EFFECTIVENESS OF PROMOTIONAL ACTIVITIES OF PHARMACEUTICAL FIRMS: A COMPARATIVE STUDY AMONG THREE MULTINATIONAL PHARMACEUTICAL FIRMS IN TURKEY

by

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EFFECTIVENESS OF PROMOTIONAL ACTIVITIES OF PHARMACEUTICAL FIRMS: A COMPARATIVE STUDY AMONG THREE MULTINATIONAL PHARMACEUTICAL FIRMS IN TURKEY

The purpose of this thesis was to determine empirically the effectiveness of promotional activities of foreign pharmaceutical firms from the point of view of doctors. Three foreign pharmaceutical firms; Pfizer, Roche, Bifa were selected for comparison of promotional activities. These three firms are the leading foreign manufacturing companies in pharmaceutical industry in Turkey.

A total of thirty four internists were selected to study the effectiveness of promotional activities of Pfizer, Roche, Bifa and pharmaceutical firms in general. The marketing managers of Pfizer, Roche and promotion manager of Bifa were interviewed also to get information on the scope of their market penetration in Turkey, promotional expenditures and sales, number of personnel employed, organization of marketing practices, perception of their promotional effectiveness vs. the other firms. The data collection instrument in both the main study and the manager interviews were questionnaires. The questions were administered through personal interviews.

Findings of the study indicate that not much difference exist among Pfizer, Roche and Bifa in terms of effectiveness of promotional activities according to doctors. But with a slight difference Roche and Bifa is ahead of Pfizer. Also other findings that can be generalized are, promotional activities of pharmaceutical firms are thought to be important both by internists and managers but insufficient according to internists.

This research is guiding not only for multinational pharmaceutical campanies, but also for domestic ones. Although most of the

questions in questionnaires were about multinational firms and specifically about Pfizer, Roche and Bifa; still some questions were asked in general and helped us to learn the perceptions of doctors and the managers of the three companies, about various promotional activities.

ÖZET

İLAÇ FİRMALARININ REKLAM VE TANITIM FAALİYETLERİNİN ETKİNLİĞİ: TÜRKİYE'DEKİ ÜÇ YABANCI FİRMAYI KARŞILAŞTIRAN BİR ÇALIŞMA

Bu tezin amacı doktorlara göre yabancı ilaç firmalarının reklam ve tanıtım faaliyetlerinin etkinliğinin deneysel olarak saptamaktır. Reklam ve tanıtım faaliyetleri bakımından karşılaştırmak üzere üç yabancı firma seçilmiştir. Bunlar Pfizer, Roche ve Bifa'dır. Bu üç firma Türk ilaç endüstrisinin en önde gelen yabancı ilaç firmalarındandır.

Pfizer, Roche, Bifa ve genel olarak ilaç firmalarının reklam ve tanıtım faaliyetlerinin etkinliğini araştırmak amacıyla otuzdört dahiliyeci seçilmiştir. Aynı zamanda Pfizer ve Roche'un pazarlama müdürleriyle, Bifo'nun reklam ve tanıtım müdürleriyle firmalarının Türkiye'de kaç yılda faaliyette bulunduğu, sermaye oranı, reklam harcamaları, satış tutarları, çalışan kişi adeti, pazarlama departmanının organizasyonu, kendi firmalarının ve diğer iki firmanın reklam ve tanıtım faaliyetlerini nasıl algıladıklarını öğrenmek amacıyla röportaj yapılmıştır. Hem esas araştırmada hem de müdürlerle yapılan röportajda bilgiler anket yoluyla elde edilmiştir. Anketler kişisel röportajlar yapılarak doldurulmuşlardır.

Araştırmanın bulguları doktorlara göre Pfizer, Roche ve Bifa arasında reklam ve tanıtım faaliyetlerinin etkinliği açısından fazla bir farklılık olmadığı yönündedir. Fakat ufak bir farkla Roche ve Bifa'nın Pfizer'e göre daha etkin olduğu saptanmıştır. Ayrıca genelleştirebileceğimiz diğer bulguları şöyle ifade edebiliriz: İlaç firmalarının reklam ve tanıtım faaliyetleri hem dahiliyeciler hem de müdürler tarafından önemli bulunmaktadır fakat dahiliyecilere göre bu faa-

liyetler yetersiz kalmaktadır.

Bu araştırma sadece çok uluslu ilaç firmaları için değil aynı zamanda yerli firmalar için de yol gösterici olabilir. Anketlerdeki çoğu soru yabancı firmalar ve özellikle Pfizer, Roche ve Bifa hakkında olduğu halde, bazı genel sorular da sorulmuştur. Bu genel sorular bize doktorların ve üç firmanın müdürlerinin çeşitli reklam ve tanıtım faaliyetleri hakkında neler düşündüklerini öğrenmemizde yardımcı olmuştur.

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INTRODUCTION

Parallel to the triend in the world, great developments in the Turkish pharmaceutical industry can be traced mainly after Second World War.

In fast development period of Turkey which is between 1953-1957; many foreign pharmaceutical firms had entered Turkish pharmaceutical market raising the production capacity and quality standards.

There has been a number of studies done about pharmaceutical Industry in Turkey; but so far, very few studies have been conducted with the purpose of measuring effectiveness of promotional activities and campaigns of pharmaceutical firms. This study's main aim is to have an understanding of promotional strategies of foreign pharmaceutical firms in Turkey which have great contributions to the development of Turkish pharmaceutical Industry.

In order to limit the scope of the study three leading foreign pharmaceutical firms were selected for comparison. These three firms were Pfizer, Roche and Bifa (Birleşik Alman İlaç Fabrikaları:Bayer, Schering,Knoll). The marketing managers of Pfizer and Roche; the promotion and market research managers of Bifa were interviewed to get information on the firm's establishment year, capital ownership in Turkey; number of products produced by the company, increase in promotional spendings and sales figures in the last 5 years, number of people worked in the company, marketing system's organization and perception of themselves, the other 2 firms and foreign pharmaceutical firms in general in terms of effectiveness of promotional activities and campaigns. The above informations received from company managers were used mainly as explanations for firms' activities in the paper.

The main research was conducted among 34 internists. Internists were chosen to be interviewed because the 3 firms which were studied had approximately the same number of products serving the needs of internists.

By the help of the questions asked to the internists, the perceptions of doctors about the effectiveness of promotional activities and campaigns of Pfizer, Roche, Bifa and pharmaceutical firms in general were studied.

