



**ADDIS ABABA UNIVERSITY
SCHOOL OF COMMERCE**

DEPARTMENT OF LOGISTICS AND SUPPLY CHAIN MANAGEMENT

**ASSESSMENT OF EMPLOYEES PERCEPTION OF SOURCING PRACTICE AND ITS
LINK WITH OPERATIONAL PERFORMANCE THE CASE OF MSF ETHIOPIA**

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**THESIS SUBMITTED IN IN PARTIAL FULFILLMENT OF THE REQUIRMENT FOR
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Declaration

This research project is my original work and has not been submitted for examination to any other university.

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Statement of certification

This investigation, entitled “*Assessment of sourcing practice and operational performance, the case of Medecins Sans Frontiers Ethiopia*” was carried by **Mekdes Teshome** so as to obtain her second degree from Addis Ababa University School of commerce. She conducted her original thesis under my guidance and supervision. I certify that, the study is her own original work and suitable for submission of the award of MA in Logistics and supply chain Management.

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Dedication

To MSF Ethiopia for allowing me conduct the research and all the facilitation owed in this regard. Above all, to all field staff working in a remote area & refugee setup where they can only live with only basic facilities in a harsh condition to alleviate the unfortunately increasing of human sufferings and satisfy unmet medical needs in pure humanitarian spirit.

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List of abbreviations

MSF	Medecins Sans Frontiers
SCM	Supply Chain Management

Abstract

This research was conducted in an attempt to investigate the status of sourcing practice (measured in terms of four dimensions, namely strategic purchasing, long-term orientation, communication and limited number of suppliers) and its relationship with operational performance in the MSF Ethiopia. Owing to the small number of the total population, the study had employed census survey to quantitatively assess the supposed relationship between the dependent and independent variables. Questionnaire was used as the formal instrument of data collection. A total of 60 questionnaires were distributed and 57 of them were filled and returned which made the response rate about 95% and of which 54 of them were found complete and hence qualified for being processed. The study findings have suggested that the levels of sourcing practices and operational performance are moderate in the case of MSF Ethiopia as the perceived evaluation of the respondents reply. It has also revealed that, though all of the dimensions of sourcing practices have statistically significant positive relationship with operational performance communication was found to have no statistically significant predictive power on operational performance of MSF, while the remaining three dimensions have found to have a statistically significant predictive power on operational performance of MSF. It is recommended that MSF is required to review its existing sourcing practices and make the necessary modifications in order to benefit from the performance improvements in terms of improved quality, swift delivery time, reduced cost of goods, and volume & mix flexibility of goods and satisfaction of internal customers.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

The survival of any business today is no longer solely dependent on its own strength rather on the ability to cooperate within the supply chain. Supply chain management is a major concept for today's rapidly growing humanitarian as well as business organizations. The term supply chain is basically a group of independent organizations connected together through the products and services that they separately and/or jointly add value on in order to deliver them to the end consumer (Dawei Lu, 2011).

The seemingly independent relation between the organization and organizations within the supply chain becomes ever more interdependent. Generally the supply chain management in any organization is influenced by strategic challenges that have long term or overall impact on the architecture and management of the supply chain varying from time to time. Market dimensions, technology, resource and time could be mentioned as the major challenges of supply chain.

According to (Wong & Wong, 2007), overall supply chain efficiency is defined as “the efficiency which takes into account the multiple performance measures related to the supply chain members, as well as the integration and coordination of the performances of those members”. A supply chain is a term that is given to the alignment of firms that bring products (i.e. finished goods and services) to markets (Grant et al., 2006). Supply chains are made up of suppliers, purchasing, materials management, production, inventory management, physical distribution, marketing and sales, customers and the final consumers and can be defined as “the total sequence of business processes, within a single or multiple enterprise environments that enable customer demand for a product or service to be satisfied” (Logistics Bureau, 2007).

Purchasing is one of the major activities of all organization to function and run. Purchasing functions covers the sourcing end of supply chain management interfacing with the delivery end of the suppliers, while the classical definition of purchasing is “to obtain materials and/or services of the right quality in the right quantity from the right source, deliver them to the right place at the right time at the right price” (Alijan, 1973). Purchasing is one of the major activities of all organization to function and run. Significant amount of budget is spent on purchase of material and service to accomplish and support the organization’s goals. Organizations use different system and policy to maximize the efficiency and minimize the risks and cost of purchase. The word procurement is used interchangeably but it has a broader send (Alijan, 1973).

Different organization has its own procurement process in order to conduct purchasing of goods and services. According to (Leenders et al. 1989), the essential steps in procurement procedure are: Recognition of need, accurate description of desired commodity, selection of possible source of supply, analysis of bids, preparation of purchase order, follow up and expediting, receipt and inspection of goods, clearing the invoices and payment and finally maintenance of records. There are different procurement methods defined in the procurement regulations and directives which are applicable depending on the items under consideration (Leenders et.al., 1989).

The objective of purchasing department can be classified into general managerial level, functional level and operational level objectives (Dobler, 1996). The standard statement of the overall objectives of the purchasing function is that it should obtain the right materials in the right quantity ,for delivery at the right time and place from the right sources the right service(after and before sale) and the right price.

Medecins Sans Frontiers (MSF) also knows as Doctors without Borders as an international emergency medical humanitarian organization which represents a very large proportion of the total spending and should be managed well to achieve optimum value. Given the sheer number of financial transactions in which MSF engages, and their high overall value, the procurement

process entails a significant risk of fraud and corruption. As a result tight rules to mitigate this risk have to be upheld (MSF supply guideline 2016 version).

The (Future of Logistics in MSF, 2015) states, the purpose of supply chain management in MSF is to enable effective and efficient operations while expanding its responsiveness and operational reach. Obviously, the supply chain management capabilities should enable the organization to implement its widening variety of operational programs in all imaginable contexts around the globe. The strategic differentiating value of supply chain management for MSF is its capacity to help reach those who cannot be reached by others; MSF deliver fit-for-purpose quality services regardless of the harshness of the terrain or the restrictions placed on it. This allows MSF to be independent and live up to its value of proximity around the globe.

In MSF Procurement/Purchasing department is known as Supply department while the activities thereto referred as supply activities. The goal of supply activities in MSF according to (MSF supply guide line 2016) version is to deliver the right goods required by its projects, in the right quantities, on time, in the right place, at the right quality and for the right costs.

Supply Chain is defined in MSF Supply guideline Version 2016 as a process that coordinates and controls the movement of goods and related information from suppliers to projects, in order to meet beneficiary requirements in a timely manner. Within the supply chain there are three types of flows:

Information flows: Information is the starting point of the chain, since information concerning which goods are needed, in what quantity, where and when is crucial to the whole process. All the activities involved in the supply chain respond to that information. Information is then needed throughout the chain in order to plan, monitor and control the movement of goods. Information is vital to track goods in order to advise those who ordered them about when they will arrive and to take actions when they are late.

Physical flows: Goods are managed at all levels within the chain. This management covers several activities, such as procurement, transportation, importation, storage and distribution.

Financial flows: Each item ordered involves financial movements within and outside the organization.

In MSF Supply/procurement is acknowledged as generally one of the most difficult functions to manage, and the most resource-intensive in terms of both human and financial inputs. It is also one of the most important, since timely supply of goods is required for the smooth running of our projects. If a mission's supply management is not functioning properly it may hamper operations and ultimately have severe consequences for the beneficiaries of its projects (mostly patients and refugees who seek the medical support). To this end; MSF strives to achieve an end-to-end supply chain management to attain its goal of supply mentioned above.

The supply chain management of MSF follows the specific MSF Supply guideline (updated every year due to dynamic nature of the context). The supply department is responsible to procure and distributes wide range of goods ranging from capital equipment to stationery.

This study aimed to assess Sourcing practice and operational performance in Medicines Sans Frontiers.

1.2 Statement of the problem

Humanitarian logistics operates in such areas where difficult to reach under normal circumstances because roads are often inadequate. Humanitarians need robust equipment that can be set up and dismantled quickly enabling them to be extremely adaptable and prepared for the unexpected circumstances. Unfortunately, logisticians in this sector often have to work with fragmented technology and poorly defined manual processes (Wassenhove, 2006). This would poor delivery of humanitarian goods and service which in turn aggravate sufferings. For instance, around the globe, between the years 1999 and 2008, more than 7000 disasters occurred,

caused 1.2 million deaths, and affected 2.7 trillion people (Disasters Report, 2009). Such a tragedy would increase by five-fold in the next fifty years as forecasted by (Thomas and Kopczak, 2005).

Human deaths and sufferings could be even worse in Africa where there are limited and poorly organized logistical infrastructures. For instance humanitarian crises have been very common in the region of East Africa which suffers from fragile physical logistics systems such as: poor road surfaces, insufficient number of suppliers, unstable rail track bedding and weak bridges (Choi, et al., 2010).

In order to reduce suffering of disaster affected population, humanitarian logistic plays crucial role due to its significant contribution to the efficiency and effectiveness of humanitarian operations however similar to logistics in the corporate sector in the 1980s, the logistics function in the humanitarian sector is under-recognized, under-utilized and under-resourced (Thomas & Kopczak, 2005).

Since the field of supply chain management is relatively new to Ethiopia, there is an apparent shortage of documented evidences that sufficiently depict the practice of buyer-supplier collaborative relationships (sourcing practice) (Demisse, 2011). To the researchers' knowledge, there exists literature gap in the area of supply chain management practice in general, and on the sourcing practice and its association towards operational performance in the humanitarian logistics and supply chain management context in particular.

Apart from the apparent literature there is also a noticeable gap as far as sourcing practice is concerned. In this regard (Demisse, 2011) claimed that the most accustomed and frequently practiced way of procurement in the case of Ethiopian firms is bid to purchase. Though this may enable to secure least price bid, it may not guarantee sustained lower cost, quality of purchases, reduced inventory, short delivery time, flexibility, venue for sharing appropriate feedbacks and improved reliability (Demisse, 2011). Lack of applying explicit dimensions and corresponding measures in assessing the sourcing practice and operational performance is also an Achilles' heel of the humanitarian organizations working in Ethiopia.

