KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI

COLLEGE OF HUMANITY AND SOCIAL SCIENCE

SCHOOL OF BUSINESS

KNUST

SOCIALLY RESPONSIBLE CHAIN PRODUCTION IN AN EMERGING MARKETS: THE ROLE OF INSTITUTIONAL FORCES, TOP MANAGEMENT SUPPORT AND SUPPLY CHAIN AMBIDEXTERITY

By

KOMBAT SOLOMON

ID (20830500)

A thesis submitted to the Institute of Distance Learning, Department of Supply Chain and Information Systems, School of Business, College of Humanity and Social Science, KNUST in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE IN

PROCUREMENT AND SUPPLY CHAIN MANAGEMENT

NOVEMBER, 2023

DECLARATION

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of another degree of the University, except where due acknowledgment has been made in the text.

KNUST

Kombat Solomon …… …….

(PG 9458621) SIGNATURE DATE

SUPERVISOR

We hereby declare that the preparation and production of this report was supervised in accordance with the guidelines on supervision of thesis laid down by the Kwame Nkrumah University of Science and Technology.

Dr John Mensah …… ……

NAME SIGNATURE DATE

Certified by

Prof David Asamoah …… ……

Head of Department SIGNATURE DATE

ABSTRACT

Supply chains sustainability are crucial for industrial enterprises to survive in highly competitive industries. Not only do supply chain sustainability dynamics shape business and working environments, but they also affect the business model opportunities and capacities. This study examines the major role of institutional force, top management support and the supply chain ambidexterity on socially responsible supply chain within the production. Industry. The study seek to achieve the following four specific objectives; determine the various institutional forces activities in the manufacturing sector in the Northern region, investigates the socially responsible supply chain activities in the Manufacturing Firms within the Northern Region and the two remaining objectives are to examine moderation role of supply chain ambidexterity on the relationship between top manage socially responsible supply chain and investigate the mediation role of top management support on the relationship between institutional forces and socially responsible supply chain. Quantitative design was adopted with a sample size of 285. Among the key findings of the study were that both direct and indirect institutional forces positively and significantly affect both the top management support system and socially responsible supply chain management practices. Also, at the higher supply chain ambidexterity practices top management support system influence the socially responsible supply chain management practices positively. The study therefore recommended that management should invest more into socially responsible supply chain in order to get more production firms running in the Country.

DEDICATION

I dedicate this work to my parents and guardians for their support to ensure that I had the best education parent could ever give to his/her child.

KNUST

ACKNOWLEDGEMENT

My sincerest thanks to Jehovah God for the gift of life and for the undeserved abundant Grace that has brought me this far in life to be able to complete my degree. My next thanks go to my brother **Inspector Kwesi Musah** for hes support and guidance provided during the preparation of this report.

I will also like to extend my heartfelt gratitude to our supervisor Dr John Mensah for his constructive criticism that has brought about the successful completion of this work.

Finally, I would want to profoundly thank my families especially my father (Mr Groruk Kombat) my wife (Mrs Mercy Jakut) my son (Kombat Nyantirut Favour) and my daughter (Kombat Yennuesom Wilhelmina) for standing solidly behind me during my academic endeavours.

KNUST

TABLE OF CONTENTS

DECLARATION i

ABSTRACT ii

DEDICATION iii

ACKNOWLEDGEMENT iv

TABLE OF CONTENTS v

LIST OF FIGURES ix

LIST OF ABBREVIATIONS x

CHAPTER ONE 1

INTRODUCTION 1

1.1 BACKGROUND OF THE STUDY 1

1.2 STATEMENT OF PROBLEM 3

1.3 OBJECTIVES OF THE STUDY 3

1.3.1 General Objective of the Study 3

1.3.2 The Specific Objectives 3

1.4 RESEARCH QUESTION OF THE STUDY 4

1.5 SIGNIFICANT OF THE STUDY 4

1.6 METHODOLOGY OF THE STUDY 5

1.7 THE SCOPE OF THE STUDY 6

1.8 LIMITATION OF THE STUDY 6

1.9 ORGANISATION OF THE STUDY 7

CHAPTER TWO 8

LITERATURE REVIEW 8

2.2 Conceptual Review 8

2.2.1 Socially Responsible Supply Chain (SRSC) 8

2.3 Institutional Forces 9

KNUST

2.4 Top Management Support 10
2.5 Supply Chain Ambidexterity 10
2.5 Theoretical Review 11
2.6 Empirical Review and Hypothesis Development 13
2.7 Impact of SRSC Process 23
2.7.1 Hypotheses Development 27
2.7.2 Institutional Forces and Top Management Support 27
2.7.3 Mediating Role of Top Management Support 29
2.7.4 Top Management Support and SRSC 29
2.7.5 The Moderating Role of Supply Chain Ambidexterity on the link between top management support and SRSC 30
CHAPTER THREE 32
METHODOLOGY AND ORGANISATIONAL PROFILE 32
3.1 Introduction 32
3.2 Research Design 32
3.3 Population of the Study 32
3.4 Sample Size and sample Technique 33
3.5 Data Collection 33
3.6 Non-Response Bias 34
3.7. Measures and Control Variables 34
3.8 Data Analysis 35
3.9 Validity and Reliability 36
3.10 Ethical Issues 36
3.11 Profile of the Organisation 37
CHAPTER FOUR 40
RESULTS AND DISCUSSION 40
4.0 Introduction 40

KNUST

4.1 Demographic Characteristics of Respondents and Focal Firms 40
4.1.1 Sample Characteristics 41
4.2 Assessment of Psychometric Properties 42
4.3 Hypothesis Testing and Model Specification 44
4.4 Discussion and Conclusion 46
Figure 2 Results of the structural model testing. 48
CHAPTER FIVE 49
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS 49
5.1 Introduction 49
5.2 Summary of the Study 49
5.2.1The various institutional forces activities in the manufacturing sector in the Northern region. 50
5.2.2 The socially responsible supply chain activities in the Manufacturing Firms within the Northern Region. 50
5.2.3 The moderation role of supply chain ambidexterity on the relationship between top management socially responsible supply chain. 51
5.2.4 The Mediating role of Top-management Support in the link between Institutional forces and Socially Responsible Supply Chain 51
5.3 Theoretical Implication 51
5.4 Managerial Implications 52
5.5 Limitation and Future Studies 53
REFERENCES 54
APPENDIX 57

KNUST

LIST OF TABLES

Table:1 Characteristics of Respondents (Sample = 143).....41

Frequency 41

Percentage.....41

Table 2: Results of Reliability.....42

Table 3: Descriptive and Inter-Variable correlation results. 44

Table 4: HTMT criterion 44

Table 5 Hypothesis Testing 46

Table 6 Summary of mediation effect testing.....46

KNUST

LIST OF FIGURES

Figure 2 Results of the structural model testing. 48

KNUST

LIST OF ABBREVIATIONS

SRSC	Socially Responsible Supply chain
TMS	Top management support
AGI	Association of Ghana industries
SSCM	Sustainable Supply chain management
TBL	Triple bottom line
SDG	sustainable development goals

KNUST

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Supply chains sustainability are crucial for industrial enterprises to survive in highly competitive industries. (Khanfar et al., 2021). Not only does supply chain sustainability dynamics shape business and working environments, but it also affects the business model opportunities and capacities (Hasle and Vang, 2021). Supply chain sustainability has become important component of organizational and strategic initiative (Perrott, 2015). Current studies have focused on the growth of socially responsible supply chain (SRSC) under the industrial sustainability (Linton et al. 2007). A SRSC is a process-related feature of a company's supply chain activities that has an effect on human wellbeing, sustainability, and business development (Tang, 2018).

As a result, the focus on social welfare for the manufacturing supply actors and their activities has shifts from local optimization of environmental factors to consideration of the welfare of entire supply chain, that is the upstream, internal, and downstream supply actors, within the production processes. The growth and stimulation of SRSC activities continues to be a concern in Sub-Saharan Africa because they are the areas largely unexplored as opposed to environmental sustainability (Croom et al. 2018). However, market-oriented practices, on the other hand, such as Fairtrade programs, are far more strategic, long-term investments that boost reputation and ultimately contribute to increased operating efficiency across the entire supply chain operations (Awaysheh and Klassen, 2010; Croom et al., 2015). It has always been a practice where companies are concentrating only on their suppliers neglecting the critical role played by the internal and the downstream actors (Quarshie et al., 2016; Thorlakson et al., 2018). In this study,

institutional forces will be examined in relation to how SRSC procedures that affect upstream, internal and downstream supply actors as supply chain ambidexterity and direct institutional forces play mediating roles.

Implementation of SRSC practices by the firms in the recent times are due to the pressures being mounted by the indirect institutions (Mann et al. 2010). As a result, SRSC practices within the production sector is continually receiving pressure from mass media, commercial competitors, local community and custodians and also force by employees, suppliers and government regulators pressures as direct institutional forces. Prior research also indicates that indirect institutional force's ability to influence SRSC practices will also depends upon the supply chain ambidexterity strategy and the direct institutional forces within the organisation in which they operate (Gibson and Birkinshaw, 2004; Ojha, 2018). However, the recent literature lacks an appreciation of whether and under what circumstances will supply chain ambidexterity which is the ability to concurrently harmonise and respond to various business opportunities enhance efficiency affecting SRSC practices within the manufacturing industries. (Rojo et al., 2016).

However, drawing from institutional theory, this study investigates the impact of supply chain ambidexterity and the direct institutional forces for ethical conduct towards the adoption of SRSC practices initiated by the indirect institutional forces and finally, the study explores whether supply chain ambidexterity is influence by the direct institutional forces to help for the implementation of SRSC practices. More so, SRSC brings about productivity and costs management goals and businesses with enough flexibility to tackle adverse incidents impacting on the production processes (Bui et al., 2020).

1.2 STATEMENT OF PROBLEM

While a considerable amount of research has been done on SRSC, institutional forces role in addressing SRSC practices has been largely unexplored (Law and Gunasekaran, 2012; Bhakoo and Choi, 2013; Kuappi, 2013; Coyle et al., 2013). Again, the current literature focuses only on the effect of either institutional force on firms' SRSC practices (Liu et al., 2014) and neglects the relationship between the on SRSC practices and the mediating role of supply chain ambidexterity and the direct institutional forces. However, firms' responses to different institutional forces (suppliers, employees, governments, regulations, competitors, mass media, local communities and custodians' pressures) have not been studied systematically and have remained unexplored compared to traditional variables of mimetic, normative and coercive pressures, a gap we seek to fill in this study. SRSC activities can open new opportunities, help maintain and attract corporate partners as well as providing a catalyst of creativity for new business and service lines as a way to achieve manufacturing social sustainability (Huq et al. 2014).

