

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

INSTITUTE OF DISTANCE LEARNING



SOCIALLY RESPONSIBLE SUPPLY CHAIN MANAGEMENT IN FIRM  
PERFORMANCES: THE MODERATING ROLE OF INSTITUTIONAL PRESSURES.

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## DECLARATION

I, as a result of this, declare that this submission is my work towards the Masters of Science in Logistics and Supply Chain Management and that, to the best of my knowledge, it contains no materials previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in text.

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## DEDICATION

I dedicate this work to the Almighty God, my wife, Mrs. Kassim Aisha, and my children, Osman Wumpini Huda and Osman Abubakari Sadiq. Also, to my dear mom, Alhassan Fati and late father, Zakaria Abubakari, May Allah continue to have mercy on you and all departed Souls.

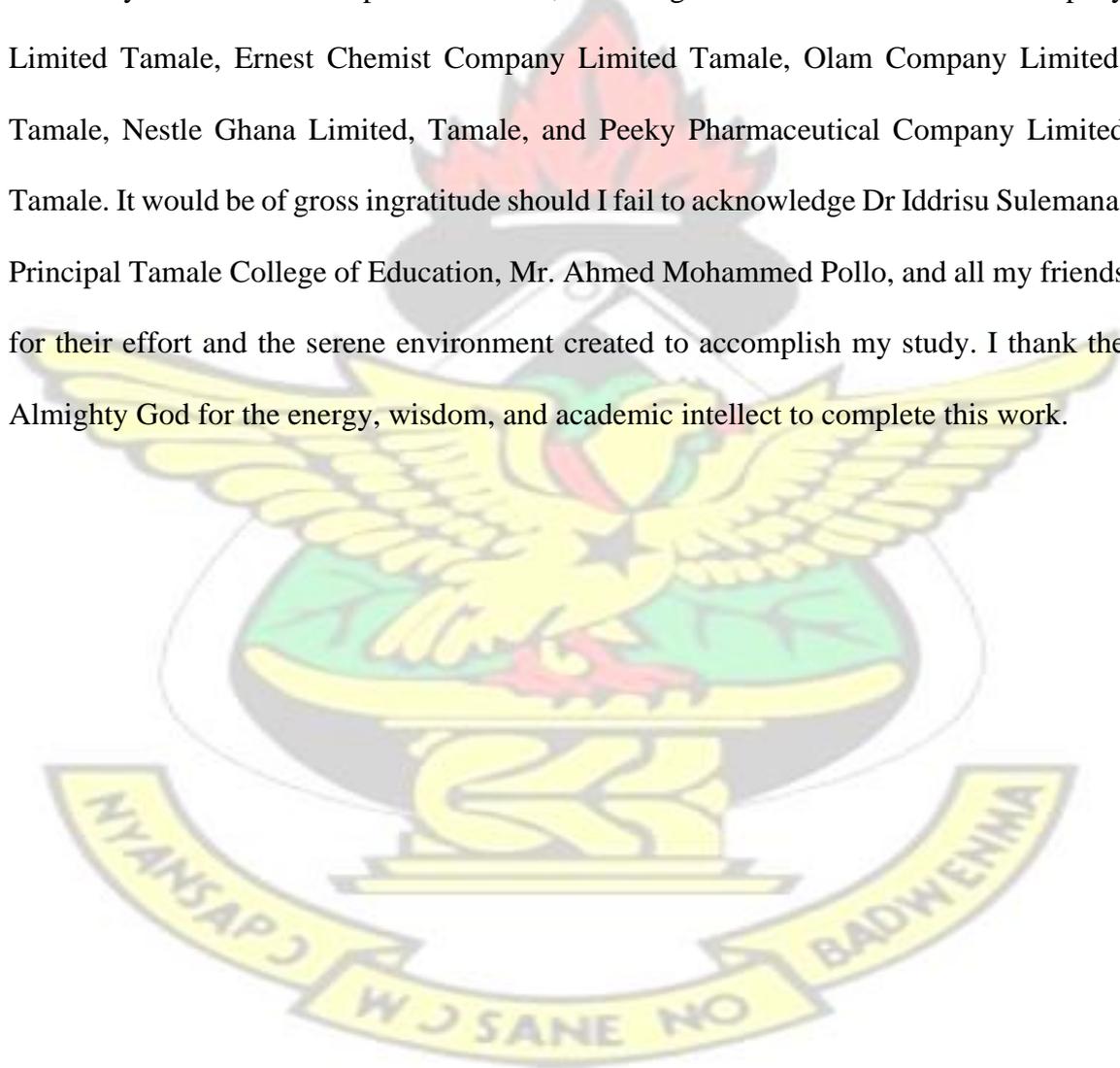
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## ABSTRACT

Businesses have progressively embraced SRSCM (Socially Responsible Supply Chain Management), integrating social factors into their supply chain management practices, in response to the growing challenges presented by the escalating social pressures associated with global sustainability. This study focuses on the increasing importance of social responsibility, human capital, and technology in supply chain management within the context of TECON. The objectives of the study include analyzing socially responsible supply chain practices in pharmaceutical companies, examining their performance, assessing the impact of socially responsible supply chains on performance, and exploring the role of institutional pressures. The study employed a descriptive survey as a research design. A Stratified Sampling Technique was used to collect data from 100 TECON staff members through a Self-Administered Questionnaire. Subsequently, the collected data was analyzed using SPSS software. Key findings indicate that Socially Responsible Supplier Selection Processes are known, efforts are made to improve delivery performance in Socially Responsible Supply Chain Management, social capital plays a role in supply chain management, and institutional social pressures impact delivery performance. The study recommends tailoring supplier selection processes to address social constraints, ensuring transparency, improving delivery performance, maintaining social capital, and addressing institutional pressures to enhance the positive impact of socially responsible supply chain management on pharmaceutical product distribution and sales targets.

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## LIST OF ABBREVIATIONS



<b>SRSCM</b>	Socially Responsible Supply Chain Management
<b>TECON</b>	Tobinco, Ernest Chemist, Olam, and Nestle Ghana
<b>SCMP</b>	Supply Chain Management Processes
<b>I.P.s</b>	Institutional Pressures
<b>TMS</b>	Top Management Support
<b>GVCs</b>	Global Value Chains
<b>GSCs</b>	Global Supply Chains
<b>ISO</b>	International Organization for Standardization
<b>CP</b>	Coercive Pressure
<b>N.P.</b>	Normative Pressure
<b>MP</b>	Mimetic Pressure
<b>TQMP</b>	Total Quality Management Practices
<b>SCMP</b>	Supply Chain Management Practices
<b>FSCP</b>	Firm Supply Chain Performance
<b>GSCP</b>	Green Supply Chain Performance
<b>SCP</b>	Supply Chain Performance
<b>GSCP</b>	Green Supply Chain Practices
<b>SCM</b>	Supply Chain Management
<b>B.I.</b>	Business Intelligence
<b>I.P.s</b>	Institutional Pressures
<b>SRM</b>	Supplier Relationship Management
<b>I.T.</b>	Information Technology
<b>RBV</b>	Resource-Based View
<b>SRCM</b>	Socially Responsible Supply Chain Management

<b>SMSE</b>	Small and Medium-sized Enterprise
<b>EM</b>	Environmental Management
<b>GSCM</b>	Green Supply Chain Management
<b>GSC</b>	Green Supply Chain
<b>CSCM</b>	Cleaner Supply Chain Management
<b>CC</b>	Corporate Citizenship
<b>CSR</b>	Corporate Social Responsibility
<b>CLSC</b>	Closed-Loop Supply Chain
<b>EandS</b>	Environmental and Social
<b>NGO</b>	Non-Governmental Organization
<b>CEO</b>	Chief Executive Officer
<b>CFO</b>	Chief Financial Officer
<b>SRSCMP</b>	Socially Responsible Supply Chain Management Process
<b>SASCM</b>	Socially Accountable Supply Chain Management.
<b>SRSSP</b>	Social Responsible Supply Selection Processes
<b>SST</b>	Stratified Sampling Technique
<b>Pp.</b>	Procurement Processes
<b>S.S.</b>	Supplier Selection
<b>CSD</b>	Contribution to Supply Delivery
<b>IESRSL</b>	Incorporating Element of Socially Responsible Supplier Selection Process.
<b>TLI</b>	Tucker -Lewis Index
<b>NNFI</b>	Non-Normal Fit Index
<b>CFI</b>	Comparative Fit Index

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background to the study

Firm performance can be defined and evaluated based on several factors, including but not limited to profitability, expansion, market worth, overall return for shareholders, economic value added, and customer contentment (Mihaela, 2017). Nonetheless, there has been significant focus in recent business and management literature on the connection between the performance of companies and their engagement in socially responsible supply chain management (SRSCM). Athletic performance, a multifaceted concept, is widely acknowledged as a critical determinant of an organization's success, encompassing financial, operational, and strategic aspects (Mihaela, 2017). Research by Brown and Green (2019) found that companies implementing SRSCM practices tend to experience improved financial performance over time, including increased profitability and return on investment. SRSCM practices help firms identify and manage risks associated with supply chain disruptions, regulatory changes, and public perception (Smith and Lee, 2017). Firms that embrace SRSCM often gain a competitive edge. A study by White and Taylor (2018) demonstrated that such companies are better positioned to meet changing consumer demands and regulatory requirements.

The need for socially responsible supply chain management (SRSCM) is motivated by stakeholder demands to control the supply chain's material, information, and capital flow (Camilleri, 2017). Also, it constitutes the embodiment of sustainable concepts in supply chain management. Additionally, it allows managers to purposefully and openly combine and achieve an organization's social, environmental, and economic goals. As a result, many

small and medium-sized businesses in the manufacturing industry have recently become interested in the idea (Camilleri, 2017).

Businesses have increasingly adopted SRSCM, which incorporates social considerations into the supply chain management processes, to address the issues posed by the burgeoning social pressures in global sustainability. Undoubtedly, this has increased institutional tensions that need to be effectively managed. A rise in global industrial outsourcing has led to social and ethical issues in the supply chain (Amos and Sullivan, 2015). As a result, it is now necessary to consider how the supply chain can affect a focal company's sustainability. As per findings by the World Business Council for Sustainable Development and the World Resource Institute in 2009, approximately 80% of the environmental impact associated with the entire supply chain can be linked to businesses that operate independently from the central firm under scrutiny. Additionally, according to a report by the British Standards Institution in 2015, one-third of the most rapidly expanding exporting companies are based in countries characterized by a high or severe risk of human rights violations or environmental abuses.

Both scholars and organizations should actively tackle the social and ethical risks that emanate from the supply chain. This is crucial because even when the root causes of sustainability-related scandals lie beyond the immediate control of the focal company, they often end up bearing the consequences of these issues.

The world economy is undergoing significant revolutionary changes at the start of the twenty-first century due to economic globalization, information technology, and virtualization. These worldwide developments are mirrored in the actions of all financial entities, the economies of all nations, and the system of all relationships between them. A wide range of global developments, such as the growing significance of social

responsibility, the relevance of human capital, the active adoption of new technologies, etc., are having an impact on the formation of global value chains (GVCs) and global supply chains-GSCs (Amos and Sullivan 2015).

It is essential for low-tech businesses, especially those that operate in this market and build infrastructure facilities, to include social responsibility in their operations. For such companies, social responsibility is more vital for the final product than the production process. With the advancement of science and technology, there is a growing need to spread corporate social and environmental responsibility methods and their application in all facets of business. Numerous scientists have focused their papers on studying social responsibility principles in the context of supply chain business sustainability (Zimmer et al., 2016).

Because of this, the origins and how it investigates the application of the core ideas behind institutional pressures are also considered. Through a scale development effort in the empirical setting of supply chain management, this study seeks to clarify and consolidate the meaning and metrics of SRSCM.

The various social element in supply chain management has resulted in ISO (International Organization for Standardization) creating the ISO 20400 standard, which gives organizations instructions on how to incorporate socially responsible considerations into procurement processes, as the topic of sustainable procurement has recently become so vital for organizations (ISO 2016).

## **1.2 Statement of Problem**

Integrating social issues into supply chain management procedures seems to have created an extensive research gap despite its significance in supply chain management practices. Given this, prominent authors and experts in this field have contributed in diverse ways to

address those challenges. Yawar and Securing (2017) claim a huge study vacuum in how social issues are integrated into supply chain management processes. The same authors assert that supplier development is a strategy for reducing social hazards in supply chains. The need for sustainable procurement is consequently crucial.

Difficulties experienced in the procurement procedures have given rise to social concerns within the supplier selection process, shedding light on a specific aspect of procurement that requires in-depth examination from both analytical and empirical angles but has faced certain obstacles along the way (Wetzstein et al. 2016; Appolloni et al. 2014).

Based on empirical findings, it is evident that despite the inclusion of social criteria in supplier management, they do not carry substantial weight in the eventual selection of suppliers. This holds true even in industries like fashion and apparel, which are currently emphasizing social purchasing practices due to their historical problems and controversies (Winter and Lash 2016). Furthermore, there is disagreement regarding the existence of a link between legislative rules and ethical shopping. While some scholars (Ehrgott et al. 2011) have not found such a connection, others have concluded that governmental regulation may hinder socially responsible activity in supply chain management.

Especially in emerging economies, the social dimension of sustainability within supply chain management has received minimal attention when discussing the process of choosing suppliers. (Zimmer et al., 2016).

SRSCM is seen as covering the economic, ecological, and social aspects of organizations across various industries, including manufacturing sectors like third-party logistics (TPL) in the pharmaceutical production sector of Ghana. Nonetheless, recent research on SRSCM underscores a noticeable disparity in the number of studies that concentrate on environmental matters compared to those addressing social issues. With the exceptions of

Carter and Jennings (2004), one of the first papers analyzing social purchasing, Alwaysheh and Klassen (2016), and Klassen and Vereecke (2012), who focused on the social dimension of social responsibility, research on social issues in supply management has been insufficient. Social responsibility is met when firms support the preservation and creation of skills and capabilities of current and future generations and promote health, support, and equal and democratic treatment within and outside the organization's borders.

The difficulty experienced in quantifying social performance compared to the economic and environmental performance dimensions of SRSCM makes it the most neglected element in the industry. The deficiency in studies that have looked at the social performance dimension of SRSCM results in a lack of agreement concerning the measurement of the constructs being studied (de Giovanni, 2012)

It is given the afore-mention discussions, and this study is being conducted to assess the socially responsible supply management in small and medium manufacturing firm performance, the moderating role of institutional pressures at the Tobinco, Ernest Chemist, Olam and Nestle Ghana (TECON)

### **1.3 Objectives of the Study**

To assess the role of socially responsible supply chain management on firm performance and how institutional pressures moderate the relationship.

#### **1.3.2 Specific Objectives**

1. Analyze some selected pharmaceutical companies' various socially responsible supply chain management practices.
2. To examine the nature of firm performances within the pharmaceutical companies.

3. To assess the effect of a socially responsible supply chain on the performance of pharmaceutical companies.
4. To determine the moderation role of institutional pressures on the relationship between socially responsible supply chain management and the pharmaceutical companies' performance.

#### **1.4 Research Questions**

1. What are the specific socially responsible supply chain management practices adopted by selected pharmaceutical companies?
2. How can the performance of pharmaceutical companies be described in terms of its nature and characteristics?
3. What impact does the implementation of socially responsible supply chain management have on the performance of pharmaceutical companies?
4. How does institutional pressure moderate the relationship between socially responsible supply chain management and the performance of pharmaceutical companies?

#### **1.5 Significance of the Study**

This work holds significance as it can contribute to the existing wealth of knowledge, serving as a valuable reference for students, researchers, and the academic community in general. The study is also helpful because the relevant findings that will solicit good recommendations will be suggested to address the constraints of socially responsible supply management and small and medium manufacturing firms' performance. Also, it is essential to policymakers since recommendations could serve as guidelines for policy formulation aimed at improving socially responsible supply chain management in a firm's performance, especially in small and medium manufacturing companies in the Tamale

Metropolis. This study will guide development experts and provide reliable references for future studies.

In addition, the study also provides a prelude for further studies for students who are pursuing a similar program. Again, it will serve as a foundation for the preparation of training manuals for managers and even beneficial owners of small and medium manufacturing companies and other similar businesses during workshops, seminars, etc., and also for other public sector organizations on how to improve upon socially responsible supply chain management in firm's performance. Other research institutions in related areas could also rely on this study for helpful information and other verifiable data.

Furthermore, this study's findings will provide results that will be required to explore the role of socially responsible supply chain management in a firm's performance. It would also highlight some challenges that hinder efficient, socially responsible supply chain management practices in a firm's performance.

### **1.5 Scope of the Study**

The research was conducted within TECON-affiliated companies, including Tobinco, Ernest Chemist, Olam, and Nestle Ghana, all located in Tamale. This investigation narrows its focus to the socially responsible supply chain management practices implemented by TECON. This study also focuses on initiatives and efforts, particularly for TECON, a small and medium manufacturing firm. However, the issues could be the most substantial assurance that most companies encounter related challenges. As a result, analysis and recommendations made in the end could go a long way to assist them in addressing the challenges affecting efforts to improve socially responsible supply chain management at TECON.

## 1.6 Overview of Research Methodology

The research methodology for this study encompasses various methods employed to collect the necessary data. The chapter discusses the research design, population, sampling techniques, instruments, questionnaire administration, and interviews.

The research design adopted for this study is a descriptive survey. Descriptive statistics are extensively utilized to investigate issues related to individuals, organizations, processes, programs, institutions, and events. The case study approach is chosen as it fulfils the requirements of the study, and the findings are not intended for generalization.

The research aims to examine the role of institutional pressures as moderators in the implementation of socially responsible supply chain management (SRSCM) practices in pharmaceutical companies operating in the Tamale Metropolis, specifically Tobinco, Ernest Chemist, Olam, and Nestle Ghana (TECON).

The target population comprises various staff members in the identified pharmaceutical companies in different units. The population is categorized as Chief Executive Officer (CEO), administrators, finance unit, procurement/supply chain unit, supervisors, and floor workers. The total population consists of approximately 300 respondents.

**Sample Size and Sampling Technique:** The study selected a sample size of 150 participants, which represents 50% of the target population. The stratified sampling technique is used to allocate the sample among pharmaceutical companies' different categories of staff.

The study utilizes both primary and secondary sources of data. The preliminary data is collected through questionnaires administered to the different categories of respondents in the sample. The questionnaire comprises six sections, covering socio-demographic

characteristics, the effects of SRSCM on company performance, top management support, socially responsible supplier selection, supply delivery effectiveness, and institutional social pressures.

The primary data collection instrument used is a questionnaire. The questionnaire includes questions that ask participants to rank the significance of issues on a scale of 1 to 5, enabling fair judgments and analysis of the data.

Pre-testing procedures are conducted to ensure the validity and clarity of the questionnaire. About ten respondents were chosen for the pre-testing exercise. The researcher's supervisor evaluates the instruments for content validity.

The collected data is coded and transferred into SPSS for analysis. Descriptive statistics are used to examine the relationships between variables.

The researcher considers privacy rights, potential psychological harm, deception, and confidentiality. Measures are implemented to provide sufficient information to the respondents, avoid liability, ensure clarity of aims, and maintain confidentiality.

The study focuses on Ernest Chemists Limited (ECL), the largest pharmaceutical company in Ghana. ECL was founded 1986 by Mr. Ernest Bediako Sampong and has become a prominent industry player. It operates many facilities, including office complexes, retail and wholesale shops, warehouses, and manufacturing plants. ECL's mission is to provide high-quality pharmaceutical products at affordable prices. It also represents multinational pharmaceutical and consumer brands in Ghana.

### **1.7 Limitations of the Study**

As a human researcher, many challenges affected his attempts to obtain adequate data and materials for this work. The first and foremost challenges relate to visits made to the

various identified units at the TPL and the difficulty in convincing the staff to respond to the questionnaires presented. The cost of printing and administering questionnaires could also create several challenges in conducting this study. With the limited time within which this study is to be carried out, the researcher requires extra hard work to meet the deadline, which poses some challenges.

Finally, the respondents sampled from the companies are not the tangible manifestation of socially responsible supply chain management practices across similar manufacturing firms in the Metropolis, and as a result, the findings may not be a reasonable inference tool and the basis for generalizing. Still, they could only be considered a direction for future studies.