Furthermore, some internal sources from MSF underlined that sourcing performance still remains with high procurement cost and difficulty of sourcing material as per the specification. In addition, MSF faces with the problem of on time shipment and quality at delivery.

Considering the aforementioned gaps, this study attempted to assess the status of sourcing practice measured in terms of four dimensions namely: Strategic purchasing, Limited number of suppliers, Long-term orientation and Communication, and operational performance while determining the relationship between sourcing practice and operational performance. Hence, answered the following major research question.

- ❖ What is the status of sourcing practice and operational performance in MSF?

In order to answer this major research question, the study addressed the following specific research questions;

- What is the level/status of sourcing practice in MSF?
- What is the level/status of operational performance in MSF?
- What is the relationship between the dimension of sourcing practice and operational performance?
- How the dimensions of sourcing practices predict operational performance?

1.3 Objective of the Study

The main objective of the study is to assess sourcing practice and operational performance of MSF using Strategic purchasing, Limited number of suppliers, Long-term orientation and Communication dimensions.

1.3.1 Specific Objectives

- To measure the level of sourcing practice in MSF.
- To measure the level of operational performance in MSF.
- To determine the relationship between the dimensions of sourcing practice and operational performance
- To determine the extent of the predictive power of the dimensions of sourcing practice on operational performance.

1.4 Significance of the Study

In light of the significant gaps in academics and practice concerning the topic under consideration, particularly in the Ethiopian context, this particular study has the following notable significances:

- ✚ As far as the practical relevance is concerned, the study provides a relevant insight on how sourcing practice and its implication on the performance of buying firms are going to be measured. The study also serves as the instrument of self-evaluation to humanitarian organizations working in Ethiopia of their practice on such relationships.
- ✚ As for its contribution to academics and theory, the study provides the basis for better understanding of the constitutive framework of sourcing practice and operational performance relationship, and hence, contributes to the cumulative learning and knowledge building process in the area of supply chain management.

1.5 Scope of the study

SCM has a wide scope and includes a lot of theories about how to set up the chain yet this study did not go through details regarding everything included in the term SCM. The aim for this study was only to analyze the sourcing practice and operational performance in MSF Ethiopia Mission. MSF in its Ethiopia mission has a head office in Addis Ababa and nine project offices in different Regional states namely; Gambella (Gambella, Kule, and Pugnido), Somali (Wardher & Danod) & Amhara (Abdurafi) and Tigray (Shimelba, Hitstas & Shire). The study was conducted solely in MSF Ethiopia using cross sectional data (one time data) collected during the period of January through May 2016.

1.6 Organization of the paper

Generally the paper is organized into five chapters. The first chapter presents background followed by statement of the problem, research questions, and objective so the study, significance of the study, scope of the study and organization of the paper. The second chapter deals with literature review which shows a review of related topics for the research and conceptual framework of the study with operational definition. The third chapter is a research methodology which includes research design, source population, study population, sample

design, data collection instrument and administration, data management, data processing procedures and ethical consideration. The fourth chapter handles data analysis, result and discussion. The fifth chapter wind ups the paper by summarizing the major findings giving conclusion, recommendation , by listing limitation of the study and by giving suggestions for further study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter briefly introduced and provided a synopsis of literature specific to concepts and ideas of SCM, Supply Chain Management Practice and firm's performance, Operational Performance, Supply Chain Performance in humanitarian organization Related organizational performance. Based on the literature reviewed, this thesis sought to compose and evaluate those research questions and identifies measurement variables which are used for answering those research questions in designed to assess sourcing practice and operational performance in MSF Ethiopia Mission. Figure 2.1 presents the research conceptual frame work that was adapted from related literatures and analyzed for this research.

Sourcing has increasingly assumed a pivotal strategic role in supply-chain management. Yet, claims of the strategic role of sourcing have not been fully subjected to rigorous theoretical and empirical scrutiny. Extant research has remained largely anecdotal and theoretically underdeveloped. In this paper, the links among strategic purchasing, supply management and firm performance is examined. We argue that strategic sourcing can engender sustainable competitive advantage by enabling firms to: (a) foster close working relationships with a limited number of suppliers; (b) promote open communication among supply-chain partners; and (c) develop long-term strategic relationship orientation to achieve mutual gains (Dobler, 2000).

2.1.2 Concepts and Ideas of Supply Chain Management

Supply chain management is a philosophy of an integrated approach to manage the total flow of a distribution channel from the supplier to the ultimate customer. (Ellram and Cooper, 1990).

The management of upstream and downstream companies connecting inside and outside the company's operations with suppliers and customers to deliver value to key customers with a low cost supply chain as a whole (Martin, 1998). SCM creates value for Organizations and permits the development of important competitive advantages by means of the relationships between suppliers and clients (Bordonaba-Juste and Cambra-Fierro, 2009). From this perspective, several

studies have verified that integration and collaboration in the supply chain can provide important benefits to the companies involved. Among these benefits are added value, the creation of efficiencies and client satisfaction (Stock et al, 2010; Chow et al, 2008), which are represented by the reduction in inventories, improvements in service delivery and quality and shorter product development cycles (Corbett et al., 1999)

An interesting point in a number of supply chain integration/collaboration oriented studies is the fact that they primarily discuss the notion in wider scopes, however, measurement to be undertaken usually at lower scopes (e.g. Zailani, and Rajagopal, 2005; Cao, Vouderbese, Zhang and Raggh-Nathan, 2013; Solakivi, 2014; Huo et al., 2014; Simatupang and Sridharan, 2004). (Fabe-Costes and Jahre, 2007) substantiated this assertion in their structured literature review work by revealing that a significantly more than half of the studies incorporated in their literature review endeavor have limited their measurement to the first tier of partners in the supply chain, some involving both customers and suppliers, and others restricted to only customers or suppliers. (Van der Vaart and van Donk, 2006) reinforced this by claiming that with respect to supply chain integration, most researchers choose to look at integration with suppliers and/or buyers and relate that directly or indirectly to the performance of the focal firm. Hence, buyer-supplier dyadic relationships have been extensively studied in the supply chain literature (Claro, Priscila, and Claro, 2009).

Buyer-supplier collaborative relationship is conceptualized by many authors in a considerably similar fashion. (Togar&Sridharan, 2002), and (Mugarurat, 2010) define collaboration in the context of buyer-supplier relationship as buyer and supplier firms working together to create a competitive advantage through sharing information, making joint decisions, and sharing benefits that result from higher business performance. In a similar fashion, buyer-supplier relationship has been defined as long-term, win-win, open information exchange types of agreements in which both parties engage in joint efforts to improve supplier performance and commit to quality, cooperation, and dispute resolution (Monczka, Terent and Handfield, 2002; Vereecke and Muylle, 2006). As suggested by (Vereecke and Muylle, 2006), this study purposely use the term collaboration instead of partnership as a way of describing buyer-supplier relationships that

embrace both conflict and partnership, implying some form of mutuality without an apparent need for lifetime commitment or total openness and trust.

Hence, buyer-supplier collaboration is a departure from the anchor point of discreteness that underlies business transactions to a relational exchange as the roles of supplier and buyer are no longer narrowly defined in terms of the simple transfer of ownership of products (MacNeil, 1981; Mugarurat, 2010). The requirements for effective collaboration are mutual objectives, integrated policies, joint decision making, information sharing and sharing of benefits and losses (Simatupang and Sridharan, 2002).

(Patterson, Forker and Hanna, 1999) suggested that for a number of years, writers in the field of supply chain management have described and analyzed the shift from traditional adversarial, arm's length buyer-supplier relationships towards longer-term, more cooperative relationships in which buyers and suppliers regard each other more as partners. According to (Patterson et al. 1999), these relationships also play an important role in managing the uncertainties of the commercial exchange process that can increase the cost of conducting business activities; hence, a focal point of these collaborative relationships is the establishment of, and commitment to, an interactive exchange where both parties benefit from sharing risks and resources.

(Tang, Shee and Tang 2001) have also enunciated that buyer-supplier relationships are often characterized by reference to two major types: adversarial and collaborative. The adversarial model, also referred to as the antagonistic model, has characteristics of tough negotiation, focus on price, short-term contracts and multiple sourcing; whereas the current trend of relationships is evolving towards a more collaborative form based on cooperation, mutual benefit, trust and relational exchange. Under the collaborative model, the buyers' consideration of a preferred supplier is not simply only based on price or cost, but also on the factors that contribute more to the suppliers' competence in production, distribution, and post-purchase service. It is also beneficial for suppliers to be able to get access to the business skill and expertise of their buyer partners (Tang et al., 2001).

Similarly, on the basis of the level of interaction between buyers and suppliers, measured in terms of the exchange frequency of materials and information; and the level of cooperation

between the buying and selling firms, measured in terms of the extent of activities performed jointly and by firms' attitude towards conflict resolution, (Saccani and Perano 2007) identified four classifications of buyer-supplier relationships, namely traditional relationship, operational relationship, project based partnerships and evolved partnerships. According to (Saccani and Perano 2007), traditional relationships corresponds the adversarial and arm's length classifications given by Patterson et al. and Tang et al. respectively; whereas the remaining three classifications incorporate degree of collaborations that range from joint actions to improve operational performances without investing in specific assets in the case of operational relationships, to high level of cooperation and continuous interaction over time in the case of evolved partnership.