The main purpose of the study is studying the similarities and differences among foreign pharmaceutical companies in terms of promotional strategies although differences exist in other organizational factors such as number of years the firms are in Turkey, capital ownership in Turkey, number and types of products produced, promotional spending and sales figures, number of personnel employed, organizational structure and many others.

Findings of the study indicate that there are not much differences among Pfizer, Roche and Bifa in terms of effectiveness of promotional activities and campaigns according to the doctors interviewed. But with a slight difference Roche and Bifa are a head of Pfizer.

This research has been designed with major emphasis on doctor's perception of effectiveness of promotional strategies of pharmaceutical firms which is an important tool of marketing management. The significance of the study is that the effective and successful promotional strategies will contribute to marketing management's success at first and then to overall success of the firm.

I. THE PHARMACEUTICAL INDUSTRY

Before having a closer look at promotional strategies of pharmaceutical firms and the effectiveness of these strategies, a general understanding of pharmaceutical industry in Turkey will be helpful in showing the problems and opportunities in the firms' existing or potential markets that can be created by environmental factors. Environmental conditions should be totally investigated and understood in order to succeed in application of corporate strategies.

1.1. DEFINITION

The pharmaceutical industry is a branch of the manufacturing industry which produces simple or complex formulation of chemical or biological substances in serial form according to scientific standards for the purpose of curing and protecting people.

Medical products are presented in different forms to serve needs of people. These forms are: powder, granule, tablet, drageé, capsule, ampoules, drops, syrup, solutions, ointments suppository, ovule, etc. (İlaç ve Kimya İşverenler Sendikası, 1984).

1.2. HISTORICAL DEVELOPMENT

Historical development of Turkish pharmaceutical industry can be analyzed in 3 different periods

1. The period until constitution of Republic
2. The period between constitution of Republic and the end of Second World War
3. The period after the end of Second World War.

1.2.1. The Period until Constitution of Republic:

In this period production was made in pharmacies. Later by the

increase in consumption, labarotories and firms were established. By 1915, 30 different types of produced could be producet but these were limited in treatment capability. Therefore many drugs were imported. There was neither quality nor price control. Also licence permit for imported products did not exist.

1.2.2 The Period Between Constitution of Republic and the end of Second World War

In 1928 a new law was passed (Number 1962, Tıbbi ve İspenciyari Müstahzarlar Kanunu). By this law control of drug import and production was achieved, leading to development of domestic drug industry as a result of free competition between the local producers and importers. During Second World War domestic production has contributed a lot to Turkish people's health (İlaç ve Kimya İşverenler Sendikası,1984).

1.2.3. The Period After the Second World War

After the enactment of the Law of Foreign Capital Encouragement in the year 1954 (Number 6224, Yabancı Sermayeyi Teşvik Kanunu) foreign companies started to make investments. According to this law, the foreign companies could invest in the form and amount they wished, could import raw materials for their productions from their parent companies with easier payment terms and could transfer their earnings out of Turkey (İstanbul Ticaret Odası, YSTK, 1961). At that time domestic firms were not able to compete with foreign firms, however as time passed they were able to compete. Foreign pharmaceutical firms contributed to the development of Turkish pharmacetical industry a lot. Today, Turkey by the help of the domestic and foreign pharmaceutical firms can meet both the country's demand and can export.

1.3. DISPERSION OF PHARMACEUTICAL INDUSTRY BETWEEN SECTORS

In Turkey, pharmaceutical production is handled by 2 sectors

1. Public Sector

2. Private Sector

1.3.1. Pharmaceutical Firms in Public Sector

Production in public sector is undertaken by following institutions:

(1) Institution of Social Security (SSK)

(2) Ministry of Defense

(3) Refik Saydam Hıfzısıhha Institution which is dependent on Ministry of Helath

(4) Kızılay Plazma Fraksiyon Laboratories

(5) Bolvadin Alkaloid Factory

The public sector meets 1-2 percent of the total parmaceutical production (DPT Special Comission Report, 1987).

1.3.2. Pharmaceutical Firms in Private Sector

In private sector there are 81 firms. Seven of the firms are owned by foreign capital while 74 are owned by local capital.

Table 1-1 shows the market shares of foreign and domestic pharmaceutical firms in Turkey in 1982 and 1983.

Table 1-1 : Market Shares of Foreign and Domestic Firms in Turkey

Years	Domestic Firms (Local Capital)	Foreign Firms (Foreign Capital		
		Swiss Firms	German Firms	US Firms
		3 Firms	2 Firms	2 Firms
1982	62.1%	19.6%	11.7%	6.6%
1983	64.1%	19.8%	10.3%	5.8%

Source: Report of İlaç ve Kimya İşverenler Sendikası 1984, p.19.

The ranking of the private pharmaceutical firms according to market shares show that there is an uneven distribution among firms. The top 10 covers 58.53% of the total industry sales, while the top 20 covers 81.05% and the top 30 has 91.47% of the total market share (Report of Bileşim Medical, 1986).

Table 1.2 shows the top 30 leading firms in pharmaceutical industry.

Table 1-2: Market Shares of Private Pharmaceutical Firms in 1986

Rank No	Manufacturer	Market Share %	Cumulative M.S. %
1	Eczacıbaşı	10.11	
2	Roche	7.40	
3	Mustafa Nevzat	7.09	
4	Deva	6.19	
5	Bayer	5.98	
6	Pfizer	5.18	
7	Sandoz	4.86	
8	Türk-Hoechst	4.02	
9	Ciba Geigy	3.95	
10	İbrahim Ethem	3.75	58.53
11	Fako	3.55	
12	Bilfar	3.48	
13	Santa-Farma	3.06	
14	Abfar	2.38	
15	Birsan	2.17	
16	Wyeth	1.88	
17	Doğu İlaç	1.79	
18	Atabay	1.76	
19	SSK	1.73	
20	Abdi İbrahim	1.45	81.05
21	Ali Raif	1.40	
22	Sifar	1.34	
23	Dr.F.Faik	1.30	
24	Padeko	1.12	
25	Embil	1.04	
26	Schering	.94	
27	Squibb	.91	
28	Biofarma	.83	
29	Glaxo	.81	
30	Nobel	.73	91.47

Source: Report of Bileşim Medical Araştırmalar Şirketi, 1986, p.6

1.4 PRODUCTION

In 1983 like in market share figures, 93.64% of the total production was made by the top 30 companies. In 1984, 99.1% of the country's pharmaceutical requirement was met by local production. However, 70% of the raw materials were imported. Only 16 companies were involved in producing raw materials (Environmental Survey WD MM 1986).