1.3 OBJECTIVES OF THE STUDY

1.3.1 General Objective of the Study

This study investigates the effect of institutional forces, top management support and the supply chain ambidexterity on socially responsible supply chain (SRSC)

1.3.2 The Specific Objectives

1. To determine the various institutional forces activities in the manufacturing sector in the Northern region.
2. To investigates the socially responsible supply chain activities in the Manufacturing Firms within the Northern Region.
3. To examine moderation role of supply chain ambidexterity on the relationship between top manage socially responsible supply chain.

4. To investigate the mediation role of top management support on the relationship between institutional forces and socially responsible supply chain.

1.4 RESEARCH QUESTION OF THE STUDY

1. What are the various institutional forces activities in the manufacturing sector in the Northern region?
2. What are the socially responsible supply chain activities in the Manufacturing Firms within the Northern Region?
3. What is the moderation role of supply chain ambidexterity on the relationship between top manage socially responsible supply chain?
4. What is the mediation role of top management support on the relationship between institutional forces and socially responsible supply chain?

1.5 SIGNIFICANT OF THE STUDY

This study makes three contributions to the body of knowledge by considering first, the case of direct and indirect institutional forces different from coercive, mimetic, and normative pressures in the existing literature (Cai et al. 2010). The study, seeks to investigate the relationship between institutional forces and SRSC, drawing on earlier studies it contributes to a growing literature on the relationship between institutional forces and SRSC (Dubey et al. 2015; Kauppi, 2013; Law and Gunasekaran, 2012; Cai et al. 2010; Liu et al. 2010). More so, this study is to investigate the indirect effect of instructional forces on SRSC and the direct institutional forces mediation effect which flows from the relationship between indirect institutional forces and the SRSC within the manufacturing firms. This allows us to know the extent to which implementation of SRSC is a dependent on the presence of pre-existing direction of the institutional pressures and the strategies of the firm which may be dependent on the broad strategic position of the manufacturing companies. Thirdly, SRSC is an essential practice that is supposed to reveal how to make

strategic social investments for manufacturing companies and promote public policies within a cross-sectional sample that support the achievement of Sustainable Development Goals (SDG). Moreso the study of SRSC is to reveal how to partner within the supply chain local players, pooling strengths to make a more significant positive impact on the various supply actors in the production sector within the sub-Saharan Africa market.

KNUST

1.6 METHODOLOGY OF THE STUDY

The theoretical models' research hypotheses were developed and checked using primary data collected through survey methodology from Northern manufacturing companies and some multinational companies residing in the Northern Region of Ghana. Data collection was carried out by way of a paper-based survey. The final survey questions were sent to a sample of 550 Purchasing, Procurement, Logistics and Supply Chain managers, Operation managers, CEOs and other top executives. Potential firms were sent a letter, and survey questions personally delivered, accompanied by a confirmation of phone calls a week apart. Emails and phone calls were also provided to non-respondents and survey questions, three weeks after the first sample was sent to them.

SPSS IBM version 25 and SmartPLS version 3 were used for the data analysis due to the enormous and model complexity. The study provided much more details about the statistical relationships between all the variables included in a model (Akter, 2017; Hair et al., 2012). Two forms of data processing were conducted on the study: descriptive processing and inferential analysis. The descriptive statistics included standard deviation, skewness and the kurtosis analysis, which was done with SPSS. For inferential statistics, Partial Least Square Modeling of Structural Equations (PLS-SEM) was conducted using the repeated indicators approach. This study is exploratory research supported in empirical studies by PLS-SEM and has become an increasingly used tool (Hair, al et., 2017). Over

the past decade, PLS-SEM research has gained momentum, and there are ample possibilities for analysis on subjects such as mediation, moderation and multi-group analysis (Hair et al., 2014).

1.7 THE SCOPE OF THE STUDY

A study's scope refers to the delimitation of studies. The scope sets boundaries, exceptions and reservations in a sample (Asamoah, 2015). In this section, the scope and meaning of this research are delineated. The study focuses on private and public enterprise organisations of large, medium and small sizes in the Northern Region of Ghana. In Ghana, the practice of SRSC is more prevalent in private organisations than in public entities because of the efficient and effective management of their limited and scarce resources. Studying big, medium, and small businesses allow the researcher to compare SRSC practices in two different contexts in which SRSC is practising. Concerning the industries to be covered, only in the manufacturing sectors were companies adopted in the analysis. Therefore, companies considered in the sector are agro-processing factories, pharmaceuticals, computer and electrical companies, beer manufacturing companies, clothing and textile businesses, to mention a few. In the manufacturing sector, the study looked at all kinds of SRSC activities, both basic and advanced, internal and external. This study was limited to businesses at the post-implementation stage of SRSC activities analogous to other researchers' approach (Asamoah, 2015; Croom et al., 2018; Zhu et al., 2010).

1.8 LIMITATION OF THE STUDY

Obtaining data from the members of the Association of Ghana Industries was a great challenge. It was complicated to access information from locally based firms. It always had to introduce a known person before the companies agreed to complete the questionnaire. In situations where there was nobody to introduce the researcher to the

firms, they usually turned the researcher away or took the questionnaire but never returned them. The sample used in this study consisted of active small, medium-sized and large manufacturing firms located in the Northern Ghana. Samples from other regions in Ghana would need further replication and refinement. Institutional forces were divided into two aspects, the direct institutional forces and indirect institutional forces. The relationship between the two elements was not studied and, therefore, further analysis of the relationship between direct and indirect institutional forces should be pursued in the future.

1.9 ORGANISATION OF THE STUDY

Chapter one is the research presentation, which includes the study background, the problem statement, and research objectives. Furthermore, the study's significance, the scope of the study, and the methodology, limitation and the organisation of the study description are addressed. The extensive theoretical and empirical literature on important concept and studies forming the foundation of the study was reviewed in Chapter Two. Chapter three describes the study's methodology, and it covers the scientific methods and sample design, including the construction of instruments and the processing of data. Chapter four presents the results and the discussion on the findings of the study. Finally, chapter five covers the summary of the findings, conclusions, implication of findings to research and practice and suggestions for further studies.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This research proposes to fill these gaps in the literature by assessing institutional forces on socially responsible supply chain process. The study examines the existing antecedents of the socially responsible supply chain processes. Relevant extant literature reviewed have been classified into various institutional forces, top management support, supply chain ambidexterity and socially responsible supply chain. This review will broaden our understanding of the factors that influence the impact and benefits of socially responsible supply chain system implementation.

2.2 Conceptual Review

2.2.1 Socially Responsible Supply Chain (SRSC)

While many definitions of sustainability in general exist, one central concept is Elkington's (1998) triple bottom line (TBL), which combines environmental, social, and economic performance. Hence, SRSC is a component of the TBL (Kleindorfer et al., 2005) and deals with the management of human and societal capital (Sarkis et al., 2010). It pertains to forming and preserving fair management practices towards labour, communities and regions in the supply chain (Sloan, 2010). Studies on SRSC have often focused on different aspects, such as issues related to the social priorities implemented by purchasing managers and their effects on some of the dimensions of manufacturing performance (Miemczyk and Luzzini, 2019); the impact of modern slavery and how organizations should deal with this issue in their supply chains (Gold et al., 2015; New, 2015; Stevenson and Cole, 2018); and how ethical issues are considered in a supply-chain context (Ferrell et al., 2013; Picasso et al., 2021). Miemczyk and Luzzini (2019), for instance, found that SRSC is positively related to performance when mediated by risk assessment practices. Thus, by

developing SRSC practices across supply chains, organizations seek to guarantee that economic gains are achieved through a value chain that acts respecting the law, adopting ethical behavior and supporting minority suppliers. Theoretically, SRSC initiatives can be viewed as indicators that support reputation-building and decrease information asymmetry in the market, which can increase customer satisfaction. (Al-Esmael et al., 2021).

KNUST

2.3 Institutional Forces

Institutional forces are present not only in the focal companies but also throughout their supply chains. Institutional forces can, either be the direct or indirect pressures for manufacturing firms to engage in socially responsible practices and require that their supply chain actors comply with ethical, regulatory and international labor laws (Picasso et al., 2010). As a result, a growing number of firms have recognized the need to audit and collaborate with suppliers, employees and customers to strengthen the social responsibility of their supply chains (Sancha et al., 2015).

Internal institutions through their direct pressures on strategic decisions and external institutions such as mass media, local communities and local custodians exercising their indirect collective voice, to influence the acceptance of SRSC practices within the manufacturing industry (Mani et al. 2015). Scholars have argued that institutional pressures emanating from the business community and transmitted through operational channels can strongly affect the strong predisposition toward adopting a SRSC (Mani et al., 2015). The findings of previous studies on how institutional forces affect a firm's implementation of supply chain practices have been mixed. For example, while some studies find significant influences of perceived coercive pressures (Khalifa and Davison, 2006; Teo et al., 2003), others show that they are insignificant (Liang et al., 2007; Son and Benbasat, 2007).

2.4 Top Management Support

Tushman and O'Reilly III (1996) underline the importance of an organization's top management support and their power to shape organizational supply chain ambidexterity. Managers play a crucial role in how units can efficiently conduct their current business activities while adapting to changes and looking for innovation. Furthermore, managers can alleviate friction and conflict between structures (Smith and Tushman, 2005) and have the potential ability to create a supportive environment (Gibson and Birkinshaw, 2004) to enhance supply chain ambidextrous features and actions. Lubatkin (2006) emphasizes the top management support level of behavioral integration and its effect on organizational by encouraging institutions to practice socially responsible supply chain. The simultaneous pursuit of exploration and exploitation is directly supported by top management support and ability to solve conflicts. Furthermore, managers connected with employees' habits and communication between the hierarchies is fluent, and tend to actuate ambidextrous behavior (Smith et al., 1994).

2.5 Supply Chain Ambidexterity

Deriving from organizational ambidexterity, individual ambidexterity refers to an individual's capability to efficiently conduct exploitative and explorative activities (Rogan and Mors, 2014). Exploitation refers to the execution and management of current business activities, whereas, exploration is searching for new opportunities or developing old ones (Raisch and Birkinshaw, 2008). Individual or organizational ambidexterity is, however, not something to consider self-evident. The issue with individuals, as with organizations, is the ability to balance between the two so that both exploration and exploitation can be conducted simultaneously and as efficiently as possible. However, for organizations, there are means to alleviate the dilemma of pursuing both concurrently.