Moreover, in different studies of buyer-supplier relationship, different factors have been evaluated by researchers to determine their implication on strengthening the relationships between buyers and suppliers in various settings. In this regard, trust, commitment, power, dependence, adaption, and formal written agreements are some of the most commonly used factors employed by various studies (Liu, Li, Zhang, 2009; Mugarurat, 2010;Yeung et al., 2008;Caniels and Gelderman, 2005). (Mugarurat, 2010) suggested that a successful buyer-supplier collaborative relationship is often characterized by a high level of trust, commitment, shared values, communication, positive bases of power, adaption, cooperation, relationship bonds and dependence; and hence, trust, commitment and adaptation alleviate the fear that one's exchange partner will act opportunistically. It may be concluded that trust, commitment and adaptation reduce transaction costs (Mugarurat, 2010) and, therefore, facilitates more effective and efficient relationships, with a direct influence on results and relationship continuity.

On the other hand, different factors have been used to measure the extent of collaboration in buyer-supplier relationships. In this regard, (Krause, Handfield and Tyler, 2006) employed factors/variables such as buyer commitment, shared value, information sharing, supplier development and length of relationship, among others, to measure the degree of collaboration in buyer-supplier relationships. (Vereecke and Muylle, 2006) also used information exchange and structural collaboration to operationalize and measure buyer-supplier collaboration. (Sanchez-Rodriguez, 2009), on the other hand, gauged the extent of buyer-supplier collaboration using

strategic orientation of purchasing and supplier development. Similarly, (Chen, 2004) used strategic orientation of purchasing, communication, long-term orientation and supply base reduction to the same end. To mention some more, in their attempt to conceptualize and develop instrument for the measurement of collaboration, (Cao et al. 2010) has also deployed seven factors/variables, namely information sharing, goal congruence, decision synchronization, incentive alignment, resource sharing, collaborative communication and joint knowledge creation. For (Prajogo, Chowdhury, Yeung and Cheng, 2012), buyer-supplier collaborative relationship is better operationalized by the factors such as logistics integration, strategic long-term relationship and supplier assessment, all incorporating multiple items for measurement.

2.1.3 The Concept of Performance Measurement Supply Chain

Performance measurement is generally defined as the process of quantifying the efficiency and effectiveness of action, where effectiveness is meant to gauge the extent to which customer's requirements are met, while efficiency measures how economically firm's resources are utilized to achieve a predetermined level of customer satisfaction (Neely et al., 1995 on Agami, Saleh and Rasmy, 2012). However, firm performance is a multi-dimensional concept that involves many aspects in its measurement. (Akyuz & Erkan, 2010) argued that despite the large number of works done on performance measurement, the existing literature lacks a unified definition of what is included and excluded. However, it has been also asserted that performance concept includes both financial and non-financial (operational) aspects and related measures wherein the financial aspect supposed to include sales, profitability and Return on Investment (ROI) as pertinent measures among others, whereas the non-financial aspect, on the other hand, supposed to include measures like inventory performance and cycle time to mention few (Martin and Patterson, 2009).

Particular to supply chain management, (Thakkar, Kanda, and Deshmukh, 2009) suggested that since it is affected by, and in turn affects, many aspects of the firm's operations, and environment, the supply chain performance measurement is a difficult proposition. In a similar fashion, (Otto and Kotzab, 2003) asserted that performance in a supply chain context and its measurement is dependent on the unique notions and problems, which can be identified beyond

the perspectives available to be considered, and hence, none of the available alternatives is an optimal approach for all contexts; instead, from the SCM holistic requirements, different performance metrics should be combined. (Thakkar et al. 2009) also suggested, in this respect, that performance measurement metrics should have the capability to capture the essence of organizational performance, ensure an appropriate assignment of metrics to the areas where they would be most appropriate, minimize the deviation that exist between the organizational goals and measurement goals, and measures, and reflect their clear linkages with various levels of decision-making such as strategic, tactical, and operational.

Regarding the application of specific performance metrics in the supply chain management context, some studies suggest the blended and balanced use of both financial, i.e. revenue, profit, ROA and ROI... etc, and non-financial/operational, i.e. inventory reduction, improved delivery service, decreased order cycle times and greater product availability...etc, metrics (e.g. Thakkar, Kanda, and Deshmukh, 2009; Li, Ragu-Nathanb, Ragu-Nathanb, and Raob, 2006; Gunasekaran, Patel, and Macgraughey, 2004). Through a structured literature review on supply chain integration and performance, (Van der Vaart and van Donk, 2008) reinforced this claim by revealing that the majority of literatures they reviewed have examined the effect of supply chain management on combination of overall measures, operational costs measures and customer service measures;

However, on the same study (Van der Vaart and van Donk, 2008) also argued that it would be very difficult to attribute total supply chain or firm performance to particular supply chain factors especially when performance is measured in overall terms such as market share, ROI and profitability since with these general measures, there are many other (both economic and managerial) variables that impact on performance items (Rodriguez, 2009; Van der Vaart and van Donk, 2008). Similarly, (Huoet al. 2014) stressed that though financial performance has been widely used as a key output measure of firm performance; numerous studies have pinpointed the limitations in relying on financial performance measures in supply chain studies.

2.2 Theoretical Foundation

According to (Dyer and Singh 1998), the two prominent views regarding the source of competitive advantage, namely the industry structure view, which takes the industry as a unit of analysis and suggests supernormal returns are primarily a function of a firm's membership in an industry with favorable structural characteristics; and the Resource Based View (RBV) of the firm, which takes the firm as the unit of analysis and suggests that differential firm performance is fundamentally due to firms heterogeneity in terms of resources and capabilities, overlook the important fact that the disadvantages of an individual firm are often linked to the disadvantages of the network of relationships in which the firm is embedded, since the firm's critical resources may often extend beyond the firm's boundary. Therefore, they argued that the relational view could alleviate such shortcomings of the two dominant views by employing the inter-firm linkages as a unit of analysis.

In recent years researchers have adopted a relational view/approach to explain how buyer-supplier relationships can be a source of competitive advantage (Sanchez-Rodriguez, 2009). The relational view suggests that having close ties with supply chain partners and intensifying the relationship by investing on relationship specific assets ultimately fosters greater trust, dependability and cooperation among supply chain partners (Chen et al., 2004). (Sanchez-Rodriguez, 2009), also suggests that firms, who combine resources in unique ways as suggested by the relational view, may realize operational efficiency through joint investment, knowledge exchange, combining valuable and scarce resources and more effective governance. The theoretical foundation of this study, is therefore, based on the relational view/approach.

Unlike the commercial sector which mainly focuses on profit maximization, humanitarian operations focus on life saving and accordingly, operational performance measurements in humanitarian contexts manly focus on the non-financial metrics yet should mix metrics from each of the three performance measurement dimensions for the humanitarian relief chains (Beamon & Balcik 2008). Modifying commercial supply chain performance metrics, (Beamon

& Balcik 2008) suggested relief aid performance measurement system from three dimensions namely: resource metrics, output metrics and flexibility metrics. The authors also underlined that organizations may have different performance measurement system but must incorporate at least one or two elements of metrics from each of the three dimensions.

Operational performance measuring dimensions (i.e., quality, delivery, flexibility, and cost) dealt under this study are adapted from the study of (Prajogo et al., 2012).

Strategic purchasing

Strategic purchasing is defined as any effort of a buying firm working with its supplier(s) to increase the performance and/or capabilities of the supplier(s) and meet the buying firm's short- and/or long-term supply needs as well as promote on-going improvements that are intended to benefit both buyer and supplier(s) (Wagner, 2011, Ahmed, and Hendry, 2012). The aims of supplier development are generally twofold from the buyer's perspective: firstly, to reduce cost, improve quality, and streamline delivery; and, secondly, to educate suppliers in a systematic process to keep driving continuous improvement; alternatively it has been conceived as one of the most important choices that could be employed by buying firms to manage problems buying firms may experience in their supply networks, such as underperformance of current suppliers, failure of current suppliers to support buying firms' strategic growth or unavailability of capable suppliers (Ahmed, and Hendry, 2012).

The purchasing literature has also stressed the importance of supplier development in supporting a firm's operations strategy by ensuring that suppliers' performance and capabilities meet the needs of the buying firm (Humphreys, Li and Chanc, 2004). Regarding the pertinent initiatives of supplier development, the extant literature have indicated that buying firms typically improve suppliers' performance and capabilities by setting supplier performance goals, providing the supplier with training, providing the supplier with equipment, technological support and even investments, exchanging personnel between the two organizations, evaluating supplier performance, recognizing supplier progress in the form of rewards, conducting visits to

supplier's sites to assess its process and collaborations with supplier in materials improvement, (Krause, Robert, Handfield, and Tyler, 2007; Humphreys et al., 2004; Sanchez-Rodriguez, 2009).

Strategic Purchasing include the extent to which: (a) purchasing is included in the firm's strategic planning process; (b) purchasing performance is measured in terms of its contributions to the firm's success; (c) purchasing professionals have a good knowledge of the firm's strategic goals; and (d) purchasing professionals' development focuses on elements of the competitive strategy (Carr and Smeltzer, 1997; Cavinato, 1999; Carter and Narasimhan, 1993).

Long-term Orientation

Long-term orientation in the context of buyer-supplier collaboration can be defined as the tendency to stick on relationships for a relatively longer period between a firm and its suppliers (Prajogo et al., 2012). According to (Paulraj and Chen 2005) long-term orientation focuses on initiatives that enhance superior relational characteristics between supply chain members and create a win-win situation for the buyer and its suppliers instead of adversarial relationships. Firms with short-term orientation rely on the efficiencies of market exchanges to maximize their gains in a transaction, whereas firms in a long-term orientation rely on relational exchange to maximize their gains over a series of transactions (Ganesan, 1994). Through close relationships with suppliers, buyers are more willing to share risk and reward, encourage mutual planning and problem-solving efforts, and maintain the relationships over a longer period of time (Li et al., 2007; Chen et al., 2004).

