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Department of Management, MBA Program

**Analysis of the relationship between promotional mix
elements and performance of pharmaceutical companies in
Addis Ababa**

By

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**January, 2019,
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elements and performance of Pharmaceutical companies in
Addis Ababa**

A Thesis submitted to Addis Ababa University, Faculty of Business and
Economics in partial fulfillment of the requirements for the degree of masters in
business administration (MBA)

BY

Redyet Nigussie

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DECLARATION

I declare this project is my original work and not been submitted to any other college, institution or university other than Addis Ababa university in Addis Ababa for academic credit.

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This project has been submitted for examination with my approval as university supervisor

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DEDICATION

This work is dedicated to the Almighty God for guiding me and allowing me to complete this research. I also dedicate this work to my husband Micheal Wondessen for his invaluable assistance during the time when I was conducting my research.

Abstract

The purpose of the study was to analyze the relationship between promotional mix elements and performance of pharmaceutical companies in Addis Ababa. The study employed descriptive survey design and population consisted of all pharmaceutical product importers in Addis Ababa. Simple random sampling technique was employed to select the sample. Data was collected from the respondents using structured questionnaires and analyzed using descriptive statistics and statistical Package for Social Sciences (SPSS). The findings indicated that personal selling, sales promotion, advertising, public relation and direct marketing jointly explained 20.7% of variance in overall performance. Personal selling, advertising and public relation had a significant and positive effect on overall performance of a company. The control variable age had a significant but negative effect on overall company performance. The study concluded that promotional mix elements had a great effect on performance of a company. It was recommended Food, Medicines, and Health care administration and Control Authority (FMHACA) could revise tight regulation in promotion of pharmaceutical products. Therefore, marketing practices of pharmaceutical companies based on personal selling, advertising and public relations should be given attention for their future enhanced performance.

Keywords: *Promotional mix elements, organizational performance, pharmaceutical companies*

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Chapter 1

1. Background of the study

Promotion of pharmaceutical products involves all informational and persuasive activities by manufacturers and distributors, the effect of which is to induce the prescription, supply, purchase and/or use of medicinal drugs (Mohiuddin et al, 2015). They expect to receive comprehensive, reliable and credible information about a given drug, its properties, application, dosage, effects and possible side effects. Such information may be provided by a doctor, a pharmacist, a leaflet, drug packaging, advertising etc. (Pilarczyk, 2010). Today's pharma marketers, as a result, are adapting in the face of evolving market forces and government regulations to expand their target markets and provide value-added services to patients and providers (Davis, 2015). Pharmaceutical industries worldwide are heavily involved in aggressive promotion of medical products (Mohiuddin et al, 2015). According to available estimates, pharmaceutical companies in the United States spent over 24 billion dollars on all kinds of promotional activities in 2010 (Labrie, 2011). This amount represents around 13% of the industry's income from sales in that country over the course of the year. Pharmaceutical companies' promotional activities take several forms: representatives' meetings with doctors, product sample distribution, and advertising in medical science journals, sponsorship of health conferences and events (Labrie, 2011). The pharmaceutical industry has undergone major changes in the last 30 years. These changes have been brought about by government legislation, changing systems of health care, developments in science and technology and consumer demand. As a result, the players in the industry have had to critically review their strategies in order to survive and grow and turn in profits (Kamba, 2010).

The Ethiopian health care system is under constant reforms that evidently continued to increase the health service coverage and improve the quality of life of the population (Ali et al, 2015). And also Ali et al (2015) mentioned as a result of such expansions, the size of the pharmaceutical market is expected to double in less than a decade. The number of pharmaceutical product importers in Ethiopia is highly increasing time to time and also manufacturing companies. International companies are opening office and start selling their products. As compared to other time the availability of branded drugs in the market is high. Pharmaceutical Companies are facing intense competition from domestic and foreign brands which is resulting in higher promotion costs and shrinking profit margins (Kamba, 2010). In

an increasingly crowded marketplace, there is pressure to ensure that sales force effectiveness is maximized, and the correct sales and marketing strategy implemented (Wentworth ,2014).

1.1.1 Promotion mix concept

This is part of marketing mix it also called marketing communication mix. Marketing communications provides a core activity so that all interested parties can understand the intentions of others and appreciate the value of the goods and services offered (Fill & Jamieson, 2001).The success of any product depends upon the appropriate promotional mix (Shma,2013).Companies plan promotional strategies based on their organization objective. Each pharmaceutical product importers can have different objectives at different or at the same time .Including: sales increases, new product acceptance, creation of brand equity, positioning, competitive retaliations, or creation of a corporate image. In relation to the company objectives promotional strategies can be planned. Promotional mix elements as discussed by many researchers such as (Bhasin, 2017; Dogramatzis, 2002; Kotler 2000) categorized in 5-advertising, personal selling, sales promotion, public relation and direct marketing. For these promotional activities companies allocate budget. Each company differ in how much they spent in promotional activities and also how they divide the budget to the 5 promotional mix elements. Having established a communications budget, companies must decide how to allocate it over the five promotional tools. Companies differ considerably in their allocations, even within the same industry. Still, because companies are always searching for more efficiency by substituting one promotional tool for another, they must be careful to coordinate all of their marketing functions (Kotler, 2000).

Kamba (2010) the elements of the promotions mix are integrated to form a coherent campaign. As with all forms of communication, the message from the marketer follows the communications process. According to Kamba (2010) the individual components of the promotions mix are integrated to form a specific communications campaign. Through integrated promotion mix marketers can disseminate required information and create awareness about their company and products to targeted audience.

1.1.2 The pharmaceutical industry in Ethiopia

For long period, the pharmaceutical industry was monopolized by one government organization till the current government regime came to power with free market economy in 1991 which introduce private companies with aggregate investment close to 754 million birr (\$76 million)(Mohammed, 2008).

There are approximately 200 importers of pharmaceutical products and medical consumables in Ethiopia. The local industry comprises 22 pharmaceutical and medical suppliers and manufacturers, with 9 involved directly in the manufacture of pharmaceutical products (MOH & MOI, 2015). And as mentioned by MOH & MOI, (2015) most of the manufacturers operate below their capacities and supply only about 20% of the local market. In 2014, local pharmaceutical companies supplied products to the value of US\$ 44.2 million. Local manufacturers have limited product portfolios and are thought to be able to supply only 90 of the more than 380 products on the national essential medicines list (MOH & MOI, 2015). As compared to the public demand of essential medicines the contribution of local industry is very minimal. Most of pharmaceutical products in the market are imported. From the strengths of National drug policy implementation, an improvement in resource allocation for regulatory and drug supply activities and growth in the number of local pharmaceutical factories from one to thirteen and also an increase in the number of importers, wholesalers and retail outlets (Tefera , 2003).

The annual pharmaceutical market in Ethiopia is estimated to be worth US\$ 400 to US\$ 500 million and growing at an impressive rate of 25% per annum. A 2012 estimate by Frost &Sullivan suggests the Ethiopian pharmaceutical market could witness growth rates of slightly over 14% to reach an approximate value of just under US\$ 1 billion by 2018(MOH & MOI, 2015). The importance of building a market presence rapidly has increased the role of an effective sales force to build prescription share and differentiate products from the available alternatives.

1.2. Statement of the problem

Promotion is one of marketing mix and the process of marketing communication. Companies use promotional mix elements to send their brand's message loud and clear to the targeted audience. Promotion is the driving force of marketing. Through promotion companies can create brand awareness, increase customer traffic, and build sales and profits (Labrie, 2011). In the globalization world the competition is getting tough in such environment promotion is crucial. Pharmaceutical companies are no different from businesses operating in other sectors of the economy. Many researchers' studies about marketing mix use and its influence in relation to sales, company performance, customer etc...Some researchers separately studies promotional mix elements. For example:

Aliata et al (2012) in their study examined the nature and influence of the relationship between the bank's promotional strategies and its performance. Positive relationship was found between promotional strategies expenditure and bank performance. Spending on promotional mixes individually had little effect on bank performance. But the study didn't go far on the promotional mix elements exercised by the bank. Kamba (2010) in his study investigate the extent to which promotional mix practices affect the sale of local pharmaceutical manufacturing company's products in Kenya and conclude that marketing managers need to determine what combination of the promotion mix that will make effective promotion programs for their ethical products. The study only focuses on local manufacturing companies. In the study of Mbugua (2014) examined the effect of personal selling strategy on organizational performance. And conclude that the performance of the pharmaceutical firms was affected by the extent to which they pursue personal selling strategies. But didn't go far to examine the rest for promotional mix elements.

The study of Bee (2008) tested multinational companies expected to experience an increase in their market share with successful implementation of the promotional programmes. The result shows that successful implementation of the promotional programmes had a positive influence with an increase in market share. Kremer et al. (2008) in their study performed a meta-analysis to formulate generalizations on the effectiveness of pharmaceutical promotional instruments .A key finding of this meta-analysis is that promotional expenditures have a significant and positive effect on sales in pharmaceutical markets, yet the elasticity of promotional expenditures are modest in size. In both studies they didn't focus the influence in company performance and the nature of promotion mix exercised by companies.

Yet no study has been carried out to assess the relationship between promotional mix elements and performance of pharmaceutical companies in Ethiopia. Thus, this study focuses on pharmaceutical product importers in Addis Ababa. In terms of operational location, the pharmaceutical companies of Ethiopia are concentrated in Addis Ababa. Since there are many public and private hospitals and clinics the companies first target to increase their market share is Addis Ababa. The study seeks to fill the observed knowledge gap on the relationship between promotional mix elements and performance of pharmaceutical companies in Addis Ababa. The following are the research questions of the study.

- A) What kind of promotion trend is exercised by pharmaceutical companies in Addis Ababa?

- B) Do promotional mix elements influence the performance for pharmaceutical companies in Addis Ababa?
- C) Which promotion mix elements highly influence performance of pharmaceutical companies in Addis Ababa?

