valid from 7<sup>th</sup> October 2021 to 6<sup>th</sup> October, 2022. You may apply for a renewal subject to submission of all the required documents that will be prescribed by the UCCIRB.

Please note that any modification to the project must be submitted to the UCCIRB for review and approval before its implementation. You are required to submit periodic review of the protocol to the Board and a final full review to the UCCIRB on completion of the research. The UCCIRB may observe or cause to be observed procedures and records of the research during and after implementation.

You are also required to report all serious adverse events related to this study to the UCCIRB within seven days verbally and fourteen days in writing.

Always quote the protocol identification number in all future correspondence with us in relation to this protocol.

Yours faithfully,

Dr. Samuel Aseidu Owusu,  
UCCIRB Administrator

ADMINISTRATOR  
INSTITUTIONAL REVIEW BOARD  
UNIVERSITY OF CAPE COAST