Duncan (1976) was the first to present the term 'organizational ambidexterity' which refers to the organization's ability to align and control its current business activities and adapt to emerging changes in the surrounding business environment (Gibson and Birkinshaw, 2004; Raisch and Birkinshaw, 2008). Exploitation refers to refinement, efficiency, choice, and execution of routine tasks, whereas exploration is search, risk-taking, experiment, and innovation (March, 1991). Radical innovation (exploration) can be targeted for new potential customers to answer potential emerging needs. Moreover, incremental innovation (exploitation) is directed to answer the needs of existing customers (Smith and Tushman, 2005). Hence, the simultaneous pursuit of both explorative and exploitative activities rewards organizations with competitive advantage (He and Wong, 2004), growth in sales (Auh and Menguc, 2005), increased performance (Bierly and Daly, 2007), more initiative towards innovation (Burgers et al., 2009) and better chances at survival (Hill and Birkinshaw, 2014). It was long believed that pursuing exploitative and explorative actions simultaneously presents organizations with a dilemma on where to allocate current resources and time (Duncan, 1976). Furthermore, there is always a close to unpreventable trade-off between whether to focus on current versus future projects or deciding on low versus high-price production (Gibson and Birkinshaw, 2004). The conflict is almost inevitable, but there are means by which organizations can alleviate these trade-offs.

2.5 Theoretical Review

We have grounded our theoretical model in institutional theory to examine the relationship between direct and indirect institutional forces, top management support, supply chain ambidexterity and socially responsible supply chain. Institutional theory considers the processes by which structures, including schemas, rules, norms, and routines, become established as authoritative guidelines for social behavior. Applying such organisational theories to supply chain management is an area which is currently in its infancy (Glover

et al., 2014); particularly where the focus of attention is on social sustainability. Previous research applying Institutional Theory has focused on organizations, whereas this study explores a supply chain comprising of multiple institutions. Institutional Theory has been used extensively in studies exploring social issues of supply chain actors (Tang, 2018). The strength of Institutional Theory is that it offers explanations of why certain practices are chosen without an obvious economic return (DiMaggio and Powell, 1983). We explore what institutions across the small and medium size manufacturing firms are doing in order to increase the welfare of their supply chain actors, whether they have future plans to do more in terms of building their efficiency in production i.e. are their practices visible or invisible beyond the firm boundary. We also explore the key factors that influence the development of sustainable strategies, in the manufacturing sectors. The present study contributes to the literature on sustainable strategies, particularly in relation to social issues and using Institutional Theory allows us to explore the factors that affect different actors across a supply chain and could help to identify where collaborative change in practices could be encouraged.

Yawar and Kauppi, (2018), argue that institutional pressures drive the adoption of social supply chain strategies and contiuous that Literature frequently applies institutional theory to explain how social issues in supply chain are managed. Sancha et al. (2015b) apply institutional theory and confirm that institutional pressures play an important role in institutionalisation of social sustainable practices. Preuss (2009) analysed the sustainability reports of FTSE 100 firms and found that firms heavily mimic organisational practice while implementing sustainability codes and standards at the supplier level. However, not many studies in sustainable supply chain management (SSCM) have focus on the social side of sustainability as compare to environmental sustainability (Touboulic and Walker, 2015) and for that matter, there is a need to research into SRSC practices.

Morali and Searcy's (2013) scholarly review on sustainable supply chain literature also argues that institutional theory overall helps in understanding the sustainable practices adopted by firms in relation to their external stakeholders.

2.6 Empirical Review and Hypothesis Development

A socially responsible supply chain is proposed to be accomplished by manifesting the core principles of the supply chain players, policies, and techniques. The studies address the duty of each supply chain actor in maintaining a responsible supply chain outside the direct control of the actor (Vaaland and Owusu 2012). The analysis of the literature on SRSC's various studies shows that no study on the subject has been done in Sub-Saharan Africa, which reflects a research void that this study will tackle.

KNUST

Table 2.1 Varied SRSC Studies in Developed Nations

Author (s) and Year	Country and Paper	Purpose of the Study/Research Objective	Independent Variable (s)	Dependent Variable	Moderator Variable (s)	Mediator Variable (s)	Methodology and Theory	Findings	limitation
Sancha et al. (2015)	Spain Journal of Cleaner Production 112, 1934-1947.	To analyse the efficacy of two sustainable supply management activities (i.e., assessment and collaboration) to create a SRSC.	Assessment Collaboration	Suppliers,' social performance, Buying firm's Social performance			Investigations were carried out using data from 120 Spanish manufacturers. No theory	Results indicate that the evaluation of suppliers contributes to improving the social performance of the buying company. Again, working with them increases the social performance of the suppliers.	Performance has been measured using self-reported data. This construct should be measured using objective indicators
Zhang et al. (2017)	United Kingdom	The research aims to explain the impact of supplier	Institutional Pressures Capability gaps Supply chain	Supply chain social		Indirect supplier Development	The research uses a qualitative	The findings suggest that manufacturers should apply	The research uses an in-depth case study approach

	Journal of Production Planning and Control,	growth activities on social responsibility in the supply chain	social responsibility	responsibility	Direct supplier development	case-study approach Institutional theory and RBV	supplier improvement practices to improve social responsibility in the supply chain, including standard operating procedures (SOPs), audits, partnerships and training.	where only one MPC and its supplier were used for data analysis and again, it was a purely qualitative analysis
Carter and Jennings (2004)	U.S.A Journal of Business Logistics, Vol. 25, No.1,	To empirically analyse issues of business social responsibility in the narrower context of the purchasing function	Top management leadership, Individual Values of Purchasing employees, Government regulation, Customer pressure, Organisational size	Purchasing social responsibility	People oriented organisational culture, Employee initiatives	The data were analysed using exploratory survey and structural equation modelling No theory	The study examined that activities related to the areas of diversity, climate, protection, human rights, and purchasing management philanthropy, which has been studied	First, the sample frame was limited to Institute of Supply Management members in consumer product organisations, potentially affecting the generalizabi

KNUST

		separately in the past, are linked and fall within the rubric of supply chain responsibilities.	lity of results;

KNUST

Park and Stoel (2005)	U.S.A International Journal of Retail and Distribution Management Vol. 33 No. 4,	Developing a model of socially responsible companies to investigate the mechanism of socially responsible purchase decisions and also to examine the effects of personal sources of influence on the SRB decision process.	Top management, Peers influence, Idealism,	Socially responsible buying	Relativism, Attitude toward ethics and social responsibility	Mail survey and use of Structural Equation Modeling No theory	SRSC typically adopted a rational decision process and was informed in part by the affective response of the decision-maker to the actions of peer buying/sourcing professionals. However, emotional response to top management was not significant	The SRSC scale created for this study focuses on the essence of clothing/shoe transactions that may limit their applicability to other industries. SRB was also determined via the subjective views of the respondents, which may be subject to some degree of bias in social desirability.

KNUST

Awaysheh and Klassen (2010)	North American-Canada International Journal of Operations and Production Management, Vol. 30 Is 12 pp. 1246 – 1268	To investigate the incorporation of social problems in SCM from an operations management viewpoint.	Supply chain structure	Supplier socially responsible practices	Survey Method No theory

Hoejmose et al. (2013)	UK International Journal of Operations and Production Management Vol. 33 No. 5, 2013 pp. 589-621	Exploring the impact of business policy on managing the SRSC.	Business practices	Socially Responsible SCM	Supply chain process sophistication	A cross-sectional survey studies No theory	Business policies have a significant impact on socially responsible management of the supply chain. Low-cost producers in the supply chain are increasingly neglecting their social obligations.	The research is only base on UK environment
Hoejmose et al. (2013)	UK Supply Chain Management: An International Journal, Vol. 18 Is 3 pp. 277 - 291	This study aims to examine the role of relation power / dependent asymmetries and symmetries in shaping SRSC, while	Power/dependency, Geographical distance	Socially responsible supply management		A cross-sectional analysed through a collection of OLS regressions No theory	Joint dependency positively affects the socially responsible management of the supply chain, while supplier control limits that.	Further research is required to explore the circumstances under which companies can exercise their power advantage or mutual

KNUST

		also exploring how the geographical distance between buyer and supplier reduces these issues.				As geographic distance grows, both mutual dependency and consumer power become increasingly important determinants of the socially responsible supply chain management.	dependency to enhance socially responsive supply chain processes, as there may be situations in which the consumer decides not to exercise his power positions
Mont and Leire (2009)	Sweden Social Responsibility Journal, Vol. 5 Iss 3 pp. 388 - 407	To investigate the factors motivating or hindering companies from adopting socially responsible purchases.	stakeholder influence organisational values, media and NGOs' attention employees' concern.	socially responsible purchasing	A qualitative study No theory	The study shows that the key factors for socially responsible buying in companies include the power of stakeholders	Future work may compare the socially responsible procurement (SRP) practices of focal organisations from

KNUST

			lack of resources for supplier audits, suppliers code of conduct, differences in culture and management style, low levels of social standards and high levels of corruption in some countries			and corporate principles, the attention of media and NGOs as well as the interest of employees. The key challenges are a lack of resources for supplier audits.	different countries and deepen understanding of contextual factors that form supplier responses in different regions.
Salam (2007)	Thailand Int. J. Procurement Management, Vol. 1, Nos. 1/2, 2007	To grasp the Purchasing Social Responsibility (PSR), drivers	Top management leadership, Individual Values of Purchasing employees, Government regulation, Customer pressure, Organisational size	Purchasing social responsibility	Survey method No theory	The results indicate that all six proposed paths were justified. Individual beliefs and corporate culture focused on people are the most important	The study was limited to small sample size members affecting the generalizability of the findings

KNUST

						predictors of PSR.	
Vaaland and Owusu (2012)	Norway and Finland International Journal of Business and Management Vol. 7, No. 4;	Systematize current research over the last decade and propose a framework for understanding responsibilities in the supply chain	supply chain actors, practices, and tactics	responsible supply chain	Archival method No theory	The relation between values and supply chain activities can be identified.	More new techniques and tools will be available to integrate corporate social responsibility into supply chain operations.

2.7 Impact of SRSC Process

In the globalized world, it is becoming increasingly apparent that, in addition to managing the own social impacts of an enterprise, all supply chains need to be controlled because the success of supply chain actors affects the success and credibility of the purchasing company (Leire and Mont, 2010). They claimed that the SRSC is interpreted as the effect of commercial activities on various social groups (or stakeholders), including protection of the environment, human rights, health at work and fair conditions for workers, etc. According to Carter and Jennings (2002), SRSC aims to incorporate the social and economic aspects of the business to generate greater value for society as a whole and to play a significant role in the country's sustainable growth. Additionally, in the view of firms' managers, SRSC can enhance the brand and social image of businesses. Besides reducing risks, on the other hand, ignoring of SRSC may bring high pressures on corporate from media activists, non-governmental organisations, professional unions and other groups of society. Such constraints have a competitive and sustainability impact on commercial activities.