Turkish pharmaceutical firms are now quite advanced considering machinery, equipment, qualified technical personnel, production methods and technology. In fact, the Turkish pharmaceutical industry has now reached to the level of transferring technology to underdeveloped countries.

The Turkish pharmaceutical production suffered a considerable decline prior to 1980 as the result of continuing political unrest and its effects lasted until recently; therefore number of companies withdrew altogether. With the decline in production capacity utilization fell down leading to idle capacity. Technological reasons like aging of machinery and equipment that were not renewed lead to idle capacity also and these resulted in high costs of production in return (DPT Special Commission Report, 1987).

Technology used in pharmaceutical production is either developed by our firms or imported from abroad by know-how or licence agreements.

Pharmaceutical production figures for 1978-1983 are given in Table 1-3.

Table 1-3 Pharmaceutical Production Units and Values for 1978-1983

Years	Units	Values (Million TL)
1978	365 208 100	6900
1979	333 390 850	10900
1980	370 803 030	24100
1981	456 540 500	41578
1982	556 970 630	62661
1983	515 060 000	73078

Source: Report of İlaç ve Kimya İŞverenler Sendikası, 1984, p.27-28.

The production figures for active raw materials which except for Bolvadin Alkaloid plant all belong to 15 private sector firms are shown in Table 1-4.

Table 1-4 Production Figures of Pharmaceutical Active Row Materials for 1979-1983

Year	Production in Kgs(000)	Values (Million TL)
1979	1808	1718
1980	1360	2829
1981	1824	5293
1982	2166	6585
1983	3146	8816

Source: Report of İlaç ve Kimya İşverenler Sendikası, 1984, p.29.

1.5 CONSUMPTION

In Turkey as the result of last developments of pharmaceutical industry after 1950 by applying modern technology most of the demand of the public could be met by domestic production parallel to this development, drug consumption had also increased. However when compared with the industrialized countries of the world drug consumption in Turkey as percentage of GNP is quite low. Between the years 1972-1982 the ratio of drug consumption to GNP changed between .63% and .95%. In 1983 drug consumption per capita was 2068 TL (9.2$).

Table 1-5 shows the relationship between income and drug consumption per capita in Turkey and other countries.

Table 1-5 Per Capita Income and Drug Consumption in Turkey and Other Countries (1982)

Countries	Income per Capita($)	Consumption per Capita($)	%*
U.S.A	9700	79	.81
Japan	7330	99	1.35
Germany	9600	85	.89
France	8270	85	1.03
Italy	3840	50	1.30
Great Britain	5030	48	.95
Spain	3520	41	1.16
Brazil	1570	11	.70
Canada	9170	50	.55
Argentina	2042	37	1.81
India	159	2	1.26
Mexico	1290	13	1.01
South Korea	1160	21	1.81
Belgium	9040	60	.66
Switzerland	12100	78	.64
Turkey	1210	11	.91

Source: Report of İlaç ve Kimya İşverenler Sendikası, 1984, p.36.

*This column explains the relationship between income per capita and consumption of drugs per capita in a specific country. It indicates the percent of income per capita spent for drug consumption per capita.

1.6. TRADE

Prior to 1984 there were severe restrictions on imports into Turkey. Products could not be imported if only packaging or labeling was to be carried out locally; finished dosage forms could not be imported in large quantities except for life-saving drugs; and semi-finished products which were already manufactured locally were banned. Ninety nine percent of pharmaceutical imports were raw materials. In 1984, the Turkish importation laws were reversed so that anything could be imported unless on figured certain lists.

In another change in 1986, the importation laws were liberalized and now the only banned pharmaceuticals are narcotics.

Finished goods now account for 2% of pharmaceutical imports and it is expected that this figure will rise.

Imported drugs require a certificate of free sale from the exporting country.

Results of Laboratory studies on finished products from abroad must be submitted to the Ministry of Health and Social Assistance, bearing the signature of responsible person. Original package inserts should be also submitted.

Import duty of 40-50% was charged on all pharmaceuticals and raw materials except antibiotics until 1984. In that year, import duty on pharmaceutical raw and auxillary materials was removed in lieu of a price increase. This concession was extended through 1985 and included other pharmaceuticals not produced locally.

Pharmaceutical trade figures for the years 1979-1983 are given in Table 1-6.

The principal destinations for exports are: Iraq, Libya, Egypt, Tunisia, Saudi Arabia, Iran and Algeria. The main sources of

imports are: U.S.A., West Germany, other European countries and Japan (Environmental Survey WDMM 1986).

Table 1-6 Pharmaceutica Trade 1979-1983

	(Million $)				
	1979	1980	1981	1982	1983
Imports					
Finished Products	1.927	1.847	1.549	1.688	5.125
Raw Materials	70.000	90.700	111.900	92.200	102.600
Exports					
Finished Products	1.412	1.982	3.684	11.410	7.540
Raw Materials	.760	2.118	3.195	4.526	5.311

Source: Report of İlaç ve Kimya İşverenler Sendikası, 1984, p.47-48.

1.7 PRICING

Prior to 1985, the prices of pharmaceuticals were set at launch according to a formula allowing a standard mark-up over industrial costs. Price rises were subsequently adjusted by decree, but only once the industrial cost had increased by 10% or more. The process was extremely slow and many companies experienced severe financial difficulties due to the falling value of the Turkish lira and increasing costs.

In 1985 a new system of pricing was introduced in line with the government's liberal economic policy. Manufacturers may set their own price, informing the General Directorate for Drugs and Pharmacies at least ten days before they start to market their products at that

price. If they do not hear from the Ministry within the ten,day period, they may proceed with the new price.

However, manufacturers must not exceed a profit of 15% on their yearly sales revenue, with a maximum 20% profit on any one product. Yearly sales revenue is net income from drug sales after deducting discounts, returns, etc., within one accounting period. Manufacturers must keep separate records of drug production and sales, and must submit evidence of increased costs with their price application.

Importers are allowed 14% profit on their import costs.

Wholesalers may sell at a maximum of 9% above the manufacturer's selling price or importer's selling price. Retailers are allowed to add a maximum of 25% to the wholesaler's selling price. The final price structure is approximately as given below (Environmental Survey WDMM, 1986).

Manufacturer's selling price	100 TL.
Wholesaler's selling price	109 TL.
Pharmacist's selling price*	136.25 TL.