It has been also claimed that in the context of supply chain management effective supplier relationships in the sense of creating long-term relationships with key suppliers helps firms achieve superior performance by reducing cost, improving quality, and enhancing customer responsiveness or flexibility (De Toni et al., 1994 on Prajogo et al., 2012). Moreover, by building up on the results of prior studies, (Chen et al, 2004) suggested that present day competitiveness has brought about a marked evolution in supply management where the achievement of superior performance in terms of cost, quality and flexibility (customer responsiveness) is increasingly dependent on long-term relationship with suppliers.

Long-term Orientation“ is operationalized by items tapping the extent to which the buying firm: (a) expects its relationships with key suppliers to last a long time; (b) works closely with key suppliers to improve product quality; and (c) views the suppliers as an extension of the company; in turn (d) suppliers see their relationship with the buying firm as a long-term alliance (Krause and Ellram, 1997; Shin et al., 2000).

Communication

Information sharing/exchange is the extent to which a firm shares a variety of relevant, accurate, complete and confidential ideas, plans and procedures with its supply chain partners in a timely manner (Cao et al., 2009; Simatupang and Sridharan, 2004). Information sharing has been described as the heart, lifeblood, nerve center, essential ingredient or foundation of supply chain collaboration (Cao et al., 2009). Supply chain partners who exchange information regularly are able to work as a single entity and can understand the needs of the other partner better and, hence, can respond to market change quicker (Li et al., 2006).By building up on the findings of prior studies, Li et al. (2006) suggested that simplified material flow, including streamlining and making highly visible all information flow throughout the chain, is the key to an integrated and effective supply chain.

Information sharing becomes crucial in these turbulent economic times as it drives the firm into becoming a collaborative structure (Krishnapriya, and Rupashree, 2014). It has been revealed that buyer and supplier strategic information flows positively impact the relationship-specific performance of both sharing and receiving parties, among which delivery time, quality and flexibility are prevalent (Klein and Rai, 2009).However, to realize the streamlining effect of information, the information shall be more proprietary, tacit and holistic than the data traded in arm’s length relationship, given the fact that levels of information sharing as well as quality and relevance of information shared become critical aspects in deciding success in collaborative efforts in buyer-supplier relationships (Krishnapriya, and Rupashree, 2014;Cao et al., 2009).

Communication is operationalized to include the extent to which the firm and its key suppliers: (a) share critical, sensitive information related to operational and strategic issues; (b) exchange such information frequently, informally and/or in a timely manner; (c) maintain frequent face-to-

face meetings; and (d) closely monitor and stay abreast of events or changes that may affect both parties (Krause and Ellram, 1997; Carr and Pearson, 1999; Carr and Smeltzer, 1999).

Limited number of Suppliers

Purchasing plays a key liaison role between external suppliers and internal organizational customers in creating and delivering value to external customers (Novack and Simco, 1991).

Given the increasing emphasis on building and managing buyer–supplier relationships (or supply Management) as the basis of sustainable competitive advantage (Dyer and Singh, 1998; Kale et al., 2000; Leenders et al., 2002), a systematic empirical investigation of the extent to which strategic purchasing contributes to the development of supply management capabilities is warranted. These capabilities include the firm’s ability to: (a) foster close working relationships with a limited number of suppliers; (b) promote open communication among supply-chain partners; and (c) develop long-term strategic orientation to achieve mutual gains.

Limited Number of Suppliers is operationalized by indicators reflecting the extent to which firms increasingly emphasize close, relational contracting with a smaller number of dedicated suppliers (Kekre et al., 1995; Bozarth et al., 1998; Shin et al., 2000).

2.2.2 The Variables of operational Performance

It would be very difficult to attribute total supply chain or firm performance to particular supply chain factors especially when performance is measured in overall terms such as market share, ROI and profitability since with these general measures, there are many other (both economic and managerial) variables that impact on performance items (Rodriguez, 2009; Van der Vaart and van Donk, 2008). Van der Vaart and van Donk (2008) suggested that it seems potentially more fruitful to relate the level of collaboration in a single buyer-supplier relationship to the performance of that particular relationship, which in fact is supposed to involve mostly operational aspect purchasing performance measures. Similarly, Huo et al. (2014) stressed that though financial performance has been widely used as a key output measure of firm performance; numerous studies have pinpointed the limitations in relying on financial performance measures in supply chain studies.

On the basis of such arguments, this study would adopt operational performance of focal organization to assess its sourcing practice. In this regard, it has been stressed that while many performance frameworks have been advanced in the literature on operations and supply chain management advocating the use of various operational performance measures, cost, quality, flexibility, and delivery are widely regarded as constituting the major operational performance variables (Vereecke and Muylle, 2006). In a similar fashion, (Sanchez-Rodriguez, 2009) has defined purchasing/operational performance as the effectiveness in procuring materials at the lower total cost of acquisition, on time, of the right quality and in the right quantities. Similarly, it has been argued that internal customer satisfaction has been identified as the most important element of purchasing performance outcome in several studies since the measures of the operational successes of purchasing such as quality of purchase, on time delivery and both volume and mix flexibility have a direct implications on the satisfaction of the user organ, hence, determining the level of internal customers' satisfaction (Sanchez-Rodriguez, 2009).

The four dimensions of operational performance are quality, delivery, flexibility and cost (Prajogo, 2012). Quality with respect to conformance product specification and product quality performance. Delivery is operationalized to on time delivery/speed of delivery. Flexibility is seen in terms of mix and volume while cost in terms of operation cost.

2.3 Conceptual Framework

On the basis of the above arguments pertaining to the claimed relationship/association between the dimensions/factors of sourcing practice and operational performance in MSF, and with reference to the suggestions of the extant literature, this study spelled out the following conceptual framework that it would pursue in the course of the preceding parts. The conceptual framework is a combined modification of the conceptual frameworks developed by prior studies (i.e. Sanchez-Rodriguez, 2009; Prajogo, 2012; Chen et al., 2004)

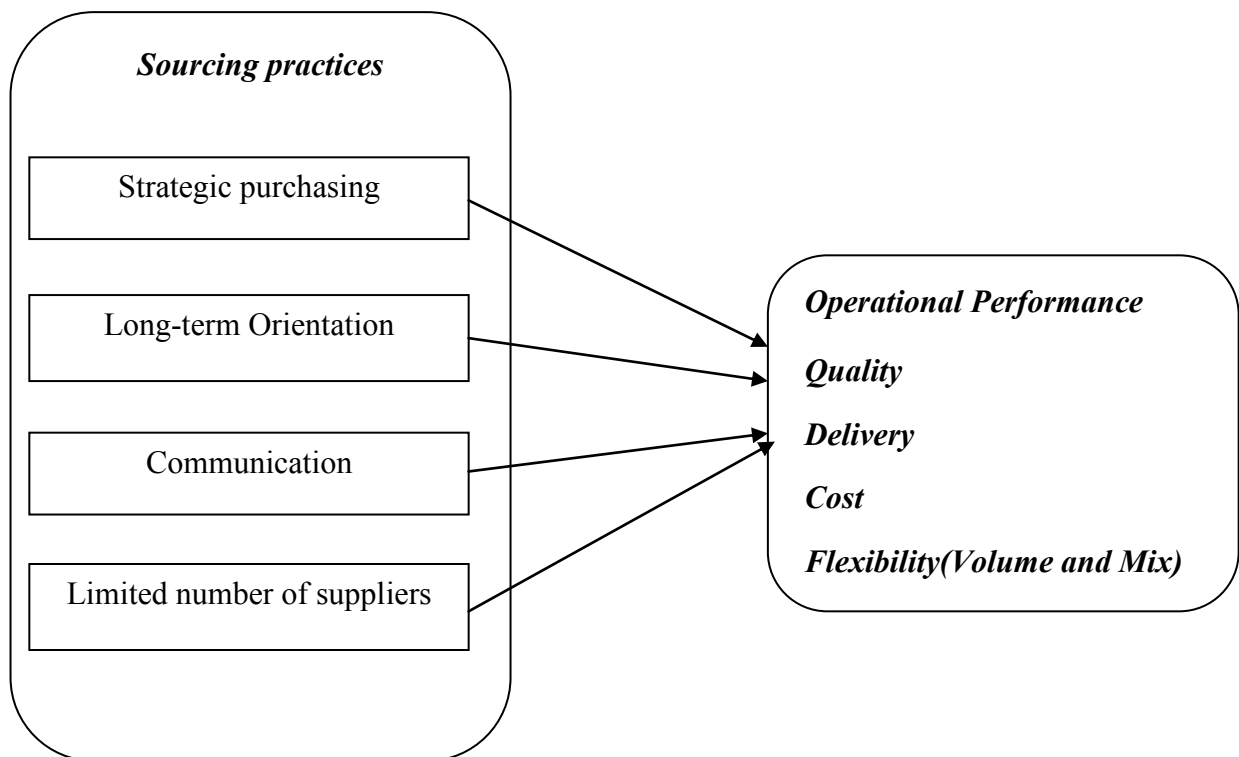


Figure 2.1: Conceptual model(adapted from Sanchez-Rodriguez, 2009); (Prajogo, 2012); (Chen et al. 2004)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Design

Research design is a blueprint for empirical research aimed at answering specific research questions or testing specific hypotheses through specifying the methods and procedures for collecting and analyzing the needed information (Bhattacharjee, 2012). Hence, it is a master plan specifying the methods and procedures for collecting and analyzing the needed information while ensuring that the information collected is appropriate for solving a problem.

The study adopted a cross-sectional census survey design to quantitatively assess the sourcing practice (using Strategic purchasing, Limited number of suppliers, Long-term orientation and Communication dimensions) and operational performance .The association between the dimensions of sourcing practice and operational performance as well as the predictive power of the former on the later were also assessed.

Quantitative research is a means for testing objective theories by examining the relationship among variables. These variables can be measured, typically on instruments, so that the numbered data can be analyzed using statistical procedures. (Creswell, 2008).