1.4. General objective

The main objective of the study is to assess the relationship between promotional mix elements and overall performance of pharmaceutical companies in Addis Ababa.

1.5. Specific objective

The specific objectives of the study are

- 1) To investigate promotion trend exercised by pharmaceutical companies in Addis Ababa.
- 2) To analyze the influence of promotional mix elements in the performance of pharmaceutical companies in Addis Ababa.
- 3) To identify a promotional mix type which highly influence the performance of pharmaceutical companies in Addis Ababa.

1.6. Significance of the study

The findings of this study could support companies to look back their promotion trends and improve promotion mix to increase sales and company performance. The study will support pharmaceutical marketers in the selection of the right promotional mix elements and also helps in preparing promotional strategies. The finding of the study could also contribute to a better understanding of promotional mix elements that influence the overall performance of pharmaceutical companies. This will help the marketing team to select the right cost effective promotional mix in order to have positive return on investment and raise company performance.

Policy makers (FMHACA) can use the findings to draw important inferences and information about the current pharmaceutical product promotion policy strength, weakness and also complains from importers. The finding of the study could provide direction for FMHACA in the revision of promotion guideline. The study could be basis for academicians for future research on promotional mix activities in the pharmaceutical industrial sector. Theoretically this research will also contribute to the growing body of knowledge in the field of marketing.

1.7. Scope of the study

The study is limited to existing pharmaceutical importers in Addis Ababa and did not cover consumer products and medical device importers.

The scope of the study is to analyze the relationship between promotional mix elements and performance of pharmaceutical product importers so as to recommend possible promotional strategies to apply and overcome pharmaceutical product promotion challenges.

Chapter 2: Literature review

2. Introduction

This chapter contains theories and concepts related with the study and review of other scholars who have done research in the same field of study. It focused on the current issues relating to the promotional mix element and the relationship with overall performance of the pharmaceutical industry. And also examine pharmaceutical marketing, promotion concept and some of the promotional mix elements such as, personal selling, advertising, sales promotion, public relation and direct marketing.

2.1. Theoretical review

In the marketing environment, marketers face brand, industry, form, and generic competition. Within these environments, marketers apply the marketing mix—the set of marketing tools used to pursue marketing objectives in the target market.

According to American marketing association (2013), marketing is the activity, set of institutions and processes for creating, communicating, delivering and exchanging offerings that have values to customers, clients, partners, and society at large. Aaker(2010)states that successful marketing depends on key issues including what the company is going to produce, how much it is going to charge, how it is going to deliver its products and services, and even how it is going to inform customers about its products and services. Traditionally, these considerations were known as 4Ps- Product, Price, Place, and Promotion. Indeed, these considerations are what determine the choice of a marketing strategy that a firm should adopt. Once marketers have estimated company demand, their next task is to choose a level of marketing effort. The chosen level will produce an expected level of sales (Kotler & Keller, 2012).

2.1.1. Pharmaceutical marketing

In pharmaceutical industry; marketing is the backbone of pharmaceutical companies. Although the pharmaceutical industry produces life-saving drugs, they also need marketing (Habib & Alam, 2011). Pharmaceutical marketing has some similarities with other industries marketing but also has difference. Many writers define and explained pharmaceutical marketing in many ways to show the similarity and uniqueness of pharmaceutical marketing. Pharmaceutical marketing is quite different from general marketing as the decision makers are the physicians (secondary customers) not the patient's (original consumers), thus

maximum marketing strategies are designed on focusing to the physician (Biswas & Ferdousy, 2016).

Ahmed et al (2014) states that marketing of pharmaceutical product is a unique and fascinating discipline, spiced with continuous interaction with target audience, and most of the communication taking place on a one-to-one basis. The unique nature of the pharmaceutical market largely determines the communications process occurring thereon. The most frequently cited factors include: the type of needs to be satisfied, the type of drugs, buyer habits and preferences, the laws in force, market globalization processes, increasing competition, as well as the development of new marketing communication technologies (Pilarczyk, 2010).

Pharmaceutical marketing is about total brand communication all forms of promotional activity working together across disciplines to develop synergy for the brand (Lam, 2004). Masood et al (2009) define pharmaceutical marketing as the activities focused on marketing physicians as well as the general public aware of new and existing pharmaceutical brands.

2.1.2. Promotion concept

Promotion is used by organizations to communicate with customers with respect to their product offerings(Jennifer R,1998).The concept of promotion extends to all personal, and non-personal contact, such as advertising, public relations, exhibitions, sales promotion, packaging, branding, samples and gifts(Nour & Almahirah,2014).This also applied to the pharmaceutical sector.

Once marketers have created a product that is appealing to customers, identified a fair price, and made it physically available to the final consumers, they must then present their products by marketing them to consumers. This important task is achieved through promotion, which includes advertising, public relations, sales promotion, and personal selling (Dogramatzis, 2002).Therefore the product with right product with right pricing strategy in right place is well communicated through proper promotion that definitely gets the positive results (Dogramatzis, 2002). Kotler (2000) writes about the selling concept to show the importance of promotion exercises by companies. According to Kotler (2000) based on the selling concept, another common business orientation, holds that consumers and businesses, if left alone, will ordinarily not buy enough of the organization's products. The organization must, therefore, undertake an aggressive selling and promotion effort. The selling concept, assumes that consumers must be coaxed into buying, so the company has a battery of selling and

promotion tools to stimulate buying. Marketing communication represents the voice of the company and its brands, they are the means by which the company can establish a dialog and build relationship (Todorova, 2015). Promotion means the process of marketing of communication that attempts to inform and remind the individual and persuade to accept, recommend or use the product(Dogramatzis, 2002).Promotion of pharmaceuticals is designed to drive prescribing decisions in order to stimulate sales(Norris et al,2005).Cuellar-Healy (2013)states that promotion is fundamental to the success of firms; because without promotion, potential customers won't know about the existence and benefits of company's products or services.

Promotional mix refers to all the ways a company markets its business (Suttle, 2017). The basic purpose of the promotional mix is first of all to create brand awareness but the most essential is to produce organizational goals and profits (Bhasin, 2017). The four elements of promotion comprise what is called the promotional mix, which companies create in various ingenious ways to communicate their products or company advantages to their publics. These elements are: personal selling, advertising, sales promotion, and public relation (Dogramatzis, 2002).

Companies use different technique, methods and tools in combination or alone to promote their product and service. This techniques, methods and tools are classified by categories in different literature. For example, Bhasin (2017) says promotional mix generally involves 5 components-personal selling, advertising, direct marketing, sales promotions and public relations. Advertising, public relations and sales promotion are “non-personal” communication elements while personal selling and direct marketing are “personal” communication elements. An effective promotional program requires a good combination of “personal” and “non-personal” communication elements (Cuellar-Healy, 2013).

The fundamental promotional tools include advertising, personal selling, sales promotion (supplementary), public relations and e-pharma marketing. Integration processes at this level require creating a “mix” of those tools (promotion mix, communication mix), which, by means of informative, persuasive and reminder functions of promotion, will help to establish groups of regular and loyal drug buyers. Creating appropriate promotion mix could have important meaning for searching competitive advantage on the market (Dogramatzis, 2002).

The components of promotional mix elements are also separately discussed in the following sub-sections.

2.1.3.1. Personal selling

Personal selling or medical detailing is one of the basic elements of the promotional mix. It refers to the direct communication between a seller and the prospective customer. Medical detailing is an approved, regulated, and widely accepted means of pharmaceutical marketing communications found in every major national market (Dogramatzis, 2002).

Personal selling as defined by Bhasin (2017) it is a part of the promotional mix which involves a one to one communication between buyers and customers (either potential or already customers). Cuellar-Healy (2013) describes the key advantages of personal selling include: a high level of persuasiveness, opportunities to customize the promotional message, getting immediate feedback, the possibility of selecting the audience while delivering complex information.

2.1.3.2. Advertising

Advertising is the most well-known and widespread promotional element and an efficient method to reach a large number of people. You can use advertising to: create awareness of a new product or service, describe its features, suggest usage situations, differentiate it from competitor's offers, induce consumers to buy it, create or enhance its brand image, etc. (Cuellar-Healy, 2013). Lake (2017) states that advertising is one of them and it refers to the paid promotion and presentation of ideas, services, and goods by a specific sponsor to a mass medium. Dogramatzis (2002) advertising is a non-personal paid form of communication by identified sponsored. So in case of pharmaceutical marketing, advertising increases awareness, interest, evaluation, and encourages customer for repeat usage. A creative and innovative advertising at clinical level has always support to achieving sale objectives.

2.1.3.3. Sales promotion

Sales promotion is an organized, preplanned component of the overall promotional mix and should be used with the strategic promotional objectives. The main objectives behind the different sales promotion strategies are as follows: to encourage trials through samples, to encourage physicians to increase usage, to encourage competitor switch, to encourage switch to bigger size, to encourage physicians to switch to new formulations, to encourage seasonality of demand, to improve company image to build loyalty and to satisfies physicians' price consciousness (Dogramatzis, 2002). Ahmed et al. (2014) describes sales promotion as Short-term incentives to encourage the purchase or sale of a product or service. Sales promotion is another element that involves non-media and non-media marketing

communication aimed at increasing consumer and market demand as well as improving product availability (Lake, 2017).

2.1.3.4. Public relation

Public relation is essentially a function of an organization, where it tends to develop and manage its goodwill in the market. The primary aim is to create a suitable environment for the firm. Public relation helps the organizations create a positive opinion about the firm in the market through appropriate communications (Dogramatzis, 2002). Public relations is now seen by some to have both a marketing and a corporate dimension (Fill & Jamieson, 2001). Their main objectives are to achieve understanding with the audience and influence public opinion (Todorova, 2015). An organization can develop its public relations with several member groups such as suppliers, customers, employees, the government, stakeholders, distributors, and members of the public (Dogramatzis, 2002). Since pharmaceutical companies cannot directly approach the consumers, they are reverting more and more to voicing their messages at public forums and through newspapers so that they can increase awareness amongst the masses about their product (Ahmed et al., 2014).