*Value added tax which is 5% is not included.

1.8. DISTRIBUTION

There was a total of 9361 retail pharmacies, 308 wholesales and 12703 pharmacists of whom 30% were employed in public sector in 1984 (Report of İlaç ve Kimya İşverenler Sendikası, 1984).

Manufacturers supply wholesalers but also sell directly to retail pharmacies, hospitals, SSK units and government health centers. Wholesalers supply retail pharmacies and hospitals.

The Ministry of Health and Social Assistance and SSK buy

directly from manufacturers by tender (Environmental Surveys WDMM, 1986).

1.9 PRODUCT INFORMATION

Advertising of prescription drugs to the public is not permitted; advertisements may appear only in a medical and pharmaceutical journals.

Advertising of nonprescription drugs to the public must be approved by the Ministry of Health and Social Assistance, even for products such as dental creams.

Samples, which may be distributed only during the first three years of marketing from the date of the marketing licence, are given only to the members of the medical profession and to hospitals. Total sampling should not exceed 5% of the annual sales volume.

Pharmaceuticals are excluded from patent protection. Pressure from private companies for the introduction of some form of patent protection has so far been ineffective. However a new patent law is being prepared and the situation may change.

Trademark protection is available initially for a period of ten years from the date of registration. Thereafter it may be renewed within the first three years following registration exiry. However, trademark rights must be registered annually and a certificate is issued to record such rights. A new trademark law is being prepared and some of these details may be changed (Environmental Surveys WDMM, 1986).

II. THE PROMOTIONAL STRATEGIES OF PHARMACEUTICAL FIRMS IN GENERAL

This chapter deals with on important and challenging area of pharmaceutical marketing management - the promotion. It is also an area of responsibility requiring detailed product knowledge, creative thought and the ability to coordinate the activities of individuals and organizations inside and outside the firms.

2.1. THE IMPORTANCE OF SUCCESSFUL PROMOTION IN PHARMACEUTICAL FIRMS

Promotion plays a vital role in a product's success in today's increasingly competitive market place of pharmaceutical industry. With many companies concentrating their efforts on the therapeatic sectors offering the highest potential return and with products having fewer clearly defined benefits to distinguish them from one another, promotional activities have an increased impact.

These external pressures are increased by internal demands. As an increasing number of new products became available within a pharmaceutical firm, promotional resources have to be carefully and effectively utilized. New products must achieve significant market shares rapidly, while existing products are protected against the competition. Yet, promotional resources, whether field force people or other promotional expenditures, are unlikely to expand at the same rate as the demands placed on them.

The pharmaceutical product management is faced with the following challenges:

-Producing and implementing promotional plans and programs which have greater impact on the prescribers than those of the competition.

-Effectively allocating resources to ensure an adequate balance between gaining new prescribers and protecting existing market share.

-Maximizing the effectiveness of field force time allocated to

the product because field force time is the most effective and expensive promotional resource currently available (A report prepared by Pfizer, 1986).

2.2. THE STEPS IN DEVELOPING AN EFFECTIVE PROMOTIONAL PROGRAM

An effective promotional program calls for following steps

- Identifying target market and its needs
- Determining the promotional objectives
- Designing the message
- Selecting the promotional mix
- Preparing promotional budget
- Implementing the program
- Measuring the performance

(Guiltinan and Paul, 1985).

In the following pages the above Steps will be explained in detail.

2.3. IDENTIFYING THE TARGET MARKET AND ITS NEEDS

Today considerable effort is invested to ensure that promotion is directed at the market segment most likely to provide the highest return. Therefore market research is the foundation of effective promotional programs (Dunn and Barban, 1986).

Research should clearly define the market segment which forms the target market for promotion and the market plan should identify it clearly also. An example of a product and its target market is as follows Cough/Cold products-Pharmacist, practitioners, internists.

After establishing market at which promotion is to be directed, we must understand its needs. Again such knowledge must be gained by research rather than guessing.

Then, a meaningful message must be designed to increase physician's retention of the product's main attributes. While designing the message one thing must be kept in mind, that is, effectiveness of a message is reduced if it is general: therefore, a message must match to a specific physician's needs and interests (Maclachlan, 1984).

2.4. DETERMINING THE PROMOTIONAL OBJECTIVES

Having idenitfied the target market and its needs, the next step in developing an effective promotional plan is to set promotional objectives.

The response required from the target market as a result of the promotion must be clearly defined. For example, should promotional activity set out to increase awareness of a new product within the target market or is it seeking to re-confirm the physician's original decision to prescribe on existing in-line product?

The responses which form promotional objectives are as follows: (Dunn and Barban, 1986).

2.4.1 Awareness

Awareness is particularly important during the pre-launch and launch phases of a product because put simply, a physician will not consider prescribing a product if he does not know it exists.

2.4.2 Interest

If awareness has been achieved, the next objective is to arouse physician's interest in using the product.

2.4.3 Evaluation

The next step having achieved interest, is to ensure that

target physician evaluates the efficacy, safety and convenience of the product for treating the illness.

2.4.4 Trial

Having persuaded the physician to evaluate the product and establish its advantages over existing therapy, promotion should then encourage trial in a growing number of patients. This is one of the most important steps in promotion process. The physician is now beginning to commit himself/herself to the product which, if it lives up to his/her expectations, will become a regular part of his/her prescribing pattern.

2.4.5 Adoption

The physician has adopted the product when it becomes a regular prescribing choice. He/she now understands and accepts the product's benefits, and it is part of his/her day-to-day practice.

2.4.6 Reconfirmation

Having achieved adoption of the product it is easy to sit back and think that there is no need to do more. This is dangerous because competitions will attempt to dislodge the products from the physicians day to day prescribing or at least minimize its use compared to their own product. Therefore, the initial prescribing decision must be constantly reconfirmed by enhancing the physicians self esteem by assuring him/her that he/she has made the correct decision for his/her patients.

2.4.7 Reminder

Having reached a late stage in the product life cycle, continued conversion of new prescribers is unlikely and as new therapeutic advances became available, the extent of usage will

probably diminish. At this point, promotion reminds physician of the continued availability of a drug which they have found effective and well-tolerated over years of experience.

Determining the response we are seeking is a critical step in developing on effective promotional program by setting on objective. "Objectives are the means through which we obtain our performance checks and this permits modifications in strategy and tactics." (Dunn and Barban, 1986, p. 278). However the objectives should always be achievable, realistic, measurable and should be clearly stated in the marketing plan for attaining successful outcomes (Guiltinan and Paul, 1985).