The findings of Mohr et al. (2009), from in-depth consumer interviews to determine their views on SRSC shows that at least, some of the motivation for a corporation to be socially responsible is to help others but they also recognize that corporations consider SRSC to be in their interests. Moreso, Cruz (2009) considered the decision-making conduct multicriteria of the various decision-makers (manufacturers, retailers, and consumers), which includes maximizing net profit, minimizing pollution, and minimizing danger. Their model helps one to analyze the interplay of heterogeneous supply chain decision-makers and measure the resulting equilibrium pattern of product outputs, purchases, commodity costs, and rates of social responsibility activities. The findings suggest that social

responsibility practices can theoretically reduce transaction costs, danger and effects on the environment.

However, Carter and Jennings (2001) use the term purchasing social responsibility to characterize the role of supply managers in SRSC activities and show that socially responsible supply chain has a direct and beneficial influence on supply chain actors 'efficiency as well as an indirect, mediated effect by enhancing trust and cooperation. Besides, as businesses become committed to SRSC practices and policies, there is also increasing demand to consider their social impact throughout the supply chain. Sutherland et al. (2016) suggested a general practice to identify social responsibility initiatives and define a range of benchmarks for SRSC activities as well.

.

KNUST

KNUST

Table 2.3 Impact of SRSC

Author (s) Year	Country /Paper	Purpose of the Study/Research Objective	Construct (s) Used	Underlying Theoretical Framework	Methodology	Findings
Mohr et al. (2001)	U.S.A The Journal of Consumer Affairs, Vol. 35, No. I,	To show what the customer feels about social responsibility in companies	Socially responsible, Consumers, Purchasing,	Measuring the size and composition of the market segment impacted by CSR when checking whether CSR has a major effect on customer responses.	Qualitative Study No theory	It has been checked that at least some of the incentive for a company to be socially responsible is to support others, but they agree that businesses often see CSR as being in their interests.
Cruz (2009)	United States Decision Support Systems 48 224–236	To develop a decision support system for modelling and evaluating CSR supply chain networks.	Supply chain networks Environment Corporate social responsibility Risk management Multicriteria optimization	Build a multicriteria supply chain decision-making network system covering manufacturing, distribution, and demand sector economic and CSR activities	Decision-makers multicriteria decision-making Behaviour No theory	The study shows that practices involving social responsibility can theoretically reduce transaction costs, risk and environmental impact
Carter and Jennings (2001)	U.S.A. Transportation Research Part E 38 37-52	Examining the potential impact SRSC could have on the supply	SRSC purchasing	To investigate the involvement of procurement managers in SRSC activities impacting the upstream supply chain	Survey No theory	The studies show that the socially responsible supply chain has both a direct and a positive impact on the output of supply chain actors and

KNUST

		chain relationship.				an indirect, mediated impact by enhancing trust and cooperation.
Sutherland et al. (2016)	United States C I R P Annals, 65(2), 689-712	It explores social impacts identified by national level social indicators, frameworks, and principles	Lifecycle, Human aspect, Social sustainability	Reviews of social impact measures, indicators and mechanisms and programs relevant to their ability to determine supply chains' social sustainability	Review of literature No theory	Companies have embraced the goal of sustainability integration by including various tools and modelling. The combination of these tools increases the awareness and influence reporting on company actions.
Pishvaee et al. (2012)	Iran Fuzzy Sets and Systems 206 (2012) 1–20	To tackle the issue of socially responsible network architecture of supply chain under unpredictable conditions.	Fuzzy mathematical programming ; Robust possibilistic programming ; Necessity measure; Corporate social responsibility ; Supply chain network design	A bi-objective mathematical programming model is developed which optimizes the supply chain network configuration concerning both social and economic aspects.	Literature review No theory	Various types of models are then developed, including the hardest case, the soft worst case and the practical RPP approaches, and their similarities, limitations, strengths and the most appropriate conditions to be used are addressed, as well as their advantages over the previously existing possible programming approaches.

2.7.1 Hypotheses Development

Organisations often responded to institutional forces by examining whether the adoption would increase operations' technical efficiency (Cavusoglu et al. 2015). The study employs this line of reasoning to explain why organisations engage in SRSC in responding to institutional pressures within the context of sustainability management. In particular, the study argue that organisations direct and indirect institutional forces on SRSC are normally channel through the top management support (Chu et al. 2017). Hence, organisations would make varying levels of investment in the event of institutional forces on SRSC. Our research model, focuses on impacts of institutional forces on SRSC through the top management support and moderated by supply chain ambidexterity shown in Fig. 1.

2.7.2 Institutional Forces and Top Management Support

Institutional theory indicates that corporations are influenced by their respective institutions' economic, social and political forces (Scott, 2001). Previous studies have identified numerous institutional influences. Cai et al. (2010) illustrate that supplier association policies, government regulations, local communities, competitors' strategies, custodians' approaches, and operational norms contribute to more substantial management intervention in developing new markets. Different types of institutional forces, such as direct and indirect forces, may have a more substantial impact on top management, and as a result, the response from each institutional pressure form a certain force for the firm (Chu et al., 2017). Cai et al. (2010) propose that both direct and indirect institutional forces affect the operation of manufacturing companies in Sub-Saharan Africa. This is essentially a mid-stage for examining the impact of top management on the application of SRSC (Chu et al. 2017). Hence, we hypothesis that:

H1. ***Direct institutional forces are positive and directly related to indirect institutional forces***

H2a. Direct institutional forces have a positive influence on the support of top managers.

H2b. Indirect institutional forces have a positive influence on the support of top managers

2.7.2.1 Institutional Forces and Socially Responsible Supply Chain

Compliance methods are viewed as a means of fending off institutional criticism and establishing the legitimacy of businesses' socially responsible actions in order to improve economic performance. (Yawar and Seuring, 2015). With regard to Hoejmose and Adrien-Kirby (2012),the The literature bases its discussions of social and ethical issues on the rules and moral standards for the purchasing groups uphold, yet this is insufficient to ensure a socially responsible approach.

Social support from managers and coworkers has a positive effect on job satisfaction and engagement, which all promote wellbeing for supply chain actors (Węziak-Białowolska et al., 2019). Social objectives, involving working conditions and the development of a social community, minimize the negative social impact of the supply chain network (Arampantzi and Minis, 2017).

Asking suppliers to pay a decent living wage according to the supplier's local costs is also an important socially responsible initiative (Flanigan, 2018; Reinecke and Donaghey, 2021) that, if not practiced, may lead to working conditions that are similar to those of slavery (Crane, 2013). In this aspect, institutional management is a key aspect of SRSC responsiveness.

H3a. ***Direct institutional forces are positive and directly related to socially responsible supply chain***

H3b. Indirect institutional forces have a positive influence on the socially responsible supply chain

2.7.3 Mediating Role of Top Management Support

After a careful review of organisational research, we found that top management support is a critical factor for organisational behavior (Colwell and Joshi, 2013), coordinating decisions and access resources, their support for SRSC practices is more likely to lead to effective organisational practice (Blass et al., 2014). According to Zhang et al. (2018), top management plays an essential role in linking institutional forces with firms' socially responsible practices. In this sense, top management plays an indispensable role, as institutional forces propel and support SRSC practices (Zhang et al., 2015). Therefore, we have the following hypothesis:

H4a: TMS positively mediate the relationship between the direct institutional forces and SRSC

H4b: TMS positively mediate the relationship between the indirect institutional forces and SRSC.

2.7.4 Top Management Support and SRSC

The management of businesses demands that public and private corporations have a social function. Business management should produce financial results to succeed over time and demonstrate how it makes a meaningful contribution to society (New York Times, 2018). Similarly, most investment firms are a signatory of the UN 'Responsible Investment Standards.' Amid this pattern, there is plenty of room for a systemic study of how TMS influence SRSC practices (Foss and Klein, 2018; Aguilera, Desender, Bednar, and Lee, 2015; Licht, 2018). Research indicates that TMS is an effective SRSC engine. In determining the pace and range of SRSC practices, TMS is highly emphasised (Desander

and Epure, 2020). Although ability and involvement can be created from any place in the organisation, TMS decisions play the most important role because they affect resource allocation activities that affect changes in social policies with the firms (Chu et al., 2017). Support from top management facilitates reflecting and enforcing organisational actions on SRSC (Sarkis et al., 2010). On the contrary, a lack of TMS will lead to more excellent firm resistance to the implementation of SRSC practices. The TMS is one of the fundamental driving forces for businesses to adopt various socially responsible initiatives (Sarkis et al., 2010). Overall, for social policies and programs to succeed, TMS is necessary (Chu et al., 2017).. Hence, we hypothesise that:

H5. Top management support has a positive influence on the implementation of SRSC

2.7.5 The Moderating Role of Supply Chain Ambidexterity on the link between top management support and SRSC

Ambidexterity has been defined as an organisation's ability to simultaneously explore and exploit different marketplace opportunities for better performances of the firms (Rojo et al., 2016). The rationales for supply chain ambidexterity illustrate why, and under what conditions, organisations resolve social issues through TMS (Hahn et al., 2016). A study on strategic human resources management and supply chain ambidexterity has assumed that supply chain ambidexterity affects organisational managers' implementation of SRSC activities. In the context of SRSC practices, senior management is regularly expected to juxtapose and evaluate different interests, as functional diversities are to lead to useful task conflicts among the top management (Henry et al., 2018). Industries tend to concomitantly use all rationales to explain social programs and boost SRSC practices (Aguilera et al., 2007). Therefore, despite their intrinsic opposition, adaptation and alignment programs are both beneficial for SRSC enhancements. The research contends that management that understands and acknowledges the simultaneous presence of opposing powers are more

likely to follow SRSC practices enhancing adaptation and alignment initiatives at the same time (O'Reilly and Tushman, 2013). However, it is argued that supply chain ambidexterity can satisfy competing demands while simultaneously contemplating divergent ideas such as alignment and adaptation (O'Reilly and Tushman, 2013), a crucial determinant of SRSC. It is established that an ambidextrous perspective of a firm on SRSC can lead to unpacking processes and conditions under which supply chain ambidexterity is supposed to result in higher SRSC.

On that basis, it can be concluded that;

H6: Supply chain ambidexterity positively moderate the link between top management support and SRSC.