The survey method can be used for three types of research, namely descriptive (which focuses on the determination of the frequency with which an event occurs and how variables are related/associated in a particular context), exploratory (which emphasizes on the discovery of ideas and insights), and explanatory (concerned with determining the impact and cause and effect relationships among variables), (Bhattacharjee, 2012; Adams, Khan, Raeside, and White, 2007). Hence, this research is undertaken with descriptive and explanatory research approaches in order to give an adequate depiction of the variables and reveal the extent to which the factors/variables of sourcing practice predict the operational performance of MSF. Using cross sectional approach is further justified for descriptive type as: Obtaining information from a cross-section of a

population at a single point in time is a reasonable strategy for pursuing many descriptive researches (Ruane, 2006).

3.1.1 Type of Data and tools/Instruments of data collection

Both primary and secondary sources of data are used for conducting this study. Primary data is the information that the researcher finds out by himself/herself regarding a specific topic having the likely advantage that the data is collected with the research's purpose in mind, whereby ensuring the resulting consistency of the information with the research questions and purpose (Biggam, 2008).

The primary data was gathered through a well-developed questionnaire from the logistics department of MSF. The questionnaire was designed in a way that enabled to capture the demographic information of respondents, and their evaluation of the factors of Sourcing Practice and operational performance. The secondary sources of data for this study were: books, journals, MSF supply guideline, and MSF official websites.

Briefing is given for respondents on the purpose of the study in order to get their collaboration in supporting the study prior to the distribution of the questionnaire. The researcher was then distributed the questionnaire to the potential respondents and collected accordingly after being filled out by the respondents.

3.1.2 Target Population,

The logistics department- Supply division staff including managers, who have direct link with the supply/sourcing activities have found to be pertinent respondents and are taken as a target population in this study. Due to the very small number of the target population, which was 60 in number, it has been decided to consider the entire population in the study, i.e. to conduct census survey, rather than sampling from the population. The respondents were chosen because of the fact that they are most accustomed with and have the relevant information pertaining to the

sourcing practices of their organization (Sanchez-Rodriguez, 2009) and the status of operational performance.

3.1.3 Unit of Analysis and Respondents

MSF Ethiopia Mission was taken as a unit of analysis. Considering the suggestion that, if the target population is smaller (e.g. 100 or less) census survey is very appropriate and effective since virtually all population would have to be sampled in small populations to achieve a desirable level of precision (Israel, 2013).

Table 3.1: Proposed and Actual Number of Respondents

S.No.	Name of the Department	Proposed no of respondents	Actual No. of Respondents
1	Logistics Department - Supply Division	60	57
Total Proposed Respondents			

3.2 Survey Instrument

3.2.1 Designing of the Instrument

The instrument used to collect data for this study is questionnaire. The questionnaire is adapted to capture both the dimensions of independent (Strategic purchasing, Limited number of suppliers, Long-term orientation) and dependent variables namely operational performance on the basis of an extensive review of the existing literature. The items were measured on five point Likert scale that range from strongly disagree to strongly agree.

3.2.2 Instrument Validity

As recommended by (Sanchez-Rodriguez, 2009), the questionnaire was developed on the basis of a thorough review of the existing literature on the area under study. Content validity is the

requirement for a good instrument that ensures whether the measurement items in an instrument cover the major content of the construct (Li et al, 2006). Furthermore, apart from the initial attempt to strongly ground the development of the questionnaire on the extant literature, it was subjected to pre-test to further ensure its content validity as suggested by (Chen et al., 2004) and (Li et al 2006). Accordingly, five experienced Sourcing practitioners working at four separate organizations have critically reviewed the items in the questionnaire for possible ambiguity, lack of clarity and appropriateness of the items. Following feedbacks, some amendments were made to make the items clearer, unambiguous and more representative/comprehensive.

3.2.3 Variables and Measurement

The four independent variables used to measure the construct of sourcing practice are Strategic purchasing, Limited number of suppliers, Long-term orientation and Communication while the dependent variable was organization's performance is operational performance.

Numbers of Items allocated to measure the independent variables were: five for strategic purchasing, six for long term orientation, five for communication and four for limited number of suppliers. In addition, five separate items were allotted for the measurement of the dependent variable, i.e. operational performance of MSF.

Table 3.2: Variables and measurement items

Variable/ Factor	Measurement Items	Adopted From
Strategic Purchasing	<p>Purchasing is included in the firm's strategic planning process; purchasing performance is measured in terms of its contributions to the firm's success; purchasing professionals have a good knowledge of the firm's</p> <p>strategic goals; purchasing focus in long term issues. Purchasing function has a long range plan</p>	<p>(Chen et al., 2004); (Krause et al., 2007); (Li et al., 2006)</p> <p>(Carr and Smeltzer, 1997)</p>
Communication	<p>Informing in advance of changing needs; exchange of proprietary information; informing about events or changes that may affect the other party; information exchange frequency; timeliness, accuracy, and completeness of exchanged information;</p>	<p>(Chen et al., 2004); (Krause et al., 2007); (Li et al., 2006)</p>
Long-term Orientation	<p>Long-lasting relationship; collaboration to improve suppliers' quality in the long run; long-term contractual agreements ; viewing suppliers as an extension of one's company; suppliers tendency to see the relationships as a long-term alliance; essentially evergreen relationship</p>	<p>(Prajogo et al., 2012); (Chen et al., 2004); (Krause et al., 2007)</p>

Variable/ Factor	Measurement Items	Adopted From
Limited number of suppliers	Firms increasingly emphasize close, relational contracting with a smaller number of dedicated suppliers; quotes only collected from short listed suppliers; suppliers are dropped for reasons other than price	(Chen et al., 2004); (Kekre et al., 1995) (Bozarth et al., 1998)
Operational Performance	Minimum cost of purchased materials; assuring quality of purchased materials; on-time delivery of ordered materials; internal customer satisfaction; Volume and mix flexibility	(Huo et al. 2014); (Sanchez-Rodriguez 2009); (Vereecke and Muylle,2006); (Prajogo et. Al, 2012)

3.2.4 Method of Data Analysis and Presentation

Statistical techniques have been applied given the quantitative nature of study and the data were analyzed using Statistical Package for the Social Science (SPSS) version 20.0.

Respondents' demographic information was summarized by percentages and tables. In order to determine the status of sourcing practices and operational performance, descriptive statistics such as mean and standard deviations of the respondents' scores on all the dimensions were employed.

Pearson Product Moment Correlation Coefficient was applied to assess the association between sourcing practice and operational performance of MSF. Pearson Product Moment Correlation Coefficient is a widely used statistical method for obtaining an index of the relationship between variables when this relationship is linear (Tharenou, Donohue, and Cooper, 2007). Moreover, multiple regression analysis was made as part of the overall data analysis endeavor with the aim

of showing the extent to which the dimensions of sourcing practice predicts the operational performance of MSF. Finally, detail interpretation and discussion of the results of the statistical analysis was provided.

3.5 Ethical Considerations

The study considered some ethical issues. As such, each respondent is aware of having the right to respond or not, the respondent has the right to participate or not, respondents have informed the purpose of the questioner and the study considers the confidentiality of the response by not asking to state name. As MSF is a medical organization no patient data are disclosed.

CHAPTER FOUR

4.1 RESULT AND DISSCUSION

In this chapter, the data collected from respondents have been analyzed and interpreted. The chapter begins by presenting reliability test, background information of respondent under the demographic variables, followed by descriptive statistics, correlation analysis and finally multiple linear regression analysis.

4.2 Reliability Test

Reliability is the extents to which a variable or set of variables is consistent in what it is intended to measure and the rationale for this internal consistency is that the individual items or indicators of the scale should all be measuring the same construct and thus be highly inter-correlated (Hair et al., 2007). The Cronbach alpha coefficient is an indicator of internal consistency of scales. A high value of the Cronbach alpha coefficient suggests that the items that make up the scale are internally consistent and measure the same underlying construct. A value of Cronbach alpha above 0.70 can be used as a reasonable test of scale reliability (Cronbach, 1951).The resulting Cronbach's alpha values of the dimensions are presented in the table that follows:

Dimension	No. of Items	Cronbach's Alpha
Strategic Purchasing	5	0.736
Long-term Orientation	6	0.889
Communication	5	0.809
Limited Number of Suppliers	4	0.740

Operational Performance	6	0.827
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Table 4.1: Cronbach's alpha

Source: Survey Finding, 2016 1

As clearly depicted on table 4.1, all the dimensions involved in this particular study were found to be high in their internal consistency implying the reliability of the instrument that measures the study constructs. This is clearly implied by the calculated alpha values that range from the lowest value of 0.736 to the highest value of 0.889.

4.3 Respondents' Demographic Information

Though the total number of potential respondent was 60, only 57 respondents have filled and returned the questionnaire constituting a 95% response rate and of which 3 of them were found incomplete and hence rejected. The demographic information of the respondents who have filled and returned the questionnaire is presented on Table 4.2.

92.6% of the respondents were males while the remaining 7.4% of the respondents were females. As far as respondents' age is concerned, the majority of the respondents (55.6%) were aged between 26 to 35 years followed by the age categories of 36 to 45 years, above 45 years and 18 to 25 years respectively with percentage scores of 31.4%, 9.3% and 3.7% in that order.

With regard to educational qualification, significantly higher percentage of the respondents (55.6%) were first degree holders, whereas those having second degree and diploma stand second and third in the ladder of educational qualification accounting for 37.0% and 7.4% of the total number of respondents. On the other hand, being an important descriptor of the profile of the respondents, years of service under the relevant job positions was also assessed and it has been revealed that those who have served 1 to 3 years and 4 to 7 years dominate the list by taking in aggregate 64.8% of the entire respondents. Those who have served 8 to 10 years came third on the ladder followed by the category of respondents who have served above 10 years respectively with the corresponding percentage scores of about 24.1% and 11.1%.