2.5 DESIGNING THE MESSAGE

Ideally a message should be attension getting, interest arousing and action creating. This kind of a message is essential for successful promotion whether through sales force, journal advertising, promotional material, mailings or by other means (Malachlan, 1984).

To achieve the ideal message it is necessary to decide on:

- Which message does management want to communicate?
- How can management communicate it effectively?
- Who should communicate the message?

2.5.1 Which Message Does Management Want to Communicate?

After finding out the needs of target market, it is necessary to identify the benefits which will motivate the target group to take the action the management desires. For example; trial of the product. This is the promotional platform. "The promotional platform for any product is the benefits which set it apart from all others in its therapeutic category and which provides a meaningful reason for the

physician to try and, subsequently adopt, the product in preference to others." (Report prepared by Pfizer, 1986)

According to the promotional platform a promotion should:

- Make a definite proposition to the physician. E.g. If you prescribe this product, you'll get this specific benefit.

- The proposition must be one that a competitor cannot or does not offer.

- The proposition must be meaningful.

2.5.2 How Can the Management Communicate the Message Effectively?

The message needs clearly presented evidence and support for the claims made for the product. According to the research results, a message is more effectively communicated and the desired action is more readily achieved if

- The conclusion is clearly stated

- The arguments are fair and balanced (Maclachlan,1984)

Also the message must attract the target group's interest because of its content and the way in which it is presented whether mailing, journal advertising or detailing material.

2.5.3 Who Should Communicate the Message

The impact of the message is highly related to the authority which communicates it.

For example if data is presented by a well trained sales representative who has considerably knowledge, the subject will receive respect. But if the some data is presented by an inexperienced, poorly trained sales representative it is not likely that the subject

will find acceptance.

The same principle applies in other forms of promotion. The endorsement given to a product by an opinion leader in a published literature, in a paper at a symposium or on a film has a considerable testimonial value. The opinion leader is perceived as an unbiased third party who has tried the product and adopted it; therefore encourages target group to follow.

Also, advertising placed in an editorially authoritative journal will achieve greater credibility than that placed in a commercial give away newspaper.

We should bear in mind that the most effective medium for communicating a message is the one that possesses credibility and authority (Stanton, 1967).

2.6 SELECTING THE PROMOTIONAL MIX

The media which are available to managers are many. Which one to choose depends on the target market, the product and the availability of promotional resources.

For pharmaceutical firms, the resources that are vailable can be basicly analyzed in 3 groups (Report Prepared by Pfizer, 1986).

1. Media
2. Sales Representatives
3. Miscellaneous

Journal advertising, mailings, films, videos, closed circuit TV's, telenet work shops are examples of media.

Brochures and samples are essential materials for sales representatives during their presentations; therefore they may be thought altogether.

Symposia, seminars, clinical trials and exhibitions can be analyzed under miscellaneous group.

When we consider all of the above basic tools of promotion, the sales representatives are the most important and effective promotional resources.

Now let's have a look at explanations of basic tools of promotion for pharmaceutical firms.

2.6.1 The Field Force

In general the field force is the central and the most effective element in the promotional mix but its effectiveness depends on many factors such as quality of training, correct choice of target group, usage of promotional aids such as samples and brochures (Jefkins, 1985).

Effectiveness of sales representativess can be maximized by

- Providing materials which clearly communicate the promotional platform.

- Selecting the segment which will provide the best return as the target market.

2.6.2 Detail Aids

Detail aids or brochures are fully effective if detailing materials are carefully produced considering the correct message to be given. Other factors must be conformed also, by detailing materials to be effective. They must be (Report prepared by Pfizer 1986).

- Easy to use
- Brand name must be clearly seen
- Product benefits must be clearly presented
- If contains diagrams, they should be clear
- References should be included
- Sales representatives must know what is in it by heart

Involving field force in development of detail aids is a very important issue.

2.6.3 Samples

If regulations permit, sampling is an important part of field force activity. But it may be dangerous because (Dunn, and Barban, 1986; Report prepared by Pfizer, 1986).

- It results in lost sales or prescriptions if trade packs are given as samples.

- It may be used as give - away by the sales representatives rather than for the purpose of gaining commitment from the physician.

However, if sampling is properly used

- Especially, it will increase trial and usage with a new product.

- It may reduce trial and usage of competitive products.

Samples should be integral parts of detail aids and sales representatives must be trained to use both the samples and the detail aids effectively.

2.6.4 Journal Advertising

Journal advertising, like samples and details aids is also an important support to field force activity, but it is only effective where editorially worthwhile media regilarly reach the target market. If the journals are not read, the advertisement will not be seen (Dunn, and Barban, 1986).

A journal advertising can

- Remind or introduce a product or concept to a large number of target group in a short time

- Add credibility to the products message if presented in a respectible medium.

- Be effective in terms of cost.

Journal advertisement may arouse interest but whether it will stimulate trial or usage is questionable.

2.6.5 Mailings

Mailings are not favoured much because large volume of mailings received by physicians are thrown into waste baskets, resulting in limited penetration. Also postal services may be inadequate and mailing lists be unreliable; in those cases mailing is questionable also.

A survey suggested that 20-30% of mailings actually reach the physician and a 10% return of a reply paid card is regarded as exceptional and 4% normal (Report prepared by Pfizer, 1986).

2.6.6 Clinical Trials

They often have the objective of supporting product marketing development by producing appropriate data about a products treatment of illness. In the early phases of the launch, clinical trials can be an important means of involving opinion leaders and encouraging adoption of the product (Report prepared by Pfizer, 1986).

2.6.7 Symposia and Seminars

They are expensive but effective as promotional tools. During the launch they stimulate trial and usage in a short time because of the influence of opinion leaders used as speakers. By the help of symposia and seminars large amounts of data may be communicated quickly and effectively.

Symposia and Seminars are effective if

- The event has a specific objective.
- If they support the main promotional activity directly.
- If the audience is from the target market and have not

attended the meeting as a social occasion.

- If speakers have credibility.

Symposia and seminars only reach some portion of the target market but they can be used to generate publication news, conferences for the medical media and audio visual materials.

Also, registering attendee's names and addresses provides a target group for sales representatives, mailings and other follow-up activities.

2.6.8 Other Meetings

Films and audio-visual video shows are also effective promotional tools. These meetings stimulate prescribing if they are organized regularly. In hospitals during film shows sales representatives may have access to doctors who might not otherwise be seen.