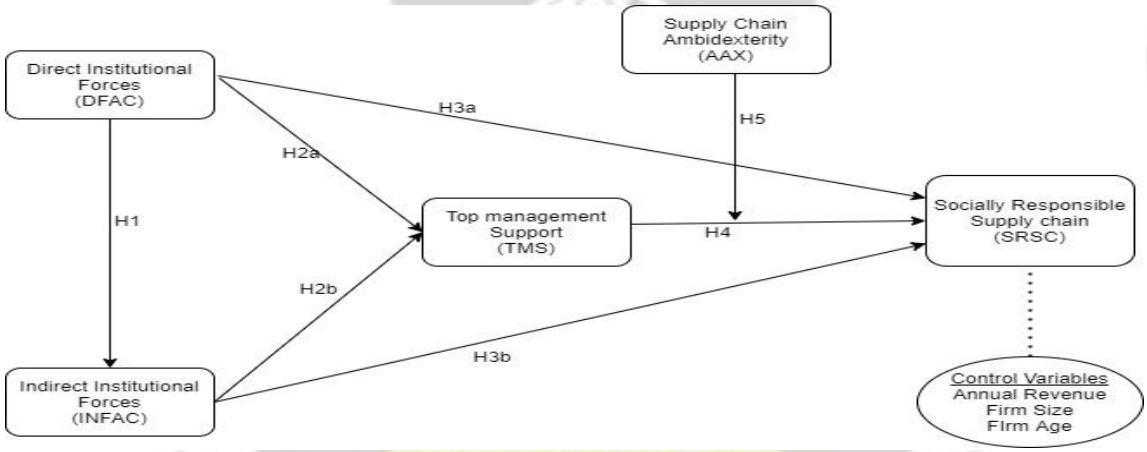

Figure: 1 Conceptual Model

CHAPTER THREE

METHODOLOGY AND ORGANISATIONAL PROFILE

3.1 Introduction

This chapter discusses the study's philosophical underpinnings and the methods used to characterize the research design used to gather data for the study. (Rindfleisch et al., 2008; de Vaus 2001). Considering the research objective and hypotheses developed previously, a comprehensive research design would clarify how the research objectives and hypotheses were validated. In brief, this chapter discusses the methodology of testing, research architecture, general data collection, and the profile of the study industry.

3.2 Research Design

Research layout is a comprehensive framework that drives research to accomplish its objectives (Bell et al., 2018). Bell et al. (2018) divided the study layout into five distinct types: experimental, cross-sectional, comparative, quantitative and case studies. It was updated that the main forms of study layout widely used in social science research are cross-sectional and longitudinal (also known as panel). The research style is a cross-sectional review for this research regardless of the short timeframe within which the report is to be presented.

3.3 Population of the Study

The population of this sample comprises all manufacturing firms registered with the Ghana Industries Association (AGI). AGI is a voluntary industry association comprised of more than 1200 members comprising small, medium and large-scale manufacturing and services firms in Agri-processing, agri-business, pharmacy, electronics, telecommunications, information technology, electricity, services, transport, construction, garment and clothing

industry. This type of population constitutes the largest group in which the researchers want the study results to be expanded. More than 1200 production firms will be very difficult to use for this analysis, so a sample has been chosen. The information was gathered through a survey that was given to 550 active manufacturing enterprises in Ghana that were registered with the Registrar General Department and the Association of Ghana Industries.

KNUST

3.4 Sample Size and sample Technique

A sample refers to a sub-group of the population that is studied to generalise the target population (Creswell, 2014). The need for sampling in research is to select a portion of the population that is most representative of the population. However, since the assessable population would be 175 administrative staff of the Cape Coast Technical University, the census method would be used to capture all the 175 administrative staff. Asamoah-Gyimah and Anane (2019) explained that the census method is used when the research can collect data from all the members of the population due to the small nature of the member in the target population. In mindful of this, the census method would be used to select all the 175 administrative staff members of the Cape Coast Technical University since the population would be relatively small.

3.5 Data Collection

To make sure that all of the measuring items were clear, after integrating final improvements, the survey was administered via a delivery-and-collection approach. The data were provided by top management of the various firms with a letter presenting the goal of the study (Essuman et al., 2020): CEO (6%), Supply chain managers (38.5%), operations managers (38.6%), logistics managers (8.1%) and other related top managers (14.4%) with useful educational and managerial experience with 67.4% of them had at least a Master's degree and above. We received 320 completed surveys, indicating a 58.2%

response rate. According to Dillman (2000), a response rate ranging from 6% to 16% is considered acceptable. The collected responses exceed the sufficient range for partial least squares structural equation modelling (PLS-SEM) analysis (Chin, 2010). Questionnaires with greater than 10 per cent of responses missing as Hair et al. (2010) recommend were discarded. Accordingly, we discarded 20 questionnaires due to missing data, and an additional 15 were unusable. Thus, 285 useable responses remained (accounting for 51.8% response rate).

3.6 Non-Response Bias

To test for non-response bias, we explored it across two mechanisms. First, early responses (received without any recall) were contrasted with late responses (obtained after a recall) (Lambert and Harrington, 1990), and were compared to the early respondents, and late respondents were considered identical to non-respondents (Armstrong and Overton, 1977). To study the variables, a multivariate t-test was used to find out if there were essential variations between the early group of respondents and the late group. The findings showed that there was no substantial difference (p=0.542) between early respondents and late respondents. In addition, the independent and dependent constructs of the survey were separated and given two the two respondents chosen from each firm, and double-barreled questions were also avoided. Consequently, we introduced a latent factor to the original measurement model and the comparison of the results obtained between the structural models with and without the latent factor revealed no significant differences. A summary of the sample characteristics is provided in Table 1.

3.7. Measures and Control Variables

A questionnaire was well-designed through a thorough investigations into the prior studies to produce measurement items for each construct (Cao et al. 2011). The measurements of constructs were adapted from or developed based on these prior studies (Gibson and

Birkinshaw,2004; Hoejmose et al. 2012; Klassen and Vereecke, 2012; Carter 2002 Mann, 2000; Du et al. 2013; Patel et al. (2013); Park and Ghauri, 2015). A five-point Likert scale was used to capture all respondents' responses to make choices that range from strongly disagree (1) and strongly agreed (5) answer. The second higher-order construct, socially responsible supply chain (Mani et al., 2020) then consists of three dimensions, i.e., upstream, internal and downstream supply chain, which were adopted from Klassen and Vereecke (2012) and Carter and Jennings (2002). Again, construct supply chain ambidexterity is based on its two dimensions of alignment and adaptation, both adopted from Gibson and Birkinshaw (2004) and Patel, et al (2013). The study included two control variables. First, considering the differences among organisations, we select company size as a control variable by means of the number of full-time employees that may influence the impact of institutional pressures and firm SRSC practices. Whereas smaller firms may surpass large firms in terms of SRSC practices (Huo et al., 2013; Kortmann et al., 2014), larger firms are more likely to achieve SRSC via enhanced scale and scope economies (Kortmann et al., 2014). Second, we controlled for firm age, since older firms often possess more production experience and reveal a higher degree of routine activities. These factors ensure superior cost structures as well as manufacturing and delivery times, they may also inert changes that are required to further improve SRSC practices (e.g., Kortmann et al., 2014). Further, older firms often have, similar to larger firms, greater access to resources (e.g., Barney,1991) and, therefore, maybe in a better position to improve their SRSC practices (Cua et al., 2001). We elaborate the effect of control variables in the analysis section.

3.8 Data Analysis

The data analysis phase would consist of editing, coding and statistical computation. After data collection, the items on each of the questionnaires would be labelled serially to ensure

easy identification, errors and easy coding. The data gathered would be analysed with the aid of the Statistical Package for Social Sciences (SPSS Version 25.0.). Percentages and frequencies would be used to analyse the data to be collected on the background information of the respondents. Data for research questions would be analysed using Smart Partial Least Square (Smart PLS). The hypothesis would be tested at a 0.05 significant level, implying a confidence level of 95%.

3.9 Validity and Reliability

The content validity and related issues would not be a challenge because the study would employ an instrument by scholars to measure observed variables to represent latent variables. The instrument contains question items that have been empirically tested, validated and used in other studies on institutional forces, top management support, supply chain ambidexterity and socially responsible supply chain practices. To check validity, the corrected instruments would be pilot tested using the survey was 45 companies and 5 academic staff members which are deemed to have similar characteristics to the entire manufacturing firms that are members of the AGI. Therefore, these respondents' firms that would be used for the pilot testing share the same working conditions as the actual respondents of the study. The convenience sampling technique would be used to select the 45 and 5 academic staff to participate in pilot testing. After the pilot testing, Cronbach's alpha would be used to estimate the reliability coefficient. According to Pallant (2010), a reliability coefficient of .70 and above is reliable for collecting data so only items with alpha values greater than or equal to 0.7 would be maintained by the study.

3.10 Ethical Issues

The key ethical issues that would be followed painstaking by the study includes an informed agreement, confidentiality, voluntary participation, and plagiarism. First and foremost, respondents would be asked to indicate their consent to take part in the study.

To ensure the confidentiality and anonymity of the respondents, they would not be required to indicate their names or address(es). Respondents would also be informed about their right to leave the study at any point they wanted especially when they feel uncomfortable in providing answers to the questions.

3.11 Profile of the Organisation

As was stated in section 4.9, the sampled companies from the eleven (11) industries are members of AGI. AGI is a voluntary industry group of more than 1200 members, consisting of small, medium and large-scale manufacturing and services industries in the fields of agro-processing (food and beverages), agri-business, pharmaceutical, electronics and electrical, telecommunications, information technology, energy, service industries, transport, construction, textiles, clothing.

AGI as the leading voice of manufacturing industries in the region is committed to:

- advocating policies that foster industrial growth and development;
- facilitating foreign trade by showing Member Goods in countries throughout the sub-region;
- reinforcing national industry associations through knowledge sharing, experience sharing and essential information;
- providing members with a wide network of contacts, in particular in the sub-region of West Africa;
- hosting industry and technology shows to promote the products of the participants.

AGI does these through:

- assessment and tracking of business policy impacts

- promoting and shaping legislation or other initiatives considered desirable for the development of industry; or
- contesting policies deemed unfavourable to industrial growth and development;
- presentation to government and stakeholders of industry position papers on relevant policies;
- Provision of quality service to member companies, in particular small and medium-sized enterprises, with a view to continuous improvement in their operations.

The group had started shortly after the age of independence. With the active intervention of the administration, Ghana embarked on a program of import-substitution industrialisation and it helped to grew the manufacturing sector with a lot of multinational companies such as United Africa Company (UAC) and a few emerging Lebanese and Indian industrialists. However, some nationals felt that the sustained growth of Ghana's industries would rely on local industrialists developing and participating actively. As a result, a small group of around 7–10 Indigenous Ghanaian Industrialists came together in 1957 to form the Ghana Industries Federation.