### **1.8 Organization of the Study**

As the introductory chapter, the first chapter comprises the study's background, the problem statement, and the objectives. Other sections of the chapter include the research questions, the significance of the study, the scope of the study, limitations, and, of course, the organization of the study itself. Chapter two deals with the literature review, which brings to bear some comprehensive pieces of other works related to the topic. Chapter three talks about the detailed presentation of the research methodology, which further discusses how raw data and information together for this study will be treated. Chapter four deals with the production and analysis of the primary outcomes of the investigation to arrive at the findings.

It also provides a detailed analysis of the data collected and the responses to the questionnaires to be sent out for this study. Chapter five comprises the summary of the findings, conclusion, and recommendation of various ways of improving socially responsible supply chain management in small and medium-scale manufacturing

companies relative to the different social pressures emanating from the socially responsible supply chain management practices in SMEs in the pharmaceutical manufacturing sector in the Tamale Metropolitan Area of the Northern Region of Ghana.

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## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

This chapter presents the relevant conceptual review, the theoretical and empirical literature on socially responsible supply management in small and medium manufacturing, and its relationship with firm performance and institutional pressure as the moderator. The chapter is further categorized into four (4) main sections. The first section deals with the conceptual review. The second section examines the theoretical study, and the third is the empirical literature review. Finally, the conceptual framework, which shows the correlation between socially responsible supply management practices and firm performance, with institutional pressure as the moderator, is presented.

#### 2.2 Keys Variables or Terminologies

The literature review focuses on critical variables such as socially responsible supply chain management, firm performance, and institutional pressures.

##### 2.2.1 Socially Responsible Supply Chain Management

In the context of a supply chain driven by profit-making, particularly in a developing country, there is a strategy proposed by Sodhi and Tang (2014) that combines social responsibility and profitability. They suggest that the company should involve individuals with limited financial resources, often referred to as "the poor," both as suppliers or producers for the early stages of production and as distributors or retailers for the later stages of sales. This approach is based on the understanding that these economically disadvantaged individuals may not have the means to operate as independent entrepreneurs or consumers. Therefore, the company can tap into their potential by engaging them as suppliers or distributors within the supply chain.

This concept of integrating impoverished individuals into the supply chain aligns with recommendations put forth by Karnani (2007) and Vachani and Smith (2008). It has the dual benefit of creating employment opportunities and increasing income for those with lower incomes while simultaneously reducing costs and boosting sales for the company. However, it's important to acknowledge that the poor encounter significant barriers when attempting to participate effectively in various supply chain activities.:

1. Insufficient access to financial resources is a pressing issue, particularly in developing nations. More than 2 billion adults in these regions, often referred to as the "unbanked," require financial services such as credit, loans, and savings to initiate or support their enterprises. Unfortunately, they are unable to secure credit or loans due to the absence of collateral, a lack of credit history, and limited experience in financial management.
2. Limited market access is a significant challenge. Economically disadvantaged suppliers and producers, such as farmers and fishermen, frequently find themselves compelled to sell their products through multiple intermediaries at meager prices. Additionally, small-scale retailers and wholesalers face elevated operational expenses due to inadequate infrastructure and the absence of established distribution networks.
3. Productivity is hampered by several factors. In numerous developing nations, individuals with limited incomes often face challenges related to education and resource scarcity. This can result in either a lack of knowledge about productivity enhancement or an inability to financially commit to acquiring equipment that would facilitate increased productivity.

### **2.2.1.1 Effects of Socially Responsible Supply Chain Management**

Socially responsible supply chain management (SRSCM) has gained significant attention in recent years as organizations recognize the importance of integrating social and environmental concerns into their supply chain practices.

Park-Poaps and Rees (2010) examine the stakeholders influencing organizations to adopt SRSCM orientation. The authors argue that stakeholder pressures are critical in shaping an organization's commitment to social responsibility in the supply chain. The study identifies five primary stakeholder forces through a comprehensive literature review and empirical analysis: customer demand, regulatory pressure, supply chain partners, internal organizational factors, and societal expectations. The findings suggest that organizations with a higher orientation towards SRSCM are more likely to respond to these pressures, highlighting the importance of stakeholder engagement and collaboration in driving socially responsible practices throughout the supply chain.

Alghababsheh and Gallear (2021) focus on the role of social capital in promoting suppliers' social performance within the context of socially sustainable supply chain management. The study conceptualizes social capital as the trust, norms, and networks among supply chain actors. Through an empirical investigation, the authors reveal that social capital positively influences suppliers' social performance, encompassing ethical conduct, employee well-being, and community engagement. Furthermore, the study highlights the mediating effect of social capital on the relationship between socially sustainable supply chain management practices and suppliers' social performance. The findings emphasize the significance of fostering social capital to enhance suppliers' social performance and achieve sustainable outcomes in the supply chain.

. Wu (2017) investigates the effects of socially responsible supplier development (SRSD) and sustainability-oriented innovation (SOI) on sustainable development, with a focus on small and medium-sized enterprises (SMEs). The study proposes a conceptual framework that links SRSD and SOI practices to three dimensions of sustainable development: economic, social, and environmental. Through a survey-based empirical analysis, the author finds that SRSD positively influences economic and social sustainability, while SOI positively impacts ecological sustainability. Furthermore, the study reveals that SRSD mediates the relationship between SOI and economic sustainability. These findings underscore the importance of integrating SRSD and SOI practices to achieve holistic, sustainable development outcomes in SMEs.

### **2.2.2 Firm Performance**

Effective supply performance relies on various elements within delivery performance, encompassing delivery channels, warehousing locations, distribution modes, and vehicle scheduling. Enhancing delivery performance involves selecting and optimizing these factors as highlighted by Anand and Grover (2015). Additionally, Andries (2013) established a positive correlation between delivery performance and overall supply chain performance, emphasizing key measures such as on-time delivery, order fulfillment lead time, and adherence to committed delivery dates.

Customer satisfaction is a central component of any supply chain strategy, and performance evaluation must invariably consider customer satisfaction, as underscored by Anand and Grover (2015). It necessitates the harmonization of product design, delivery approaches, and feedback mechanisms with customer requirements. In light of escalating environmental volatility and diversity, organizations view their supply chains as strategic tools for achieving a competitive edge. Consequently, flexibility assumes paramount importance in the realm of supply chain management, as noted by Yusuf and Shehu (2017).

More broadly, flexibility denotes a firm's capacity to adapt and respond to ever-changing environmental variables, including market demand and customer needs. The ensuing hypothesis seeks to explore this relationship.

### **2.2.3 Institutional Pressures**

Institutional pressure (I.P.) refers to the impact of the institutional environment, which encompasses social norms, regulations, and cultural elements, on an organization's form, structure, or behavior. This influence can lead to actions and choices that may or may not align with what is considered reasonable, acceptable, and sustainable (Qian and Burritt, 2016).

I.P. can be categorized into three components based on an institution's regulations, rules, and cultural context: coercive pressure (C.P.), normative pressure (N.P.), and mimetic pressure (M.P.). These institutional factors encompass national laws, government policies, and guidelines from non-governmental organizations (NGOs) that establish standards for corporate practices related to environmental protection and social responsibility. These factors can impact how firms engage in Socially Responsible Supply Chain Management (SRSCM). Companies may choose to demonstrate a high level of commitment to environmental protection and social responsibility that goes beyond the requirements set by the government, thereby reducing the potential for strict institutional constraints imposed by the government (Luzzini et al., 2015).

Tangible metrics for SRSCM include environmental performance (as noted by Xia et al., 2015), corporate social responsibility (as indicated by Hsueh, 2015), and financial performance (as discussed by Luzzini et al., 2015). These align with the ecological, social, and economic dimensions, respectively.

## **2.3 Conceptual review**

### **2.3.1 Institutional Pressures and Top Management Support**

Enterprises are motivated to undertake Socially Responsible Supply Chain Management (SRSCM)-related activities by various stakeholder and institutional pressures (Tate, Ellram and Kirchoff, 2016). Assuming that senior managers will support socially responsible supply chain management practices, it may be crucial to investigate whether institutional pressures and SRSCM implementation are causally related. However, institutional constraints, including governmental restrictions, customer wants, or competitive plans, may substantially impact top management. As a result, their support may change in reaction to various institutional pressures. This study takes an intermediate approach in examining the influence of top management on the adoption of SRSCM. It empirically assesses the extent to which top management responses vary in response to diverse institutional constraints. Managers tend to perceive government regulations as the most conspicuous external factor affecting their firms' environmental practices, even though such regulations substantially encourage innovative environmental initiatives. (Murphy and Gouldson, 2010). Organizations must comply with government environmental regulations or face potential penalties and the risk of being forced out of the market. (Sarkis, Gonzalez-Torre and Adenso-Diaz, 2010). According to Zhu and Sarkis (2017), coercive pressure significantly impacts senior management's behaviour. Customers' needs are frequently mentioned as a significant initiative or a driving force in implementing environmental actions (Álvarez-Gil, Berrone, Husillos and Lado, 2017). This implies that consumers and downstream supply chain partners must choose socially-friendly items as society's overall environmental consciousness rises.

Additionally, businesses must know how their rivals' socially related marketing strategies are evolving (Taddeo, Simboli, Ioppolo and Morgante, 2017.). This will inevitably result

in successful businesses in the same sector and firms with which they interact socially, which can serve as suitable models for imitation. Miemczyk (2012) claims that the company can use the mimetic method to apply the best SRSCM practice and induce the best performance improvement.

The importance of top management's role in shaping the extent and speed of social practices is emphasized (Powell and Colyvas, 2014). While capability and commitment can emerge throughout the organization, the decisions made by senior management have the most significant impact on driving changes in social policies because they influence everything from resource allocation to deployment (Taddeo et al., 2017). Top management's support facilitates the process of aligning institutional pressures for Socially Responsible Supply Chain Management (SRSCM) within the organization and implementing organizational strategies. Conversely, the absence of support from senior management can lead to the rejection of institutional pressures and a failure to adopt environmentally friendly production methods. One of the primary motivators for businesses to initiate various environmental initiatives is the leadership and initiative from senior management (Parmigiani, Klassen and Russo, 2011). This underscores the necessity of senior management support for the success of social initiatives and programs. Hence, it is suggested that the implementation of SRSCM can benefit significantly from the backing of top management.

### **2.3.3. SRSCM and Social Capital**

The process of SRSCM fosters collaboration between buyers and suppliers in the realm of environmental management and performance, offering advantages to both parties involved. SRSCM operates as an interactive initiative, necessitating transparent performance assessments, efficient feedback channels, and a mutual understanding among

supply chain partners. Consequently, both partners in the supply chain share common environmental goals and philosophies (Lee 2016). As Wu and Ragatz (2011) asserted that enhanced understanding and transparent communication in addressing social criteria can reduce potential conflicts between partners, thereby reinforcing the relationships within the supply chain network. The SRSCM approach places a greater emphasis on long-term capacity enhancement as opposed to immediate quality improvement or cost-cutting measures. (Parmigiani et al., 2011).

Establishing enduring partnerships and fostering loyalty between buyers and suppliers can be achieved by extending greater support and collaborative efforts. This includes educational and training initiatives, alongside technical assistance, during the implementation of SRSCM (Krause, Handfield and Tyler, 2017). Hence, constructing relational social capital becomes easier when customers and suppliers engage in mutually beneficial relationships. Likewise, SRSCM promotes consistent and repetitive transparent communication and the exchange of information, making these interactions between supply chain partners visible and mandatory. Consequently, building structural social capital becomes more straightforward. Enhanced relationships often lead to the formation of cross-functional teams, collaborative exercises, joint workshops, and other organizational activities (Krause et al., 2017). There can be differing opinions about the extent to which social capital can serve as a catalyst for SRSCM or whether social capital can serve as a mediator in the relationship between SRSCM and performance. These variations in perspective may result in disagreements regarding the association between SRSCM and social capital. Nevertheless, there has been limited research conducted on the intersection of SRSCM and social capital.

As Wu et al. (2012) stressed, social capital was recently considered a driving force for SRSCM procedures. However, our study aims to determine whether SRSCM can aid in

building social capital, and we believe there are strong arguments in favour of this claim. Lee (2016) has demonstrated evidence for the idea that social capital can mediate the relationship between SRSCM and performance. According to Lee (2016), SRSCM has a beneficial effect on building relational and structural social capital. This research also considers cognitive and social capital to provide a complete framework.

#### **2.3.4. Social Capital on Environmental Performance**

The growing interest among scholars centers on how suppliers contribute to improvements within the purchasing companies, as indicated by Taddeo et al. (2017). Mitra and Datta (2014) demonstrated that collaborating with suppliers has a positive impact on environmental performance, particularly in areas like green product design and logistics. However, few studies have definitively proven that social capital significantly influences ecological performance. The prevailing belief is that when customer and supplier companies share a common vision for environmental achievements, environmental performance naturally improves. Essentially, Supplier Relationship Supply Chain Management (SRSCM) enhances environmental performance through its accumulated cognitive and social capital. Structural social capital, characterized by regular contact, information exchange, and teamwork, facilitates knowledge transfer, aiding discussions and problem-solving for achieving environmental capabilities and performance (Mitra and Datta, 2014).

Relational social capital, built on long-term trust-based connections, strengthens commitment between parties and serves as a motivating force for enhancing an organization's environmental capabilities (Ye, Zhao and Prahinski, 2013). Strong engagement based on relationships, information sharing, communication, and trust fosters the development of innovative solutions for various social concerns (Parmigiani et al.,

2017). Consequently, institutions pursuing SRSCM experience significantly improved social performance.

### **2.3.5. Social Capital on Operational Performance**

The economic effects of a company's SRSCM procedures concern operational performance. The proposition that social capital functions as a powerful motivator for increased operating performance have received support from many researchers (Carey, Lawson and Krause, 2011). With cognitive capital, buyers and suppliers can collaborate on ideas, combine their thought processes, and look for resource integration (Carey et al., 2011). By implementing the above-stated interventions, goals aligned to have a synergistic effect tend to decrease the likelihood of conflicts and increase joint returns for buyers and suppliers, thereby enhancing their motivation to improve each other's operational and strategic performance.

Lawson, Tyler, and Cousins (2016) held that better goal-setting, planning, and problem-solving are produced by structural social capital, which serves as a route for communication and information sharing. This can enhance the performance of both the buyer and the provider. They further indicated that the version of the supply chain could be influenced favourably by interactions, including technological exchanges. Numerous pieces of research have shown that Relational social capital significantly improves quality, cost, flexibility, and productivity performance (Wagner, Grosse-Ruyken and Erhun, 2012). According to Preston, Chen, Swink, and Meade (2016), the key driver of operational improvement is relational social capital, which lowers opportunistic behaviour and monitoring costs. In general, possibilities to enhance operational performance are presented by social capital, which is built through regular communication, prompt information sharing, joint issue resolution, and positive connections (Preston et al., 2016).

## **2.4 Theoretical review (theory)**

The theories which are reviewed and discussed in this section are as follows:

### **2.4.1 Social Capital Theory**

In recent years, operations and supply chain management have paid growing attention to institutional theory (Kauppi, 2013). The institutional theory's foundation is that businesses institutionalize interpersonal and organizational relationships by imposing values or limitations on their internal processes or systems (Scott, 2013). This will enable enterprises to secure social legitimacy by following prevailing societal norms, influences, and traditions. Similarly, Liang, Saraf, Hu and Xue (2017) proposed that businesses understand the value of social legitimacy and financial gains. They further believed managers are under pressure from outside stakeholders when making judgments.

In contrast to the rational approach, which solely considers the economic aspect, the theoretical perspective that can account for the influence of social networks provides a much more thorough explanation of organizational actions. DiMaggio and Powell proposed the division of leading institutional powers on decision-makers into three dimensions, coercive, normative, and mimetic, to connect relevant stakeholders with institutional theory. Organizations that must meet societal and cultural expectations are the source of coercive institutional pressure. Since the company is a part of society, it would inevitably face official and informal pressure from other institutions like governmental bodies and regulatory norms. The acts of government agencies are an excellent example of how strong groups can sway an organization's decisions (Rivera, 2014).

Furthermore, professional codes, which assume that professionals will adhere to rules that align with the customs of formal education and the professional society, lead to normative pressure (Rivera, 2014). Each company must consider or adhere to its external

stakeholders' standards, rules, and expectations because of its social legitimacy. In most situations, client demand shapes a fundamental normative pressure.

In their view, McFarland, Bloodgood, and Payan (2008) emphasized that organizations are ingrained in social networks, and businesses inside these networks tend to mimic the actions of their fellow network users. There is the likelihood of copying other companies, mainly when there is a lack of clarity in the organization's organizational purpose or its grasp of the technology (Liang et al., 2017). This makes social capital a valued resource resulting from social access to resources through social ties. Kauppi (2013) again argued that the social capital theory's incorporation into academic theory had given researchers a wider lens through which to examine the competitive advantage that a firm gains from its social networks. Social capital can be divided into cognitive, structural, and relational categories.

Kauppi (2013) added that social capital's cognitive aspect refers to shared objectives, beliefs, and values among social network participants that result in common interpretations and systems of meaning. Because customers and suppliers see the potential for synergy in their interactions, the alliance of aims tends to decrease the likelihood of disputes and increase joint profits for both parties.

De Carolis and Saporito (2008) identified the second aspect of structural social capital as the network of relationships between individuals, namely the pattern that answers the questions of who to contact and how to do so. Regular and diverse interactions enable the timely exchange of information and resources, presenting opportunities and incentives to enhance the bond between two parties (De Carolis and Saporito 2008). Cross-functional teams, team-building activities, collaborative problem-solving workshops, and carefully organized institutional social gatherings all put into practice the potential of interpersonal

engagement. (Carey et al., 2011). This connection makes the supply chain more conducive to collaboration and cooperation. Structural social capital is acknowledged for the advantages it yields through the establishment of a network of contacts, continual communication, sharing of information, and social interaction connections (Koka and Prescott, 2012).

Koka and Prescott (2012) went on to further describe how the moral aspect of an actor's interpersonal relationships, such as trust, duties, respect, and friendship, is tied to the relational dimension. For example, relational social capital is highly dependent on trust. Long-standing beliefs reduce the expectation of opportunistic behavior, promote open communication, and heighten behavioral transparency. Similarly, repeated interactions increase friendship, respect, and reciprocity, leading to long-lasting partnerships (Kale, Singh and Perlmutter, 2010) Thus, relational social capital places a strong emphasis on creating long-lasting, partnership-driven relationships that foster friendship, trust, and reciprocity through repeated contacts. As a result, cooperative actions are encouraged, and transaction costs are decreased (Lee, 2016).

#### **2.4.2 Collaborative Theory**

The foundation of cooperation within supply chains diverges from the traditional focus on competition. Instead, it revolves around the concept of cooperative advantage as opposed to competitive advantage. In accordance with the collaborative paradigm, a supply chain is an intricate web of interrelated associations established via strategic partnerships and cooperative efforts (Chen and Paulraj, 2014). This means that the idea of shared competitive advantage is rooted in relationships. While competitive advantage emphasizes actions that maximize an individual firm's profits through rent-seeking activities, collaborative advantage arises from relational rents that result from mutually beneficial bidirectional rent-seeking behaviors (Lavie, 2006).

As opposed to a zero-sum game where partners compete to obtain more relational rents for their own competitive advantage, supply chain partners see collaboration as a positive-sum game. There are a variety of perspectives in the literature on supply chain collaboration. In this paper, we investigate supply chain collaboration using four perspectives: transaction cost economics, resource-based views, relational views, and extended resource-based views.

### **2.4.3 Transaction Cost Economics (TCE) Theory**

The highly influential theory of transaction cost economics (TCE), which helps explain relationships between organizations, distinguishes between markets and hierarchies as two types of organization advanced (Barringer and Harrison 2010). TCE claims that the choice between using market processes or vertical integration/hierarchies depends on the relative monitoring costs caused by constrained rationality and uncertainty from partners' vested interests and opportunism (Kaufman et al., 2010).

The third option for organizations that helps avoid the issues brought on by both hierarchies and markets is supply chain collaboration. Supply chain collaboration enables firms to reduce opportunistic and monitor expenses inherent in market transactions, increasing the possibility that partners will behave in the partnership's best interests (Croom, 2001). This is accomplished through process integration and mutual trust. Collaboration along the entire supply chain helps companies avoid internalizing a task that might not be a good fit for their core competencies.