Table 4.2: Profile information of respondents

Variable	Frequency	Valid Percent
Gender		
Female	4	7.4
Male	50	92.6
Total	54	100
Age		
18-25 Years	2	3.7
26-35 Years	30	55.6
36-45 Years	17	31.4
Above 45 Years	5	9.3
Total	54	100
Educational Qualification		
College Diploma	20	37.0
First Degree (BSc, BA)	30	55.6
Second Degree (MSc, MA)	4	7.4
Total	54	100
Service Year		
1 to3 Years	19	35.2
4 to 7 Years	16	29.6
8 to 10 Years	13	24.1
Above 10 Years	6	11.1
Total	54	100

Source: Survey Finding, 2016

4.4 Descriptive Statistics

Concerned respondents' feedbacks were captured along the 26 items corresponding to the five dimensions that were introduced to measure the study constructs. The composite mean scores and standard deviations have been computed for all the dimensions of the independent and dependent variables. The composite mean value shows the average of all respondents' perceptions on a certain dimension. While, standard deviation shows how diverse are the perceptions of respondents for a given dimension. For instance, high standard deviation means that the data are wide spread, which means that respondents give variety of opinion and low standard deviation implies that respondents express close opinion.

The rule of thumb pertaining to the intervals for breaking the range in measuring variables that are captured with five point scale (that ranges from strongly disagree to strongly agree) is 0.8, which is actually found by dividing the difference between the maximum and minimum scores to the maximum score (Kidane (2012)). Hence, a calculated composite mean value that ranges from 1 to 1.80 implies strong disagreement, whereas the remaining ranges of 1.81 to 2.6, 2.61 to 3.4, 3.41 to 4.2 and 4.21 to 5.00 representing respondents' perceptions of disagreement, neutrality, agreement and strong agreement respectively.

Therefore, composite scores of mean and standard deviation were calculated for the four scales of sourcing practice, namely strategic purchasing, long-term orientation, communication and limited number of suppliers, and for the scale of operational performance. The resulting composite scores of mean and standard deviation are presented on the following table.

Table 4.3: Mean and standard deviation

Dimension	N	Mean	Standard Deviation
Strategic Purchasing	54	2.66	.735
Long-term Orientation	54	3.34	.756
Communication	54	3.26	.706
Limited Number of Suppliers	54	2.91	.706
Operational Performance	54	3.12	.60

Source: Survey Finding, 2016

A clear portrayal of the calculated composite mean values of each of the scales of sourcing practice were found to be between 2.66 and 3.34 with relatively smaller scores of standard deviation that range between 0.60 and 0.756. The lowest composite mean value is registered in the case of strategic purchasing followed by the composite mean score for limited number of suppliers. Whereas the composite mean scores of 3.34 and 3.26 respectively for long-term orientation and communication are relatively larger.

The composite mean scores of the dimensions of sourcing practice entail that MSF's employees perceive that the organization has been so far making moderate efforts to promote such practices. This implies the fact that the attempts made by MSF were not as such significant pertaining to championing the strategic role of procurement/purchasing for the successful accomplishment of organizational goals. It also implies that the existing platform for the effective communication of valued relationship related and other necessary information with key suppliers is only modest. The performance of MSF in promoting the likely benefits that might be realized by working with few key suppliers in a long-term oriented relationship is also only modest as implied by the composite mean scores of the respective dimensions.

On the other hand, the composite mean score of the scale of operational performance is 3.12 with relatively the lowest standard deviation of 0.60. Similar to what has been witnessed in the case of the status of sourcing practice at MSF the respondents were rating the operational performance of MSF at best moderate.

4.5 Correlation Analysis

In this section, correlation analysis was conducted in an effort to answer one of the basic research questions. The relationship between sourcing practice and operational performance was investigated using two-tailed Pearson correlation analysis. This provided correlation coefficients that indicate the strength and direction of relationship. The coefficient of correlation could take values ranging from -1 to +1, where the signs signifying the direction of relationship. As per the guide line suggested by Field (2005), the strength of relationship that ranges from 0.1 to 0.29 shows weak relationship; 0.3 to 0.49 is moderate; and >0.5 shows strong relationship between the two variables.

The following part presents the correlation analysis between the four dimensions of sourcing practice, namely strategic purchasing, long-term orientation, communication and limited number of suppliers, and operational performance at MSF:

4.5.1 Correlation between Strategic Purchasing and Operational Performance

As seen from the results table, strategic purchasing has a statistically significant strong positive correlation with operational performance (with $r=0.537$, $p\text{-value}=0.000$). The relationship indicates that as the focus on strategic purchasing increases so do operational performance.

Table 4.4: Correlation between strategic purchasing and operational performance

		Operational Performance
Strategic Purchasing	Pearson Correlation	.537**
	Sig. (2-tailed)	.000
	N	54
** . Correlation is significant at the 0.01 level (2-tailed).		

Source: Survey Finding, 2016

This implies that strategic purchasing initiatives, such as involving purchasing in the organizational planning process, creating a suitable platform for the purchasing function to have a good knowledge of the organization's strategic goals, enabling purchasing to work by making special emphasis to long-term issues that involve risk and uncertainty and recognizing purchasing by its contribution to the organization's success, are somehow positively related to how MSF performs in assuring reduced cost of purchased materials, materials quality, on-time delivery, volume and mix flexibility and overall satisfaction of their internal user organs.

The findings of past works of similar nature also suggest somehow complementary result as the findings of this particular study. For instance, Chen et.al (2004) identified that companies' reliance on strategic purchasing would have a positive relationship with delivery capability and flexibility. Similarly, as per the findings of Sanncheze-Rodriguez (2009), buying organizations strategic purchasing efforts should lead to increased performance both directly and indirectly (mediated by supplier development).

4.5.2 Correlation between Long-term Orientation and Operational Performance

The correlation matrix in the following table indicates that a statistically significant positive relationship was observed between long-term orientation and operational performance ($r=0.694$, $p\text{-value}=0.000$).

From this result it has been identified that engagement in long-term oriented activities that involve committing in long-term contractual agreements, working to make the relationship long lasting and collaborating with suppliers to improve their quality in the long-run, among others, are strongly related to how MSF performs in assuring reduced cost of purchased materials, materials quality, on-time delivery, volume and mix flexibility and overall satisfaction of their internal user organs.

Table 4.5: Correlation between long-term orientation and operational performance

		Operational Performance
Long-term Orientation	Pearson Correlation	.694**
	Sig. (2-tailed)	.000
	N	54
**. Correlation is significant at the 0.01 level (2-tailed).		

Source: Survey Finding, 2016

Pertaining to past works conducted on the area, a strong positive correlation between long-term orientation and shorter delivery time and swift response to customer complaints has been identified by Chen et al. (2004), where the later two items were designated to measure operational performance. In a similar fashion Prajogo et al. (2012) has discovered that strategic long-term relationship had a strong positive relationship with the improvement of delivery time, flexibility and purchase cost reduction. This finding is in line with the claim by Chen et al.(2004) that when buyers intended to commit themselves in to a strategic long-term oriented relationship with their key suppliers, there would be a joint tendency to improve future performances since in the long run, the invisible hand of the market favors firms whose behavioral orientation support trust and cooperation rather than competition and opportunism,

and such behavioral orientation enable buyers and suppliers to work together to increase the likelihood of cooperation to reduce costs and/or enhance product quality through relationship-specific investments. According to Prajogo et al.(2012), strategic relationship under the conditions of a regular long-term contract with suppliers involves more than just transactional activities (i.e., selling–buying), but also high- level coordination of suppliers’ systems and capabilities, which has positive effects on cost, quality, and cycle time

4.5.3 Correlation between Communication and Operational Performance

Similar to the above two cases here also communication has been identified to have a statistically significant strong positive relationship with operational performance ($r=0.635$, $p\text{-value}=0.000$).

Table 4.6: Correlation between communication and operational performance

		Operational Performance
Communication	Pearson Correlation	.635**
	Sig. (2-tailed)	.000
	N	54
** . Correlation is significant at the 0.01 level (2-tailed).		

Source: Survey Finding, 2016

This particular finding is also consistent with the findings of other studies. For instance it has been revealed that effective communication between buyers and their key suppliers, measured in terms of the relevance, timeliness, level and frequency of the information shared, has positive relationship with rapid handling of customers’ order on the buyers’ side (Chen et al. 2004). On the other hand, the level and quality of information shared among buyers and suppliers have identified to have a positive relationship with the operational aspects of firms performance, such as fulfillment performance (shorter delivery time) inventory performance and flexibility (Simatupang and Sidharan, 2005). According to (Li et al., 2006) the key to the seamless supply chain is making undistorted and up-to-date information available at every node within the supply chain, hence taking the available information and sharing it with other parties within the supply chain can be used as a source of competitive advantage.

4.5.4 Correlation Between Limited Number of Suppliers and Operational Performance

Though all the dimensions of sourcing practice have found to have a strong correlation with operational performance, the relative strength of the correlation is even better in the case of limited number of suppliers as evidenced by the statistically significant and strong positive relationship that the two have exhibited ($r=0.722$, $p\text{-value}=0.000$).

Table 4.7: Correlation between limited No. of suppliers and operational performance

		Operational Performance
Limited Number of Suppliers	Pearson Correlation	.722**
	Sig. (2-tailed)	.000
	N	54
**. Correlation is significant at the 0.01 level (2-tailed).		

Source: Survey Finding, 2016

This finding makes real sense given the fact that dealing with a limited number of quality suppliers would create a suitable platform for closer partnership and venue for better understanding of the needs and requirements of the parties involved in the relationship, which in turn could ensure quality of relationship (Yeung, Selen, Zhang and Huo, 2008).

According to Stanley and Wisner (2001), establishing close relationships with a limited number of suppliers, when properly and selectively used, has been directly linked to responsiveness/flexibility and financial performance. Many companies have achieved substantial cost savings by reducing the number of suppliers in their supplier base and deepening the relationships with remaining suppliers and in doing so, they also expect to improve their customer responsiveness/flexibility (Johnston et al., 2004).