In 1961, the federation's base realizing that all Ghana manufacturing companies faced a common destiny regardless of ownership, it was expanded to embrace both the manufacturing industries owned by the state and those owned by foreign companies. Consequently, the association's name was changed to Ghana Manufacturers' Association. In 1984, it was deemed important that all sectors of business would be under one umbrella. Consequently, the Constitution of the Association was amended to accept membership companies whose services affect manufacturing, namely financial institutions, insurance companies and specialist associations such as the Ghana Association of Liquor Manufacturers, the Ghana Printers and Paper Converters Association, the Ghana

Association of Furniture and Wood Products, the Ghana Timber Millers' Organisation, Advertising Association of Ghana, as Associate Members. Consequently, the Association's name was changed to the Association of Ghana Industries (AGI).

KNUST

CHAPTER FOUR

RESULTS AND DISCUSSION

4.0 Introduction

This section showed and discussed the outcomes of the analysis. Beginning with the descriptive statistical outcomes of the demographic characteristics of the respondents, the chapter presented and discussed further, the assessment of psychometric properties, Descriptive and Inter-Variable correlation, and hypothesis testing and model specification. To make the results more readable, they are given in tables. The PLS method employs an "iterative mix of principal component analysis and regression." Its benefit is that it estimates all route coefficients and individual item loadings in the context of a given model at the same time.

4.1 Demographic Characteristics of Respondents and Focal Firms

In this chapter, we presented the results of demographic characteristics of respondents of employees of the firms and firm itself. Specifically, the section presented the results on the employee size, the firm age, revenue, and position of the respondents from the various firms that are under study.

4.1.1 Sample Characteristics

Table:1 Characteristics of Respondents (Sample = 143)	**Frequency**	**Percentage**
Employee Size		
10-49	**35**	**24.5**
50-99	**47**	**32.9**
100-200	**35**	**24.5**
201-1000	**21**	**14.7**
Over 1000	**5**	3.4
	143	**100**
Firm Age		
1-3years	**2**	1.4
4-6years	**25**	17.5
7-10years	**67**	46.9
11years and above	**49**	34.3
	143	**100**
Annual Revenue (Millions)		
<40,000.00	1	.7
40,000.00-119,000.00	4	3.2
120,000.00-159,000.00	17	11.6
160,000.00-199,000.00	38	26.7
200,000.00-499,000.00	41	29.1
500,000.00-1,000,000.00	24	16.5
>1,000,000.00	18	12.3
	143	**100**
Job Positions		
CEO	35	24.5
Operation Manager	55	45.5
Supply Chain Manager	13	9.1
Logistics Manager	7	4.9
Other Top Management Position	23	16.1
	143	**100**
Firm Categories		
Agro-processing (food and drink)	15	10.5
Pharmaceuticals	16	11.2
Electronics and Electrical	14	9.8
Garment and Textiles	16	11.2
Cosmetics Firms	5	3.5
Plastic manufacturing firms	31	21.7
Metal and fabrication	9	6.3
Agro Input Firms	15	10.5
Paper manufacturing companies	7	4.9
Roofing manufacturing companies	3	2.1
Beverage Manufacturing	12	8.4
Total	**143**	**100**

4.2 Assessment of Psychometric Properties

Before testing the reliability and validity of the measurement items, it is necessary to test the normality assumption to satisfy the conditions of maximum likelihood method of estimation for structural equation modeling. The maximum absolute value of the skewness of the items was -0.209 and the maximum absolute value of the kurtosis was 0.435, which are fully within the limits to confirm univariate normality assumption (univariate skewness < 2, kurtosis < 7) following the method of Kim, (2013) p = 0.01, dismissing the multivariate normality assumption. For the assessment of variance inflation factor (VIF) which is a measure of the amount of multicollinearity in a set of multiple regression variables, the highest value was 1.617 and the least was 1.465 (see appendix B) indicating that all the values were below the threshold value of 5 showing there was no collinearity problem within the measurement items.

Table 2: Results of Reliability

Latent Variables	Loadings	CA	CR	AVE
Direct Institutional Forces		**.781**	**0.859**	**0.605**
DIP1	**.704**			
DIP2	**.732**			
DIP3	**.866**			
DIP4	**.798**			
Indirect Institutional Forces		.832	0.887	0.663
ISP3	.802			
ISP4	.858			
ISP5	.786			
ISP6	.810			
Supply Chain Ambidexterity		.706	0.835	0.629
SCA1	.825			
SCA2	.706			
SCA3	.842			
Socially Responsible Supply Chain		.858	0.898	0.638
SRSC1	.800			
SRSC2	.830			
SRSC3	.802			
SRSC4	.796			
SRSC7	.765			

Notes: **CA** = Cronbach's Alpha; **CR** = Composite Reliability; **AVE** = Average Variance Extracted;

According to Hair et al. (2019), values above 8.0 are preferred, whereas good internal consistency reliability is defined as being above 0.7. As a result, Table 2 displays the results of all four constructs and their items, including direct institutional forces, indirect institutional forces, supply chain ambidexterity, and the socially responsible supply chain, demonstrating that each reliability measure exceeded the respective threshold values. The findings pointed to this study having very high internal consistency dependability.

Secondly, the most important aspect of high-quality research is reliability, but reliability alone is not enough; validity is also important. Accurate data measuring the concepts will be provided by using a reliable questionnaire. How well a construct and facts fit together is referred to as validity (Neuman, 2014). In addition, the examination of the correlations between items and factor scores for reflective constructs did not reveal cross-loading issues of the individual item (see Table 3). The Heterotrait-Monotrait ratio of correlations (HTMT) test (Table 4), a novel and more rigorous evaluation of discriminant validity for PLS-SEM, was done in light of the weakness of the cross loading of the constructs (Henseler et al., 2015). The findings show that the study's greatest HTMT value is 0.826, which is below the required threshold of 0.90 (Hair et al. 2019), confirming that the study's measures have sufficient discriminant validity. This also implied that there are no collinearity issues among the latent components, as they all contribute significantly and substantially to the composite model. As a result, both validity and reliability tests indicate that each item's consistency is stable and has minimal redundancy.

Table 3: Descriptive and Inter-Variable correlation results.

Variables	1	2	3	4
1. Direct Institutional Forces	1			
2. Indirect Institutional Forces	.624**	1		
3. Socially Resp, Sup, Chain	.575**	.520**	1	
4. Supply Chain Ambidexterity	.621**	.554**	.543**	1
Mean	**5.61**	**5.34**	**5.48**	**5.18**
Standard Deviation	**.96**	**.99**	**1.09**	**1.12**

Note: **p < 0.01 (2-tailed).

KNUST

Table 4: HTMT criterion

	DINFS	INDFS	SRSC	SCAB
DINFS				
INDFS	**0.757**			
SRSC	**0.677**	**0.594**		
SCAB	**0.826**	**0.691**	**0.693**	

4.3 Hypothesis Testing and Model Specification

The various hypotheses of the study were tested relying on the repeated indicators analysis approach using the SmartPLS SEM version 4 (Ringle et al., 2015). The results of the hypothesis testing are presented in Table 5. A second-order formative factor model was constructed in the structural model for the SRSC construct and its associations with three subconstructs: upstream SRSC, internal SRSC and downstream SRSC. Table 5 presents the results of the structural model estimation including standardised path coefficients, their t-statistics and significance on two-tailed t-tests. The standard errors were computed using the bootstrap resampling method (1000 resamples). According to Streukens and LeroiWerelds (2016), using bootstrapping (10,000 resamples) yields bootstrap confidence ranges for standardised regression coefficients. In terms of structural model evaluation, an

essential consideration is the structural/inner model; bootstrap confidence intervals are an effective method for discovering path coefficients (Hayes and Scharkow, 2013).

All coefficients on hypothesised paths; H1, H2a, H2b, H3a, H4, H5 and H6 were significantly supported at ($p < 0.05$). Hence, the study concluded that all hypotheses were supported. Approximately 100% of the variance is explained for SRSC. Weights of subconstructs used as indicators for second-order formative constructs were all also significant ($p < 0.05$), suggesting that each of them significantly contributed to the creation of the underlying factors.

Approximately 67.1% of the variance is explained for TMS. To test mediation effects. The mediator (TMS) was removed from the mode assessed and the coefficients of direct paths from direct institutional forces and indirect institutional forces to SRSC were significant. As reported in Table 4, both of the path coefficients were significant. Next, we added the mediator TMS to the model and examined the significance of several path coefficients to test mediation effects. While the magnitudes were decreased, both of the coefficients on the direct paths (direct institutional forces to SRSC and indirect institutional forces to SRSC) remained insignificant. The path coefficient from TMS to SRSC was significant, and all the path coefficients from direct and indirect institutional forces to TMS were significant. Taken together, we concluded that the effects of both direct and indirect institutional forces on SRSC are partially and fully mediated through by TMS respectively (Hair et al. 2019).

Table 5 Hypothesis Testing

Hypothesis	***Path***	*Path coefficient (t-value)*	***Hypothesis testing***
H1	**DIRECT -> INDIRECT**	0.83** (27.50)	Supported
H2a	**DIRECT -> TMS**	0.32** (2.08)	supported
H2b	**INDIRECT -> TMS**	0.54** (3.54)	supported
H3a	**DIRECT -> SRSC**	0.27** (2.59)	supported
H3b	**INDIRECT -> SRSC**	0.08** (0.65)	Not Supported
H4	**TMS -> SRSC**	0.25** (2.12)	Supported
H5	**Moderating Effect 1 -> SRSC**	0.20** (3.33)	Supported

** p < 0.05.

Table 6 Summary of mediation effect testing

Independent Variable	**Dependent Variable**	**Mediator**	**Path without Mediator**	**Coefficient**	**Path with Mediator**	**Coefficient**	**Testing Results**
Direct institutional forces	SRSC	TMS	**DIRECT -> SRSC**	0.00**	DIRECT -> SRSC DIRECT -> TMS TMS -> SRSC	0.27 0.32 0.25	No Mediation
Indirect Institutional Forces	SRSC	TMS	**INDIRECT -> SRSC**	0.00**	INDIRECT -> SRSC INDIRECT -> TMS TMS -> SRSC	0.08 0.54 0.25	Full mediation

**** p < 0.05.**

4.4 Discussion and Conclusion

This study empirically identifies two institutional forces, direct and indirect institutional forces primary compose of seven institutional pressures; government regulation, suppliers and employees of the firm forming direct institutional forces and competitors, mass media, local communities and custodian pressures also serving as indirect institutional pressures. Indirect institutional force was found to influence SRSC through TMS whiles direct

institutional force influence SRSC unswervingly. As the research on SRSC is still evolving, compared to other dimensions of sustainability pertaining to supply chain, this research will not only help the supply chain anagers, corporate strategists and policymakers to formulate their social response activities but also provide first-hand information on pressures that have a greater driving power on practices SRSC, so that they can be managed well all the time. Direct institutional force composes of government regulation pressures, suppliers' pressures and employees' pressures comes out as the strongest forces with high driving power directly on SRSC and also on indirect institutional forces. This shows that, in the emerging markets, the government regulations, suppliers association and employees union pressure still play roles in corporate governance. This could be because of the fact that social issues in the manufacturing sector are deeply related to the upstream, internal and downstream supply actors and their well-being. These findings are consistent with those of Mani (2015) and Cavusoglu et al. (2015) who asserts that the pressure from employee unions in the form of negotiations and discussions as well as government regulations significantly influence socially responsible practices. This study offers a deeper understanding of the socially responsible supply chain practices. The effects that direct and indirect institutional forces, top management support and the supply chain ambidexterity have on socially responsible supply chain. The empirical results emphasise the critical role of each construct, especially the adoption of top management role on socially responsible supply chain initiated by direct and indirect institutional forces.