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

Much emphasis is paid to the organization's resource-based view (RBV) while attempting to understand supply chain collaboration. Resources, Capabilities, and Strategic Assets most often relate to RBV and form its core ideas (Barney, 1991). According to RBV,

strategic resources, including core competency, dynamic capability, and absorptive capacity, can explain variations in business performance (Teece et al., 1997). Businesses that combine resources in novel ways may gain an advantage over rival companies that cannot do so (Dyer and Singh, 1998). Firms can achieve a prolonged market advantage by possessing limited resources and assets and excelling in their core strengths and capabilities (Knudsen, 2003). RBV asserts that because relation-specific purchases are uncommon, valuable, non-replaceable, and difficult to mimic, investing in them helps partnered enterprises gain a competitive edge (Barney, 1991). Park et al. (2014) disclosed that it is challenging for their rivals to copy the supply chain partnering organizations' relational assets due to the embedded structure of such relationships and the ambiguity around the causes. Collaboration in the supply chain also enables businesses to concentrate on their distinctive core functions, which boosts firm-specific talents, realizes economies of scale, and positively impacts learning (Park et al., 2014).

From the discussions above, four main theoretical foundations were identified and reviewed relative to the variables of this study. However, not all of the four (4) theories were found to be directly related to this particular study. One that was essential and fit for this study is the social capital theory, which states that businesses understand the value of social legitimacy in addition to financial gains. The study, therefore, adopted the social capital theory as the theoretical basis for this study.

Out of the four (4) theories identified in this study, including the social capital theory, the collaborative theory, the transaction cost economics, and the resource-based view theory, the social capital theory was found to be one that applied to the conceptual framework of this study.

### **2.4.5 Institutional Theory**

As a different perspective from this research, institutional theory has typically centered on exploring how groups and organizations can enhance their standing and credibility by conforming to the conventions and regulations within their institutional context. These regulations and norms encompass various aspects such as regulatory frameworks, government entities, legal systems, judicial processes, professional standards, and other societal and cultural conventions that exert pressure to conform (Scott, 2007). According to institutional theory, corporations' strategies and organizational choices are shaped by external social, political, and economic factors as they seek to adopt or validate their actions in the perception of other stakeholders. It is possible to utilize institutional theory to describe how changes in social values, technical development, and legislation impact decisions about 'green' sustainable activities and environmental management (Ball and Craig, 2010).

The institutional strategy is concerned with how social, legal, and regulatory constraints to conform influence corporate behavior. The study investigates how various supply chain actors view sustainability and questions whether this is a strategic strategy (Hillestad et al., 2010). This is done to assess what the various stakeholders are doing to improve supply chain efficiency and what they intend to do going forward to take institutional pressures into account. This study also examines the main issues that, due to specific institutional pressures, impede pharmaceutical companies in Tamale from developing sustainable supply chain management strategies.

### **2.5 Empirical Review**

This aspect of the review focuses on the thematic areas of the study. Such themes include socially responsible supply chain management, firm performance, institutional pressures, and top management support.

Socially responsible supply chain management (SRSCM) has gained significant attention in recent years as organizations recognize the importance of integrating social and environmental concerns into their supply chain practices.

Park-Poaps and Rees (2010) examine the stakeholders influencing organizations to adopt SRSCM orientation. The authors argue that stakeholder pressures are critical in shaping an organization's commitment to social responsibility in the supply chain. The study identifies five primary stakeholder forces through a comprehensive literature review and empirical analysis: customer demand, regulatory pressure, supply chain partners, internal organizational factors, and societal expectations. The findings suggest that organizations with a higher orientation towards SRSCM are more likely to respond to these pressures, highlighting the importance of stakeholder engagement and collaboration in driving socially responsible practices throughout the supply chain.

Alghababsheh and Gallear (2021) focus on the role of social capital in promoting suppliers' social performance within the context of socially sustainable supply chain management. The study conceptualizes social capital as the trust, norms, and networks among supply chain actors. Through an empirical investigation, the authors reveal that social capital positively influences suppliers' social performance, encompassing ethical conduct, employee well-being, and community engagement. Furthermore, the study highlights the mediating effect of social capital on the relationship between socially sustainable supply chain management practices and suppliers' social performance. The findings emphasize the significance of fostering social capital to enhance suppliers' social performance and achieve sustainable outcomes in the supply chain.

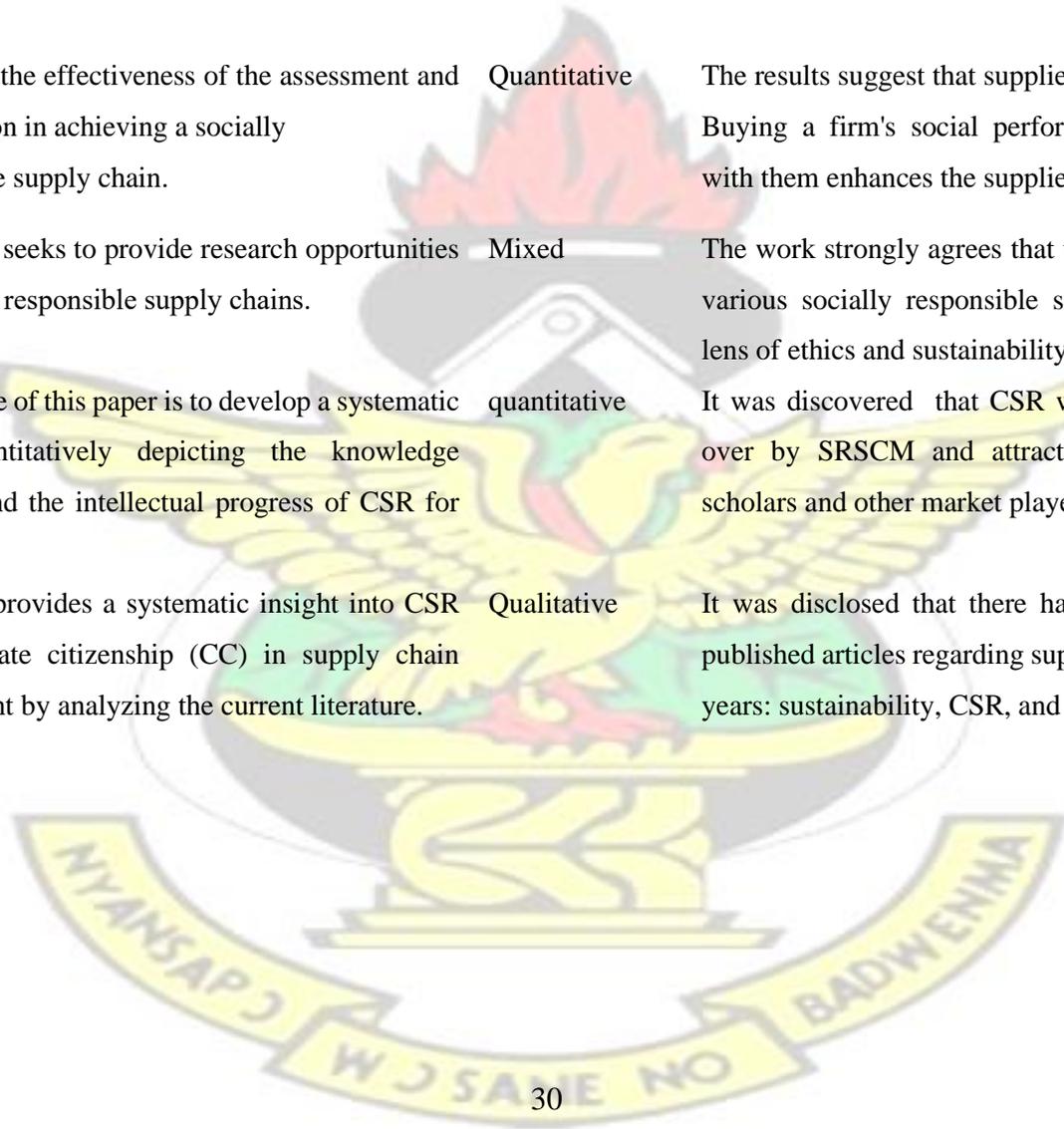
. Wu (2017) investigates the effects of socially responsible supplier development (SRSD) and sustainability-oriented innovation (SOI) on sustainable development, with a focus on

small and medium-sized enterprises (SMEs). The study proposes a conceptual framework that links SRSD and SOI practices to three dimensions of sustainable development: economic, social, and environmental. Through a survey-based empirical analysis, the author finds that SRSD positively influences economic and social sustainability, while SOI positively impacts ecological sustainability. Furthermore, the study reveals that SRSD mediates the relationship between SOI and economic sustainability. These findings underscore the importance of integrating SRSD and SOI practices to achieve holistic, sustainable development outcomes in SMEs.



**Table 2.1 Socially Responsible Supply Chain Management**

<b>Author(s) of Pub.)</b>	<b>(Year</b>	<b>Research Objective/ Hypotheses</b>	<b>Method</b>	<b>Key Results/Findings</b>
Sancha, C. and Gimenez, C. Sierra, V. (2015)	C.	To analyze the effectiveness of the assessment and collaboration in achieving a socially Responsible supply chain.	Quantitative	The results suggest that suppliers contribute to improving Buying a firm's social performance, and collaborating with them enhances the suppliers' social performance.
Daniel R G. (2018)		This article seeks to provide research opportunities in “socially responsible supply chains.	Mixed	The work strongly agrees that there is a need to examine various socially responsible supply chains through the lens of ethics and sustainability.
Feng, Y., Zhu and Lai, K. H. (2017)	Q.	The purpose of this paper is to develop a systematic study quantitatively depicting the knowledge structure and the intellectual progress of CSR for SRSCM	quantitative	It was discovered that CSR was gradually being taken over by SRSCM and attracting more attention from scholars and other market players
Akbari, M. and McClelland, R. (2020)	R.	The study provides a systematic insight into CSR and corporate citizenship (CC) in supply chain development by analyzing the current literature.	Qualitative	It was disclosed that there had been visible growth in published articles regarding supply chains over the last 18 years: sustainability, CSR, and CC.



**Table 2.1 Socially Responsible Supply Chain Management**

<b>Author(s) (Year of Pub.)</b>	<b>Research Objective/ Hypotheses</b>	<b>Method</b>	<b>Key Results/Findings</b>
Panda, S., N.M., Modak M. Basu and Goyal, S.K. (2015)	This paper analyzes the coordination of a manufacturer–distributor–retailer supply chain where the manufacturer exhibits corporate social responsibility (CSR)	Quantitative	The study found that the wholesale prices of the manufacturer are less than its marginal production cost above a threshold of CSR
Panda, S., Modak, N. M. and C´ardenas-Barr´on L. E. (2017)	This paper analyzes the effects of CSR and explores channels and Coordination in a socially responsible manufacturer-retailer closed-loop supply chain (CLSC).	Quantitative	The work found that Manufacturers are socially responsible and exhibit it by recycling used products they collect. Through the retailer using the reverse channel
Schiller C. M. (2018)	This work examines the role of global supply-chain relationships in transmitting corporate Environmental and Social (EandS) policies.	Quantitative	The study found a novel channel through which firms can benefit from costly environmental and social activities.
Devin B. and Richards C. (2016)	To examine CSR and power within the context of the food supply chain,	Quantitative	The study confirms the influential role of food retailers and how they legitimately engage in socially responsible behaviours to lower food waste.
Yawar, S. A., and Seuring, S. (2017)	To explore the intersection between social issues, corporate social responsibility (CSR) actions, and Performance outcomes.	Qualitative	The study eventually established that relating CSR and supply chain management results in exploring strategies and performance outcomes focusing on social issues.

**Source: Researcher’s Construct, 2023**

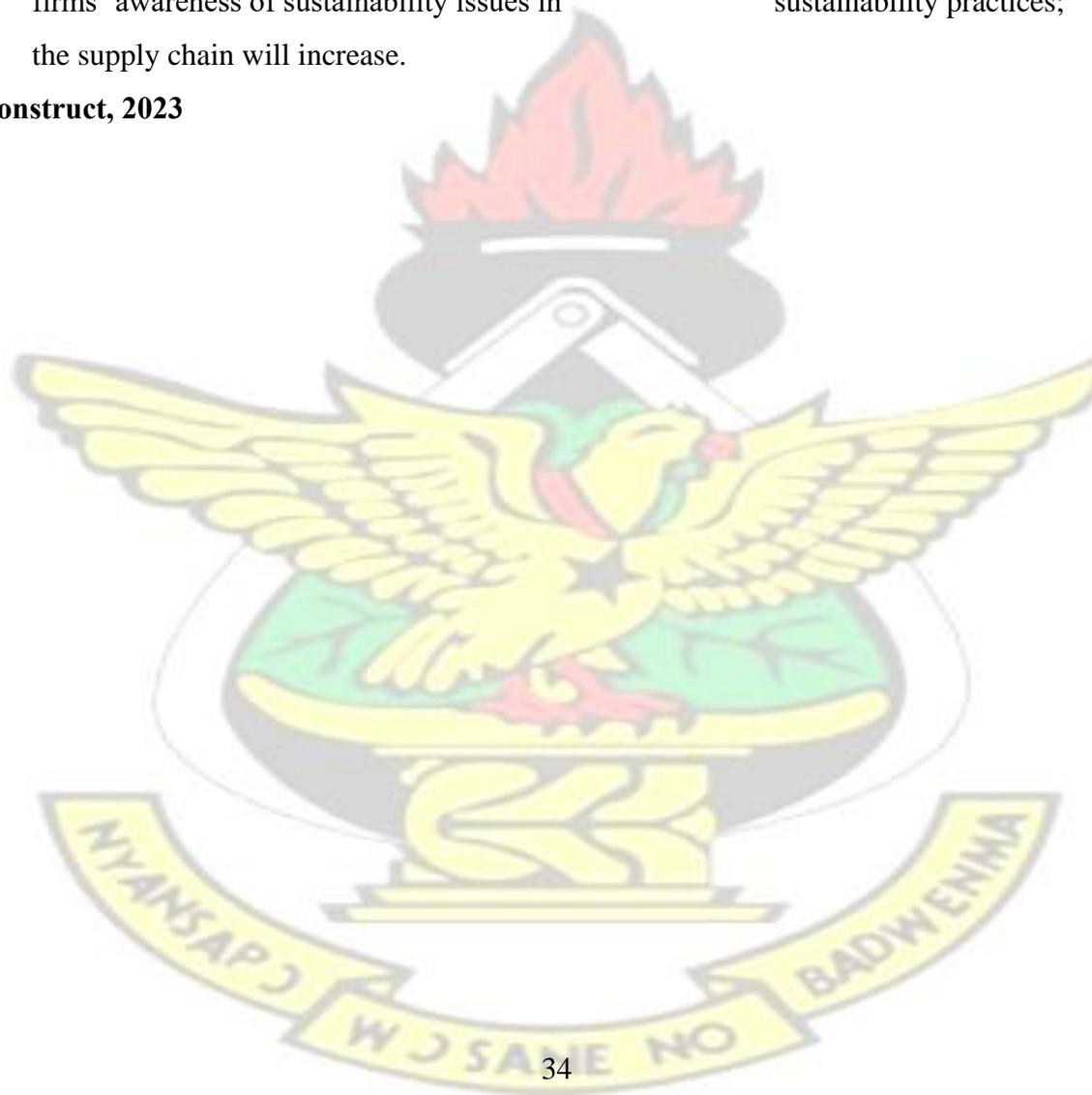
**Table 2.1 Institutional Pressures**

<b>Author(s) (Year of Pub)</b>	<b>Research Objective/ Hypotheses</b>	<b>Method</b>	<b>Key Results/ Findings</b>
Masood N. K., Aftab S. and Imran S. (2019)	To investigate the role of institutional pressures on the direct link Between GSCM practices and environmental performance and GSCM practices and financial performance.	Quantitative	Institutional pressures significantly moderate GSCM practices, environmental performance and financial performance
Rameshwar D., Angappa G. and Sadia S. A. (2014)	To test the impacts of supplier relationship management (SRM) and TQM on environmental performance under the influence of leadership and the Moderation effect of I.P.  H: Leadership positively impacts TQM and SRM with supply chain partners.	Quantitative	Institutional pressures influence the integration of SRM and TQM in a green supply chain network.
Shibin, K. T., Dubey, R., Angappa G., Benjamin H., David R., Shivam G. and Cyril F. (2017)	To assess social, environmental, and economic measures in the automobile industry  H: Coercive pressure has a positive influence on top management beliefs.	Qualitative	The study established that integrating I.T. and RBV to explain how SSCM is possible under the influence of institutional pressures,

<b>Author(s) (Year of Pub)</b>	<b>Research Objective/ Hypotheses</b>	<b>Method</b>	<b>Key Results/ Findings</b>
Tseng, M L., Islamb, S., Kariab, Fauzi N. A. and Afrin S. (2019)	This study aims to review the literature on green supply chain management (GSCM) published from 1998 to 2017	Mixed	The study finds consistent growth in evaluating Green supply chain management practices and performance.
Dubey, R, Gunasekaran, A, Papadopoulos, T, Childe, S. J., Shibin, K.T. and Wamba, S. F. (2016)	To systematically review the literature on SSCM drivers related to SSCM. Drivers.	Quantitative	The study found that SSC drivers are distributed based on the drivers' influences through transitive links.
Subramanian, N and Gunasekaran, A. (2014)	This study offers in-depth reviews of published studies on cleaner practices at various supply chain stages.	Qualitative	The study found a close link between quality and green practices when considering the competitiveness firms have gained from cleaner routines.
Tachizawa E.M., Gimenez, C and Sierra, V. (2015)	Monitoring GSCM practices is positively associated with environmental performance.	Qualitative	The study found the interrelationships among GSCM and performance drivers in building our research hypotheses.
Meixell M. J. and Luoma, P. (2014)	To summarize and analyze what is known regarding how stakeholder pressure may influence supply chain sustainability?	Qualitative	It was discovered that stakeholder pressure on sustainability in the supply. Chain management may result in sustainability awareness, adoption of

Author(s) Pub)	Year of Research Objective/ Hypotheses	Method	Key Results/ Findings
	H: As stakeholder pressure increases, firms' awareness of sustainability issues in the supply chain will increase.		sustainability goals, and implementation of sustainability practices;

Source: Researcher's Construct, 2023



**Table 2.2 Firm performance**

Author(s) (Year of Pub)	Research Objective/ Hypotheses	Method	Key Results/Findings
Muhammad F. B., Mohammed R. A. S., Abdullah M. A., and Saira G. H. (2019)	The impact of TQMP and SCMP on firm supply chain performance of the textile sector of Pakistan H: A firm's TQM practices have a significant positive effect on FSP	Quantitative	The study results have shown significant agreement among the hypothesized effects.
Luisa P. (2020)	Analyze the relationship between green S.C. practices and companies' economic and environmental performance.	Qualitative	There is a significant positive relationship between GSCP and firm performance.
Hsiao-Hui L. Jianer Z. and Jingqi W. (2017)	Examined how trade credit responds to various types of competition in SCM	Quantitative	The study found that suppliers with smaller market shares are associated with more trade credit.
Mohamad S.S. and Jafar R. (2016)	Examined the role of business intelligence (B.I.) in achieving agility in the supply chain context by examining the relationship between B.I. competence, agile capabilities, and agile performance of the supply chain H: The supply chain of B.I. competence has a positive impact on agile capabilities	Quantitative	The study provides support for the partial mediation of agile capabilities on the relationship between B.I. competence and agile performance of the supply chain
Payman A. and Cory S. (2018)	To identify and analyze the metrics and the impact on GSCM and SSCM. H: GSCM and SSCM are positively and significantly related	Mix	The study found that Environmental issues, to a greater extent, provide a solid basis for using metrics in GSCM.

<b>Author(s) (Year of Pub)</b>	<b>Research Objective/ Hypotheses</b>	<b>Method</b>	<b>Key Results/Findings</b>
Chencheng F. and Jiantong Z. (2018)	H: Internal environmental management positively affects economic performance.	Quantitative	GSCM practice has a positive impact on firm performance
Laari S, Töyli J and Solakivi T, O. (2014)	Identify the direct and indirect relationships between customer-driven GSCM practices and environmental and financial performance in Manufacturing. H: GSCM positively impacts the environmental performance	Quantitative	Manufacturers can respond to customer pressure in upstream SCM
Noor A. B. A. S. (2016)	to bridge the between GSCM and green innovation to improve their environmental performance significantly	Quantitative	The Results confirmed the complementary effect of GSCM practices on green innovation. And environmental performance.
Ruoqi G., Afshin Mansouri S. and Emel A. (2016)	To assess the relationship between GSCM practices and firm performance in the Asian manufacturing sector.	Qualitative	The GSCM practices improve economic, environmental, operational, and social performance.
Saumyaranjan S. and Lokesh V. (2020)	To explore the impact of GSCM practices, e.g., green purchasing and customer cooperation.	Quantitative	GSCM was found to significantly impact at least one of the performance dimensions, directly or indirectly.