2.1.3.5. Direct marketing

One of the fastest growing sectors in the global economy is direct marketing, by which organizations communicate directly with their target customers to generate reaction and/or transaction (Todorova, 2015). According to Kotler and Keller (2012) direct marketing makes use of mail, telephone, fax, email or internet to communicate directly with or solicit response or dialogue from specific customers and prospects. According to Bhasin (2017) while advertising targets a mass-audience, direct marketing targets prospects and customers. Social media marketing email marketing and internet marketing are all types of direct marketing used by companies. They have become important in the promotional mix lately because people are using internet far more than they used to a decade back.

2.1.4. Demographic factors

An excellent performance in terms of output or profitability is one of the major goals of any firm and in order to achieve this, firms use various inputs, one of the input is human resources (labor force) so that demographic factors such as gender, education level and age also play a key role in influencing performance of a firm (Lucas, 2017). Most of the time researchers include the impact of demographic factors in their studies. Age and gender are one of demographic factors commonly used.

2.1.4.2. Gender

Gender has an impact on entrepreneurial success and hence on firm performance (Lucas, 2017). According to Moncrief et al (2000) there are more similarities than differences between men and women in the sales force. In contrast Kalleberg and Leicht (1991) states that women entrepreneurs are disadvantaged relative to their men counter- parts. And also Lucas (2017) has shown that male entrepreneurs or firms operated by males do better than firms operated by females do. On the other hand Moncrief et al (2000) said that the percentage of women in the sales force and the gender mix of the customer base may be potentially important factors mitigating the gender issue.

2.1.4.3. Age

Age is used in social science research to classify people and point out the differences among them (Aapola 2002). When we refer to age differences, we are referring to group-level differences between individuals at one age and individuals at another age (Ng & Feldman, 2008).

It is a time of life and one's qualification and power increases with age. Asserts that the skills of a person improve with age (Lucas 2017). As the nature of work is rapidly changing, organizations in developed nations all over the world are experiencing shifts in the age composition of their workforces (Burlacu, 2011). While an increase in age diversity has become an organizational reality in most corporations, its potential effects on age discrimination, commitment, and performance are not yet fully understood (Kunze, Boehm, & Bruch, 2011). Developmental theorists differ in their views of aging in that some advocate theories that have a very optimistic view of aging, while some advocate theories that focus on the detriments and losses associated with age (Burlacu, 2011). Jobs in which general cognitive abilities, visual-perceptual abilities, and psychomotor abilities are important components for superior job performance and this abilities decreases as a person age increase (Thomas W.H, 2008). Avolio and Waldman (1994) have suggested that age is negatively related to job performance.

2.1.4.1 Organizational performance

The concept of organizational performance is the comparison of an organization's goals and objectives with its actual performance in three distinct areas—financial performance, market performance, and shareholder value (Jameadows, 2012). Organizational performance refers to how well an organization is doing to reach its vision, mission, and goals.

Organizational performance management and measurement is one of the most popular terms in today's public sector management terminology. The idea of managing organizational performance is being widely accepted and adopted all over the world (Salem, 2003). In all organizations, performance relate to organizational purpose. Performance also needs to reflect achievements relative to the resources used by the organization. The first component reflects the organization's mission, the second component reflects how well the organization manages its resources, and the third, its adaptability within the context of external forces (Charles.L et al., 1995). Assessing organizational performance is a vital aspect of strategic management. Executives must know how well their organizations are performing to figure out what strategic changes, if any, to make. Performance can be defined as the outcomes of work because they provide the strongest linkage to the strategic goals of an organization, customer satisfaction and economic contributions (Salem, 2003).

Organizational performance has always had a significant influence on the actions of companies. One of the consequences of this influence is the increase in the number and variety of the means and methods to accurately measure the performance and, gradually establishing an important research field for both companies and academics (Jenatabadi, 2015). Based on their performance measurement result organizations can easily understand strength and weakness of the companies and take in to consideration in their future planning.

2.2. Empirical Review

Articles in the marketing and medical literatures examined various aspects of influence of promotional mix elements in the overall performance of pharmaceutical companies. Drug promotion for consumers is restricted so that pharmaceutical companies target doctors. In the study of Ahmed et al (2014) the result revealed that the prescription chain starts with the information to the doctor by the company's sales team. The information is communicated through either in-clinic promotional activities, or out-of-clinic promotional efforts. As Ahemed et al (2014) describes the doctor, if convinced, prescribes the product and the patient goes and buys the product, thus making the both Product Chain & Prescription Chain meet in the end, which was the basic marketing objective. So, it has been observed the overall promotional mix revolves around the effective communication mix in pharmaceutical marketing. There is a big debt about pharmaceutical companies' promotion. Criticism often leveled against pharmaceutical promotion is that it leads to an undue increase in the consumption of prescription (Balay-Karperien et al, 2007). Empirical studies, however, are not all in agreement about the impact of pharmaceutical promotion on the volume of drugs

prescribed by doctors Furthermore, there is no indication that a greater volume of prescriptions by doctors would come at the expense of the wellbeing of the population(Rubin, 2004).In the study of Negash and Adamu (2017)the factor analysis result shows that physicians perceived different kinds of promotional tools under six factors i.e. sales promotion, personal selling, advertising, image, educational tools and public relations.

Companies use different promotional mix elements and different studies investigate the effectiveness of this promotional mix elements. Biswas & Ferdousy (2016) in their study the results reveals that among all promotional strategies, public relation was found most effective strategy that influence a physician's prescription remarkably while advertisement of the pharmaceutical products in a journal or other printing object attracts the physician concentration least. In contrast in the study of Naikuni (2001) found that most commonly used promotional mix element used by multinational pharmaceutical firms is personal selling and sales promotions. These two are the key elements of promoting medicinal products used by most of the multinational pharmaceutical firms. Publicity and public relations together with advertising are the least used promotional tools. Sara et al (2008) find that detailing is the most studied instrument (32%), followed by direct to consumer (DTC) advertising (20%) and journal advertising (12%).The relative effectiveness of promotional instruments differs among disease categories. Detailing is more effective than medical journal advertising in the categories of inflammations, heart and vascular diseases, and skin diseases, but this picture reverses for the hypersensitivity category.

Companies with similar products or service compete in the same market implement different promotional mix elements to get the market share and increase company performance. Study done by Aliata et al (2012) in bank sector of Kenya conclude that increasing the amounts spent on the different promotional strategies individually had little effect on the improvement of performance of National Bank of Kenya Limited (NBK).However when the amount spent on the promotional strategies was done simultaneously for all the promotional strategies and the performance of the NBK increased significantly. Some study also done in the return on investment (ROI) of pharmaceutical promotion mix elements. For example in the ROI study of Neslin (2001) findings reveal that in terms of medical journal advertising, have the highest overall ROI among all four of the marketing activities. This finding, plus its small share of budget, suggests that journal advertising is underutilized, and may be an area where firms need to focus a little bit more attention. In another ROI study of Narayanan et al(2004) using monthly observations from April 1993 to March 2002; they examined market shares, prices, and promotional expenditures of three brands (Claritin, Zyrtec, and Allegra) in a subcategory

of pharmaceuticals. The findings reveal that detailing primarily affects the brand share positively; in contrast, DTC (Direct to consumer) has a significant, positive effect on both brand share and category sales. Detailing ROIs are greater than DTC ROIs. Furthermore, there is a synergy between the effects of the two promotional variables on brand.

It has remained unclear the influence and relationship between marketing mix elements and performance in pharmaceutical industry. Therefore, this study wanted to fill this research gap.

2.3. Conceptual framework

This study is focused on the relationship between promotional mix elements and overall performance of pharmaceutical companies in Addis Ababa. This research also focused in the type of promotional mix elements used by pharmaceutical companies and their influence in the company performance. The independent variables are personal selling, advertising, sales promotion, public relation and direct marketing and control variables are age and gender. The dependent variable is company overall performance.

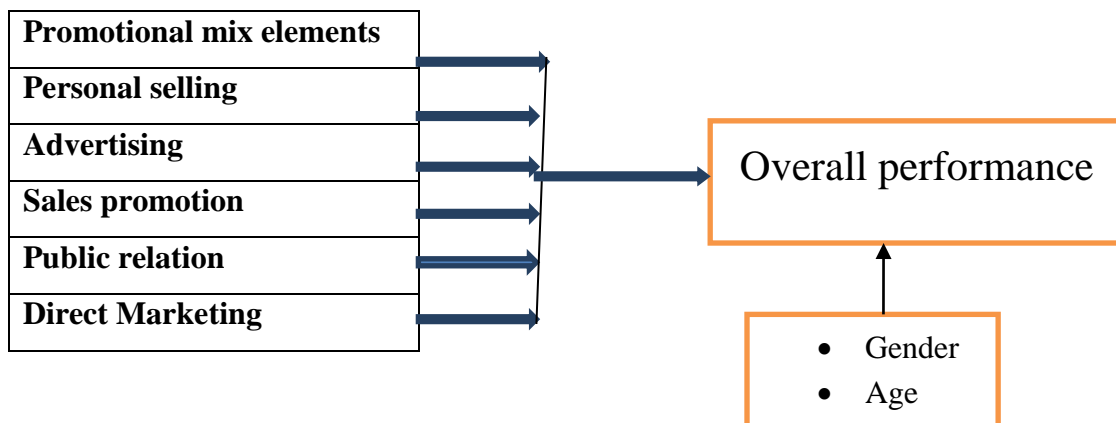


Figure 1: Conceptual model of research (Source: Own literature review)

Chapter 3: Research Methodology

3.1. Introduction

This chapter discusses about the procedure that is followed in collecting, organizing and analyzing of data. And also discusses about the research design, population of interest, data collection methods and data analysis methods. It focuses on the sources of data and their collection techniques, the sampling procedure adapted and tools used for data presentation and interpretation.