4.6 Regression Analysis

For the purposes of determining the extent to which the explanatory variables predict the variance in the explained variable, multiple linear regression analysis was conducted. Multiple Regression analysis is a statistical method through which one can analyze the relationship between a dependent or criterion variable with the set of independent or prediction variable/s. Unlike correlation, however, the primary purpose of regression is prediction (Marczyk G, DeMatteo D, and Festinger D, 2005).

As a statistical tool multiple regression is frequently used to achieve best predictive relationship for a given set of both dependent and predictor variables, with the aim of evaluating the contribution of specific variables or set of variables and find structural relationship and provide explanation for multiple relationship (Robert, 2006). Therefore, in this particular study multiple linear regression method was used to determine the unique contribution of each dimension of the independent variable to the dependent variable.

4.6.1 Multicollinearity Analysis

According to (Dillon, 1993) when independent variables are highly correlated, there is overlap or sharing of predictive power. This may lead to the paradoxical effect, whereby the regression model fits the data well, but none of the predictor variables has a significant impact in predicting the dependent variable (Robert, 2006). This is because when the predictor variables are highly correlated, they share essentially the same information. Thus, together, they may explain a great deal of the dependent variable, but may not individually contribute significantly to the model. The impact of multicollinearity is, therefore, to reduce any individual independent variable's predictive power by the extent to which it is associated with the other independent variables (Beyan, 2014).

Before conducting the regression analysis Tolerance and Variance Inflation Factor (VIF) values were calculated to check multicollinearity. According to (Robert, 2006) Tolerance value is an indication of the percentage of variance in the predictor that cannot be accounted for by the other

predictors implying the fact that very small values indicate overlap or sharing of predictive power, whereas VIF is the reciprocal of Tolerance.

Table 4.8: Multicollinearity Test

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Strategic Purchasing	.555	1.803
	Long-term Orientation	.286	3.492
	Communication	.317	3.154
	Limited Number of Suppliers	.541	1.850

Source: Survey Finding, 2016

The calculated Tolerance value of the dimensions of the independent variable is ranging from 0.286 in the case of long-term orientation to 0.555 in the case of strategic purchasing. The remaining two dimensions, namely communication and limited number of suppliers have Tolerance values of 0.317 and 0.541 respectively. All the Tolerance values are within the acceptable level of greater than 0.1, whereas the VIF values are also less than the cut of value of 10. The fact that the Tolerance and VIF values are falling within the acceptable limit entails in this particular study multicollinearity is not a serious problem.

4.6.2 Regression Result

The following model summary table shows how much of the variance in operational performance is explained by the explanatory variables considered in the model.

Table 4.9: Model Summary

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	.787 ^a	.619		.588	.38510
a. Predictors: (Constant), Limited Number of Suppliers, Strategic Purchasing, Communication, Long-term Orientation					

Source: Survey Finding, 2016

The Adjusted R Square value on the model summary table is a representation of the correlation between the observed values of the dependent variable, i.e. purchasing performance of buying

firms, and the values of the same dependent variable predicted by the multiple regression models. Hence, the Adjusted R Square value obtained indicates that 58.8% of the variation in the operational performance can be explained by the combined variance in the dimensions of the independent variable, namely strategic purchasing, long-term orientation, communication and limited number of suppliers. Whereas the remaining 41.2% of the variations operational performance is explained by factors not considered in this model.

Table 4.10: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.825	4	2.956	19.934	.000b
	Residual	7.267	49	.148		
	Total	19.092	53			
a. Dependent Variable: Operational Performance						
b. Predictors: (Constant), Limited Number of Suppliers, Strategic Purchasing, Communication, Long-term Orientation						

Source: Survey Finding, 2016

ANOVA test shows the acceptability of the model from statistical perspective. Accordingly, the regression row indicates the extent of variation explained by the model, whereas the residual row indicates information about the variation that is not accounted for the model, i.e. variation on the dependent variable explained by factors not included in the model.

On the above table it is clearly indicated that the computed F statistic is 19.934 with an observed significance level of 0.000, implying the statistical fitness of the regression model to the data.

Table 4.11: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.932	.268		3.480	.001
Strategic Purchasing	.108	.097	.132	1.119	.027
Long-term Orientation	.219	.131	.276	1.677	.100
Communication	.034	.133	.040	.258	.797
Limited Number of Suppliers	.390	.102	.458	3.824	.000
Dependent Variable: Operational Performance					

Source: Survey Finding, 2016

As far as the predictive power of the dimensions of the independent variable is concerned, a closer look at the coefficients of the independent variable shows that three of the dimensions of the independent variable, namely strategic purchasing, long-term orientation and limited number of suppliers have statistically significant beta values. The standardized coefficients (beta values) of these three dimensions indicate the relative importance of all the three dimensions in predicting the dependent variable, namely operational performance. This implies that the remaining one dimension of the independent variable, namely communication couldn't make statistically significant contribution in predicting operational performance of MSF. As far as the strength of the predicting power of the three statistically significant dimensions are concerned, it is revealed that limited number of suppliers has the strongest positive predicting power on the dependent variable with standardized coefficient of 0.458, followed by long-term orientation and strategic purchasing with respective standardized coefficients of 0.276 and 0.132 .

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

This research was conducted towards an attempt to investigate the status of sourcing practice and its relationship with operational performance in the MSF Ethiopia. The following conclusions have been drawn on the bases of the findings of the data analysis effort.

A total of 60 respondents have filled and returned the survey questionnaire making the response rate about 95% and of which 54 of them were found complete and hence qualified for being processed. About 92.6% of the respondents are males, while females constituting the remaining 7.4% of the total respondents. About 64.8% of the respondents have served four years and above in their current position implying that the major portion of the response is obtained from respondents who had relatively better information regarding the collaborative practices their respective organizations have with key suppliers of critical items and their purchasing performance.

The composite mean scores of the scales of the independent variables, namely Strategic Purchasing, long-term orientation, communication and Limited Number of Suppliers, revealed that the respondents perceive that MSF Ethiopia exerted relatively moderate efforts towards the improvement of these variables. Similar to what has been witnessed in the case of the status of sourcing practice at MSF the respondents were rating the operational performance of MSF at best moderate.

Similar to what has been witnessed in the case of the status of sourcing practice at MSF the respondents were rated the operational performance of MSF at its best moderate.

The separate analyses of the relationship between the dimensions of sourcing practice and operational performance have revealed that all of the dimensions of sourcing practice have statically significant positive relationship with operational performance.

So long as the predicting power of the dimensions of the dependent variable are concerned, it has been investigated that Strategic Purchasing, long-term orientation and Limited Number of Suppliers have statistically significant beta values indicating that only these three dimensions have an effect on the dependent variable, i.e. operational performance of MSF Ethiopia. The strength of influence is highest in the case of Limited Number of Suppliers relative to the influence, Strategic Purchasing and long-term orientations have on operational performance of the MSF. On the other hand, communication found to have no statistically significant predictive power on the operational performance of MSF.

Generally, the study findings have suggested that the levels of sourcing practices and operational performance are moderate in the case of MSF Ethiopia as the perceived evaluation of the respondents reply. It has also revealed that, though all of the dimensions of sourcing practices have statistically significant positive relationship with operational performance communication was found to have no statistically significant predictive power on operational performance of MSF, while the remaining three dimensions have found to have a statistically significant predictive power on operational performance of MSF.

In a nut shell:

- ❖ According to the perceived evaluation of the respondents, MSF exerts relatively:
 - ✓ modest effort in Strategic Purchasing, Long Term Orientation, Communication, Limited Number of Suppliers dimensions, and
 - ✓ Pertaining to Operational Performance, the respondents' perceived evaluation implies that the Operational Performance of MSF is still modest,
- ❖ As far as the predictive power of the Dimensions of sourcing practice on Operational Performance is concerned:
 - ✓ Strategic Purchasing, Long Term Orientation & Limited Number of Suppliers have identified to have statistically significant predictive power on Operational Performance,
 - ✓ LNS having the strongest predictive power followed by LTO and SP;

- ✓ Communication have found to have no statistically significant predictive power on the OP of MSF,

5.2 Recommendations

MSF is required to review its existing sourcing practices and make the necessary modifications in order to benefit from the performance improvements in terms of improved quality, swift delivery time, reduced cost of goods, volume & mix flexibility of goods and satisfaction of internal customers. Here, some suggestions are forwarded on the basis of the findings of the study:

As discovered by the findings of the study, the level of sourcing practices and the corresponding operational performance at the disposal of MSF Ethiopia are at best rated as moderate. The apparent moderate sourcing practices and the corresponding operational performance together with the significant positive relationship that has been witnessed between the two, implicated that MSF Ethiopia need to work on its sourcing practices in order to enhance its operational performance.

Given the finding of the study that suggested the relatively strong positive relationship that operational performance has with Strategic Purchasing, long-term orientation, communication and Limited Number of Suppliers, and considering the suggestion of the other finding that only Strategic Purchasing, long-term orientation and Limited Number of Suppliers have significant impact in explaining the changes in the dependent variable, namely operational performance, MSF Ethiopia needs to give special attention in the improvement of its sourcing practices through an efficient reformation of its sourcing processes by giving due emphasis to and involving the sourcing unit in the organization's overall strategic planning process and by making the unit to focus on long-term strategic issues that involve both risk and uncertainty elements. Moreover, strengthening of its long-term oriented relationship with key suppliers would also be suggested along with creating the platform to work with few strong suppliers by promoting a closer partnership oriented approaches.

5.3 Limitation and Suggestions for Future Studies

One of the major limitations of this study that worth mentioning is the fact that it does not comprehensively capture all aspects of sourcing practices rather it made emphasis in revealing the associations and impact relationships that four sourcing practice dimensions have with operational performance of MSF. In order to benefit from a comprehensive assessment of the factors that truly affect the operational performance of MSF, future studies may consider more dimensions of sourcing practice that haven't been considered in this particular study .