The success of these programs mainly depends on the sales representatives.

2.6.9 Literature

Large quantities of scientific literature are produced both nationwide and internationally. They directly support promotional activities. Scientific publications are particularly important during the pre-launch and launch phases when they help to build a high level of knowledge among opinion leaders and physicians who seek a scientific basis for their prescribing.

2.6.10 Gifts

Gifts, in other words leave behinds like pens, notepads, vary in usage and impact. Where regulations permit they can be useful means of obtaining and maintaining product awaraness.

They are effective if (Report prepared by Pfizer, 1986).

- Relevant to the disease area for which the product is being prescribed.

- They have retention value that will keep them in front of the physician for some time in the prescribing environment.

- They are high in quality. It is better to give a small number of physicians gifts high in quality, rather than to give a large number of physicians gifts poor in quality.

2.7 PREPARING THE PROMOTIONAL BUDGET

There are many approaches in determining how much to spend for promotional budget. Some firms use one method; others prefer a combinations of methods. Percentage of sales, unit of sale, competitive parity, all you can afford, objective method and pay out methods are some of the many approaches to determine promotional budgets (Dunn, and Barban, 1986).

Generally promotional budgets are based on a percentage of budgeted sales but if following factors are taken into account variations can occur.

- New product promotional budgets are often based on the market potential and expected market share.

- The activity of competitors introduction of new products by competitors and level of promotional spending of competitors affect promotional budgets of the firms.

- Introduction of new indications or presentations may require increased promotional expenditure for in line products.

-Segmentation may effect promotional budget also. A relatively small target group requires smaller promotional budget.

2.8. IMPLEMENTING THE PROMOTIONAL PROGRAM

One of the major steps in implementing the promotional

strategy will be the development of a promotional campaign. Whether such a campaign is prepared by the firm or an advertising agency, it requires analysis of data and classifications of objectives.

The following steps may be followed in implementing the promotional program.

- Selecting the advertising agency if product managers do not have time or expertise do produce a promotional campaign.

- Giving a written brief to the agency comprehensive in content with all the necessary information for the campaign. This brief should be approved by all the related managers of the firm.

- Evaluating agencies proposal and approving promotional material (Guiltinan and Paul, 1985).

2.9. MEASURING THE IMPACT OF PROMOTION

Depending on the availibility of in-market research resources and size of promotional budget, it is possible to collect information on the impact of promotion.

Simple questionnaires can be developed to measure product awareness and usage after promotional campaigns. Similarly, recall of certain journal advertisements and benefits being promoted for the product can be measured. However such testing of promotional materials requires professional resources.

Given the growing complexity and competitiveness of pharmaceutical advertising, research can yield a great deal of useful information. Such research reduces the risk of producing a campaign which fails to correctly communicate the promotion message and product platform. All major campaigns should be tested prior to their final execution. Also, after a campaign is actually being implemented it is often worth commissioning further research to

discover its impact on the target group's habits. Results of this kind of research assist the development of following campaigns also.

2.9.1 Pretesting of Materials

Pretesting of materials can be done using following approaches (Stanton, 1967; Dunn and Barban, 1986).

- Direct rating: The subjects are shown many promotional material such as brochures gifts, journal advertisements and than asked to rate them on various attributes.

This approach is not much reliable but may screen out poor material.

- Portfolio tests: A portfolio of promotional materials are given to the subjects. They are free to spend as much time as they wish to examine the materials. Then they are asked to recall as much as possible of the individual campaigns and the messages they communicated.

This is an effective approach for pre testing campaigns and promotional materials.

- Laboratory tests: Psychographic techniques are used in laboratories to measure attention getting power of materials rather than attitudes or intentions.

- Sales representative testing: Materials should be tested with selected representatives to be sure that they are useable.

2.9.2 Post Testing of Materials

Post-testing of materials can be undertaken by using following approaches (Stanton, 1967; Guiltan and Paul, 1985).

- Recall tests: The subjects are asked to tell what they recall from the promotional materials such as brochure literature,

journal advertisement, that they were exposed to before.

These tests are valuable but with detail aids such as brochures, the result depends on the ability of the sales representative.

- Recognition tests: The subjects are given a journal and asked to point to advertisements seen before. Each advertisement is scored as (a) noted - the subjects who have seen it before (b) seen/associated - the subjects who correctly identify the product and the advertisement (c) read most - the subjects who say they read more than half of the text in the advertisement.

These tests are valuable for only journal advertisements.

2.10 HOW FREQUENTLY SHOULD PROMOTIONAL MATERIAL BE CHANGED?

Effectiveness of promotional materials rely on repetition. These materials need not be changed constantly to stimulate the physicions' interest. The managers of a firm may be tired of a campaign well before the average prescriber has the product's benefits and name established in his/her mind.

The sales representatives may demand new material but research will tell whether the physicians have also reached the point of boredom. We should have in mind that sales representatives see the same promotional materials more than once in a day, whereas the physician will see it once in a month at most (Report prepared by Pfizer, 1986).

When the time comes to change the campaign, all of the elements of the preceding campaign need not be discarded particularly if the preceding campaign has been succesful. Each step in the campaign should be a logical development from its predecessor, product positioning and promotional platform in which heavy investments are made. This can be maintained by use of similar colors, a consistent

choice of type of brand name and certain visual elements.

The materials produced must conform to the product's promotional platform at every stage and contribute to communicating the promotional message.

III. A COMPARATIVE STUDY AMONG THREE MULTINATIONAL PHARMACEUTICAL FIRMS ON THE EFFECTIVENESS OF PROMOTIONAL ACTIVITIES

3.1. THE RESEARCH METHODOLOGY AND DESIGN

The main purpose of this study is to investigate if any differences exist among foreign pharmaceutical firms in terms of effectiveness of promotional activities. This study also aims at gathering information from doctors on how they perceive promotional activities of pharmaceutical firms in general and personal efforts they spend to follow promotional activities of pharmaceutical firms. The study is supported by interviews made with company managers of Pfizer, Roche and Bifa to get the firms' characteristics and their opinions on promotional activities conducted by each firm and other firms in pharmaceutical industry.

This study has both explanatory and descriptive research design. It is explanatory because ideas are gathered and insights into the phenomenon of promotional activities and campaigns of pharmaceutical firms are gained. On the other hand to generate a picture of the relationships between and among variables studied, descriptive design is used.