3.2. Research Design

The research adopts descriptive survey design. When the purpose happens to be an accurate description of a situation or of an association between variables, the suitable design will be one that minimizes bias and maximizes the reliability of the data collected and analyzed (Kothari, 2004). In addition, the study used mixed approach, i.e. both quantitative and qualitative approaches that are important to measure objective and perform statistical analysis of numerical data to understand and explain a phenomena and forecasting on understanding marketing phenomenon from the perspective of participants in the study. Mixed methods approach is the general term for when both quantitative and qualitative data collection techniques and analysis procedures are used in a research design. Mixed method research uses quantitative and qualitative data collection techniques and analysis procedures either at the same time (parallel) or one after the other (sequential) but does not combine them. This means that, although mixed method research uses both quantitative and qualitative world views at the research methods stage, quantitative data are analyzed quantitatively and qualitative data are analyzed qualitatively. In addition, often either quantitative or qualitative techniques or procedures predominate. In contrast, mixed-model research combines quantitative and qualitative data collection techniques and analysis procedures as well as combining quantitative and qualitative approaches at other phases of the research such as research question generation. This means that you may take quantitative data and qualities it, that is, convert it into narrative that can be analyzed qualitatively. Alternatively, you may quantities your qualitative data, converting it into to numerical codes so that it can be analyzed statistically (Tashakkori, and Teddlie, 1998).

3.3. Study population

The population consisted of all pharmaceutical product importers in Addis Ababa, Ethiopia. Pharmaceutical product importers can import from different countries and different brands.

According to FMHACA (2018) data, there are 132 Pharmaceutical product importers in Addis Ababa. And on average one importer company is sole agent or second agent for 3 manufacturing companies. Importers have different agreement with each manufacturer and based on their agreement the product will be promoted .So that the population size is 396.

Pharmaceutical product importers in Addis Ababa = 132

Average number of manufacturers registered under one importer= 3

$132 * 3 = 396$

396 is total number of manufacturing companies registered their products under 132 pharmaceutical product importers in Ethiopia.

3.4. Determination of the sample size

Sampling involves any procedure that draws conclusions based on measurements of a portion of the population. In other words, a sample is a subset from a larger population (William G. et al, 2011).So that the sample size taken from the population of pharmaceutical product importers in Addis Ababa. The researcher used sample size determination formula developed by Yamane (1967).

$$n = \frac{N}{1 + N(e)^2}$$

Where: n is the sample size

N is the population size and

e is the acceptable sample error = (5%)

$$= \frac{396}{1 + 396(0.05)^2}$$

$$= 199$$

3.5. Sampling technique and procedure

The researcher employed simple random sampling technique to select the representative samples from 396 pharmaceutical product importing companies and data collected through questionnaire. Kothari (2004) simple random sampling applies to sampling without replacement i.e., once an item is selected for the sample, it cannot appear in the sample again and normally one should resort to simple random sampling because under it bias is generally eliminated and the sampling error can be estimated.

3.6. Measurement and operationalization of variables

Performance is the dependent variable in this study. Performance is measured subjectively using a multiple items following Munshi and Hanji (2014) by stating about the sales, profit and customer handling of the companies. The five point likert type scale (where 1 is strongly disagree and 5 is strongly agree) is used to capture subjectively the performance variable.

Table 1 shows the definition and measurement of independent variables.

Variables	Definition of the variable	Measurement	Expected Effect
Personal selling	Direct communication between a seller and the prospective customer	Likert scale (where 1 is strongly disagree and 5 is strongly agree)	+
Advertisement	non-personal paid form of communication by identified sponsored	Likert scale (where 1 is strongly disagree and 5 is strongly agree)	+
Sales promotion	Short-term incentives to encourage the purchase or sale of a product or service	Likert scale (where 1 is strongly disagree and 5 is strongly agree)	+
Public relation	Function of an organization, where it tends to develop and manage its goodwill in the market	Likert scale (where 1 is strongly disagree and 5 is strongly agree)	+
Direct Marketing	sales communications delivered directly to individual customers through e-mail, direct mail, and telemarketing	Likert scale (where 1 is strongly disagree and 5 is strongly agree)	+
Age	group-level differences between individuals at one age and individuals at another age	1=21-30 years,2=31-40years,3=41-50 years,4=51-60 years,5=Above 60 years.	+/-
Gender	The respondent being male or female	Dummy variable (1= Female, 0= Male)	+/-

Table 1: Measurement of Variable

3.7. Data collection methods

The study used primary source of data. The data obtained by self-administered semi-structured questionnaire to sampled respondents. The questionnaire was prepared from literatures and previous studies. For multi-items we adopted the instrument developed by Kamba (2010). Before distributed to respondents the questionnaire was pretested to avoid questions that don't make sense or problem with the questionnaire that might lead to biased answer. The questions are closed, likert type statement and open ended questions(see appendix I).The closed ended questions and likert type statements enabled the researcher to collect quantitative data while open-ended questions were used to collect qualitative data. Four sections were included in the questionnaire. Section one was concerned with the general information about the respondent. Section two deals with the promotion mix elements and their effectiveness on sales. Section three deals with the extent to which companies use promotional mix elements and section four deals with the effect of promotional mix elements in organizational performance and the effect of promotional performance in the pharmaceutical industry. The data was collected from people managing promotional activities in the company: included either, marketing manager, medical representatives, sales managers, brand manager, marketing supervisors or the equivalent.

3.8. Pre-testing (validity and reliability)

The researcher prepared the questionnaire in a structured way and with clear wording of questions or statements to avoid ambiguity. Each question in the questionnaire have a logically link with the objective of the study. Every issue in the study addressed by the questionnaire. The structured questionnaire first pretested to identify questions that do not make sense or problem with the questionnaire that might lead to biased answer. This process increases the validity of the questionnaire instrument of this study.

In checking the reliability, the data was tested for its reliability using Chronbach alpha (See Table 4.1).

3.9. Data collection procedures

The researcher communicated with administration and human resource departments of the pharmaceutical companies to seek permission to gather and access data from employees and other sources. The researcher hand delivered questionnaires to the respondents and follow up calls was also made to remind the respondent to save time and reduce risk of non-response. And collect administered questionnaire by hand to make sure all the questions are answered accordingly.

3.10. Data Analysis

Data from the completed questionnaires inputted, edited and summarized using descriptive statistics. Descriptive statistics used to analyze the mean scores, standard deviation and frequency distribution were used to analyze the data. The summarized data presented by using tables, pie charts, bar charts and graphs as needed. Data entered into the Statistical Package for Social Sciences (SPSS) for analysis of collected data because of the ease, speed, accuracy and sophisticated statistical capabilities of manipulating data of the software.

Multiple linear regression was used to analyze the influence of the promotional mix elements on the performance of pharmaceutical companies. The relationship of the variables is shown by using the following regression model.

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + e$$

Where

Y is Overall company performance,

X₁ = Personal Selling

X₂ = Advertising

X₃ = Direct Marketing

X₄ = Sales promotion

X₅ = Public relation

X₆ = Age

X₇ = Gender

e = error term

3.11. Ethical considerations

The researcher informed respondents on the introduction part of the paper about the title and objective of the study. Besides to develop respondents confidence they are informed that their responses will be kept confidentially and the information uses only for academic purpose.

To avoid misunderstanding and problems related with questionnaires in acquiring information from the respondents the researcher designed the questionnaires in clearly and understandable manner.

Chapter 4: Result and Discussion

4.1. Introduction

In this chapter, the data collected through questionnaire are presented, analyzed and interpreted. Data is analyzed based on the research objective. Accordingly, the chapter deals with general information of the respondents and presents detailed analysis and discussion of data collected and information obtained from administered questionnaires.

4.1.1. Reliability

Validity and reliability are assessed to ensure the quality of the result obtained and conclusions of this study. According to Nunnally (1978) and Hair et al (1998), the minimum requirement of cronbachs alpha should be greater than 0.7. The result in table 4.1 fulfills the requirement. The cronbachs alpha reliability statistics shows that all the variables had reliability statistics greater than 0.7 indicating that the variables were reliable for the study. See also Table 4.2.

Table 4.2: Cronbachs reliability statistics

Variables	Cronbachs reliability statistics
Personal selling	0.697
Sales promotion	0.815
Advertising	0.780
Public relation	0.837
Direct marketing	0.829

Source: Survey data (2018).

4.2. Response rate

There were 199 questionnaires that were distributed to 66 pharmaceutical product importers. From 199 questionnaires 196 are collected and from that 194 are duly filled and good for analysis. The good response rate was due to the fact that the questionnaires are mainly distributed and collected on annual Ethiopian pharmacist association meeting and the rest were hand delivered to the respondent.

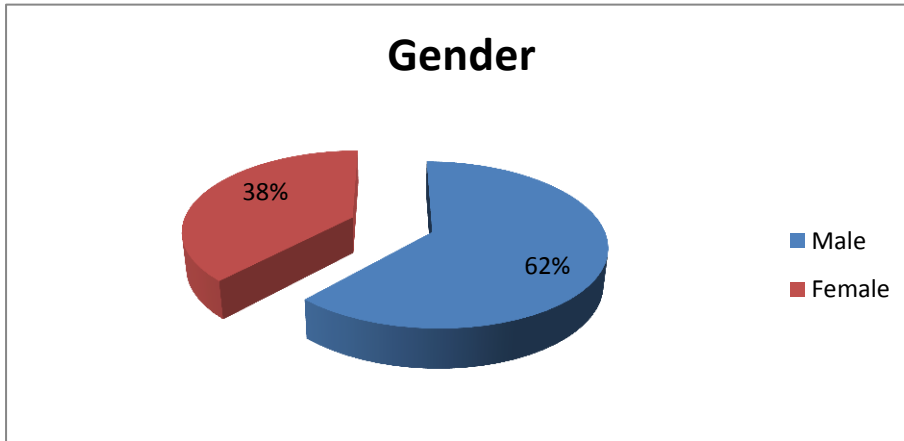
4.3. Demographic Information

This section gives an analysis on the results on demographic factors on the respondents who are participated in this research study.