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Annex1. Regression result

Reliability Test

1. For the Scale of Strategic Purchasing

		N	%
Cases	Valid	50	92.6
	Excluded ^a	4	7.4
	Total	54	100.0

a. Listwise deletion based on all variables in the procedure.

Cronbach's Alpha	N of Items
.736	5

Mean	Variance	Std. Deviation	N of Items
13.38	11.996	3.463	5

2. For the Scale of Long-term Orientation

		N	%
Cases	Valid	51	94.4
	Excluded ^a	3	5.6
	Total	54	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.889	6

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
20.25	21.074	4.591	6

3. For the Scale of Communication

Case Processing Summary

		N	%
Cases	Valid	51	94.4
	Excluded ^a	3	5.6
	Total	54	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.809	5

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
16.27	10.883	3.299	5

4. For the Scale of Limited Number of Suppliers

Case Processing Summary

		N	%
Cases	Valid	54	100.0
	Excluded ^a	0	.0
	Total	54	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.740	4

5. For the Scale of Operational Performance

Case Processing Summary

		N	%
Cases	Valid	52	96.3
	Excluded ^a	2	3.7
	Total	54	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.827	6

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
19.27	13.010	3.607	6

Demographic Analysis

Statistics

		Age of Respondent	Sex of Respondent	Respondent's Educational Qualification	Respondent Service Year on the Current Position
N	Valid	52	51	51	51
	Missing	2	3	3	3
Percentiles	100	4.00		4.00	4.00

Age of Respondent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25 Years	2	3.7	3.8	3.8
	26-35 Years	30	55.6	57.7	61.5
	36-45 Years	17	31.5	32.7	94.2
	Above 45 Years	3	5.6	5.8	100.0
	Total	52	96.3	100.0	
Missing	-999	2	3.7		
Total		54	100.0		

Sex of Respondent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	24	44.4	47.1	47.1
	Male	27	50.0	52.9	100.0
	Total	51	94.4	100.0	
Missing	-999	3	5.6		
Total		54	100.0		

Respondent's Educational Qualification

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	College Diploma	1	1.9	2.0	2.0
	First Degree (BSc, BA)	46	85.2	90.2	92.2
	Second Degree (MSc, MA)	4	7.4	7.8	100.0
	Total	51	94.4	100.0	
Missing	-999	3	5.6		
Total		54	100.0		

Respondent Service Year on the Current Position

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 to3 Years	16	29.6	31.4	31.4
	4 to 7 Years	16	29.6	31.4	62.7
	8 to 10 Years	13	24.1	25.5	88.2
	Above 10 Years	6	11.1	11.8	100.0
	Total	51	94.4	100.0	
Missing	-999	3	5.6		
Total		54	100.0		

Descriptive Statistics

Descriptive Statistics

	N	Mean	Std. Deviation
StraPur	54	2.6583	.73515
LonTerRe	54	3.3438	.75596
Comunic	54	3.2593	.70644
LimNoSup	54	2.9074	.70593
OpePerfo	54	3.1982	.60019
Valid N (listwise)	54		

Correlations

Correlations

		StraPur	LonTerRe	Comunic	LimNoSup	OpePerfo
StraPur	Pearson Correlation	1	.648**	.616**	.437**	.537**
	Sig. (2-tailed)		.000	.000	.001	.000
	N	54	54	54	54	54
LonTerRe	Pearson Correlation	.648**	1	.805**	.652**	.694**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	54	54	54	54	54
Comunic	Pearson Correlation	.616**	.805**	1	.634**	.635**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	54	54	54	54	54
LimNoSup	Pearson Correlation	.437**	.652**	.634**	1	.722**
	Sig. (2-tailed)	.001	.000	.000		.000
	N	54	54	54	54	54
OpePerfo	Pearson Correlation	.537**	.694**	.635**	.722**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	54	54	54	54	54

** . Correlation is significant at the 0.01 level (2-tailed).

Multicollinearity Analysis

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	LimNoSup, StraPur, Comunic, LonTerRe ^b		Enter

a. Dependent Variable: OpePerfo

b. All requested variables entered.

Coefficients^a

Model	Collinearity Statistics		
	Tolerance	VIF	
1	StraPur	.555	1.803
	LonTerRe	.286	3.492
	Comunic	.317	3.154
	LimNoSup	.541	1.850

a. Dependent Variable: OpePerfo

Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions				
				(Constant)	StraPur	LonTerRe	Comunic	LimNoSup
1	1	4.906	1.000	.00	.00	.00	.00	.00
	2	.038	11.352	.21	.64	.00	.00	.12
	3	.029	12.952	.76	.04	.02	.01	.31
	4	.018	16.725	.01	.31	.18	.24	.56
	5	.009	23.522	.01	.01	.80	.75	.01

a. Dependent Variable: OpePerfo

Regression Analysis

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	LimNoSup, StraPur, Comunic, LonTerRe ^b		Enter

a. Dependent Variable: OpePerfo

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.787 ^a	.619	.588	.38510

a. Predictors: (Constant), LimNoSup, StraPur, Comunic, LonTerRe

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	11.825	4	2.956	19.934	.000 ^b
Residual	7.267	49	.148		
Total	19.092	53			

a. Dependent Variable: OpePerfo

b. Predictors: (Constant), LimNoSup, StraPur, Comunic, LonTerRe

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	99.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
1 (Constant)	.932	.268		3.480	.001	.214	1.650
StraPur	.108	.097	.132	1.119	.27	-.151	.367
LonTerRe	.219	.131	.276	1.677	.100	-.131	.570
Comunic	.034	.133	.040	.258	.797	-.322	.391
LimNoSup	.390	.102	.458	3.824	.000	.117	.663

a. Dependent Variable: OpePerfo

Annex2.QUESTIONNAIRE

ADDIS ABABA UNIVERSITY COLLEGE OF COMMERCE SCHOOL OF GRADUATE STUDIES DEPARTMENT OF LOGISTICS AND SUPPLY CHAIN MANAGEMENT

Dear respondents:

I'm a graduate student at Addis Ababa University College of Commerce in the Department of Logistics and Supply Chain Management. Currently, I'm conducting a research entitled '*Assessment of Sourcing Practice and Operational Performance in MSF*' as a partial requirement for the award of Masters of Art Degree in Logistics and Supply Chain Management.

The purpose of this questionnaire is to gather data for the proposed study, and hence you are kindly requested to assist the successful completion of the study by providing the necessary information. Your participation is entirely voluntary and the questionnaire is completely anonymous. I confirm you that the information you share will stay confidential and only used for the aforementioned academic purpose, thus not affects you in any way. So, your genuine, frank and timely response is vital for the success of the study. I want to thank you in advance for your kind cooperation and dedication of your precious time to fill this questionnaire.

Sincerely yours,

MekdesTeshome

Note:

1. No need of writing your name.
2. Indicate your answer with a check mark (✓) on the appropriate block/cell both for multiple choice and Likert scale questions.
3. If you need further explanation you can contact me and discuss the matter freely at (Telephone No. 0911 864852, E-mail mekdesie@yahoo.com)

Section I: Respondents Profile:

1. Age: 18-25 years 26-35 years 36-45 years above 45 years
2. Sex: Male Female
3. Educational Qualification:
 Below college diploma College diploma First Degree (BSc, BA)
 Second Degree (MSc, MA) PHD and above
4. Current Position _____
5. Year of service in the current position: manipulated
 1 to 3 years 4 to 7 years 8 to 10 years above 10 years

Section II: Main Questionnaire

Please indicate your choice by putting the tick mark (✓) on the appropriate cell. **Where, 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.**

6. Please indicate the degree to which you agree with the following statements regarding MSF's position pertaining to sourcing practices. (Please take your key suppliers of critical items in mind while rating the statements).

No.	Measurement Items	Score				
		1	2	3	4	5
Strategic Purchasing						
6.1	Purchasing is included in the organization planning processes					
6.2	The Purchasing function has a good knowledge of the organization strategic goal					
6.3	Purchasing performance is measured in terms of its contribution to the organization success					
6.4	Purchasing focus is on long-term issue that involves risk and uncertainty					
6.5	The purchasing function has a formally written long-range plan					
Long-term Orientation						
6.6	We expect our relationships with key suppliers to last a longer time					
6.7	We have long-term contractual agreements with key suppliers					
6.8	We collaborate with key suppliers to improve their quality in the long run					
6.9	We view our key suppliers as an extension of our company					
6.10	Key suppliers see our relationships as a long-term alliance					
6.11	The relationship we have with key suppliers is essentially evergreen					
Communication						

No.	Measurement Items	Score				
		1	2	3	4	5
6.12	We inform key suppliers in advance of changing needs					
6.13	Proprietary information is shared between us and our key suppliers					
6.14	We keep each other informed about events or changes that may affect the other party					
6.15	Exchange of information with key suppliers takes place frequently					
6.16	Information exchange between us and our key suppliers is timely, accurate, and complete					
Limited Number of Supplier						
6.17	We rely on small number of high quality suppliers					
6.18	We maintain closer relationship with a limited pool of suppliers					
6.19	We receive price quote only from short listed suppliers					
6.20	We mostly drop suppliers for reasons other than price (such as delivery capability, quality etc...)					

7. Please indicate the degree to which you agree with the following statements regarding the operational performance at the disposal of MSF.

No.	Measurement Items	Score				
		1	2	3	4	5
Operational Performance						
7.1	We are successful in minimizing cost of purchased materials,					

No.	Measurement Items	Score				
		1	2	3	4	5
7.2	We are successful in assuring quality of purchased materials,					
7.3	We are successful in assuring on-time delivery of ordered materials,					
7.4	We are successful in assuring the delivery of the required volume of materials					
7.5	We are successful in assuring the delivery of the required mix of materials					
7.6	Internal customers are much satisfied with the achievements of our purchasing function					