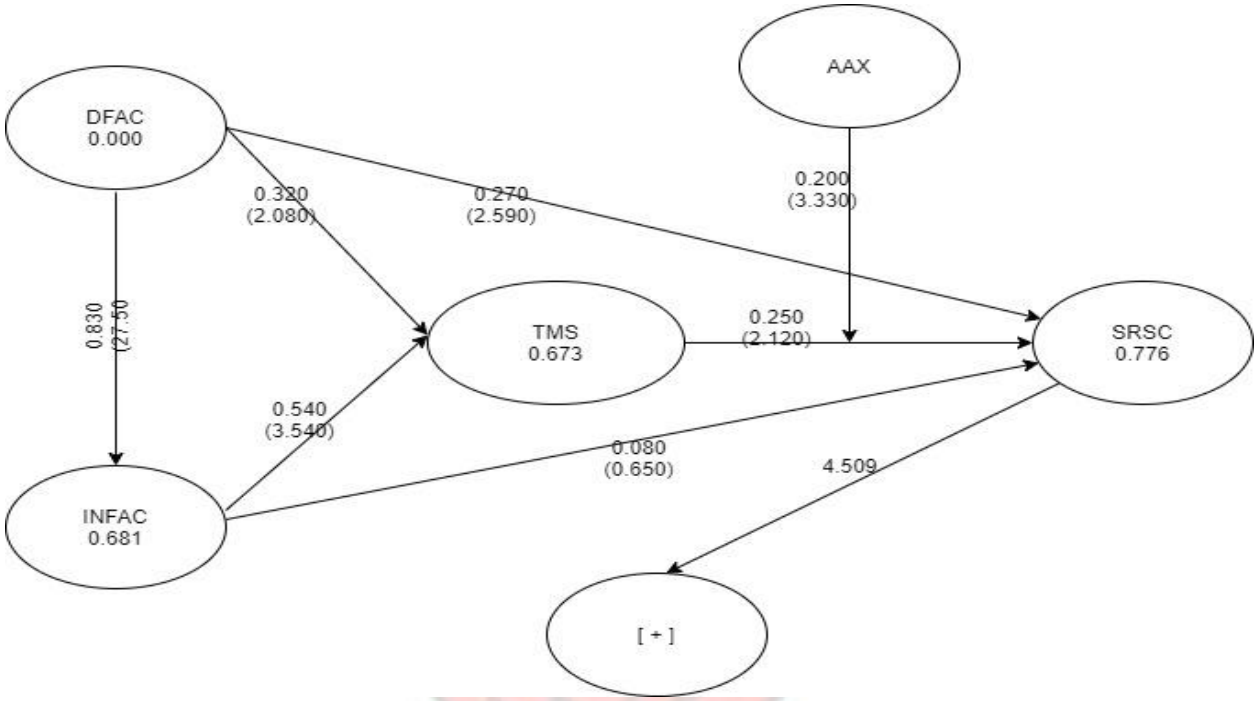

Figure 2 Results of the structural model testing.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

In this final section, the summary and conclusions of the research were provided. In addition, the chapter proffered to policy makers and management of the various manufacturing firms, some recommendations based on the findings. The chapter finally made submissions for additional researches.

5.2 Summary of the Study

The research examined the effect of institutional forces on socially responsible supply chain , the mediation role of top management support and moderation of supply chain ambidexterity. To achieve this overall objective, four specific objectives were formulated; the first objective was to determine the various institutional forces activities in the manufacturing sector in the Northern region. Secondly, the study is to investigates the socially responsible supply chain activities in the Manufacturing Firms within the Northern Region. The remaining two objectives also is to examine moderation role of supply chain ambidexterity on the relationship between top management support and socially responsible supply chain and the mediation role of top management support on the relationship between institutional forces and socially responsible supply chain.

In addressing the above objectives, the research reviewed relevant theoretical and empirical literature to the research. The study employed institutional theory as the theoretical lens to explain how firms respond to various pressures through alignment and adaptation to achieve SRSC outcomes. This confirms the argument that insights from the institutional theory helps to understand that firms who are able to absorb the

pressures from various institutions through alignment and adaptation achieve higher performance outcomes (Lin and Ho 2015).

The empirical literature also included concept of direct and indirect institutional forces, socially responsible supply chain top management support and supply chain ambidexterity. In addition, the study designed the appropriate conceptual framework, which pictured, for further understanding of socially responsible supply chain within the manufacturing firms in the northern region of Ghana.

The study utilised descriptive research with a quantitative approach to data collecting. The respondents for the survey were chosen using a census method. The data collecting instrument utilised for data collection was a questionnaire. The study population consisted of all the registered manufacturing members Association of Ghana Industries. In all a sample of 143 manufacturing firms were used for the study. The data was subsequently inputted and analysed using the SPSS and Smart Partial Least Square Structural Equation Modelling (PLS-SEM) software.

5.2.1The various institutional forces activities in the manufacturing sector in the Northern region.

This study empirically identifies two institutional forces, direct and indirect institutional forces direct compose of seven institutional pressures: government regulation, suppliers and employees of the firm forming direct institutional forces and competitors, mass media, local communities and custodian pressures also serving as indirect institutional pressures.

5.2.2 The socially responsible supply chain activities in the Manufacturing Firms within the Northern Region.

The study found out that most of the firms are in tune of ensuring that human rights policy for our manufacturing facilities are in place, ensures welfare of stakeholders at trading partner locations, availability of health care facilities in at their end in trading partner

locations. They also ensures strict adherence to gender non-discrimination policies at trading partner locations, volunteers at local charities and donates to charitable organizations. More so they the assists NGOs with societal development.

5.2.3 The moderation role of supply chain ambidexterity on the relationship between top management socially responsible supply chain.

This result could be explained that not only can pressures (direct and indirect) from institutional forces explain SRSC practices adoption, but an organization could also respond to these pressures to influence their socially responsible supply chain practices through supply chain ambidexterity.

5.2.4 The Mediating role of Top-management Support in the link between Institutional forces and Socially Responsible Supply Chain

The results revealed that top management mediates between institutional forces and socially responsible supply chain. This means that although high institutional forces has a significant effect on socially responsible supply chain practices, this effect increases when its channel through top management support.

5.3 Theoretical Implication

This study contributes to the growing empirical literature on SRSC implementation (e.g. Hoejmose et al. 2013; Sancha et al. 2015; Zhang et al. 2017) through the application of direct and indirect institutional forces, and the supply chain ambidexterity process. Previous empirical studies on SRSC neither adopted direct and indirect institutional forces as antecedents nor focused on supply chain ambidexterity. This work, therefore, offers a robust analytical framework that can be used to better understand what drives companies to practice SRSC. The study focused on the expansion of the SRSC framework to include all actors of the supply chain - upstream, internal and downstream - and not just the suppliers, as most of the current studies have done. In this way, the study includes a theory-focused framework that makes explicit distinctions between the established framework

and the new framework for SRSC, which is also consistent with the practices of some multinational companies. In all, the study breaks new ground in several areas and sheds light on the relationship between direct and indirect institutional forces, supply chain ambidexterity and SRSC. The confirmation of suppliers' pressure, employees' pressure, government regulation pressure, competitors' pressure, local communities' pressure, and mass media pressure, as institutional forces in supply chain management are rather limited in practice and organizational behaviour literature. Overall, the model performed well and predicted a significant degree of variation in the various indicators and the constructs thereby contributing to the expansion of the institutional theory.

5.4 Managerial Implications

The current findings have several implications for manufacturing firms and their top management. First, our research uncovers new information about the role of various institutional forces influencing socially responsible supply chain practices across the supply chain and anchoring supply chain ambidexterity, which will be useful to supply chain partners seeking to achieve long-term success in the manufacturing sector. We understand that advising firms to purposefully expose themselves to institutional impacts may seem counterintuitive, given that contemporary management and supply chain literature blames institutional forces for organizational "mindlessness" when it comes to embracing new strategies (Liang et al. 2021). Our findings, however, are focused on firms that have already committed significant resources in developing socially responsible supply chain strategies. From this vantage point, institutional factors appear to be positive and beneficial to businesses seeking to profit from their sunk socially responsible supply chain investments. Public policymakers and regulators can further understand how to motivate manufacturers to practice socially responsible supply chains. It is useful that government regulators, employees' unions, suppliers' associations, commercial

competitors, mass media, local communities and the related bodies promote a socially responsible supply chain by initiating pressures on the focal firms for the adoptions and implementations of the socially responsible supply chain to improve the business among the supply chain partners. Supply chain ambidexterity as a vital ingredient of a socially responsible supply chain proactively identifies and manage the tensions associated with the simultaneous pursuit of alignment and adaptation strategies. Overall, this research is necessary and significant for sub-Saharan Africa and global manufacturers.

5.5 Limitation and Future Studies

This study adopted cross-sectional data which is not sufficient for explanatory research (e.g. Jia et al. 2018). Future studies are encouraged through the use of longitudinal data to study the relationships and enhance causal inference (Podsakoff et al. 2012). Indeed, the sample used in this study consists of active small, medium-sized and large manufacturing firms located in the Northern Region of Ghana, a Sub-Saharan West Africa country. Samples from other regions within Ghana would be needed for further replication and refinement. Finally, institutional forces were divided into two aspects, the direct and indirect institutional forces and the relationship between the two aspects was not studied. Therefore, further analysis of the relationship between direct and indirect institutional forces should be carried out.

REFERENCES

Awaysheh, A., and Klassen, R. D. (2010). The impact of supply chain structure on the use of supplier socially responsible practices. International Journal of Operations andProduction Management, 30(12), 1246-1268.

Cao, M., and Zhang, Q. (2011). Supply chain collaboration: Impact on collaborative advantage and firm performance. *Journal of operations management*, *29*(3), 163-180.

Closs, S. (2011). *Single Source Publishing: modularer Content für EPUB and Co*. entwickler. Press.