**Source: Researcher's Construct, 2023**

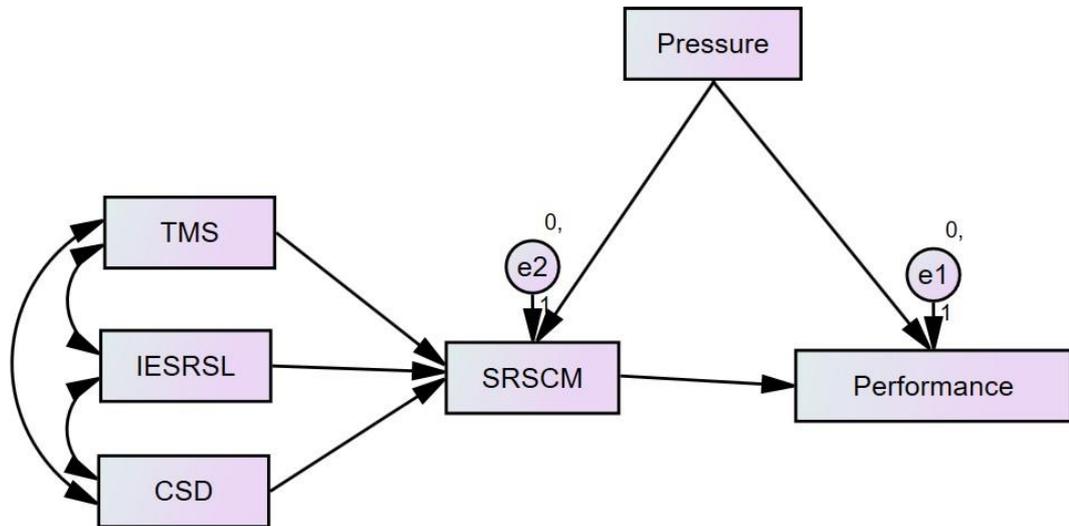
This section aimed to establish a connection between firm performance, institutional pressures, and socially responsible supply chain management using empirical studies conducted by various researchers. The empirical literature's findings in Tables 2.1, 2.2, and 2.3 laid the foundation for further investigations into the roles of the variables under scrutiny. By gathering data from diverse methods, such as quantitative, qualitative, and mixed methods, and studying different companies in various countries, this study identified and analyzed supply chain management practices in manufacturing companies and their economic and environmental performance indicators.

The results from the reviewed empirical literature predominantly supported adopting socially responsible supply chain management practices. Embracing green and environmentally friendly supply practices was found to enhance competitiveness in the market. Consequently, manufacturing companies are advised to implement internal and external green practices and economic and environmental performance measures to reflect the impact of social aspects in supply chain management practices. The study also identified several moderating variables, including trade credit financing, agile capabilities of companies, green innovation, institutional pressures, sustainable supply chain, business ethics, anticipated profit, and product recycling.

## **2.6 Conceptual framework**

In this section, the study put forth a theoretical framework and accompanying hypotheses after conducting a thorough examination of the existing literature. The framework is shown in Figure 2.1, which integrates the relationships between firm performance and socially responsible SCM (SRSCM), which is also explained by Top Management Support (TMS) Integrating Elements of Socially Responsible Supplier Selection Processes

(IESRSL) and Contribution to Supply Delivery (CSD) and these will be moderated by institutional pressures (Pressure)



**Figure 2.1 Conceptual framework**

Source: Researcher's Construct, January 2023.

Figure 2.1, which demonstrates this study's main conceptual framework, depicts the three types of variables the study has investigated. These variables include the independent variable, Socially Responsible Supply Chain Management (SRSCM), and the dependent firm performance variable. The third variable, the institution pressures, is moderated by firm and market characteristics. The institutional pressures are identified as the regulatory, market, and competitive nature of the close competitors. Firms respond differently, even if exposed to different pressure levels, due to the moderating effect of institutional pressures. The role of institutional pressures takes place after the pressures cross the firm's boundary, and it is influenced by factors such as material flow, information flow, and social, environmental conditions and economic conditions. In general, the framework can be applied to any company within the supply chain that is expected to engage in SRSCM practices, which typically includes the various manufacturing processes, since they are

active players in supply chains and are subject to institutional pressures to act in a socially friendly manner (which comprises buying/offering socially responsible logistics). Indeed, the level of pressure experienced to engage in socially accountable logistics practices differs, mainly due to their diverse industries and different roles as suppliers. To further explain the framework concerning the manufacturing process, firms in this sector are influenced by institutional pressures to implement SRSCM practices, whether these practices are conducted internally within a firm's boundary or externally through collaboration with external partners (Zhu, Sarkis, and Lai 2013).

External SRSCM practices cover purchasing socially responsible logistics services (Pazirandeh and Jafari 2013). Seuring and Müller (2008) argue that companies hand the pressure down to their suppliers through the downstream supply chain. Following this logic, manufacturing firms transfer some of the pressure they exert onto their suppliers by demanding socially responsible logistics services. In this situation, firms should provide examples of socially accountable logistics practices since their extensive literature review highlights manufacturing firms' main environmental initiatives while grouping them into distinct categories. Note that these practices could be implemented in response to pressures experienced by the manufacturing firms (e.g., regulatory, market, and competitiveness) or triggered by top managers' proactive behaviours resulting in the types of firms' performance, such as financial performance and customer-oriented performance.

The theory that applied to the conceptual framework is the social capital theory; this is due to the fact of the facts that free interplay of the variables (SRSCMP, institutional pressure, and firm performance) as discussed in the conceptual framework and their roles in establishing the relationship between the tenets of the social capital theory which focuses on the institutionalization of interpersonal and organizational relationships. Business establishments are governed by rules and regulations based on the existing relationships.

The connections are regulated by imposing values or limitations on their internal processes or systems to ensure collaboration and cooperation as well as compliance with the rules and regulations governing the institutions.

The regulatory nature of the rules and regulations, which creates restrictions on the behaviours of the individuals, makes them appear to be creating some stress, nervous tension, and anxiety, most often referred to as institutional pressure. The conceptual framework defines features such as regulatory, market-oriented, and competitive. Institutional forces, therefore, stress managers of business establishments since the regulations sometimes owe to their external nature and thus impact making judgments to direct the performance of the firm or company. These arrangements lead and manage social networks and, in the end, provide a much more careful explanation of organizational actions and behaviours.

The above discussions, therefore, find expression in how actions are triggered by top managers' proactive behaviour, resulting in the types of firms' performance to achieve the objectives for which the organizations were established. The influence of social networks provides a much more comprehensive explanation of organizational actions regulated by institutional powers, categorized into three dimensions: coercive, normative, and mimetic, to connect relevant stakeholders with institutional theory. Organizations that must meet societal and cultural expectations are the source of coercive institutional force. Because pharmaceutical companies are part of society, it is predictable that they would face official and informal pressures from other institutions like governmental bodies regulating institutional norms. Therefore, each company must consider or adhere to its external stakeholders' standards, rules, and expectations because of its social legitimacy.

Organizations are embedded in social networks, and businesses inside these networks have a tendency to imitate the actions of their fellow network users with similar features, the possibility of replicating the strategies of the other companies, mainly when there is a lack of clarity in the organization's organizational purpose or its grasp of the required institutional knowledge or memory. As a result, social capital is a valued resource that emanates from social access to resources through social ties in organizational setups.

### **2.5.1 The Role of the Moderating Variable**

This framework provides a means for the researcher to investigate the theoretically significant measurement attributes that elucidate the functions of each variable, with a particular focus on the moderating variable known as institutional pressure. This moderator allows for a more intricate and precise examination of Socially Responsible Supply Chain Management (SRSCM) concerning its impact on a company's performance. The assessment of the moderators involved the creation of distinct subgroups, allowing for subsequent comparisons with the primary effects to ascertain the influence of each specific moderator. In addition to the aforementioned hypotheses, the conceptual framework explored five dimensions of Socially Responsible Supply Chain Management (SRSCM): material flow, information flow, social objectives, and environmental and economic conditions. These were distinct and separate concepts that could potentially be influenced by institutional pressures. While certain researchers focused on particular facets like establishing connections with customers and suppliers, others opted for more expansive frameworks to capture the full spectrum of SRSCM. Institutional pressures serve as a gauge for supplier integration, encompassing proactive endeavors aimed at comprehending and satisfying customer demands through collaborative approaches.

Pressures emanating from the regulatory aspect of the overall firm structure are certainly an institutional issue. The pressures experienced due to market forces and the competitive nature of the environment are undoubtedly external and thus require simultaneous integration, which is incorporation with customers and suppliers. While not a central focus of this study on SRSCM, several articles included the concept of internal integration in their research models. Some view internal integration within a company's internal boundaries as an implicit aspect of SRSCM, as suggested by Flynn et al. (2013). Others treat it as a precursor or supplementary element to external integration. This moderator, as defined by Koufteros, Rawski, and Rupak (2010), pertains to the integration of functions or departments within a single firm. We separately assessed various dimensions of firm performance, with a specific focus on financial performance and customer-oriented performance. Financial performance serves as a crucial metric for overall effectiveness and has been utilized in multiple studies within our sample, as seen in the works of Germain, Davis-Sramek, Lonial, and Raju (2011) and Vickery, Jayaram, Droge, and Calantone (2003). Customer-oriented performance, on the other hand, pertains more to perceptual aspects.

## **2.6 The hypotheses of the study**

Companies' delivery performance determines SRSCM through delivery supply chain management channels such as warehousing location, distribution mode, and vehicle scheduling, which are socially friendly and highly imperative in supply performance. To a greater extent, firms' delivery performance depends on delivery channels, location policies, and scheduling. It can be made to work better by appropriate selection and application of the role of the factors mentioned above. Based on the literature review and

the subsequent construction of the conceptual framework, the following hypotheses are proposed:

*H<sub>1</sub>: Top management support for supply chain practices will significantly predict socially responsible supply chain management;*

*H<sub>2</sub>: Integrating Elements of Socially Responsible Supplier Selection Processes will significantly define socially responsible supply chain management;*

*H<sub>3</sub>: Contribution to Responsible Supply Delivery through collaborative relationships with suppliers will significantly predict socially responsible supply chain management*

*H<sub>4</sub>: SRSCM and firm performance are positively related.*

The SRSCM operations of businesses in particular may be impacted by institutional variables such as state laws and regulations, federal policies, and NGO guidelines that offer standards for corporate environmental protection measures and social responsibility. Companies that go above and above what the government requires in terms of environmental protection and social responsibility behavior lessen the likelihood that the government will impose strict institutional limits. Hence, it is hypothesized that:

*H<sub>5</sub>: The relationship between SRSCM and firm performance will be significant when moderated by Institutional pressures.*

## CHAPTER THREE

### METHODOLOGY

#### 3.1 Introduction

This chapter entails the various methods adopted in collecting the required data for this study, focusing on the research design, population, sampling, research instrument, questionnaire administration, and interview.

#### 3.2 Research Design

Descriptive statistics were extensively utilized. It meant investigating issues concerning exceptional individuals, organizations, processes, programs, institutions, and events. Given the above principles, since the current study satisfies the conditions indicated above, the case study was selected for this study because the survey fulfils the above-identified requirements. Adopting the case study is also justified since the findings are not for generalization purposes.

In effect, this work adopts a descriptive survey as a research design. As Cobb (2011) emphasizes, this enables researchers to examine many study respondents through questionnaires. He additionally stated that descriptive studies aim to establish current views of the study population. Further, it describes the present variables in a specified manner and helps establish a link among them (Christensen, 2012).

A descriptive survey, however, is characterized by some limitations, which, in the view of DeFranzo (2012), are highlighted as follows. First and foremost, respondents might not feel confident as a result of answering the questions truthfully and sincerely.

Secondly, respondents are made to offer responses even if they are unfavourable to them.

Even though this method has drawbacks, it is more suitable for evaluating the moderating

role of institutional pressures between SRSCM and the performance of pharmaceutical firms.

### 3.3 Research Purpose

The purpose of this research is to examine the role of institutional pressures as moderators in the application of socially responsible supply chain management (SRSCM) operations in pharmaceutical companies operating in Ghana, specifically Tobinco, Ernest Chemist, Olam, and Nestle Ghana (TECON).

### 3.4 Population of the Study

The gathering of all possible individuals, mainly referred to as the study's target population, comprises the various staff at the identified pharmaceutical companies in different units, as revealed in the Table below.

The Table below shows the operational structure of the four (4) pharmaceutical companies in the Tamale Metropolis. Therefore, this gives a target population of about three hundred (300) respondents.

**Table 3.1. Category of Population**

<b>Category of Respondents</b>	<b>Number of Respondents</b>	<b>Percentage</b>
Chief Executive Officer (CEO)	02	1.4 %
Administrators	04	2.6%
Finance unit	04	2.6%
Procurement/supply chain unit	40	26.6%
Supervisors	20	13.4%
Floor workers; lower level staff	80	53.4%
<b>Total</b>	<b>150</b>	<b>100.00%</b>

**Source: Researcher's Construct 2023.**

### **3.5 Sample Size and Sampling Technique**

The sample used for data collection is intended at plummeting cost, ensuring sound data presentation and analysis and meeting timelines. This also facilitates the possibility of arriving at a representative sample that adequately and more fully represents the intended population. According to Rose (2016), a 30–50% sample size is appropriate to reflect the study population accurately. Based on this hypothesis, the study selected 150 participants in light of the principle espoused by Rose, as indicated above. This was complemented by the researcher's instinct and familiarity with pharmaceutical companies and their administrative units. So, in effect, 50% of the target population was used as the sample size. According to Rodger (2012), a study is deemed to have external validity if it uses a sizable, representative, and carefully chosen sample.

The respondents were chosen using the stratified sampling technique to determine the sampling allocation among the various categories of staff at the pharmaceutical companies. First, the population was divided into three (3) strata: top management, middle-level employees, and those at the lowest rank. The stratified sampling technique was justifiable because it aids in the proportionate selection of the required respondents to form the sample size

### **3.6 Data Collection**

The study used a variety of primary and secondary sources of data, including the various units of pharmaceutical firms. The primary data obtained from questionnaires was this study's leading source of empirical data. As Creswell (2008) indicates, the main benefit of using preliminary data is that they are more trustworthy because they are obtained from the sources, especially from first-hand sources such as the research respondents.

### **3.6.1 Data Collection Instruments**

The key instruments to be used for the data collection for this study included a questionnaire. Questionnaires will be administered to all the different categories of respondents included in the sample size.

#### **3.6.1.1 Questionnaires**

There are diverse types of questionnaires in practice, and the types of questionnaires used usually depend on the purpose of the study and the types of data collected. Such questions facilitate drawing on what respondents consider significant in vital decision-making.

This data collection method has also been confirmed to be more systematically accurate. Questions that asked participants to rank the significance of issues on a scale of 1 to 5 were adopted. Such questions facilitate making fair judgments on the data being analyzed and discussed.

The questionnaires comprised six (6) sections. Section 'A' entails the analysis of the socio-demographic characteristics of the respondents, section 'B' deals with the effects of socially responsible supply chain management on the pharmaceutical companies' performance, section 'C' assesses the role of top management support on supply chain management at the pharmaceutical companies, section 'D' evaluates ways of integrating elements of socially responsible supplier selection processes at the pharmaceutical companies, section 'E' examines the extent to which socially accountable supply chain management contributes to effective supply delivery and section 'F' determines how institutional social pressures influence the performance of the pharmaceutical companies in the Tamale Metropolis.

The questionnaires designed for the data collection will be based on the Licket Scale measurement tool ranging from Strongly Agree =5 to Strongly Disagree =1.

### **3.7 Validity and Reliability**

#### **3.7.1 Pre-testing Procedures**

My supervisor's evaluation of the instruments in the content validity provided a way of scrutinizing and making judgments as to whether the device measures institutional pressures and its moderating role on SRSCM and service delivery at pharmaceutical firms. According to Fraenkel and Wallen (2009), the pre-test of a questionnaire could detect ambiguities and reveal whether the instructions to the respondents are clear and appreciated. About ten (10) respondents will be chosen for the pre-testing exercise. The instruments on all the identified functional units of the pharmaceutical firms will be included.

### **3.8 Analytical Procedure**

This entails the following under-listed processes:

#### **3.8.1 Coding of Responses**

The questionnaires were numbered sequentially to eliminate errors while transferring the data into SPSS. Regarding coding relative to the demographic information, the male and female numbers were 1 and 2. This was applied to the remaining questions, as earlier indicated.

### **3.9 Ethical Considerations**

The significant aspects of the researcher's ethical considerations are privacy rights, the impact of psychological harm, deception, and confidentiality.

#### **3.9.1 Privacy Rights**

The Respondent's right to privacy is considered one of the most essential ethical issues in this study. Taking into consideration the delicate nature of establishing the link between SRSCM and pharmaceutical firms' performance, with institutional pressure as a

moderator, and as an effort to accomplish a significant aspect of the respondent's privacy right, the researcher furnished the respondents in their respective units with sufficient information concerning the phenomenon being investigated to enable respondents to decide to participate or otherwise in the data collection process.

### **3.9.2 The Potential for Psychological Harm**

The researcher was also sensitive to the likelihood of causing psychological harm to the respondents since the remainder of the severe challenges in establishing the connection between SRSCM and pharmaceutical firms' service delivery with institutional pressures in moderation; those in charge could experience emotional discomfort and psychological pain. Therefore, the researcher strategized effectively to avoid causing any harm to the identified respondents in this study.

### **3.9.3 Deception**

Deception could be justified in certain spheres of social research. Still, considering the delicate realities of managing the variables such as SRSCM, pharmaceutical firms' performance, and institutional pressures, the researcher, in his judgment, did everything possible to make sure that respondents were not deceived or misled by disclosing and clearly explaining the aims of the research to all the respondents during the data gathering process and to keep them up-to-date with the rationale of the study.

### **3.9.4 Confidentiality**

Data gathering on research respondents raises the issue of confidentiality. To address this difficulty, the researcher assured all the respondents of the required secrecy of the data obtained. The researcher again ensured that defining features about the respondents were not connected with exact responses without the respondents' permission. In his capacity,

the researcher ensured that information from the identified respondents was handled with the extreme secrecy it deserved. Hence, high-level confidentiality was adopted.

### **3.10 Organizational profile**

Ernest Chemists Limited (ECL) is renowned as Ghana's largest pharmaceutical company. It is known for its unwavering commitment to delivering a comprehensive range of high-quality pharmaceutical products at affordable prices (Ernest Chemists Limited, 2023). Established in 1986 by Mr Ernest Bediako Sampong, a distinguished pharmacist, ECL has experienced remarkable growth and stability over its impressive three-decade history (Ernest Chemists Limited, 2023).

(Ernest Chemists Limited, 2023.). Leveraging their profound insight, extensive knowledge, and vast experience in the pharmaceutical industry, ECL remains steadfast in its mission to provide pharmaceutical products of the highest quality that are accessible and affordable to individuals from all walks of life (Ernest Chemists Limited, 2023.). With a robust distribution network spanning Ghana and beyond, ECL has firmly established itself as the region's foremost distributor of pharmaceutical products. Moreover, ECL operates the largest retail chain in the country, featuring cutting-edge pharmacy setups that ensure convenient access to products and exceptional customer service.

In addition to manufacturing quality and affordable medicines, ECL proudly represents a diverse portfolio of multinational pharmaceutical and consumer brands, solidifying its position as the leading provider of prescription and consumer products in Ghana (Ernest Chemists Limited.)

With a rich history of success, ECL continues to innovate and adapt to the evolving needs of the healthcare industry, embracing modern technologies and employing highly skilled

professionals. By prioritizing excellence, affordability, and accessibility, ECL remains dedicated to improving individuals' overall w

ell-being and healthcare outcomes throughout Ghana and beyond (Ernest Chemists Limited, 2023)

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## CHAPTER FOUR

### DATA PRESENTATION AND ANALYSIS

#### 4.1 Introductions

This chapter covers the demographic characteristics of the respondents, the effects of socially responsible supply chain management on the pharmaceutical companies' performance, assesses the role of top management support on supply chain management at the pharmaceutical companies, evaluates ways of integrating elements of socially responsible supplier selection processes at the pharmaceutical companies, finds out the extent to which socially accountable supply chain management contributes to effective supply delivery and determines how institutional social pressures and the performance of the pharmaceutical companies.