The study is cross sectional. The emphasis is on the frequency distribution of many and interrelationship of same variables. It measures these variables at a single point in time. Moreover it is a field survey. Univariate data analysis methods are used. Sample size is 34. Frequencies, Anova and chi-square are the key analysis in the study.

3.2. SAMPLE SELECTION PROCEDURE

The sample of the study consists of 34 internists. It is approximately 5% of the total number of internists in Istanbul.

Internists were chosen as sampling units because the three firms that were studied; Pfizer, Roche and Bifa, had approximately the same amount of products serving the needs of internists.

The 34 doctors were selected by using convenience method. Doctors having private offices on the main streets of Istanbul were interviewed. Sixty-eight doctors were contacted; however 34 of them responded. If all of 68 doctors that were contacted, had responded, the sample would have been 90% confident with 10% error term. In this case the confidence interval is less and error term is higher.

3.3. DATA COLLECTION PROCEDURE AND INSTRUMENT

This research is based on primary data source. Primary data were collected from the internists in Istanbul that were the probable users of products of Pfizer, Roche and Bifa and therefore open to their promotional activities and compaigns. The data collection instrument was a structured questionnaire (Appendix 1, pp.86-92). Open and close ended questions were used. The questionnaire can be divided into 3 parts:

a. General opinions of internists on promotional activities of pharmaceutical firms (Questions 1, 2, 3a, 3b, 4, 9b, 10a belong this part).

b. Personal efforts of internists to follow up promotional activities of pharmaceutical firms (Questions 5a, 6a, 7a, 8a can be considered in this part).

c. Opinions of internists about various promotional activities and campaigns of Pfizer, Roche and Bifa (Questions 2b, 3c, 5b, 6b, 7b, 8b, 9a, 9b, 10b, 10c belong to this part).

Explanation of each question is as follows:

Question 1: The importance of promotional activities of pharma-

ceutical firms was asked to the internists. A 4 point such ranging from "very important" to "not important" was presented. Doctors were to choose one of the scale points.

Question 2a: An open ended question asking what doctors thought about promotional activities and campaigns of pharmaceutical firms in Turkey was prepared.

Question 2b: Again an open ended question this time asking what doctors thought about promotional activities and campaigns of Pfizer, Roche and Bifa.

Question 3a: The effectiveness of specific promotional activities was asked to be rated as very effective, quite effective, somewhat effective and not effective.

Question 3b: This question asked to rank the specific promotional activities as 1, 2, 3 in which foreign pharmaceutical firms were most successful.

Question 3c: This time doctors were asked to rank the specific promotional activities as 1, 2, 3 in which Pfizer, Roche and Bifa were most successful.

Question 4: "How much do promotional activities affect doctors when choosing among products with the same effect?" was the question Doctors were to sign one among: "Affect very much", "affect a lot", "affect a little", "affect none".

Question 5a, 6a, 7a, 8a: The frequency of reading medical journals, mails, participating in film shows and symposia, seminars were asked respectively to the doctors. Answers were to be chosen among "Always", "frequently", "seldom", "never" responses.

Question 5b, 6b, 7b, 8b, 9a: The aim was to learn how frequently do Pfizer, Roche and Bifa offer specific promotional activities. The questions were about advertisements in medical journals; sending

mails; inviting to film shows, inviting to symposia, seminars and sending their sales representatives respectively. The doctors were asked to sign one among; "Very frequently", "frequently", "seldom", "never" responses.

Question 9b: The importance of various factors related with sales representatives was asked. They were to be rated as "very important", "quite important", somewhat important and not important.

Question 9c: The doctors were asked to rank the various factors related with sales representatives as 1, 2, 3 in which Pfizer, Roche and Bifa were most successful.

Question 10a: "Do foreign pharmaceuticals firms consult doctors to measure effectiveness of promotional activities and compaigns?" was the question. The doctors were to assign either "always" or "sometimes" or "never".

Question 10b: This time doctors were asked whether Pfizer, Roche or Bifa consult doctors to measure effectiveness of promotional activities and campaigns. They were to assign either "always" or "sometimes" or "never".

Question 10c: Question 10b was changed by adding when. The aim was to learn whether Pfizer, Roche and Bifa consulted doctors before promotional compaigns, after promotional compaigns or both before and after promotional compaigns. Again the doctors were to choose among "always", "sometimes" and "never" responses.

As mentioned before, this study was supported by interviews made with marketing managers of Pfizer, Roche and promotion manager of Bifa. The data collection instrument was again questionnaire this mini-survey (Appendix 2; pp.91-95). Open and close ended questions were used. This questionnaire can be divided into 3 parts also.

a. Summary of firm characteristics (Questions 1 through 7).

b. Opinions of managers on promotional activities of pharmaceutical firms Questions: 8, 9a, 11a.

c. Comparison of Pfizer, Roche and Bifa in terms of promotional activities and campaigns according to managers (Questions: 9b, 10, 11b).

Explanation of each question in manager interviews is as follows:

Questions 1 through 7 were open ended questions about firms' characteristics. Number of years the firms were in Turkey; capital ownership percentage in Turkey; number of products produced by the companies; percentage change in promotional spendings for the last five years; percentage change in sales for the last five years, number of personnel in the companies, organization of the marketing functions* were what questions contained respectively.

Question 8: This question's aim was to get opinions of managers on the importance and application frequency of promotional strategies. The managers would answer whether a certain strategy was "very important" "quite important", "somewhat important" or "not important" and if they applied the same strategy "very frequently", "frequently", "seldom" or "never".

Question 9a: Managers' opinions on promotional activities and compaigns of foreign firms were taken by an open ended question.

Question 9b: This time managers' opinions on promotional activities and compaigns of Pfizer, Roche and Bifa were taken by an open ended question.

Question 10: Managers were asked to compare the success of Pfizer, Roche and Bifa in specific promotional activities on a five

*Although question seven was answered by all managers, it was not evaluated later because evaluating it would be hard, time consuming and subjective.

point scale ranging from "very successful" to "not successful at all".

Question 11a: The effectiveness of specific promotional activities according to managers were asked. The managers were to choose among "very effective", "quite effective", "somewhat effective" and "not effective" at all responses.

Question 11b: This time managers were asked to rank specific promotional activities as 1, 2, 3 to which Pfizer, Roche and Bifa give the most importance.

All of the questionnaires concerning both the main study of internists and survey of managers of the 3 firms were administered by the writer.