4.3.1. Gender of respondents

The researcher sought to investigate the distribution of the respondents by gender. Findings revealed that 62% of respondents were male and 38% were female. See also Figure 4.1.

Figure4.1: Gender of respondents

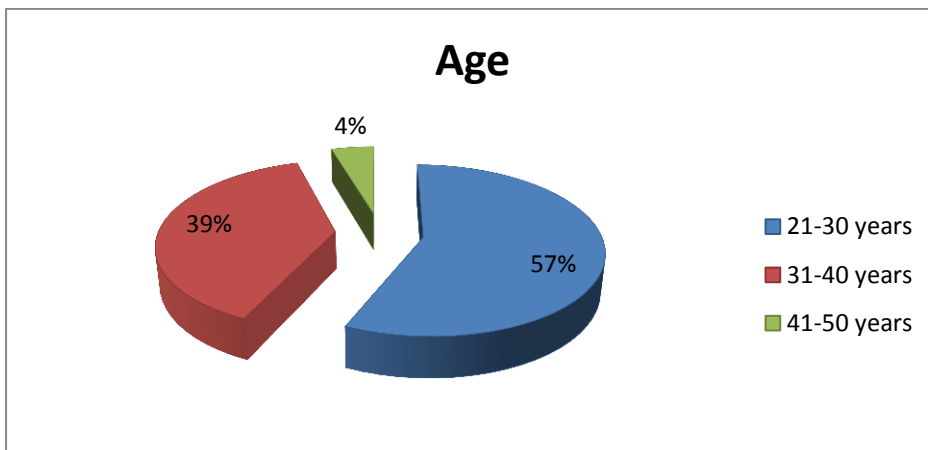


Source: Survey data (2018).

4.3.2. Age of respondents

The researcher sought to investigate the distribution of the respondent's by age. Findings revealed that 57% of respondents were age group of 21-30 years, 39% of respondents were age group of 31-40 and 4% of respondents were age group of 41-50 years. See also Figure 4.2.

Figure4.2: Age of Respondents

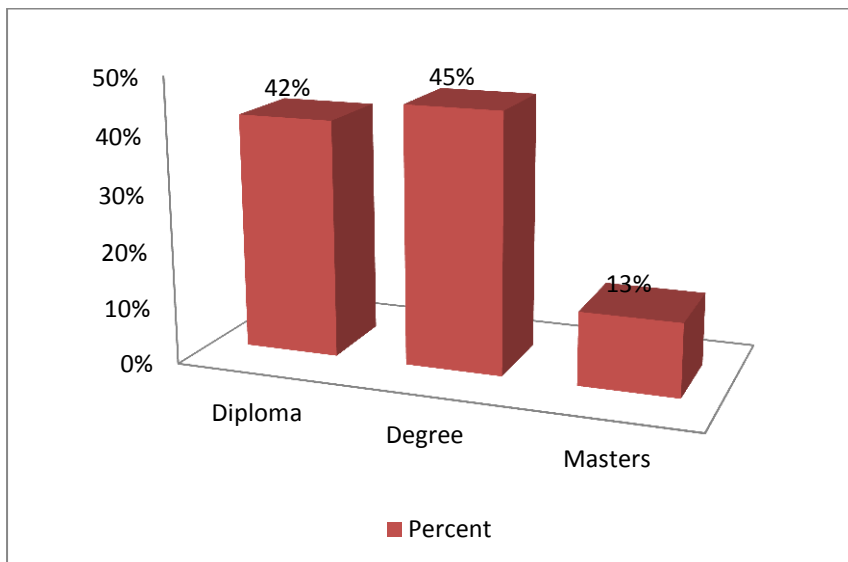


Source: Survey data (2018).

4.3.3. Level of Education

The researcher sought to investigate respondent level of education. Finding reveals that 45% of the respondents are degree holders, 42% diploma holders and 13% masters holders. See also Figure 4.3.

Figure 4.3: Levels of Education

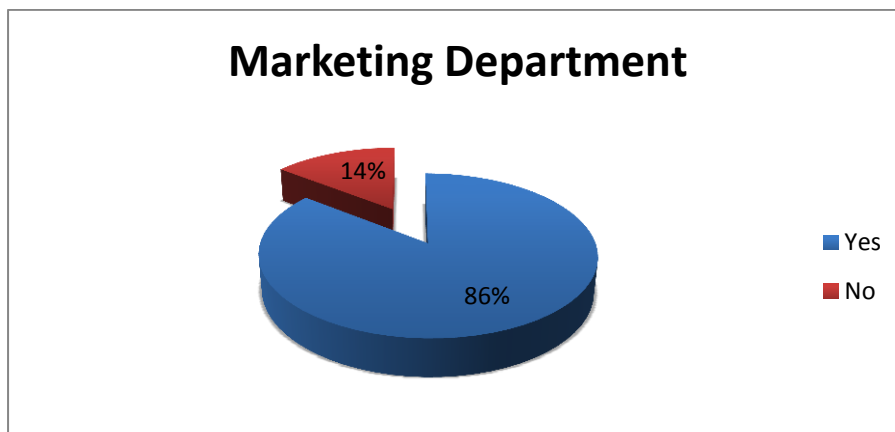


Source: Survey data (2018).

4.4. Marketing department in the organization

The researcher sought to investigate presence of marketing department in the organization of respondents and 86% of the respondents indicate the presence of marketing department and 14% indicate no marketing department. See also Figure 4.4.

Figure 4.4: Marketing department

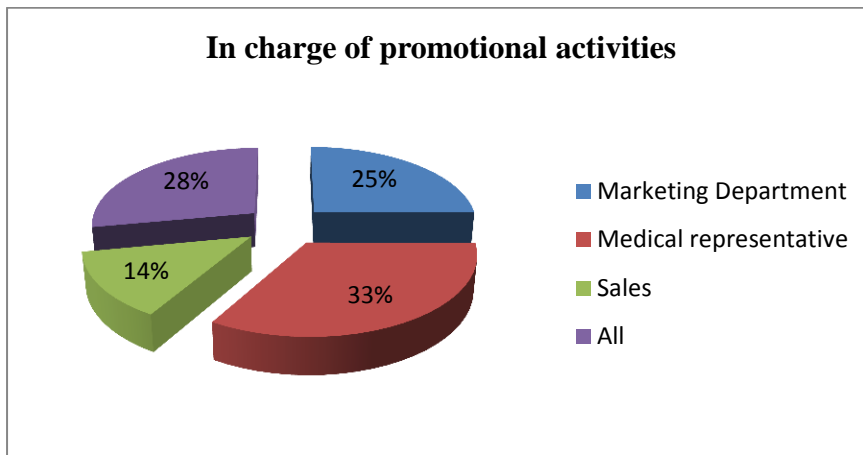


Source: Survey data (2018).

4.5. In charge of promotional activities

The researcher sought to investigate who's in charge of promotional activities in the organization of the respondents and 33% of respondents indicate medical representatives, 25% marketing department, 28% indicate all (marketing department, medical representative and sales) and 14% indicate sales personal. See also Figure 4.5.

Figure4.5: In charge of promotional Activities

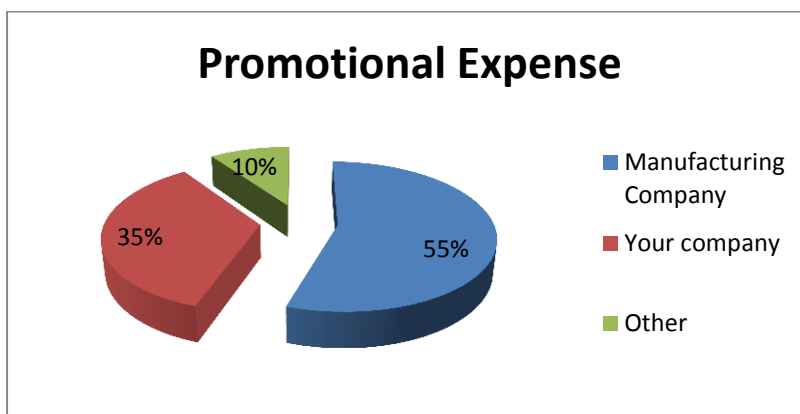


Source: Survey data (2018).

4.6 Promotional expense

The researcher sought to investigate promotional activities expense covered by manufacturing company, importer or both. And the finding reveals that 55% of importers, the whole promotional expense are covered by manufacturing company, 35 % the importer itself cover the whole expense and 10% of importers promotional expense covered by both manufacturing and importer or funds from NGO's. See also figure 4.6.

Figure4.6: Promotional Expense



Source: Survey data (2018).

4.7.1. Tracking and analyzing effectiveness of promotional activities

The researcher sought to investigate whether companies of the respondents track and analyze effectiveness of promotional activities and the finding reveals 87.1% have procedure of tracking and analyzing effectiveness of promotional activities and 12.9% do not have. See also table 4.3.

Table4.3:Tracking and analyzing effectiveness of promotional activities

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	169	87.1	87.1	87.1
No	25	12.9	12.9	100.0
Total	194	100.0	100.0	

Source: survey data (2018).

4.7.2. Evaluate effect of promotional campaign

The study revealed that73.4% of the respondents evaluate the effect of promotional campaign monthly,6.2% quarterly,2.3 % semiannually and 18.1% other(weekly, every 15 days or every 2month). See also table 4.4.

Table 4.4:Evaluate impact of promotional campaign

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Monthly	130	73.4	73.4	73.4
Quarterly	11	6.2	6.2	79.6
Semiannually	4	2.3	2.3	81.9
Other	32	18.1	18.1	100.0
Total	177	100.0	100.0	

Source: Survey data (2018).