Croom, S., Vidal, N., Spetic, W., Marshall, D., and McCarthy, L. (2018). Impact of social sustainability orientation and supply chain practices on operational performance. *International Journal of Operations and Production Management*.

Dubey, R., Gunasekaran, A., Papadopoulos, T., and Childe, S. J. (2015). Green supply chain management enablers: Mixed methods research. Sustainable Production and Consumption, 4, 72-88.

Dubey, R., Gunasekaran, A., Papadopoulos, T., and Childe, S. J. (2015). Green supply chain management enablers: Mixed methods research. *Sustainable Production and Consumption*, *4*, 72-88.

Gibson, C. B., and Birkinshaw, J. (2004). The antecedents, consequences, and mediating role of organizational ambidexterity. *Academy of management Journal*, *47*(2), 209-226.

Hasle, P., and Vang, J. (2021). Designing better interventions: insights from research on decent work. *Journal of Supply Chain Management*.

Hoejmose et al. (2012) An empirical examination of the relationship between business strategy and socially responsible supply chain management International Journal of Operations and Production Management, Vol. 33 No. 5, 2013 pp. 589-621,

Huq, F.A., Stevenson, M. and Zorzini, M. (2014), "Social sustainability in developing country suppliers: an exploratory study in the ready-made garments industry of Bangladesh", International Journal of Operations and Production Management, Vol. 34 No. 5, pp. 610- 638.

Karmaker, A. K., Rahman, M. M., Hossain, M. A., and Ahmed, M. R. (2020). Exploration and corrective measures of greenhouse gas emission from fossil fuel power stations for Bangladesh. *Journal of Cleaner Production*, *244*, 118645.

Kauppi, K. (2013). Extending the use of institutional theory in operations and supply chain management research. *International Journal of Operations and Production Management*.

Kauppi, K. (2013). Extending the use of institutional theory in operations and supply chain management research. *International Journal of Operations and Production Management*.

Khanfar, A. A., Iranmanesh, M., Ghobakhloo, M., Senali, M. G., and Fathi, M. (2021). Applications of blockchain technology in sustainable manufacturing and supply chain management: A systematic review. Sustainability, 13(14), 7870.

Kittilaksanawong, W., and Curcuraci, O. (2017). Ferrero group: Achieving sustainability through supply chain integration.

Klassen, R.D. and Vereecke, A. (2012), "Social issues in supply chains: capabilities link responsibility, risk (opportunity), and performance", International Journal of Production Economics, Vol. 140 No. 1, pp. 103-115.

Law, K. M., and Gunasekaran, A. (2012). Sustainability development in high-tech manufacturing firms in Hong Kong: Motivators and readiness. *International Journal of Production Economics*, *137*(1), 116-125.

Linton, J. D., Klassen, R., and Jayaraman, V. (2007). Sustainable supply chains: An introduction. *Journal of operations management*, *25*(6), 1075-1082.

Liu, H., Ke, W., Wei, K. K., Gu, J., and Chen, H. (2010). The role of institutional pressures and organizational culture in the firm's intention to adopt internet-enabled supply chain management systems. *Journal of Operations Management*, *28*(5), 372-384.

Mann, H., Kumar, U., Kumar, V., and Mann, I. J. S. (2010). Drivers of sustainable supply chain management. *IUP Journal of Operations Management*, *9*(4).

Marshall, D., McCarthy, L., McGrath, P. and Claudy, M. (2015), "Going above and beyond:

Ojha, R., Ghadge, A., Tiwari, M. K., and Bititci, U. S. (2018). Bayesian network modelling for supply chain risk propagation. International Journal of Production Research, 56(17), 5795-5819.

Pagell, M. and Wu, Z. (2009), "Building a more complete theory of sustainable supply chain

Emerald Group Publishing Limited, 0144-3577, DOI 10.1108/01443571311322733 how sustainability culture and entrepreneurial orientation drive social sustainability supply chain practice adoption", Supply Chain Management: An International Journal, Vol. 20 No. 4, pp. 434-454.

Quarshie, A. M., Salmi, A., and Leuschner, R. (2016). Sustainability and corporate social responsibility in supply chains: The state of research in supply chain management and business ethics journals. *Journal of Purchasing and Supply Management*, *22*(2), 82-97.

Qiu, J., Tang, J., Ma, H., Dong, Y., Wang, K., and Tang, J. (2018, July). Deepinf: Social influence prediction with deep learning. In Proceedings of the 24th ACM SIGKDD international conference on knowledge discovery and data mining (pp. 2110-2119).

Seles, B. M. R. P., de Sousa Jabbour, A. B. L., Jabbour, C. J. C., and Dangelico, R. M. (2016). The green bullwhip effect, the diffusion of green supply chain practices, and institutional pressures: Evidence from the automotive sector. *International Journal of Production Economics*, *182*, 342-355.

Tang, C. S. (2018). Socially responsible supply chains in emerging markets: Some research opportunities. *Journal of Operations Management*, Volume 57, January, Pages 1-10

Tate, W.L., Ellram, L.M. and Kirchoff, J.F. (2010), "Corporate social responsibility reports: a thematic analysis related to supply chain management", Journal of Supply Chain Management, Vol. 46, No. 1, pp. 19-44.

Thorlakson, T., De Zegher, J. F., and Lambin, E. F. (2018). Companies' contribution to sustainability through global supply chains. Proceedings of the National Academy of Sciences, 115(9), 2072-2077.

Vachon, S., and Klassen, R. D. (2006). Extending green practices across the supply chain: the impact of upstream and downstream integration. *International Journal of Operations and Production Management*.

van Donk, D. P., van der Vaart, T., Awaysheh, A., and Klassen, R. D. (2010). The impact of supply chain structure on the use of supplier socially responsible practices. *International Journal of Operations and Production Management*.

Winter, M., and Knemeyer, A. M. (2013). Exploring the integration of sustainability and supply chain management: Current state and opportunities for future inquiry. *International Journal of Physical Distribution and*

APPENDIX
QUESTIONNAIRE

This research is purely academic exercise, and all information given shall be used solely for that purpose. I would be grateful if you could provide the necessary answers to questions stated. All information given would be treated as confidential.

INSTRUCTIONS: Please kindly write in ink by way of circle the appropriate number in the box which corresponds to the statement, which in your opinion is the most appropriate answer to the related question. For the following questions, kindly select by circle the number that apply

	UPSTREAM SOCIALLY RESPONSIBLE SUPPLY CHAIN *Scale: not at all (=1), to a largest extent (=5)*	not at all, (=1) (=5) a largest extent
SRSC 1	Has a human rights policy for our manufacturing facilities.	1 2 3 4 5
SRSC 2	Ensures welfare of stakeholders at trading partner locations	1 2 3 4 5
SRSC 3	Ensures availability of health care facilities in trading partner locations	1 2 3 4 5
SRSC 4	Ensures strict adherence to gender non-discrimination policies at trading partner locations	1 2 3 4 5
SRSC 5	Volunteers at local charities	1 2 3 4 5
SRSC 6	Donates to charitable organizations Assists	1 2 3 4 5
SRSC 7	NGOs with societal development	1 2 3 4 5
	INSTITUTIONAL FORCES	
DIP1	Customers pay attention to social issues about the firm's (e.g. how the firm assist some of the suppliers and distributors)	1 2 3 4 5
DIP2	Employees believe being ethical and socially responsible is the most important thing a firm should do	1 2 3 4 5
DIP3	Our suppliers are loyal to the firms that care for their social needs	1 2 3 4 5
DIP4	There are laws and regulations to ensure fair competition among manufacturing companies	1 2 3 4 5
ISP1	Mass media plays a pivotal role in maintaining and improving public relations between firms and consumers in the local market	1 2 3 4 5

ISP2	Local communities expect companies to contribute to societal development	1 2 3 4 5
ISP3	NGOs influence socially responsible activities	1 2 3 4 5
ISP4	Firms suffer from pressure on emulating competitors social and ethical practices	1 2 3 4 5
	Top Management Support ***SCALE: 1 = "strongly disagree" to 5 = "strongly agree"*** ***In my organisation…***	*Strongly disagree* *Strongly agree*
TMS1	Top management is supportive of our efforts for the wellbeing of our suppliers, distributors, employees, and the community	1 2 3 4 5
TMS 2	Social activities are vital part of our corporate practices	1 2 3 4 5
TMS 3	Views on socially responsible supply chain are considered important in the eyes of the top managers	1 2 3 4 5
	AMBIDEXTERITY ***SCALE: 1 = "strongly disagree" to 5 = "strongly agree"*** ***Ambidexterity-Alignment***	*Strongly disagree* *Strongly agree*
AAL 1	People in this organisation often end up working at cross purposes because our management systems give them conflicting objectives	1 2 3 4 5
AAD 2	The management systems in this organisation are flexible enough to allow us to respond quickly to changes in our socially responsible supply marketing programmes	1 2 3 4 5
AAD 3	The management systems in this organisation develop rapidly in response to shifts in our supply chain priorities	1 2 3 4 5
	Which of the following sectors does your organisation operate? ☐ Manufacturing ☐ Agriculture and agribusiness ☐ Who lesaling/retailing ☐ Service provider ☐ Hospitality (including hotels, hostel and restaurants) ☐ nancial services ☐ Health facility/services ☐ Extraction drilling and mining *How many years (approximately) has your organisation been in existence?*_____ *How many full-time employees does your organisation have currently?*_____ How long have you worked in this industry? About _____ years. *Please, what is your education level?* Up to SHS/A 'level/O 'level ☐ ☐	

	☐Up to Diploma/HND Up to 1st Degree ☐Up to 2nd Degree Up to PhD *Please indicate the range of the company's annual Revenue for the past three years in Ghana Cedis* ☐<40,000; ☐40,000-80,000; ☐80,000-120,000; ☐120,000-160,000; ☐160,000-200,000; ☐200,000-500,000; ☐500,000-1,000,000; ☐>1,000,000 What is your position in your organisation? CEO☐ Supply chain ☐ Manger ☐ Operation Manager ☐ Logistics Manager General ☐ manager Other top management position ☐ How long (in years) have you held this current position? About _____ years. Name of your Organsation/institution_____		
	To what extent do you agree or disagree with the following statements?	*Strongly disagree*	*strongly agree*
	The questionnaire deals with issues I am very knowledgeable about	1 2 3 4 5	
	I am completely confident about my answers to the questions	1 2 3 4 5	
	I am confident that my answers reflect the organisation's situation	1 2 3 4 5	

END OF THE SURVEY. THANK YOU ONCE AGAIN FOR YOUR PARTICIPATION IN THIS SURVEY

KNUST
NYANSAPO WOSANE NO BADWENHWA