#### 4.2 Background of Respondents

**Table 4.1: Gender/sex distribution of respondents**

<b>Sex Distribution Of Respondents</b>	<b>Frequency</b>	<b>Percentage</b>
Male	90	60
Female	60	40
<b>Total</b>	<b>150</b>	<b>100</b>

Source: field data, January 2023.

Gender is inalienable in the determination of employees' roles at work. As a result, the researcher tells the difference that one's gender may influence their thoughts on the social responsibilities of employees in the supply chain management processes in the pharmaceutical companies, hence, the inquiry into the gender distribution of the respondents. A total number of one hundred and fifty (150) workers were chosen to give

answers to the structured questionnaire. The 150 employees were chosen because out of the 300 employees, not all could give the expected responses to the questionnaires. Also, at the time of the research, a significant portion of the employees had taken annual leave and could not be used for work. Relatively, the 150 selected were very strategic and meaningful to work with. In Table 4.1, 90 of the respondents, representing 60%, were males, and the remaining, which was 60, meant 40% were females. This analysis indicates a considerably high male composition of pharmaceutical company staff members. It thus suggests male dominance in the working force and other institutions, of which pharmaceutical companies are no exception.

**Table 4.2.: Age Distribution of Respondents**

Age distribution	Frequency	Percentage
20-25	23	15
26-30	45	30
31-35	37	25
36-40	23	15
41-45	15	10
46 and above	07	05
<b>Total</b>	<b>150</b>	<b>100</b>

**Source: Field Data, January 2023**

From the above Table, it was observed that, out of the 150 participants who responded to the questionnaires, 23 respondents, representing 15%, had their ages ranging from 20 to 25 years, 45 (30) being the majority had their ages ranging from 26 to 30 years, 37

respondents expressed in percentage terms as 25 had their ages ranging from 36 to 40 years. Furthermore, 15 (10%) of respondents had periods between 41 and 45, and 7 of the respondents, representing 15%, were found to be 46 years and above. Because most of the employees were found to be between 26 and 30 years old, the workforce of the pharmaceutical firms is undoubtedly a youthful one.

**Table 4.3: Educational qualification of respondents**

<b>Educational Qualification</b>	<b>Frequency</b>	<b>Percentage</b>
No Formal Education	07	05
SHS	23	15
HND	60	40
Degree	45	30
Masters	15	10
<b>Total</b>	<b>150</b>	<b>100</b>

**Source: field data, January 2023**

Survey participants were chosen at random from various departments within the companies, encompassing both educated and uneducated staff. The educated staff primarily constitute the informed workforce, holding diverse roles in managing the supply chain activities of the companies. On the other hand, the uneducated staff members provide supportive services to administrators, such as custodial and secretarial tasks, among others. As observed in Table 4.2, 7 (5%) of the employees had no formal education. Those with SHS qualifications were 23, representing 15% of the sample size. As the data further reveals, the majority of the employees had HND as their highest education qualification

since 60 (40%) of the employees were found to be in this category. Those with Master's Degrees represented 15 employees, expressed in percentage terms as 10. The selection of the employees mentioned above was specific. Because this study focuses on socially responsible supply chain management practices, a premium was given to the educated staff.

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**Table 4.4: Work Schedule/Departments**

<b>Educational Qualification</b>	<b>Frequency</b>	<b>Percentage</b>
Administration	08	05
Operations	22	15
Distribution	90	60
Sales	18	12
Accounts.	12	08
<b>Total</b>	<b>150</b>	<b>100</b>

**Source: Field Data, January 2023**

Employees fell into different work schedule categories, including administration, operations, distribution, sales, and accounting. Since most of the respondents, represented by 90 (60%), were in the distribution unit, the supply chain management unit employees were more than the other company employees. The fact that supply chain staff outnumbered other staff members confirms that the pharmaceutical firm's primary business focuses on distributing pharmaceutical products to the critical places where they are most needed using social and environmental measures. Therefore, the supply chain staff becomes the pivot on which the entire operations of the companies revolve.

Also, because of the critical administrative responsibility played by the pharmaceutical companies' top management, this department could not be left out of the study, and eight employees (5%) were selected and included in the sample for data collection. The operations department, which also steers the affairs of the general direction of the companies as a critical factor to the distribution of pharmaceutical products, 22 of the employees representing 15% was also paramount to work. Considering the nature of the distribution of pharmaceutical products, 18 employees, represented 12%, came from the sales department since it could not be left out. The staff numbered 12 and expressed as 8% were responsible for the management of the accounts of the companies.

The selection of respondents from different departments in the pharmaceutical companies is essential in giving this study a generalization potential. It is realized from Table 4.4 that the respondents constitute staff from diverse backgrounds in the companies. This enriches the study with various thoughts. The selection included administration, operations, distribution, sales and accounts employees. Instrument Reliability an

#### **4.3 Instrument Reliability and Discriminant Validity**

This part of the investigation provides an examination of three key factors: Cronbach's alpha evaluates the instrument's reliability, composite reliability measures the collective reliability of several interconnected items, and average variance extracted (AVE) quantifies the fraction of variance attributed to a construct in relation to that which stems from measurement errors.

**Table 4.5 Reliability Statistics**

<b>Variable</b>	<b>No. of Items</b>	<b>Cronbach's Alpha</b>	<b>Composite reliability</b>	<b>AVE</b>
Socially responsible SCM	6	0.872	0.810	0.5
Top management support	6	0.910	0.903	0.5
Socially responsible supplier selection	7	0.882	0.877	0.4
Contribution to supply delivering	6	0.759	0.870	0.5
institutional social pressures	4	0.523	0.602	0.3
Firm Performance	4	0.429	0.521	0.2

The table above assessed the reliability of different constructs related to socially responsible supply chain management (SCM) in pharmaceutical companies. The first construct, "Socially Responsible SCM," comprising six items, showed commendable internal consistency reliability (Cronbach's Alpha = 0.872) and high composite reliability (0.810). The construct demonstrated the ability to capture a significant portion of its underlying variance (AVE = 0.5). The second construct, "Top management support," also exhibited excellent internal consistency (Alpha = 0.910) and strong composite reliability (0.903), with an AVE of 0.5. The third construct, "Socially responsible supplier selection," with seven items, demonstrated good internal consistency (Alpha = 0.882) and high composite reliability (0.877), though a slightly lower AVE (0.4). The fourth construct, "Contribution to supply delivering," had acceptable internal consistency (Alpha = 0.759) and high composite reliability (0.870), with an AVE of 0.5. The fifth construct, "Institutional social pressures," showed moderate internal consistency (Alpha = 0.523) composite reliability of 0.602, sound but with a lower AVE of 0.3, below the acceptable

threshold. The essential items of firm performance were probably below the allowable value for all the reliability and validity tests, according to the results displayed in Table 4.5 above.

Also, the discriminant validity test was conducted and displayed in the correlation table below (Table 4.6). According to Henseler et al. (2015), a significant correlation value above 0.90 would suggest that discriminant validity is absent. However, a lower, more conservative threshold value is offered when constructs are conceptually more distinct, such as 0.85. Henseler et al. (2015) further explained that a value below 0.85 indicates that discriminant validity is present. Table 4.6 below shows that there is discriminant validity as all the values highlighted were below 0.8, which is the thumb rule for the PLS-SEM. This correlation value indicates that the constructs are sufficiently distinct from each other.



**Table 4.6 Discriminant Validity**

	SR 1	SR 2	SR3	SR4	SR5	SR6	TS 1	TS 2	TS 3	TS 4	EI1	EI2	EI3	EI4	EI5	SD1	SD2	SD 3	SD 4	SD5	SD6	SP1	SP2	SP3	SP4	P1	P2	P3	P4
<b>S R 1</b>	1	.77 <sup>3**</sup>	.695 <sup>**</sup>	.323 <sup>**</sup>	.561 <sup>**</sup>	.434 <sup>**</sup>	.37 <sup>3*</sup>	.48 <sup>3*</sup>	.51 <sup>2**</sup>	.37 <sup>0**</sup>	.51 <sup>8**</sup>	.64 <sup>1**</sup>	.34 <sup>2**</sup>	.494 <sup>**</sup>	.557 <sup>**</sup>	0.07 <sup>9</sup>	- 0.11 4	- .16 7*	- 0.0 78	.695 <sup>**</sup>	.323 <sup>**</sup>	.561 <sup>**</sup>	.434 <sup>**</sup>	.494 <sup>**</sup>	.557 <sup>**</sup>	0.07 <sup>9</sup>	- 0.11 4	.323 <sup>**</sup>	.561 <sup>**</sup>
<b>S R 2</b>	.77 <sup>3**</sup>	1	.640 <sup>**</sup>	.253 <sup>**</sup>	.603 <sup>**</sup>	.339 <sup>**</sup>	.39 <sup>7**</sup>	.44 <sup>2**</sup>	.50 <sup>9**</sup>	.40 <sup>1**</sup>	.51 <sup>3**</sup>	.63 <sup>3**</sup>	.29 <sup>5**</sup>	.506 <sup>**</sup>	.599 <sup>**</sup>	0.06	- 0.10 5	- .26 2**	- 0.0 8	.640 <sup>**</sup>	.253 <sup>**</sup>	.603 <sup>**</sup>	.339 <sup>**</sup>	.506 <sup>**</sup>	.599 <sup>**</sup>	0.06	- 0.10 5	.253 <sup>**</sup>	.603 <sup>**</sup>
<b>S R 3</b>	.69 <sup>5**</sup>	.64 <sup>0**</sup>	1	.417 <sup>**</sup>	.346 <sup>**</sup>	.400 <sup>**</sup>	.24 <sup>5**</sup>	.41 <sup>5**</sup>	.46 <sup>6**</sup>	.31 <sup>1**</sup>	.47 <sup>7**</sup>	.57 <sup>6**</sup>	.28 <sup>8**</sup>	.357 <sup>**</sup>	.481 <sup>**</sup>	0.07 <sup>3</sup>	- 0.07	- 0.0 86	- 0.0 05	1.00 <sup>0**</sup>	.417 <sup>**</sup>	.346 <sup>**</sup>	.400 <sup>**</sup>	.357 <sup>**</sup>	.481 <sup>**</sup>	0.07 <sup>3</sup>	- 0.07	.417 <sup>**</sup>	.346 <sup>**</sup>
<b>S R 4</b>	.32 <sup>3**</sup>	.25 <sup>3**</sup>	.417 <sup>**</sup>	1	0.13	.221 <sup>**</sup>	0.0 <sup>51</sup>	.18 <sup>9*</sup>	.17 <sup>0*</sup>	.15 <sup>6*</sup>	.21 <sup>4**</sup>	.21 <sup>2**</sup>	.15 <sup>9*</sup>	0.05	.199 <sup>**</sup>	- 0.07 1	- 0.10 2	- 0.0 86	- .15 2*	.417 <sup>**</sup>	1.00 <sup>0**</sup>	0.13	.221 <sup>**</sup>	0.05	.199 <sup>**</sup>	0.07 <sup>1</sup>	- 0.10 2	1.00 <sup>0**</sup>	0.13
<b>S R 5</b>	.56 <sup>1**</sup>	.60 <sup>3**</sup>	.346 <sup>**</sup>	0.13	1	.238 <sup>**</sup>	.33 <sup>2**</sup>	.32 <sup>0**</sup>	.33 <sup>5**</sup>	.37 <sup>2**</sup>	.29 <sup>3**</sup>	.34 <sup>5**</sup>	.16 <sup>5*</sup>	.320 <sup>**</sup>	.345 <sup>**</sup>	0.11 <sup>3</sup>	- 0.04 6	- 0.1 04	- 0.0 83	.346 <sup>**</sup>	0.13	1.00 <sup>0**</sup>	.238 <sup>**</sup>	.320 <sup>**</sup>	.345 <sup>**</sup>	0.11 <sup>3</sup>	- 0.04 6	0.13	1.00 <sup>0**</sup>
<b>S R 6</b>	.43 <sup>4**</sup>	.33 <sup>9**</sup>	.400 <sup>**</sup>	.221 <sup>**</sup>	.238 <sup>**</sup>	1	.48 <sup>4**</sup>	.63 <sup>5**</sup>	.56 <sup>5**</sup>	.36 <sup>8**</sup>	.51 <sup>3**</sup>	.50 <sup>8**</sup>	.32 <sup>3**</sup>	.459 <sup>**</sup>	.609 <sup>**</sup>	.339 <sup>**</sup>	0.04 <sup>7</sup>	- 0.1 11	- 0.1 32	.400 <sup>**</sup>	.221 <sup>**</sup>	.238 <sup>**</sup>	1.00 <sup>0**</sup>	.459 <sup>**</sup>	.609 <sup>**</sup>	.339 <sup>**</sup>	0.04 <sup>7</sup>	.221 <sup>**</sup>	.459 <sup>**</sup>
<b>T S1</b>	.37 <sup>3**</sup>	.39 <sup>7**</sup>	.245 <sup>**</sup>	0.05 <sup>1</sup>	.332 <sup>**</sup>	.484 <sup>**</sup>	1	.73 <sup>8**</sup>	.64 <sup>7**</sup>	.53 <sup>7**</sup>	.42 <sup>2**</sup>	.51 <sup>7**</sup>	.32 <sup>5**</sup>	.598 <sup>**</sup>	.527 <sup>**</sup>	.390 <sup>**</sup>	.156 <sup>*</sup>	- .21 8**	- 0.0 93	.245 <sup>**</sup>	0.05 <sup>1</sup>	.332 <sup>**</sup>	.484 <sup>**</sup>	.598 <sup>**</sup>	.527 <sup>**</sup>	.390 <sup>**</sup>	.156 <sup>*</sup>	0.05 <sup>1</sup>	.332 <sup>**</sup>
<b>T S2</b>	.48 <sup>3**</sup>	.44 <sup>2**</sup>	.415 <sup>**</sup>	.189 <sup>*</sup>	.320 <sup>**</sup>	.635 <sup>**</sup>	.73 <sup>8**</sup>	1	.75 <sup>4**</sup>	.47 <sup>0**</sup>	.54 <sup>9**</sup>	.60 <sup>0**</sup>	.38 <sup>3**</sup>	.620 <sup>**</sup>	.660 <sup>**</sup>	.264 <sup>**</sup>	.135 <sup>*</sup>	- .15 7*	- 0.0 79	.415 <sup>**</sup>	.189 <sup>*</sup>	.320 <sup>**</sup>	.635 <sup>**</sup>	.620 <sup>**</sup>	.660 <sup>**</sup>	.264 <sup>**</sup>	.135 <sup>*</sup>	.189 <sup>*</sup>	.635 <sup>**</sup>
<b>T S3</b>	.51 <sup>2**</sup>	.50 <sup>9**</sup>	.466 <sup>**</sup>	.170 <sup>*</sup>	.335 <sup>**</sup>	.565 <sup>**</sup>	.64 <sup>7**</sup>	.75 <sup>4**</sup>	1	.54 <sup>2**</sup>	.58 <sup>3**</sup>	.68 <sup>7**</sup>	.34 <sup>4**</sup>	.512 <sup>**</sup>	.666 <sup>**</sup>	.237 <sup>**</sup>	0.02 <sup>1</sup>	- .24 2**	- 0.1 13	.466 <sup>**</sup>	.170 <sup>*</sup>	.335 <sup>**</sup>	.565 <sup>**</sup>	.512 <sup>**</sup>	.666 <sup>**</sup>	.237 <sup>**</sup>	0.02 <sup>1</sup>	.170 <sup>*</sup>	.512 <sup>**</sup>
<b>T S4</b>	.37 <sup>0**</sup>	.40 <sup>1**</sup>	.311 <sup>**</sup>	.156 <sup>*</sup>	.372 <sup>**</sup>	.368 <sup>**</sup>	.53 <sup>7**</sup>	.47 <sup>0**</sup>	.54 <sup>2**</sup>	1	.56 <sup>7**</sup>	.51 <sup>9**</sup>	.35 <sup>7**</sup>	.496 <sup>**</sup>	.539 <sup>**</sup>	.265 <sup>**</sup>	0.08 <sup>6</sup>	- 0.1 23	- 0.0 51	.311 <sup>**</sup>	.156 <sup>*</sup>	.372 <sup>**</sup>	.368 <sup>**</sup>	.496 <sup>**</sup>	.539 <sup>**</sup>	.265 <sup>**</sup>	0.08 <sup>6</sup>	.156 <sup>*</sup>	.372 <sup>**</sup>
<b>EI 1</b>	.51 <sup>8**</sup>	.51 <sup>3**</sup>	.477 <sup>**</sup>	.214 <sup>**</sup>	.293 <sup>**</sup>	.513 <sup>**</sup>	.42 <sup>2**</sup>	.54 <sup>9**</sup>	.58 <sup>3**</sup>	.56 <sup>7**</sup>	1	.66 <sup>7**</sup>	.35 <sup>7**</sup>	.524 <sup>**</sup>	.658 <sup>**</sup>	.141 <sup>*</sup>	0.04 <sup>1</sup>	- .14 8*	- 0.0 51	.477 <sup>**</sup>	.214 <sup>**</sup>	.293 <sup>**</sup>	.513 <sup>**</sup>	.524 <sup>**</sup>	.658 <sup>**</sup>	.141 <sup>*</sup>	0.04 <sup>1</sup>	.214 <sup>**</sup>	.513 <sup>**</sup>
<b>EI 2</b>	.64 <sup>1**</sup>	.63 <sup>3**</sup>	.576 <sup>**</sup>	.212 <sup>**</sup>	.345 <sup>**</sup>	.508 <sup>**</sup>	.51 <sup>7**</sup>	.60 <sup>0**</sup>	.68 <sup>7**</sup>	.51 <sup>9**</sup>	.66 <sup>7**</sup>	1	.53 <sup>4**</sup>	.631 <sup>**</sup>	.723 <sup>**</sup>	.148 <sup>*</sup>	0.00 <sup>9</sup>	- .18 8*	- 0.0 42	.576 <sup>**</sup>	.212 <sup>**</sup>	.345 <sup>**</sup>	.508 <sup>**</sup>	.631 <sup>**</sup>	.723 <sup>**</sup>	.148 <sup>*</sup>	0.00 <sup>9</sup>	.212 <sup>**</sup>	.508 <sup>**</sup>
<b>EI 3</b>	.34 <sup>2**</sup>	.29 <sup>5**</sup>	.288 <sup>**</sup>	.159 <sup>*</sup>	.165 <sup>*</sup>	.323 <sup>**</sup>	.32 <sup>5**</sup>	.38 <sup>3**</sup>	.34 <sup>4**</sup>	.35 <sup>7**</sup>	.35 <sup>7**</sup>	.53 <sup>4**</sup>	1	.498 <sup>**</sup>	.552 <sup>**</sup>	.152 <sup>*</sup>	0.02	- 0.0 48	- 0.0 69	.288 <sup>**</sup>	.159 <sup>*</sup>	.165 <sup>*</sup>	.323 <sup>**</sup>	.498 <sup>**</sup>	.552 <sup>**</sup>	.152 <sup>*</sup>	0.02	.159 <sup>*</sup>	.323 <sup>**</sup>
<b>EI 4</b>	.49 <sup>4**</sup>	.50 <sup>6**</sup>	.357 <sup>**</sup>	0.05	.320 <sup>**</sup>	.459 <sup>**</sup>	.59 <sup>8**</sup>	.62 <sup>0**</sup>	.51 <sup>2**</sup>	.49 <sup>6**</sup>	.52 <sup>4**</sup>	.63 <sup>1**</sup>	.49 <sup>8**</sup>	1	.763 <sup>**</sup>	.278 <sup>**</sup>	.189 <sup>*</sup>	- 0.1 34	- 0.1 13	.357 <sup>**</sup>	0.05	.320 <sup>**</sup>	.459 <sup>**</sup>	1.00 <sup>0**</sup>	.763 <sup>**</sup>	.278 <sup>**</sup>	.189 <sup>*</sup>	0.05	.320 <sup>**</sup>
<b>EI 5</b>	.55 <sup>7**</sup>	.59 <sup>9**</sup>	.481 <sup>**</sup>	.199 <sup>**</sup>	.345 <sup>**</sup>	.609 <sup>**</sup>	.52 <sup>7**</sup>	.66 <sup>0**</sup>	.66 <sup>6**</sup>	.53 <sup>9**</sup>	.65 <sup>8**</sup>	.72 <sup>3**</sup>	.55 <sup>2**</sup>	.763 <sup>**</sup>	1	.234 <sup>**</sup>	0.06 <sup>6</sup>	- .14 5*	- 0.1 27	.481 <sup>**</sup>	.199 <sup>**</sup>	.345 <sup>**</sup>	.609 <sup>**</sup>	.763 <sup>**</sup>	1.00 <sup>0**</sup>	.234 <sup>**</sup>	0.06 <sup>6</sup>	.199 <sup>**</sup>	.345 <sup>**</sup>
<b>S D 1</b>	0.0 <sup>79</sup>	0.0 <sup>6</sup>	0.07 <sup>3</sup>	- 0.07 1	0.11 <sup>3</sup>	.339 <sup>**</sup>	.39 <sup>0**</sup>	.26 <sup>4**</sup>	.23 <sup>7**</sup>	.26 <sup>5**</sup>	.14 <sup>1*</sup>	.14 <sup>8*</sup>	.15 <sup>2*</sup>	.278 <sup>**</sup>	.234 <sup>**</sup>	1	.152 <sup>*</sup>	- 0.0 78	- 0.0 88	0.07 <sup>3</sup>	- 0.07 1	0.11 <sup>3</sup>	.339 <sup>**</sup>	.278 <sup>**</sup>	.234 <sup>**</sup>	1.00 <sup>0**</sup>	.152 <sup>*</sup>	- 0.07 1	0.11 <sup>3</sup>