4.8. Promotion Methods Used by pharmaceutical products importers in Addis Ababa

The respondents were asked to rate the extent of using promotional mix elements within their pharmaceutical company. They rated them on a scale of 1 to 5 with 5- To a very great extent, 4-To a great extent, 3-To a moderate extent, 2-To small extent and 1- To a very small extent. See also table 4.5.

Table 4.5: Descriptive of promotion methods

	N	Mean	Std. Deviation
personal selling	194	3.95	.825
Sales promotion	194	3.41	1.245
Promotional mix elements	194	3.08	1.087
Direct marketing	194	2.96	1.072
Advertising	194	2.69	1.460
Public relation and publicity	194	2.27	1.272
Valid N (list wise)	194		

Source: survey data (2018).

The respondents indicated that the companies used personal selling, sales promotion and promotional mix elements was to a moderate extent which had means of 3.95, 3.41 and 3.08 respectively. Direct marketing, advertising and public relations and publicity were rated to have been used to a small extent.

4.9. Promotional mix elements and organization performance

The respondents were asked to rate the extent of using promotional mix elements within their pharmaceutical company. The respondents were asked to rate the extent of their pharmaceutical firm performance improved as a result of adoption of promotional mix elements. They rated them on a scale of 1 to 5 with 5- To a very great extent, 4-To a great extent, 3-To a moderate extent, 2-To small extent and 1- To a very small extent. See also table 4.6.

Table4.6: Promotional mix elements and organization performance

	N	Mean	Std. Deviation
Help in increased financial performance	194	4.04	.915
Help for increased volume of sales	194	4.28	.665
Help for improved profit Margin	194	3.82	1.134
Help for faster movement	194	4.23	.675
Help for increased pharmaceutical firm education and sponsorship of events	194	3.23	1.347
Help for increased customer retention	194	3.89	.872
Valid N (list wise)	194		

Source: Survey data (2018).

The respondents indicate that promotional activities helps to increase their company financial performance, volume of sales and product movement to a great extent which has a mean of 4.04,4.28 and 4.23 respectively. The findings also indicate that promotional activities helps to improve profit margin, pharmaceutical firm education and sponsorship of events and helps to increase customer retention to a moderate extent which had a mean of 3.82,3.23 and 3.89.

4.10. Influence of promotional mix on performance

To test the influence of promotional activities on performance, multiple regression was performed between company performance as dependent variable and promotional mix elements (personal selling, sales promotion, advertising, public relation and direct marketing) as independent variables. To conduct regression analysis the five basic assumptions have to be checked and proved that they are not ignored or violated. In this study the assumptions were checked before conducting a regression analysis and explained as below.

4.10.1. Linearity

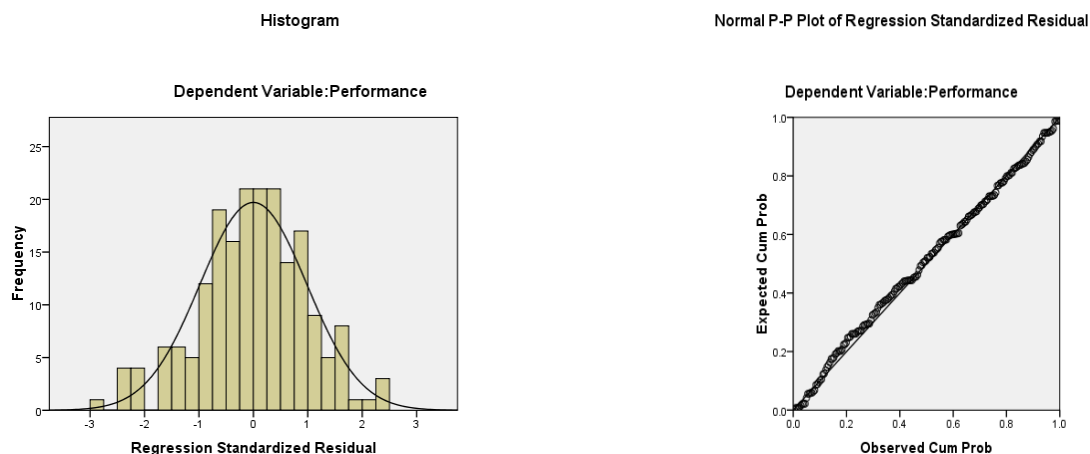
Multiple regression can accurately estimate the relationship between dependent and independent variables when the relationship is linear in nature (Osborne & Waters, 2002). To test the linearity of associations, scatter plot diagram with line of fit can be used. Scatter plots available in most statistical software packages (Keith, 2006; Osborne & Waters, 2002).

All the five relationships between dependent and independent variables (Performance with personal selling, sales promotion, advertising, public relation and direct marketing) fit reasonably with linear pattern and it holds that linearity assumption is met. For test of linearity please refer Appendix 2.

4.10.2. Normality

Multiple regression assumes that variables have normal distributions (Darlington, 1968). This implies that errors are normally distributed, and that a plot of the values of the residuals will approximate a normal curve (Keith, 2006). P-plots are a more exacting methods to spot deviations from normality (Keith,2006). Normality can further be checked through histograms of the standardized residuals (Stevens,2009).

Figure4.7 : Histogram and p-p plot of standardized residuals



Source: Survey data (2018)

Figure 4.7 shows a histogram and P-Plot with normal distribution.

4.10.3. Multicollinearity

The explanatory variables are very highly correlated with each other, and this problem is known as multicollinearity (Brooks, 2008). When a predictor variable has a strong linear association with other predictor variables, the associated variance-inflation factor (VIF) is

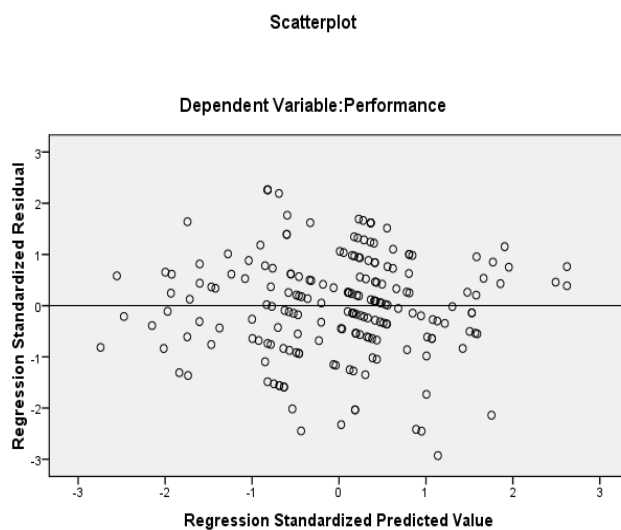
large and is evidence of multicollinearity (Shieh, 2010). The rule of thumb for a large VIF value is ten (Keith, 2006; Shieh, 2010). Tolerance levels for correlations range from zero (no independence) to one (completely independent) (Keith, 2006). Small values for tolerance and large VIF values show the presence of multicollinearity (Keith, 2006).

The variance-inflation factor (VIF) data in regression result (table 4.8) suggests that collinearity is no problem as the figures are well below 10.0 for each variable. And also tolerance levels are all above 3.28. The data satisfied the assumptions of multicollinearity.

4.10.4. Homoscedasticity

The assumption of homoscedasticity refers to equal variance of errors across all levels of the independent variables (Osborne & Waters, 2002). This means that researchers assume that errors are spread out consistently between the variables (Keith, 2000). Statistical software scatter plots of residuals with independent variables are the method for examining this assumption (Keith, 2006).

Figure 4.8: Scatter plot of standardized residuals



Source: Survey data (2018)

. Ideally, residuals are randomly scattered around zero (the horizontal line) providing even distribution (Osborne & Waters, 2002). Figure 4.8 shows that the residuals are distributed evenly. The assumption of homoscedasticity is met.

4.10.5. Autocorrelation

Autocorrelation or independence of errors refers to the assumption that errors are independent of one another, implying that subjects are responding independently (Stevens, 2009).

Graphical methods may be difficult to interpret in practice, however, and hence a formal statistical test should also be applied. The simplest test is due to Durbin and Watson (1951).

Table 4.7: Durbin-Watson (DW) table

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.485 ^a	.235	.207	.53339	1.775

a. Predictors: (Constant), Age, sales promotion, Gender, Direct marketing, personal selling, Advertising, Public relation

b. Dependent Variable: Performance

Source: Own survey (2018)

The DW value needs to be close to 2. Values below 1 and above 3 are problematic and causes for concern. DW value in table shows autocorrelation assumption is not a problem.

4.11. Correlations

A set of pearson correlations were computed to determine if there were any significant relationships between independent variables (promotional mix elements).

The null hypothesis for each of these correlation tests is that there is no statistically significant relation between each pair of variables.

The correlation between direct marketing and advertising is +.335; this is significant at the .01 level. The null hypothesis can be rejected.

The correlation between advertising and personal selling is +.352; this is significant at the .01 level. The null hypothesis can be rejected.

The correlation between personal selling and sales promotion is +.439; this is significant at the .01 level. The null hypothesis can be rejected.

The correlation between sales promotion and public relation is +.747; this is significant at the .01 level. The null hypothesis can be rejected.

Table 4.8 : Correlation Table

		Correlations				
		Direct marketing	Advertising	Personal selling	Sales promotion	Public relation
Direct marketing	Pearson Correlation	1	.335**	.013	.395**	.414**
	Sig. (2-tailed)		.000	.852	.000	.000
	N	194	194	194	194	194
Advertising	Pearson Correlation	.335**	1	.352**	.600**	.492**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	194	194	194	194	194
Personal selling	Pearson Correlation	.013	.352**	1	.439**	.306**
	Sig. (2-tailed)	.852	.000		.000	.000
	N	194	194	194	194	194
Sales promotion	Pearson Correlation	.395**	.600**	.439**	1	.747**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	194	194	194	194	194
Public relation	Pearson Correlation	.414**	.492**	.306**	.747**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	194	194	194	194	194

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

4.12. Regression analysis

Multiple regression was performed between company performance as dependent variable and promotional mix elements (personal selling, sales promotion, advertising, public relation and direct marketing) as independent variables. Adjusted R-Squared, F-statistics and P-value are used to identify how well the regression model fit overall with all predictors.