	SR1	SR2	SR3	SR4	SR5	SR6	TS1	TS2	TS3	TS4	EI1	EI2	EI3	EI4	EI5	SD1	SD2	SD3	SD4	SD5	SD6	SP1	SP2	SP3	SP4	P1	P2	P3	P4
SD2	0.11	0.105	0.07	0.102	0.046	0.047	.156	.135	0.021	0.086	0.041	0.009	0.002	.189*	0.066	.152*	1	.297**	0.043	0.07	0.102	0.046	0.047	.189*	0.066	.152*	1.000**	0.102	0.046
SD3	.167	.262	0.086	0.086	0.104	0.111	.218	.157	.242	0.123	.148	.188	0.048	0.134	.145*	0.078	.297**	1	.527	0.086	0.086	0.104	0.111	0.134	.145*	0.078	.297**	0.086	0.104
SD4	0.08	0.08	0.005	.152*	0.083	0.132	0.093	0.079	0.113	0.051	0.051	0.042	0.069	0.113	0.127	0.088	0.043	.527	1	0.005	.152*	0.083	0.132	0.113	0.127	0.088	0.043	.152*	0.083
SD5	.695	.640	1.000	.417**	.346**	.400**	.245	.415	.466	.311	.477	.576	.288	.357**	.481**	0.073	-	0.086	0.05	1	.417**	.346**	.400**	.357**	.481**	0.073	-	.417**	.346**
SD6	.323	.253	.417**	1.000	0.13	.221**	0.051	.189	.170	.156	.214	.212	.159	0.05	.199**	0.071	0.102	0.086	.152	.417**	1	0.13	.221**	0.05	.199**	0.071	-	0.102	1.000
SP1	.561	.603	.346**	0.13	1.000	.238**	.332	.320	.335	.372	.293	.345	.165	.320	.345**	0.113	0.046	0.104	0.083	.346**	0.13	1	.238**	.320**	.345**	0.113	0.046	0.13	1.000
SP2	.434	.339	.400**	.221**	.238**	1.000	.484	.635	.565	.368	.513	.508	.323	.459**	.609**	.339**	0.047	0.111	0.132	.400**	.221**	.238**	1	.459**	.609**	.339**	0.047	.221**	.238**
SP3	.494	.506	.357**	0.05	.320**	.459**	.598	.620	.512	.496	.524	.631	.498	1.000	.763**	.278**	.189*	-	0.134	0.113	.357**	0.05	.320**	.459**	1	.763**	.278**	.189*	0.05
SP4	.557	.599	.481**	.199**	.345**	.609**	.527	.660	.666	.539	.658	.723	.552	.763**	1.000	.234**	0.066	-	0.145	0.127	.481**	.199**	.345**	.609**	.763**	1	.234**	0.066	.199**
P1	0.079	0.006	0.073	0.071	0.113	.339**	.390	.264	.237	.265	.141	.148	.152	.278**	.234**	1.000	.152*	0.078	0.088	0.073	0.071	0.113	.339**	.278**	.234**	1	.152*	0.071	0.113
P2	0.11	0.105	0.07	0.102	0.046	0.047	.156	.135	0.021	0.086	0.041	0.009	0.002	.189*	0.066	.152*	1.000	.297**	0.043	0.07	0.102	0.046	0.047	.189*	0.066	.152*	1	0.102	0.046
P3	.323	.253	.417**	1.000	0.13	.221**	0.051	.189	.170	.156	.214	.212	.159	0.05	.199**	0.071	0.102	0.086	.152	.417**	1.000	0.13	.221**	0.05	.199**	0.071	-	0.102	1
P4	.561	.603	.346**	0.13	1.000	.238**	.332	.320	.335	.372	.293	.345	.165	.320	.345**	0.113	0.046	0.104	0.083	.346**	0.13	1.000	.238**	.320**	.345**	0.113	0.046	0.13	1

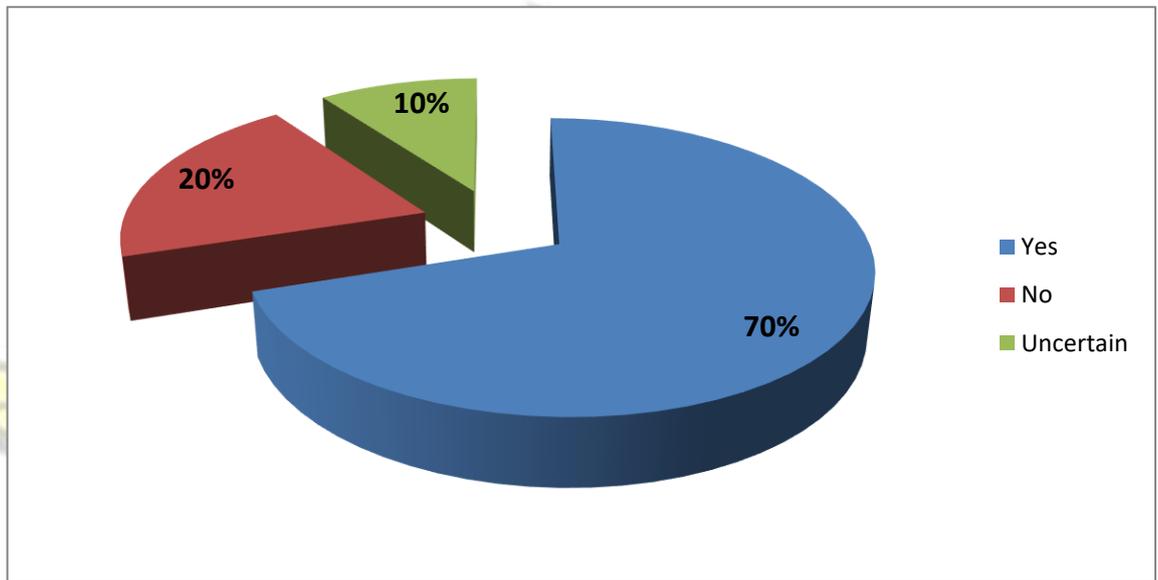
\*\* Correlation is significant at the 0.01 level (1-tailed)

\* Correlation is significant at the 0.05 level (1-tailed).

### 4.3 The Effects of Socially Responsible Supply Chain Management on Pharmaceutical Companies' Performance.

The existing competition in the pharmaceutical sector necessitates establishing Supply chain management processes aimed at distributing pharmaceutical products through socially and environmentally friendliness.

**Figure 4.1 Knowledge of Supply Chain Management Processes**



**Source: Field Data, January 2023**

As the data reveals, there is confirmation of staff's knowledge of the supply chain management processes through socially and environmentally friendly nature since 70% of the respondents attested to the above assertion. Notwithstanding the highly positive response of some respondents, (20%) revealed an opposed affirmation. Those who affirmed the above statement further indicated that the social elements in the supply chain process of pharmaceutical companies are found to be friendly.

Most respondents consider staff in the supply chain process as trustworthy; it offers a precise declaration of facts and a sincere demonstration of those facts, reflecting the pharmaceutical companies' mission statement. Thus, the supply chain processes have two

qualitative dimensions: social responsibility and profitability. This idea is reflected in Sodhi and Tang (2014), where they propose that pharmaceutical companies can achieve both social responsibility and profitability by involving individuals with limited financial resources as suppliers and distributors in the early stages of production and as distributors and retailers in the later stages of sales.

Furthermore, the concept of involving individuals with low incomes in the supply chain aligns with the recommendations put forth by Karnani (2007) and Vachani and Smith (2008). They argue that this approach can not only generate more job opportunities and income for those with limited financial resources but also result in cost reduction and increased sales for pharmaceutical companies. Additionally, implementing this strategy can help mitigate the challenges faced by impoverished individuals when trying to effectively participate in various supply chain activities, including limited access to finance, restricted market access, and low productivity.

**Table 4.7: The Effects of Socially Responsible Supply Chain Management on Pharmaceutical Companies' Performance**

Types of Effects	Min.	Max.	Mean	SD	Chi-square
SCMP influences the sales target	1.00	5.00	1.96	0.94	102.343
Social elements of SCMP and positive impact on the distribution	1.00	5.00	2.9	1.138	44.619
Social elements are greatly needed in SCMP	1.00	5.00	2.79	1.331	21.19
Possibility for people with low incomes to act as suppliers/distributors in SCMP	1.00	5.00	1.76	1.016	108.4
Management of social relations	1.00	5.00	<b>2.42</b>	<b>1.132</b>	101.321

**Source: Field Data, January 2023**

Highlighting the effects of socially responsible supply chain management on the pharmaceutical companies' performance is essential for understanding the direction of the distribution systems of pharmaceutical products in the Tamale Metropolis.

As Table 4.7 shows, the first effect of socially responsible supply chain management on the pharmaceutical companies' performance was that SCMP influenced their sales target. Recording a mean value of 1.96, which is approximately 2.00, and with a chi-square value of 102.343, this thus signifies strong agreement on the part of the respondents concerning the usefulness of the Socially Responsible Supply Chain Management Practices (SRSCMP) in the distribution of pharmaceutical products in the Tamale Metropolis. SRSCMP seems to be a complex process but must be understood by those in charge of the distribution to improve the delivery performance of pharmaceutical products. Thus, this finding has a theoretical correlation with Anand and Grover's (2015) statement, suggesting that delivery performance is contingent on variables like delivery channels, location policies, and scheduling, and can be improved through a judicious choice of these factors.

The Social elements of SCMP positively impacting distribution was another effect of SRSCMP, which was regarded as the most efficient among all the other products. This was evident by the 2.90 (approximately 3.00) mean values, the highest mean value analyzed, and with a chi-square value of 44.619, this was the most likely effect to be accepted by all standards. This creates a situation where delivery performance in the supply chain is performed on the requested date. This aligns with the findings of Andries (2013), who discovered a favorable correlation between delivery performance and supply chain performance. Andries emphasized the significance of essential delivery performance

metrics such as adherence to requested delivery dates, order fill lead time, and adherence to committed delivery dates in assessing supply chain performance.

The third effect of SRSCMP was identified as social elements being greatly needed in SCMP. The results reveal that the mean value of 2.76, one of the highest in the data analysis scheme, shows how vital SRSCMP is for pharmaceutical firms. A chi-square value as low as 21 could fall within the acceptable limits of the analysis. Authorities of the pharmaceutical firms confirmed that the SRSCMP has significantly facilitated the distribution of the pharmaceutical products of the pharmaceutical firms in Tamale. This thus creates flexibility, which can be seen as a critical dimension of supply chain management and makes employees capable of making meaning out of the kind of administrative decisions made in organizations. This relates to Yusuf and Shehu (2017), who believed that flexibility could be seen as a firm's ability to adjust or respond to ever-changing environmental factors, i.e., market demand and customer needs. Suppliers/distributors in SCMP. With a mean value of 1.76 and a chi-square.

As the fourth effect of SRSCMP, people with low incomes can act as a value of 108.400. The results show that this could create a permanent job opportunity for people experiencing poverty in the supply chain management processes of the pharmaceutical firms in Tamale. Theoretical correlation is therefore established between Karnani (2007) and Vachani and Smith (2008). Their assertion is related to the fact that SRSCMP creates more jobs, generates more income for low-income people, reduces costs, and simultaneously increases sales for the firm.

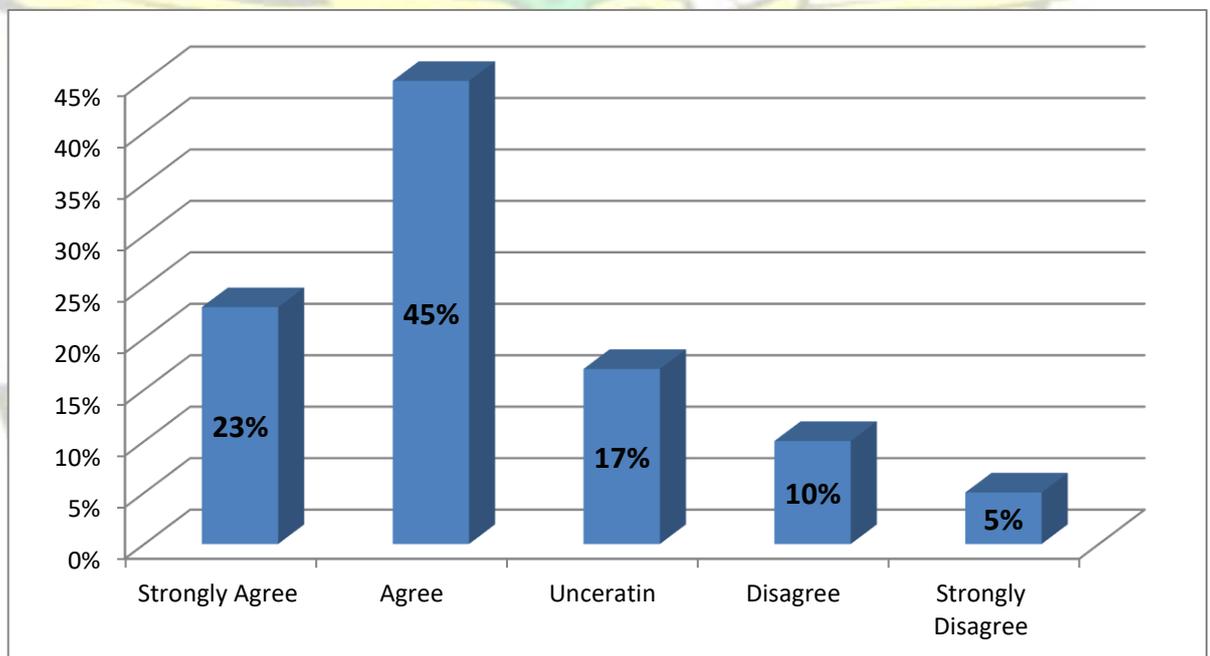
Management of social relations as an effect of SRSCMP recorded a mean value of 2.45, representing respondents' views of managing social relations as outcomes identified as essential in the company's distribution process. With a chi-square of 103.324, the

likelihood of management of social relations experiencing serious challenges was possible and thus could not be measured by SRSCMP. The management of social relations plays a significant role in efforts to preserve the SCMP. Considering the various effects of SRSCMP identified, it is reasonable to conclude that it allows the employees of the companies to acquire the needed talent and aptitudes for the distribution of pharmaceutical companies in the Tamale Metropolis.

#### 4.4: The Role of Top Management Support on Supply Chain Management at Pharmaceutical Companies.

This section primarily centers on examining the diverse functions of top management within pharmaceutical companies that contribute to supporting supply chain management.

**Figure 4.2. The Nature of the Operation of Top Management Support of the Companies**



Source: Field Data, January 2023

The respondents were also aware of the nature of the operation of top management of pharmaceutical companies. The results showed not much difference in the views of those

in management positions and other respondents on the support of top management since 68% of the respondents attested to this assertion. Those who were non-aligned to either of the agreement and disagreement with this issue represented 17%. The remaining 15% registered their dissent to the point at stake.

This implied that the existing category of respondents of the pharmaceutical companies are of the optimistic view that adequate top management support is required to undertake any form of administration and management of the resources such as human, material, financial, and technical at their respective units to deliver services effectively and adequately to all prospective customers.

**Table 4.8: Top Management Support**

<b>Top management support</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>SD</b>	<b>Chi-square</b>
Supports effective SCMP	1.00	5.00	1.85	1.074	165.38
Monitoring and evaluation	1.00	5.00	1.69	1.013	221.76
Up and downstream support Management	1.00	5.00	2.12	0.904	163.04
Satisfaction of Stakeholders	1.00	5.00	2.52	0.959	148.57

**Source: Field Data, January 2023**

This section presents explicitly and discusses data about top management support to improve the companies' performance. The analysis is based on a five-point Likert scale arranged in the form of strongly agreed (1), approved (2), uncertain (3), disagreed (4), and strongly disagreed (5). An estimated mean value of each outcome associated with top management support is analyzed in line with the coding of the levels of agreement. Thus, a mean value of approximately 1 signifies a strong understanding of the outcomes associated with the various forms of top management support for pharmaceutical companies.

From the results shown in Table 4.8, support for effective SCMP is practically possible since it recorded a mean value of 1.85, approximately 2. This, therefore, signifies an agreement by the staff to the issue of the top management providing the required assistance for achieving effective SCMP in the administration of pharmaceutical companies. The Figures depict the views of the entire respondents on how effective the current top management is. Ultimately, this will ensure an effective social responsibility partnership in supply chain management practices. In this regard, senior managers are seen providing socially responsible supply chain management practices to support the critical areas of the distribution systems of pharmaceutical products. This is consistent with Tate, Ellram, and Kirchoff (2016), who argued that enterprises, especially those in the pharmaceutical sector, are motivated to undertake Socially Responsible Supply Chain Management (SRSCM)-related activities by various stakeholder and institutional pressures.

Top management support (TMS) inevitably leads to monitoring and evaluating the supply chain network, recorded a mean value of 1.69, with a standard deviation of 1.013. This figure indicates not so much deviation from the results. However, the chi-square value of 221.76 could eventually result in rejecting this particular result among some socially responsible supply chain professionals of pharmaceutical companies. Irrespective of this negative response, the entire TMS represents a declaration of effective distribution management systems that ensure smooth service delivery progress.

There is also the possibility of difficulties with certain institutional constraints, including governmental restrictions, customer wants, or competitive plans, which may substantially impact top management. Given this, TMS may change in reaction to various institutional pressures. This, therefore, finds expression in Murphy and Gouldson's (2010) assertion, which indicates that top managers in the pharmaceutical sector view government

regulation as the most apparent external force influencing the environmental practices of their firms, even though it dramatically promotes creative ecological activities.

The results reveal a favourable outcome with a mean value of 2.12 and a standard deviation of 0.904. It was understood that effective TMS should be routinely maintained by the senior staff members at their respective companies as they are officially assigned duties. This implies that effective TMS could be vital to the pharmaceutical company's upstream and downstream support. This will inevitably result in successful businesses in the same sector and firms with which they interact socially. This result corroborates Taddeo, Simboli, Ioppolo, and Morgante's (2017) analysis, which revealed that businesses in the pharmaceutical sector must be conscious of how their rivals' socially related marketing strategies are developing.

Satisfaction of stakeholders in the supply chain, facilitated by top management, was also identified as an outcome in the general administrative protocols in pharmaceutical companies. A mean value of 2.53 measured by the standard deviation of 0.959 provides sufficient evidence for the authorities in the management of SCMP efficiently so that members of staff are incentivized to work in an environment proved to be reliable for both administrative and functional areas of the pharmaceutical companies. Therefore, employees at the top echelon are expected to be given various incentives to either maintain or improve on the successes being choked by the pharmaceutical companies. This created situations in ensuring the adequacy and importance of better distribution management systems that support management activities in their respective designations.

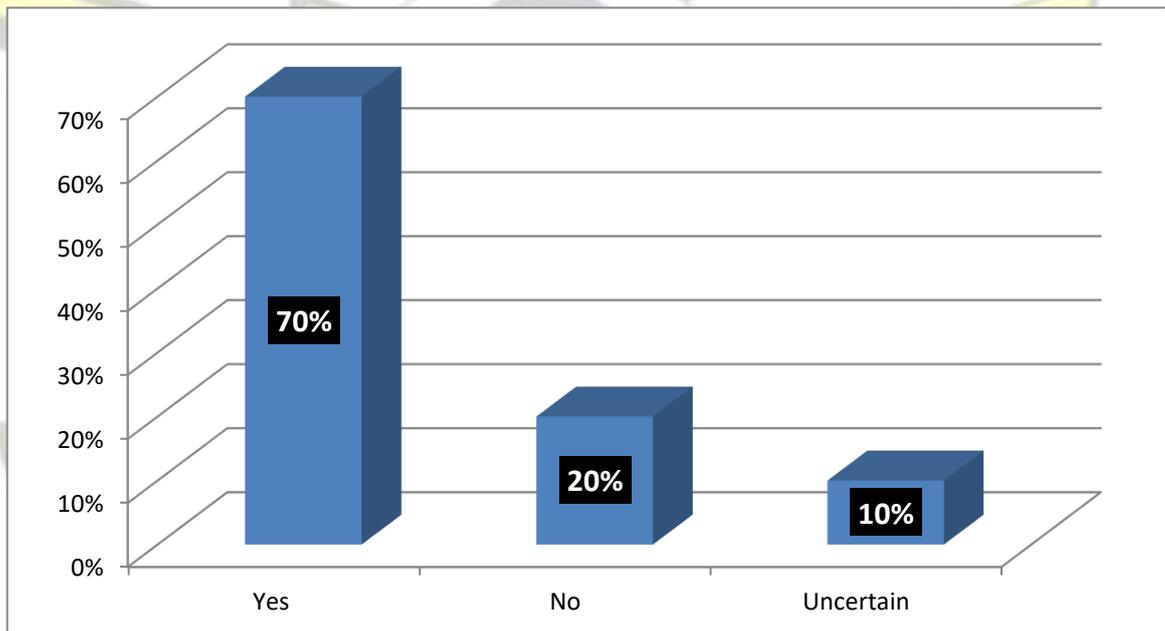
By way of establishing a relationship between the above finding and the assertion of Taddeo et al. (2017), which indicates that, although capability and commitment can be produced at any level of the organization, senior management decisions have the most

significant impact on social policy changes since they affect everything from resource allocation to deployment.

Based on the above findings, it can therefore be concluded with a high level of certainty that TMS in the pharmaceutical sector directly results in formulating and implementing policies, making it possible to keep track of day-to-day administration of the companies supply chain activities as well as achieving greater efficiency are related to the positive outcomes of socially responsible supply chain management practices.

#### **4.5: Ways of Integrating Elements of Socially Responsible Supplier Selection Processes at the Pharmaceutical Companies**

**Figure 1.3: Integrating Elements of Socially Responsible Supplier Selection Processes at the Pharmaceutical Companies**



**Source: Field Data, January 2023**

The Figure above contains the responses relative to integrating elements of socially responsible supplier selection processes at pharmaceutical companies. These results, which represent the ability of senior management staff to ensure an effective selection process, reveal the following personnel performances. First and foremost, most of the

respondents (70%) agreed to integrate elements of socially responsible supplier selection processes at pharmaceutical companies. It was further discovered that 20% of the respondents disapproved of the above assertion. As revealed by 10% of the respondents, they had no clue and could not provide any meaningful contribution to the ongoing discussion.

**Table 4.9 Integrating Elements of Socially Responsible Supplier Selection Processes**

Social elements of SCMP	Min	Max	Mean	SD	Chi-square
Socially-related marketing is core to SCMP	1	5	1.25	1.078	155.38
Generating more income through sale	1	5	1.49	1.063	211.76
Addressing social constraints in participating in SCMP	1	5	2.21	0.994	113.04
Making supplier selection fair and transparent	1	5	2.02	0.989	108.57

**Source: Field Data, January 2023**

Having agreed to the above assertion, Table 4.9 contains data on integrating elements of socially responsible supplier selection processes. Based on the five-point Likert scale data collection tool as reflected in the following arrangement, strongly agreed (1), approved (2), uncertain (3), disagreed (4), and strongly disagreed (5). An anticipated mean value of each of the ways of integrating elements of socially responsible supplier selection processes is analyzed relative to the coding of the responses on the levels of agreement. Thus, a mean value of approximately 1 suggests a firm understanding of integrating elements of socially responsible supplier selection processes.

The first measure of integrating elements of socially responsible supplier selection processes was adopting a socially related marketing strategy as a core to the effective functioning of SCMP. A mean value of 1.25 and a standard deviation of 1.078 strongly agreed with the first measure. This result could also be rejected due to the high chi-square value of 155.38.

Another measure responsible for integrating elements of socially accountable supplier selection processes was generating more income through sales. This measure, found to have a negative outcome, recorded a mean value of 1.49, 1.063 value of standard deviation, and 211.76 as a chi-square value. Though agreed to, this challenge was as strong as the earlier response. This implies that inevitable setbacks from implementing the measure posed severe outcomes to the supply chain management professionals.

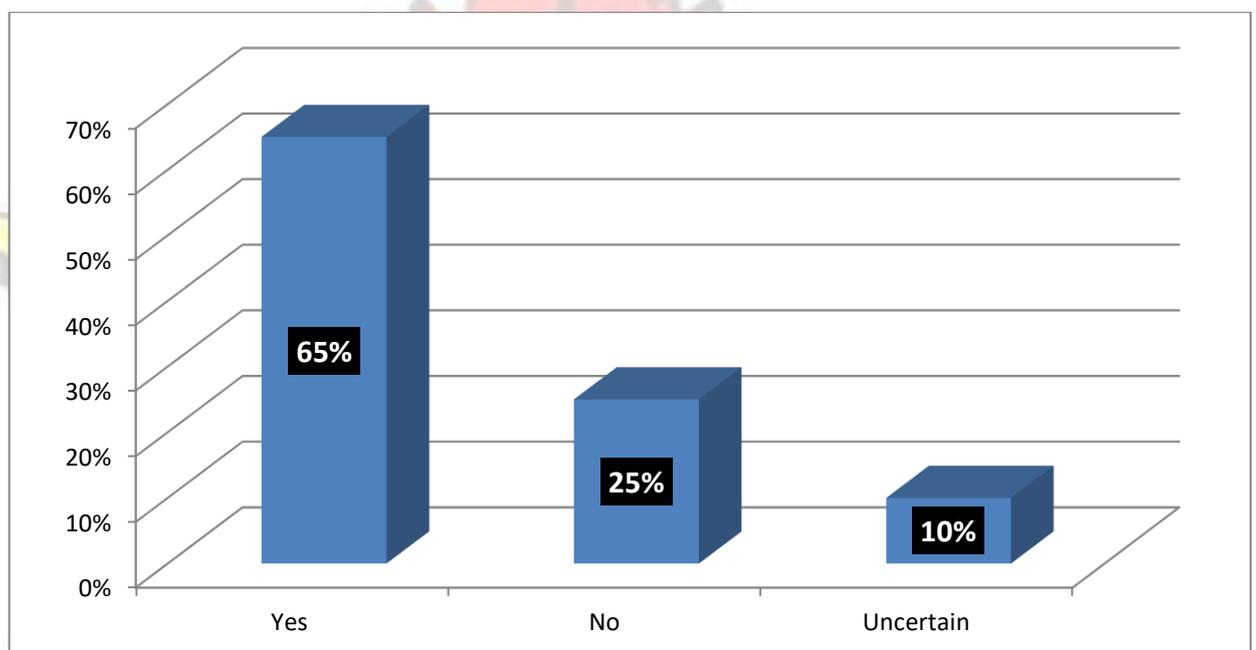
Addressing social constraints in participating in SCMP is another measure of social element integration. Though not as strong as the respondents' agreement with this measure, the mean value of 2.21 attests to its agreement as not assertive. The standard deviation of 0.994 is almost one and can potentially be questioned as a genuine measure with a negative outcome on the professionals in charge of SRSCMP. The chi-square value of 113.04 was very high and could downplay the beneficial effects of the above-identified measure in the SCMP of the pharmaceutical companies.

As a measure of integrating social elements in the SCMP, making supplier selection fair and transparent was found to be necessary. As the Table above shows, the mean value of 2.02 did not indicate a firm agreement. The adverse outcomes have been identified, implying that this measure has demerits for the professionals in charge of the supply management process. The different criteria, such as adopting a socially related marketing strategy, making supplier selection fair and transparent, addressing constraints in

participating in SCMP, and generating more income through sales, have all, in one way or another, contributed to the social integration process in the supply chain management processes in the pharmaceutical sector.

#### 4.7: Socially Responsible Supply Chain Management and its Contribution to Supply Delivery

**Figure 4.4. Reliable Delivery Performance and Its Role in Socially Responsible Supply Chain Management**



**Source: Field Data, January 2023**

The Figure above contains data on whether reliable delivery performance plays an active role in responsible supply chain management. In response to the above issue, the majority of the respondents (65%) answered in the affirmative to whether reliable delivery performance is indeed identified as playing an active role in responsible supply chain management. It was further discovered that quite a reasonable proportion of 25% of the respondents opposed the above assertion. As revealed by 10% of the respondents, they had

no clue whether reliable delivery performance is identified as playing an active role in responsible supply chain management and, therefore, could not offer any critical contribution to the ongoing discussion.

**Table 4.10 Socially Responsible Supply Chain Management and its Contribution to Supply Delivery**

<b>SRSCMP and its Contribution</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>SD</b>	<b>Chi-square</b>
Vehicle scheduling in SCMP	1.00	5.00	1.25	1.078	155.38
Social capital as the network of relationships	1.00	5.00	1.49	1.063	211.76
Creating a conducive atmosphere for collaboration and cooperation	1.00	5.00	2.21	0.994	113.04
Competitors' socially-related marketing	1.00	5.00	2.02	0.989	108.57
Suitable models for policy Formulation	1.00	5.00	2.11	1.204	112.302

**Source: Field Data, January 2023**

After agreeing, there is reliable delivery performance and its role in responsible supply chain management. Respondents were asked to indicate the measures to improve socially accountable supply chain management and its contribution to supply delivery. As the results reveal, the respondents were asked to evaluate five measures to strengthen the SRSCMP in the pharmaceutical companies operating in the Tamale Metropolis. Table 4.10 presents the five measures' mean scores, standard deviations, and rankings. All five actions have mean ratings of 1.25, 1.49, 2.02, 2.11, and 2.21, representing response rates of solid agreement for all five measures. The standard deviation of each measurement demonstrates acceptance for all the measures put forward by the respondents, who also double data the employees and are therefore considered significant.

The results reveal that the five measures are the most significant strategies aimed at improving socially responsible supply chain management and its contribution to supply

delivery in the various administrative units of pharmaceutical companies. These measures include improved vehicle scheduling in SCMP, building social capital in the network of relationships, creating conducive collaboration and cooperation, competitors' socially related marketing, and suitable supply chain policy formulation models.

Given the previous analysis and discussions, it is reasonable to state that SRSCM is essentially an interrelated and interactive plan that requires a mutual understanding between supply chain partners, unambiguous performance ratings, and efficient feedback mechanisms. This analogy thus finds expression in Lee's (2016) assertion, which stipulates that both supply chain partners have shared philosophical and environmental objectives to work towards their achievement. In this vein, Wu and Ragatz (2011) believed fewer potential disputes between partners due to better understanding and open communication in the supply chain management practices would strengthen the connection within the supply chain networks. On their part, Parmigiani et al.'s (2011) analysis, which relates to the findings, indicates that the SRSCM method places more emphasis on long-term capability development than on improving present quality or cutting costs now.

#### **4.6 Institutional Social Pressures (ISPs) and the Performance of the Pharmaceutical Companies.**

In this section, the focus of the analysis is centred on the various (ISPs) institutional social pressures and how they affect the performance of the pharmaceutical companies operating in the tamale metropolis. It further delved into whether institutional forces and SRSCM implementation are causally related.

**Table 4.11. Effects of Institutional Social Pressures (ISPs) and the Performance of the Pharmaceutical Companies**

Types of Effects	Min	Max	Mean	SD	Chi-square
Top management decisions are affected	1.00	5.00	1.96	0.94	102.343
ISPs impact on top management's performance	1.00	5.00	2.9	1.138	44.619
ISPs and SRSCM implementation are casually related	1.00	5.00	2.79	1.331	21.19
The level of responsiveness of top management to varied ISPs	1.00	5.00	1.76	1.016	108.4
Change in support by top management in reaction to various ISPs	1.00	5.00	2.42	1.132	101.321

**Source: Field Data, January 2023**

Emphasis on the effects of institutional social pressures (ISPs) and the performance of the pharmaceutical companies sets out the structural networks for managing the distribution systems of the pharmaceutical products in the Tamale Metropolis.

As observed in Table 4.11, one of the effects of ISP that affect the performance of top management of the pharmaceutical companies in Tamale was found to be that ultimate management decisions are influenced by governmental restrictions, customer wants, or competitive plans, resulting in a more substantial impact on top management. With a mean value of 1.96, approximately 2.00, and a chi-square value of 102.343, this signifies strong agreement on the part of the respondents concerning the issue at stake. This finding directly relates to what Zhu and Sarkis (2017) identified as coercive pressure, which appeared to have a considerable impact on how the top management

behaves, resulting in the performance of their respective roles in pharmaceutical companies.

ISPs inevitably impact top management's performance in the various pharmaceutical companies in Tamale. This was obvious by the revelation that 2.90 (approximately 3.00) mean values, the peak mean values analyzed in this section, and with a chi-square value of 44.619, this had a greater likelihood of being accepted by all the respondents who also doubled as employees of the pharmaceutical companies. This could result in circumstances where the performance of top management is diverted following the social pressures that engulf the entire hierarchy of authority at the pharmaceutical companies. This practically culminates in conditions where the relationship between maximum managerial performance and supply chain performance is hampered following the external social pressures the top management encounters in the supply chain management processes.

The ISPs and SRSCM implementation were found to be causally related as the results reveal the mean value of 2.76, one of the highest in the analytical structure, indicating the importance of IS.

Ps potential impact on SRSCMP for the pharmaceutical firms operating in the Tamale Metropolis. The chi-square value of about 21, which falls within the acceptable limits of the analysis, indicates strong agreement. This thus creates suppleness in the top managerial decisions relative to SCMP in the various administrative units of the pharmaceutical companies. Top managers view government regulation as the most apparent external force influencing the environmental practices of their firms, even though it dramatically promotes creative ecological activities. This relates to Murphy and Gouldson's (2010) assertion, which indicates that most top hierarchical position holders consider government

regulation the most visible external factor affecting their companies' environmental operations.

Concerning the level of responsiveness of top management to varied ISPs in pharmaceutical companies, there is a possibility of a higher response rate to the hierarchy of authority to the existing social pressures, especially those that are externally inclined. With a mean value of 1.76 and a chi-square value of 108.400, the results show that this could create a reasonable policy modification. This also suggests that the primary origins of institutional pressures on decision-makers—coercion (from government regulations), adherence to norms (from customers), and emulation (from competitors)—are indeed influencing top management. This situation serves as a reminder of the vital role they are expected to fulfill.

Theoretical correlation is therefore established between Karnani (2007) and Vachani and Smith (2008). Their assertion is related to the fact that SRSCMP creates more jobs, generates more income for people experiencing poverty, reduces costs and increases sales for the firm at the same time.

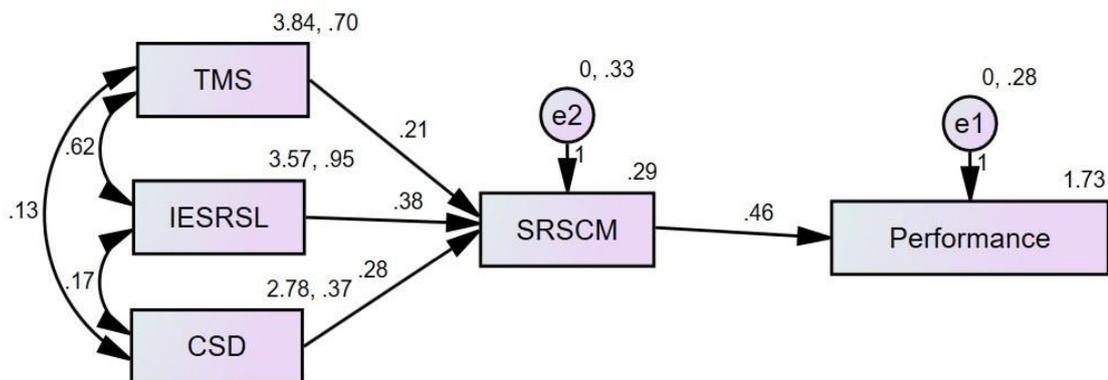
Change in support by top management in reaction to various ISPs recorded a mean value of 2.45 and a chi-square of 103.324. There is the likelihood of top management of the pharmaceutical companies bowing to institutional pressures, which could affect the SRSCM implementation at the various pharmaceutical companies operating in the Tamale Metropolis. This is reflected in institutional theory, which offers additional perspectives on how top executives participate in the implementation of reverse logistics. According to institutional theory, organizations can enhance their capacity to thrive and succeed in a competitive landscape by meeting the needs of their stakeholders.

Taking into consideration the various effects of SRSCMP identified and the types of institutional pressures and their consequences, it is reasonable to state that they all allow the employees of the companies to acquire the needed talent and aptitudes for the distribution of the varied pharmaceutical products by companies being studied in the Tamale Metropolis.

#### 4.7 Inferential Analysis

##### 4.7.1 Confirmatory Factor Analysis (CFA) Model

This study conducted a Confirmatory Factor Analysis (CFA) to assess the defined practices that define a socially responsible supply chain management (SRSCM) and to show the relationship between SRSCM and firm performance (FP).



**Figure 4.5. Confirmatory Model for CRSCM and FP**

Before evaluating the adequacy of the structural model, it is imperative to exhibit a measurement model to corroborate the three apparent variables expressing the SRSCM construct. The constructed measurement model, displaying loaded factors and estimated items, is illustrated in Figure 4.5 above. In the context of conducting statistical analyses using SPSS AMOS, it is imperative to observe the restriction that items are solely authorized to load on a single construct without the occurrence of cross-loading. Furthermore, the allowance of correlation among latent variables is a permissible practice.

There are five latent factors, namely, Top management support (TPS), Integrating Elements of Socially Responsible Supplier Selection Processes (IESRSL), Contribution to Responsible Supply Delivery through a collaborative relationship with suppliers (CSD), socially responsible supply chain management (SRSCM) and to show the relationship between SRSCM and firm performance (FP) with their related observed variables. Also, the five-factor model precisely hypothesized the practices that define SRSCM and how it impacts athletic performance. The resulting model reveals the standardized regression weights connecting the latent factors and observable variables.

#### 4.7.2 Assessment of the Model Fit

The structural equation modelling (SEM) analysis provides an absolute goodness-of-fit measure in Table 4.12 below.

**Table 4.12 Model Fit Analysis**

Model	RMSEA	TLI	CFI
Default model	.475	.915	.948
Saturated model	.518		1.000
Independence model	.000	.000	.000

The *p-value* of the chi-square ( $\chi^2=103.721$ ,  $df = 3$ ) was 0.710, and it was statically insignificant. This proves that the proposed model accurately corresponds to the observed data, indicating a successful fit of the model. You've provided some fit indices for a structural equation modelling analysis. RMSEA (Root Mean Square Error of Approximation) measures the discrepancy between the observed data and the hypothesized model. It assesses how well the model fits the data, with lower values indicating a better

fit. Generally, RMSEA values below 0.05 are considered a perfect fit, values between 0.05 and 0.08 are considered reasonable, and values above 0.10 indicate a poor fit. TLI (Tucker-Lewis Index), also known as the Non-Normed Fit Index (NNFI), measures the relative fit of the model compared to a null (independence) model. It ranges from 0 to 1, with higher values indicating better fit and a TLI value above 0.90, often indicative of a reasonably good fit. CFI (Comparative Fit Index) is another index that compares the fit of the hypothesized model to the null (independence) model. It also ranges from 0 to 1, with values closer to 1 indicating a better fit; therefore, a CFI value above 0.90 is typically considered indicative of a reasonably good fit. Based on the fit indices displayed in Table 4.10 above, the default Model showed a RMSEA of 0.475 (Reasonable fit, but not excellent), a TLI of 0.915 (Reasonable fit, above 0.90 threshold) and CFI = 0.948 (Reasonable fit, above 0.90 threshold). The saturated model also showed a RMSEA of 0.518 (Reasonable fit, but not excellent). The Independence Model led to an RMSEA of 0.000 (Perfect fit to the independence model, which is expected), a TLI and a CFI of 0.000 (Perfect fit to the independence model). The default model generally provides a reasonably good fit to the data, as indicated by the TLI and CFI values above 0.90. However, the RMSEA value is slightly above the threshold for a perfect fit.