As shown in Table 4.8 the coefficient of determination; Adjusted R2 is 20.7% which is 20.7% of variation in the dependent variable was explained by the set of independent variables.

Table4.9: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.485 ^a	.235	.207	.53339

a. Predictors: (Constant), Gender, Advertising, Age, Direct Marketing, Personal Selling, Public relation, sales promotion

Source: Survey data (2018).

Table 4.10: Regression result

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	2.647	.286		9.243	.000		
Personal Selling	.195	.060	.241	3.241	.001	.742	1.349
Advertising	.127	.064	.162	1.977	.050	.611	1.638
Direct Marketing	.003	.039	.006	.079	.937	.761	1.314
Sales promotion	-.039	.077	-.057	-.505	.614	.328	3.053
Public relation	.146	.062	.236	2.341	.020	.405	2.469
Age	-.125	.069	-.121	-1.823	.070	.927	1.079
Gender	.055	.080	.044	.681	.497	.969	1.032
F-Statistics (7, 186)= 8.177					0.000		
R ² (Adjusted R ²)=0.235 (0.207)							

Source: Survey data (2018).

In addition, the above table shows that how the regression model fit overall with all predictors. To present the regression model significance as measured by F-test for the overall fit of the model. In the regression results table we have the F-statistic of 8.177 and P-value of 0.000 indicate that the estimated model is a good fit.

The regression results show that personal selling, advertising and public relations are positively and significantly related to the overall performance of pharmaceutical companies in Addis Ababa. Specifically these variables are positively and significantly related to performance of pharmaceutical companies as follows; personal selling ($B=.195$, $P < 0.001$), advertising ($B=.127$, $P < 0.05$), and public relation ($B=.146$, $P < 0.05$). This may mean that increased promotional exercises using personal selling, advertising and public relations are useful to enhance the performances of pharmaceuticals in Addis Ababa. The other two promotional mix elements; sales promotion ($-.039$, $P > 0.1$) and direct marketing ($B=.003$, $P > 0.1$) are not found to influence the performance of pharmaceuticals in Addis Ababa. The control variable age ($B=-0.125$, $P < 0.10$) is statistically significant and it is negatively related to overall performance. This may mean that with the increased employees age performance tends to decrease in pharmaceutical companies in Addis Ababa. The control variable gender ($B=0.055$, p-value of 0.497) is statistically insignificant. The control variable gender shows insignificant relationship with performance in this study.

4.12. Discussion

The main objective of the study was to assess the relationship between promotional mix elements and performance of pharmaceutical companies in Addis Ababa. And specific objectives of the study was: (i) To investigate promotion trend exercised by pharmaceutical companies in Addis Ababa.(ii)To analyze the influence of promotional mix elements in overall performance of pharmaceutical companies in Addis Ababa.(iii)To identify a promotional mix type which highly influences the performance of pharmaceutical companies in Addis Ababa.

a) The relationship between promotional mix elements and overall performance

The result shows that personal selling, advertising and public relation has significant and positive effect on overall company performance. This finding was supported by many previous findings (Ahmed & Sattar, 2014;Bee,2008;Shakib, 2017).The result of this study also in line with study done in Kenya by Francis & Mathenge (2015) the result revealed that

promotional mix element with regards to its effect on sales volume personal selling (66%), advertising (65%), and public relations (63%).

The regression analysis shows personal selling has significant positive effect on overall company performance. This result was consistent with Mbugua (2014) research. Mbugua (2014) proved that personal selling plays a major role in the performance of the pharmaceutical firms as it creates awareness while at the same time encouraging the non-users to try the products of the firm. And also the result of the study in line with Fill & Jamieson (2001) personal selling ability to deliver a personal message and level of interaction is high and Kamba (2010) personal selling affects sales of the local pharmaceutical manufacturing companies to a great extent.

The regression analysis shows advertising has significant positive effect on overall company performance. The finding of this study was supported by some previous findings who has examined the impact of advertising variable on company performance (Kamba, 2010); Narayanan et al, 2004; Shakib, 2017). Possible explanation for this positive result could be that pharmaceutical importers in Addis Ababa distribute brochures, leaflets etc...to their customers continuously and can cover many customers at once. The study of (Yoo et al, 2000) investigated the level of brand equity to the extent to which advertising is invested for the brand. The finding indicated that consumers are exposed to a brand's advertising more frequently; they develop not only higher brand awareness and associations but also a more positive perception of brand quality, which leads to strong brand equity. In contrast in the study of Kamba (2010) due to restriction of pharmaceutical product advertising in Kenya, advertising effects in promotion of pharmaceutical products is very less.

The regression result additionally exhibited that public relation has significant and positive relationship with overall performance of the company. It implies public relation focused on the whole company and the main aim is to Influence public opinion. This is in line with the study done by (Ahmed & Sattar, 2014) pharmaceutical companies cannot directly approach the consumers, they are reverting more and more to voicing their messages at public forums and through newspapers so that they can increase awareness amongst the masses about their product. Furthermore in the study of Vidhya and Ramesh (2017) the study revealed as compare to other promotional mix elements, public relation has high mean score in consumer preference towards of natural cosmetics products.

Control variable age has significant and negative relationship with overall performance of the company. This is in line with study done by Ng and Feldman (2008) the result revealed age had a weak negative relationship with performance in training program and stronger negative association between age and general absence. The finding of this study is also supported by the study done by (Kunze et al., 2011) age diversity was related to higher levels of perceived age discrimination climate in companies and indirectly also negatively influenced collective affective commitment of employees and also the study confirmed the mediated negative relationship of perceived age discrimination climate on overall company performance. In contrast Lucas (2017) a person age is not related to firm performance, but further the firm's age is the one that matter.

b) Promotion trend exercised by pharmaceutical companies in Addis Ababa

The respondents indicated that companies used personal selling, sales promotion and promotional mix elements was to a moderate extent. Findings are in line with studies done by Awuor (2014) which revealed that the predominant promotion strategy was personal selling at 93.5%. Coming closely in the second place was the use of fliers and brochures at 87.1%. The respondents also indicated that the companies used direct marketing, advertising and Public relations and publicity to a small extent. This is due to the fact that there is restriction on advertising and limitations on direct marketing of pharmaceutical products in the country. Findings are in line with studies done by Kamba (2010) Public relations and publicity was rated to have been used to a moderate extent and advertising to no extent. This is attributable to the fact that there is a restriction on pharmaceutical advertising which limits the companies to personal selling. Francis & Mathenge (2015) in their study they mention it is important to keep in mind that advertising, personal selling, public relations, and sales promotions all have their own unique, often overlapping, roles to play in the promotional mix and, collectively, as one of the vital 4Ps (product, place, price and promotion) of the company's overall marketing mix.

The studies done by Francis & Mathenge (2015) finding reveals that promotional elements usually are used by various organizations to elicit responses from target markets to increase the market share.

c) The influence of promotional mix elements in overall performance of pharmaceutical companies

The respondents indicate that promotional activities help to increase their company financial performance, volume of sales and product movement to a great extent. The findings also

indicate that promotional activities helps to improve profit margin, pharmaceutical firm education and sponsorship of events and helps to increase customer retention to a moderate extent. Findings are in line with studies done by Kremer et al (2008) promotional expenditures have a significant and positive effect on sales in pharmaceutical markets. On the other hand in the study of Adewale & Adesola (2013) the relationship between promotion consideration and business performance is significant, but the relationship is negative. According to research done by Cheruiyot & Peter (2016) findings revealed that direct marketing advertising, personal selling, sales promotion and public relations enhance the company's performance by enhancing customer attraction, customer loyalty, sales volumes, branch expansion and reminding customers.

d) Promotional mix type which highly influence performance

From the regression analysis, one can notice that the highest influential factor of overall performance is personal selling. The coefficient of personal selling is 0.195 which represents the direct relationship between personal selling and overall performance of pharmaceutical product importers. The estimated positive sign indicates that for one unit increase in personal selling, the overall performance will increase by 0.195.

From the regression analysis, the second highest influential factor of overall performance is public relation. The coefficient of public relation is 0.146 which represents the direct relationship between public relation and overall performance of pharmaceutical product importers. The estimated positive sign indicates that for one unit increase in public relation, the overall performance will increase by 0.146.

From the regression analysis, the third influential factor of overall performance is advertising. The coefficient of advertising is 0.127 which represents the direct relationship between advertising and overall performance of pharmaceutical product importers. The estimated positive sign indicates that for one unit increase in advertising, the overall performance will increase by 0.127.

Chapter 5: Summary, Conclusion and Recommendation

5.1. Summary

This study was designed to assess the relationship between promotional mix elements and performance of pharmaceutical companies in Addis Ababa. Hence this section summarizes the key findings as presented by the respondents. The study was guided by three specific objectives:(i)Assess the influence of promotional mix elements in performance of pharmaceutical companies in Addis Ababa.(ii)To investigate promotion trend exercised by pharmaceutical companies in Addis Ababa.(iii)To assess effective promotional mix in company performance of pharmaceutical companies in Addis Ababa. The chapter also gives conclusion and recommendation for improvements and further studies.

5.2. Summary of the Findings

The studies revealed that majority of the respondents were male. Majority of the respondents were aged between 21 and 30 years. The majority of respondents are degree and diploma holder.

Majority of the respondents indicated that the company had a marketing department. They further indicated that promotional activities responsible parties in the company are medical representatives, sales person and marketing departments. Majority of the respondents indicated that the company promotional expense covered by manufacturing company. Almost all of the respondents indicated that the company had procedure of tracking and analyzing the effectiveness of the promotional activities. Most of the respondents indicated that the company evaluated the impact of their promotional campaign monthly.