#### **4.8 Hypotheses Testing**

This section of the study discusses the directional relationship among the variables. It examined the relationship between the independent and dependent variables and the moderating variables and their impact on the relationship between the predator and independent variables.

**Table 4.13. Regression Weights**

	Path	Estimate	S.E.	C.R.	P	Decision
SRSCM	← TMS	.207	.087	2.389	.017	Accepted
SRSCM	← IESRSL	.380	.075	5.090	***	Accepted
SRSCM	← CSD	.279	.081	3.437	***	Accepted
Performance	← SRSCM	.459	.053	8.697	***	Accepted

a) *S.E.* is an approximation of the standard error of the covariance.

b) *C.R.* is the critical ratio attained by dividing the covariance estimation by its standard error.

The empirical findings, presented in Table 4.13, have confirmed the designated relationship between SRSCM and top management support towards socially responsible practices, as determined by critical ratio (C.R.), a value of 2.389 was obtained. The required ratio (CR) is expressed as the quotient of the estimated covariance and its corresponding standard error, calculated as a t-value. This relationship is subject to the influence of various additional factors, which also play a role in SRSCM. A numerical value surpassing 1.96 denotes a level of statistical significance of 0.05. The above observation suggests that top management support plays a significant role in determining the SRSCM in the company.

More so, Integrating Elements of Socially Responsible Supplier Selection Processes (IESRSL) (C.R. =5.090) and Contribution to Responsible Supply Delivery through collaborative relationships with suppliers (CSD) (C.R. = 7.141) significantly predict SRSCM. This implies that integrating elements of socially responsible supplier selection processes into a firm's strategy and collaborating with suppliers to contribute to reliable supply delivery defines the practice of socially responsible supply chain management. Furthermore, the model shows that there is a positive relationship between SRSCM and a firm's performance has proposed. Thus, the CR value showed a covariance of 8.697. This

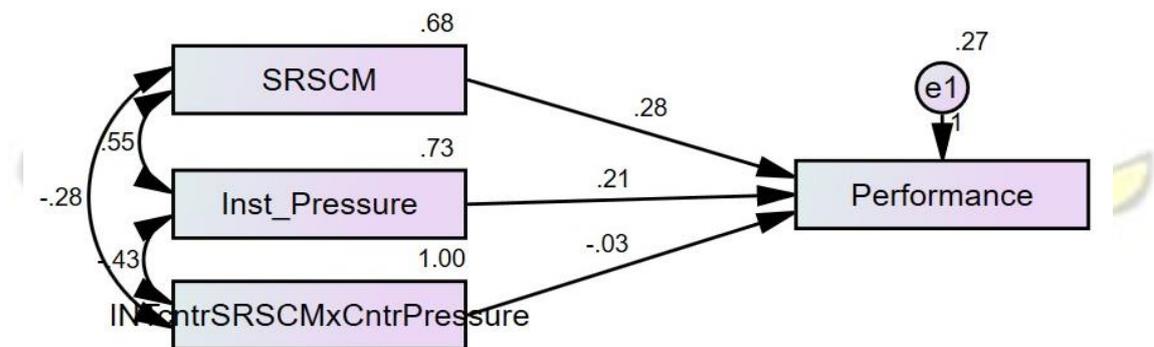
indicates that the more businesses become socially responsible in their supply chain management, the more the company is likely to increase its profitability and net profit margin whilst satisfying and forming a good relationship with its customer base.

#### 4.9 Moderation Analysis

This section presents the analysis regarding the moderating effect of institutional pressure between SRSCM and firm performance. This analysis is displayed in Figure 4.6 and Table 4.13 below.

**Figure 4.6. Moderation Diagram**

Table 4.14 below shows that when institutional pressure is introduced at the moderator, it



leads to an adverse relationship between SRSCM and FP. However, as shown in Table 4.14, this moderation effect is insignificant. Thus, institutional pressure significantly moderates the relationship between SRSCM and FP since the C.R value shows a -0.625, below 1.9 and at a p-value of 0.532.

**Table 4.14 Moderation Effect Regression Weight**

	Estimate	S.E.	C.R.	P
Performance ← SRSCM	.276	.083	3.311	***
Performance ← INTcntrSRSCMxCntrPressure	-.031	.049	-.625	.532
Performance ← Inst_Pressure	.209	.088	2.386	.017

## CHAPTER FIVE

### SUMMARY, CONCLUSION, AND RECOMMENDATIONS

#### 5.1 Introduction

In this chapter, the study's findings are summarized, and conclusions are drawn based on the results discovered by the survey. This chapter has also dealt with recommendations for improving effective record-keeping and management.

#### 5.2 Summary of the Findings

This study examined the socially responsible supply chain management in firm performances: the moderating role of institutional pressures. The first research objective was to analyze some selected pharmaceutical companies' various socially accountable supply chain management practices. The study confirmed the staff's knowledge of the supply chain management processes and their effectiveness on the identified or selected pharmaceutical companies in the Tamale Metropolis. These effects include SCMP's influence on the sales target, social elements of SCMP and its positive impact on the distribution of the companies' pharmaceutical products, and the possibility for people experiencing poverty to act as suppliers/distributors in the SCMP. Other effects include the option of management of social relations in the SCMP. The study again disclosed that professionals of the pharmaceutical companies were allowed to acquaint themselves with the nature of the operations of the top management of the companies.

As the study further reveals, top management support (TMS) provides the required assistance to facilitate the SCMP. It was further established that TMS, in certain situations, experiences challenges in monitoring and evaluating the supply chain

network of pharmaceutical companies. The study discovered the grave essence of TMS to both the upstream and downstream in the SCMP of the pharmaceutical companies. According to the survey, TMS offers satisfaction to the stakeholders in the SCMP.

The study further discovered the need for integrating elements of socially responsible supplier selection processes at the pharmaceutical companies operating in the TECONs. As revealed by the survey, these social elements are adopting socially-related marketing strategy as a core to the effective functioning of SCMP, and socially responsible supplier selection processes were identified among the social features integrated with the distribution system. As an element of social integration, addressing social constraints in participating in SCMP was also found in this study. Making supplier selection fair and transparent was also identified in the integration process.

The second research objective was aimed to examine the nature of firm performances within the pharmaceutical companies. The study's findings showed that reliable delivery performance and its role in socially responsible supply chain management, which the study also brought, include vehicle scheduling in the SCMP, using social capital as the network of building relationships, and creating a conducive atmosphere for collaboration and cooperation. Two aspects of the delivery performance of SRSMP identified competitors' socially related marketing and suitable models for supply chain-related policy formulation.

However, the study discussed the effects of institutional social pressures (ISPs) on pharmaceutical companies' performance, including top management decisions being affected by state or governmental restrictions, customer wants, or competitive plans. The second effect revealed that ISPs unavoidably impact top management's performance in the various pharmaceutical companies operating in Tamale. According to the study, the

ISPs and SRSCM implementation were causally related. It was again revealed that a change in support by top management in reaction to various ISPs was possible.

### **5.3 Conclusion**

The study established that knowledge of the staff on the supply chain management processes and the effectiveness of the identified or selected pharmaceutical companies in the Tamale Metropolis is specific. These effects result in SCMP greatly influencing the sales target, maintenance of social elements of SCMP in the distribution of the companies' pharmaceutical products, the possibility for people experiencing poverty to act as suppliers/distributors in the SCMP, and the management of social relations in the SCMP. This thus allowed the professionals of the pharmaceutical companies to acquaint themselves with the nature of the operations of TMS and offer satisfaction to the stakeholders in the SCMP of the companies. However, assistance from TMS suffers a setback of inability to conduct adequate monitoring and evaluation of the supply chain network of the pharmaceutical companies in both up and downstream SCMP of the pharmaceutical products of the companies.

If the benefits mentioned above are not fully achieved due to the challenges enumerated above, the need for integrating elements of socially responsible supplier selection processes at the pharmaceutical companies operating in the Tamale Metropolis was introduced to the SRSCMP with the required recognition. These elements include adopting a socially related marketing strategy, addressing social constraints among players in SCMP, and making socially responsible supplier selection processes based on fairness and transparency. These resulted in vehicle scheduling, using social capital as the network of building relationships, creating a conducive atmosphere for collaboration and cooperation, and investigating

competitors' socially related marketing and suitable models for the supply chain, resulting in efforts to perfect the delivery performance of SRSMP.

It is, therefore, crucial that the effects of institutional social pressures (ISPs) and the performance of pharmaceutical companies, such as top management decisions, be affected by state or governmental restrictions, customer wants, or competitive plans. ISPs unavoidably impact top management's performance in the various pharmaceutical companies in Tamale. To create a cordial relationship between ISPs and SRSCM, a change in support by top management due to multiple ISPs must be responded to in the pharmaceutical sector.

#### **5.4 Recommendations of the Study**

To improve the SRCMP in the selected pharmaceutical companies in Tamale, the recommendations indicated below must be considered:

Since the study established members of staff knowledge of the SCMP and their effectiveness on the identified or selected pharmaceutical companies in the Tamale Metropolis, they should be assisted by the management of TECON to effectively utilize the information related to this to improve their performances in their respective companies.

There should be more efforts from the management of the companies to maintain SCMP's influence on the sales target for a more extended period, provision of more support in identifying the social elements of SCMP to ensure that the positive impact they possess on the distribution of the companies' pharmaceutical products are enhanced.

As a social responsibility, people experiencing poverty and the downtrodden in society should always be offered the opportunity to play a greater active as the companies' suppliers/distributors in the SCMP in all aspects of the communities in Tamale. As a

social-related SCMP, there should be a permanent educational campaign on managing and maintaining social relations in the SCMP.

The modalities for improved professionalism in the pharmaceutical sectors should at all times be maintained, if not improved upon, among the staff of the pharmaceutical so that the principles on the nature of the operations of top management of the companies would be harnessed for the betterment of the pharmaceutical companies in Tamale.

As crucial as it is, the top management support (TMS) unit should be effectively equipped by providing the required logistics to facilitate the SCMP in pharmaceutical companies. Since TMS, in certain situations, experiences challenges in monitoring and evaluating the supply chain network of pharmaceutical companies, there should be regular audits of the operations of the TMS to address the challenges that always characterize their operations. By this intervention, the role of the TMS would be brought to bear at both the up and downstream sectors in the SCMP of the pharmaceutical companies.

Relentless efforts should also be made to facilitate further the possibility of the TMS providing the needed satisfaction to all the stakeholders in the SCMP in the pharmaceutical sectors, not only in the Tamale Metropolis but the entire country as a whole.

The need for integrating elements of socially responsible supplier selection processes at the pharmaceutical companies operating in the Tamale Metropolis was found to be very relevant. As a result, adopting a socially related marketing strategy should be made a top priority of the TMS unit to ensure that the core mandate of SCMP will always be achieved, subsequently leading to attaining the required profits.

Other recommendations aimed at bettering socially responsible supplier selection processes include addressing social constraints that affect meaningful participation in SCMP for improved delivery of pharmaceutical products. Also, making supplier selection fair and transparent would encourage significant involvement in all aspects of the SRSCMP in all the branches of the studied pharmaceutical companies in Tamale.

To further improve and make delivery performance reliable in socially responsible supply chain management, interventions such as vehicle scheduling should be made to be timely and very responsive to the SCMP in the catchment areas of the companies. Since social capital was found to be relevant in facilitating a network of social relationships, there should be efforts to encourage staff to be dedicated to maintaining such social relations in all aspects of the company.

Conduciveness of the market atmosphere for collaboration and cooperation should be encouraged among the TMS unit, the middle-level staff, and those at the bottom for improved, rapid and responsive delivery of pharmaceutical products in the Tamale Metropolis. The delivery performance of SRSMP can also be enhanced when competitors' socially-related marketing and suitable models for supply chain-related policy formulation are understood and tenets in them implemented for effective SCMPs.

Institutional social pressures (ISPs) were also found to be impacting the delivery performance of pharmaceutical companies. As a result, top management decisions affected by state or governmental restrictions should, as early as possible, be addressed so that it does not impede the functions of the SRSCMPs. Since the ISPs and SRSCM were found to be related, TMS attention should always be directed at this so that responses will be implemented appropriately.

Since the change in support by top management could result in a reaction to various ISPs, members in all aspects of the pharmaceutical companies should be made aware of the challenges associated with the types of emerging ISPs to always ensure the entire staff, including TMS unit on alert for the improved overall performance of the pharmaceutical companies.

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## APPENDIX

### KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

#### BUSINESS SCHOOL

#### INSTITUTE OF DISTANCE LEARNING

As part of the requirement for the award of the master's program, final-year students are expected to undertake the study of their choice. Given this, a study entitled '*Socially Responsible Supply Chain Management Practices in Pharmaceutical Companies: The Moderator Role of Institutional Pressures at Tobinco, Ernest Chemist, Olam and Nestle Ghana*' is currently being undertaken. This study is purposely meant for academia, and any information obtained will be treated as such. Your cooperation and participation in the data collection exercise will go a long way to the supply chain management practices of the selected pharmaceutical companies.

#### **Section A: Socio-Demographic Data**

1. Gender/sex distribution of respondents i. male [ ] ii female [ ]
2. Age distribution i. 20-25 [ ] ii. 26-30 [ ] iii. 31-35 [ ] iv. 36-40 [ ] v. 41-45 [ ] vi. 46 and above. [ ]
3. Educational Qualification i. SHS [ ] ii. HND [ ] iii. Degree [ ] iv. Masters [ ]
4. Work schedule i. Administration [ ] ii. Operations [ ] iii. Distribution [ ] iv. Sales [ ] v. Accounts [ ] vi. Other, specify.....
5. Work duration i. 1-5 years [ ] ii. 6-10 years [ ] iii. 11-15 years [ ] iv. 16-20 years [ ] v. 21 years and above [ ].

**Section B: The Effects of Socially Responsible Supply Chain Management on the Pharmaceutical Companies' Performance.**

6. Supply chain management processes are known to the staff involved in the supply of the company's products. i. Agree [ ] ii. Strongly Agree [ ] iii—neutral [ ] iv. Disagree [ ] v. Strongly disagree. [ ]
7. The social elements in the supply chain process are found to be friendly. i. Agree [ ] ii. Strongly Agree [ ] iii—neutral [ ] iv. Disagree [ ] v. strongly disagree. [ ]
8. The supply chain management processes of the company can influence the sales target. i. Agree [ ] ii. Strongly Agree [ ] iii—neutral [ ] iv. Disagree [ ] v. Strongly disagree. [ ]
9. Social elements of the supply chain also positively impact the distribution of the company's products. i. Agree [ ] ii. Strongly Agree [ ] iii—neutral [ ] iv. Disagree [ ] v. Strongly disagree. [ ]
10. The need for social elements in supply chain management processes is significant. i. Agree [ ] ii. Strongly Agree [ ] iii—neutral [ ] iv. Disagree [ ] v. Strongly disagree. [ ]
11. The company opens the possibility for people experiencing poverty to act as suppliers or distributors in the company's supply chain. i. Agree [ ] ii. Strongly Agree [ ] iii—neutral [ ] iv. Disagree [ ] v. Strongly disagree. [ ]

**Section C: The Role of Top Management Support on Supply Chain Management at the Pharmaceutical Companies.**

12. Employees of the companies are conversant with the nature of the operation of top management. i. Agree [ ] ii. Strongly Agree [ ] iii—neutral [ ] iv. Disagree [ ] v. Strongly disagree. [ ]
13. Top management supports effective supply chain management of the company. i. Agree [ ] ii. Strongly Agree [ ] iii—Neutral [ ] iv. Disagree [ ] v. Strongly disagree. [ ]
14. What kind of support does top management provide to ensure adequate supply chain management processes of the companies?.....
15. How can the kind of support identified above help facilitate the company's effective supply chain management processes?
16. Top management support contributes to the effectiveness of the company's upstream and downstream supply chain management processes. i. Agree [ ] ii. Strongly Agree [ ] iii—neutral [ ] iv. Disagree [ ] v. Strongly disagree. [ ]
17. The top management in the various roles identified above really contributes to the satisfaction of stakeholders in the supply chain management processes of the company. i. Agree [ ] ii. Strongly Agree [ ] iii—neutral [ ] iv. Disagree [ ] v. Strongly disagree. [ ]

**Section D: Ways of Integrating Elements of Socially Responsible Supplier Selection Processes at the Pharmaceutical Companies.**

18. Are there any existing strategies aimed at integrating elements of socially responsible supplier selection processes at pharmaceutical companies? i. Yes [ ]  
ii. No [ ].

19. Are you aware of the existing strategies to integrate elements of socially responsible supplier selection processes at the TPL? i. Yes [ ] ii. No [ ].

20. Provide reasons to support the above answer.....  
.....  
.....

21. Socially related marketing strategies constitute the core of SRSCM in the companies under investigation. i. Agree [ ] ii. Strongly Agree [ ] iii—neutral [ ]  
iv. Disagree [ ] v. Strongly disagree. [ ]

22. Integrating social elements create more jobs, generate more income, reduce cost, and increase sales for pharmaceutical firms simultaneously. i. Agree [ ] ii. Strongly Agree [ ] iii—neutral [ ] iv. Disagree [ ] v. Strongly disagree. [ ]

23. Do players face significant constraints in participating in various supply chain operations of the company? i. Yes [ ] ii. No [ ].

24. Making Supplier Selection Processes fair and transparent also positively impacts the company. i. Agree [ ] ii. Strongly Agree [ ] iii—neutral [ ] iv. Disagree [ ] v. Strongly disagree. [ ]

**Section E: Socially Responsible Supply Chain Management and Its Contribution to Supply Delivery.**

25. Reliable delivery performance is identified as playing an active role in responsible supply chain management. i. Agree [ ] ii. Strongly Agree [ ] iii—neutral [ ] iv. Disagree [ ] v. Strongly disagree. [ ]
26. Strategies such as delivery channel, warehousing location, distribution mode, and vehicle scheduling are essential in supply performance. i. Agree [ ] ii. Strongly Agree [ ] iii—neutral [ ] iv. Disagree [ ] v. Strongly disagree. [ ]
27. Structural social capital constitutes the network of relationships between individual stakeholders in SRSCM. i. Agree [ ] ii. Strongly Agree [ ] iii—neutral [ ] iv. Disagree [ ] v. Strongly disagree. [ ]
28. SRSCM should be structured more conducive to collaboration and cooperation among cross-functional teams. i. Agree [ ] ii. Strongly Agree [ ] iii—neutral [ ] iv. Disagree [ ] v. Strongly disagree. [ ]
29. Pharmaceutical companies must know how their competitors' socially related marketing strategies evolve to ensure successful business performance. i. Agree [ ] ii. Strongly Agree [ ] iii—neutral [ ] iv. Disagree [ ] v. Strongly disagree. [ ]
30. Businesses that interact socially with all stakeholders in the SRSCM can serve as suitable models for policy formulation. i. Agree [ ] ii. Strongly Agree [ ] iii—neutral [ ] iv. Disagree [ ] v. Strongly disagree. [ ]

**Section F: Institutional Social Pressures and the Performance of the Pharmaceutical Companies.**

31. Enterprises undertaking SRSCM are influenced by various activities offered by top management to manage institutional pressures. i. Agree [ ] ii. Strongly Agree [ ] iii—neutral [ ] iv. Disagree [ ] v. Strongly disagree. [ ]
32. Institutional pressures and SRSCM implementation by top management are causally related. i. Agree [ ] ii. Strongly Agree [ ] iii—neutral [ ] iv. Disagree [ ] v. Strongly disagree. [ ]
33. Constraints such as governmental restrictions, customer wants, or market competitiveness produce institutional pressures that impact top management's decision-making. i. Agree [ ] ii. Strongly Agree [ ] iii—neutral [ ] iv. Disagree [ ] v. Strongly disagree. [ ]
34. The responsiveness of top management to varied institutional constraints is essential for the effective functioning of pharmaceutical companies. i. Agree [ ] ii. Strongly Agree [ ] iii—neutral [ ] iv. Disagree [ ] v. Strongly disagree. [ ]