The regression analysis shows personal selling has significant positive effect on overall company performance with (B=.195, P<0.05). Personal selling has impact on company performance this is due to face to face contact with customers (Doctors, whole sellers and retailers) and can deliver the message as per the client. So that the seller persuades and helps the buyer decide to purchase.

The regression analysis shows advertising has significant positive effect on overall company performance with (B=.127, P<0.1). The study reveals that even there is a restriction on pharmaceutical advertising in TV and radio, by using other means of advertising materials like leaflet, company symbol and logos etc...disseminate company information and create

brand awareness to a large number of targeted audiences at once. This has influence on doctor's prescription decisions and pharmacist recommendation.

The regression result additionally exhibited that public relation has significant and positive relationship with overall performance of the company with ($B=0.146$, $p\text{-value} < 0.05$). It implies public relation focused on the whole company and the main aim is to influence public opinion. By participation in community activities for fundraising, medicine donation for government hospitals, sponsorship of special events and other public works contribute in the development of the society and also improve the image of the organization.

Control variable age has significant and negative relationship with overall performance of the company with ($B=-.125$, $p < 0.10$). This may be due to most of promotional jobs are in the field and need more energy and motivation.

5.3. Conclusion

The study assesses the relationship between promotional mix elements and company performance of pharmaceutical product importers in Addis Ababa. 20.7% of the dependent variable (performance) is explained by the independent variables (personal selling, sales promotion, advertising, public relation and direct marketing. personal selling, advertising and public relation has a significant and positive effect on performance of pharmaceutical product importer companies. And also control variable age has a significant but negative effect on overall performance.

An analysis of the promotional mix elements and company performance also revealed that promotional activities affects company financial performance, volume of sales and product movement to a great extent and also in profit margin, pharmaceutical firm education and sponsorship of events and customer retention to a moderate extent.

In addition to that the study revealed pharmaceutical product importers use personal selling, sales promotion and promotional mix elements to a moderate extent and direct marketing advertising and public relation to a small extent.

From the results, it can be concluded that promotional mix elements had a great effect on performance of a company. Therefore pharmaceutical companies should improve the extent to which they use promotion mix elements.

Due to the strong regulation of pharmaceutical product promotion in the country the use of some promotional mix elements by pharmaceutical companies is limited. Responsible body in the promotion activity of the company should select the right promotional mix element to their products in order to meet the expectations of the target audience.

5.4. Recommendation

This study forwards the following recommendations,

First, due to globalization and development of technologies the marketing environment is changing rapidly. The awareness and number of people using technologies is highly increasing. In light of the above findings, there is a limitation in the use of promotional mix elements in the country. There is a tight regulation of promotion and advertisement of drugs DACA (2008).It would be of importance if the FMHACA could revise tight regulation in promotion of pharmaceutical products.

Second, the study revealed that promotional mix elements have positive and significant effects on overall performance. However it is recommended that importers should invest on the right promotional mix elements and it's important to monitor the effects of promotion on their performance since all the promotional mix elements may not necessarily influence the performance of pharmaceutical product importers.

Third, the success of these industries lies largely on their marketing strategies. Strategic marketing is backbone of the business. Promotional strategy makers in the pharmaceutical industry should select the right cost effective promotional methods based on their goals and also update promotional tools distribute to customers. In addition, more focus in designing promotional strategies need to focus on personal selling and advertising since they are factors strongly influencing the performance of pharmaceutical companies as the findings of this study indicated.

Fourth, the study analyzed the relationship between promotional mix elements and overall performance of pharmaceutical product importer in Addis Ababa. This study has served as a direction for future research on promotional mix elements in pharmaceutical industry. A similar study could be carried out in other importing and manufacturing industries within Ethiopia. Similar study could also aim at the strategies that these importers and manufacturing pharmaceutical firms could be competitive in the local and foreign market.

5.5. Limitation of the study

Most of the companies were located far much away from each other and difficult to get there exact address. The works of the respondents were usually out of office they will be available in the office for a short time and therefore they required a lot of time in order to fill in the questionnaires. The study only focuses on pharmaceutical product importers in Addis Ababa due to budget and time.

The research adopts descriptive design which is rigid design. So that cannot provide answer to the why and how part of pharmaceutical product promotional activities in Addis Ababa.

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APPENDIX I: Questionnaire

Instruction

Dear respondents, I am carrying out a research study to assess the relationship between promotional mix elements and overall performance of pharmaceutical product importers in Addis Ababa. The research is carried out as a minimum requirement for award of degree of Masters of Business Administration (MBA) at Addis Ababa university. Your participation will be highly appreciated. All responses provided will be treated confidentially for academic purposes. Kindly answer all questions by ticking or explaining as appropriate as per your opinion and based on the facts.

SECTION ONE: GENERAL INFORMATION

1. Name of the firm

2. Position of the respondent

3. Please indicate your Gender Male Female

4. Please tick the age in which you fall.

21-30 years

31-40 years

41-50 years

51-60 years

Above 60 years

5. Level of education

Diploma Degree Masters

Other, please state.....

6. Do you have a marketing department?

Yes No

7. Who is in charge of promotion activities in your organization?

.....

8. Who covers the promotional activity expenses of the organization?

Manufacturing company Your Company

If any other, please state

8. Does your firm have a procedure of tracking and analyzing the effectiveness of your promotional activities?

Yes No

If yes, after how long the company evaluate the impact of your promotional campaign?

a) Monthly

b) Quarterly

c) Semiannually

d) Yearly

e) Other, please state

SECTION TWO: On a scale of 1-5. How would you rank the effectiveness on sales of the following promotion mix elements by your company? (1-to very small extent,2 -to a small extent, 3-to a moderate extent. 4-to a great extent,5-to a very great extent)

	To very small extent (1)	To a small extent (2)	To a moderate extent (3)	To a great extent (4)	To a very great extent (5)
i) Personal Selling:					
Medical representatives	1	2	3	4	5
Group presentations	1	2	3	4	5
Product demonstrations	1	2	3	4	5
Pharmacist's advice	1	2	3	4	5
Salesperson (order taker)	1	2	3	4	5
Support through new technologies(electronic detailing)	1	2	3	4	5
(ii) Sales Promotion:					
Premium and gifts (Branded gifts e.g. pens, calendars)	1	2	3	4	5
Sampling (Free medical samples)	1	2	3	4	5
Fair &. trade show (pharmaceutical trade fairs)	1	2	3	4	5
Entertainment (Doctors nights. Distributors dinner parties)	1	2	3	4	5
Continuity programs (Continuous medical educations)	1	2	3	4	5
Bonus (Cash discounts, product discounts)	1	2	3	4	5
Sponsorship (Doctors travel expenses, trophies)	1	2	3	4	5
(iii) Advertising;					
Television	1	2	3	4	5

Radio	1	2	3	4	5
Branded Posters & leaflets	1	2	3	4	5
Directories (dedicated pages for your company)	1	2	3	4	5
Point of purchase display (Floor and wall mats)	1	2	3	4	5
Company Symbols and logos	1	2	3	4	5
Branded Brochures and booklets	1	2	3	4	5
(iv) Public Relations					
Speeches (By leading doctors e.g. Physicians, Surgeons)	1	2	3	4	5
Seminars for doctors	1	2	3	4	5
Charitable donations(Money, free medicine)	1	2	3	4	5
Publications in medical journals	1	2	3	4	5
Community relations (corporate social responsibility)	1	2	3	4	5
Company magazines	1	2	3	4	5
(V)Direct marketing					
Catalogs (product lists, price lists, new introductions)	1	2	3	4	5
Mailings (Individuals and groups of customers)	1	2	3	4	5
Telemarketing(doctors, distributors, retailers, hospitals)	1	2	3	4	5
Fax mail (doctors, distributors, retailers, hospitals)	1	2	3	4	5
E-mail (doctors, distributors, retailers, hospitals)	1	2	3	4	5

Section 3: 1. On a scale of 1-5. How would you rank the extent of use of the following promotion mix elements by your company? (1-to very small extent, 2 - to a small extent, 3 -to a moderate extent, 4- to a great extent, 5-to a very great extent)

Items	To very small extent (1)	To a small extent (2)_	To a moderate extent (3)	To a great extent (4)	To a very great extent (5)
Promotional Mix elements	1	2	3	4	5
Advertising	1	2	3	4	5
Sales promotion	1	2	3	4	5
Personal selling	1	2	3	4	5
Public Relation and publicity	1	2	3	4	5
Direct Marketing	1	2	3	4	5

Section 4:

a) Promotional mix elements and organization performance

To what extent has the performance of your pharmaceutical firm improved as a result of adoption of Promotional mix elements? Use 1-Very low extent, 2-Low extent, 3-Moderate extent, 4-Great extent, 5-Very great extent

Items for performance	To very small extent (1)	To a small extent (2)	To a moderate extent (3)	To a great extent (4)	To a very great extent (5)
Increased financial performance	1	2	3	4	5
Helps for increased volume of sales	1	2	3	4	5

Help for improved profit margin	1	2	3	4	5
Help for faster movement (turnover) of drugs	1	2	3	4	5
Help for increased pharmaceutical firm education and sponsorship of events	1	2	3	4	5
Help for increased customer retention	1	2	3	4	5

Section 4

b) Effects of Promotion performance in pharmaceutical industry

What is your level of agreement with the following statements regarding effect of promotion on performance in pharmaceutical industry? Circle using a scale of 1to5 where 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, and 5=strongly agree

		Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
	Performance items					
1	Profitability of my company has increased since we start importing	1	2	3	4	5
2	We do all efforts retaining existing customers	1	2	3	4	5
3	Our follow ups in assisting customers to find products is very high	1	2	3	4	5
4	Since we start importing we have reached our sales targets	1	2	3	4	5
5	We regularly exercise product demonstrations to enhance product	1	2	3	4	5

Note the measurement instrument is adopted from Kamba (2010).

Thank you for your cooperation!!!

APPENDIX II: Scatter plot with line of fit