The questionnaires were filled by the interviewer unless the doctors wanted to fill them, themselves. In that case before leaving the office each question was checked out to see if there were any misunderstandings.

3.4. DATA ANALYSIS PROCEDURE

This research is based mainly on type of questions which have nominal and interval scaled. For nominally scated questions a numeral was assigned to each category so that each number represented a distinct category. Only frequency and percent of these kind of questions were determined. For questions which used ratio scale along with frequency and percent, getting means, standard errors and standard deviations was meaningful and they were used in conducting ANOVA tests.

Data was analyzed by SPSS computer program utilizing one way frequencies and crosstab sub programs. Frequencies of all questions which showed the distributions and percentages in each category and cross tabulations which helped in seeing relationships among and

between variables were obtained. Anova tests were made by hand using some of the outputs of frequency sub program.

Univariate analysis was used.

3.5. FINDINGS

First findings on the interviews made with the managers of Pfizer, Roche and Bifa will be presented.

3.5.1. Summary of Findings from Manager Inteviews

As mentioned before in data collection procedure, the questionnaires given to the managers can be analyzed in three parts, therefore findings will be given in three parts also. In the following pages findings are presented and some are summarized in Tables 3-1 through 3-5.

In the first part of the questionnaire, the characteristics of the firms were studied. Table 3-1 summarizes these characteristics.

Table 3-1

Summary of Firm Characteristic Based on Manager Interviews*

Variables Studied	Findings
1. Number of years the firm was in Turkey	
Pfizer	Since 1958
Roche	Since 1958
Bifa	Since 1954
2. Capital ownership of the firm in Turkey	
Pfizer	99.5 %
Roche	100.0 %
Bifa	77.5 %
3. Number of products produced by the company	
Pfizer	28
Roche	45
Bifa	67

4. Percentage change in promotional spendings for the last five years

	1981/82	1982/83	1983/84	1984/85	1985/86
Pfizer	20	-	28	85	62
Roche	Confidential				
Bifa	8	8	9	12	15

5. Percentage change in sales for the last five years

Pfizer	-19	2	-25	43	22
Roche	Confidential				
Bifa	9	9	10	10	

6. Number of personnel in the company

	Technical	Finance	Marketing	Production	Other	Total
Pfizer	25	23	73	72	88	281
Roche	50	45	138	163	72	468
Bifa	25	23	229	462	10	749

*Questions 1 through 6

The first question asked in the second part of the questionnaire which aimed finding out opinions of managers on promotional activities of pharmaceutical firms, was about importance and application frequency of some important promotional strategies.Table 3-2 explains this question. Means reflect the importance given and frequency of application of strategies. Higher the mean more important they are and applied more frequently.

Table 3-2

Importance and Application Frequency of Some Important Promotional Strategies According to Managers.*

	Importance (Mean)	Application Frequency (Mean)
Preparing promotional activities and campaigns for		
- company image	3.33	2.67
- product image	4.00	4.00
To measure the effectiveness of promotional campaigns		
- before the campaign	3.33	2.33
- after the campaign	3.00	2.67
Evaluating research results and using them in developing strategies:	3.70	2.67
Following promotional campaigns of competitors	3.70	3.70

Scale values: 4= Very important, very frequently
3= Quite important, frequently
2= Somewhat important, seldom
1= Not important, never

*Question 8

Another question in the second part was asking managers to state their general opinions on promotional activities of foreign pharmaceutical firms in Turkey. Their opinions can be summarized as follows.

Important foreign firms carry out promotional activities and campaigns according to world standards and they are successful. When compared with domestic firms promotional activities and compaigns of multinational firms are more scientific, serious and rich in quality. In general, target groups are reached and these groups evaluate promotional activities as successful.

Related with the second part, the question about perceived effectiveness of various promotional activities according to managers was asked. Table 3-3 presents the effectiveness of promotional activities by emphasizing their means.

Table 3-3

The Perceived Effectiveness of Various Promotional Activities According to Managers*

Activities	Means
S.Representatives	4.00
Symposia and Seminars	4.00
Sample	3.67
Clinical Trials	3.67
Brochure	3.33
Literature	3.00
Gifts	2.67
Film shows	2.67
Adv. in Medical Journals	2.33
Mailings	2.33
Telephone calls	1.33

4= Very effective
3= Quite effective
2= Somewhat effective
1= Not effective

*Question 11

From Table 3-3, we can conclude that managers think sales representatives, symposia and seminars are the most effective promotional activities. They are followed by samples, clinical trials and brochures. Gifts, film shows, advertisements in medical journal and mailings are between quite effective and somewhat effective while telephone calls are considered to be not effective at all.

In the third part of the questionnaire which was formed by questions asking managers to compare Pfizer, Roche and Bifa in terms of promotional activities, one of the questions was about managers' general opinions on promotional activities of Pfizer, Roche and Bifa. These opinions can be summarized as follows.

The promotional activities of Pfizer are serious, high in quality, sufficient and effective. Roche is aggressive in these activities, achieves the best, sufficient and effective. Bifa like Pfizer and Roche is sufficient and effective, at the same time successful in promotional activities.

In this part another question was taking managers' opinions on success of Pfizer, Roche and Bifa in various promotional activities. Table 3-4 presents the results of this question. As will be seen in the table, the means reflect the success of each firm; higher the mean, more successful the company is in that specific activity.

Table 3-4

Opions of Managers on Success of Pfizer, Roche and Bifa in Various Promotional Activities.*

Activities	Means		
	Pfizer	Roche	Bifa
Brochures	4.33	4.67	3.67
Samples	3.00	3.33	4.33
S.Representatives	3.33	4.33	3.67
Gifts	4.33	4.33	4.00
Symposia nad Seminars	4.00	4.33	3.33
Literature	5.00	3.33	3.67
Adv. in M.Journals	4.33	3.67	2.00
Film shows	3.33	3.00	2.67
Clinical Trials	3.67	4.33	4.00
Mailings	4.00	3.33	3.33
Telephone Calls	-	-	-

Scale values: 5= Very successful

4= Quite successful

3= Successful

2= A little successful

1= Not successful at al

*Question 10

As seen from the Table 3-4 Pfizer is most successful in literature, followed by brochures, gifts and advertisement in medical journals; while it is considered table least successful in samples, followed by sales representatives and film shows. On the other hand Roche is most successful in brochures followed by sales representatives, gifts, symposia, seminars and clinical trials, while it is least successful in film shows, followed by samples, literature and mailings. Bifa in contrast to Pfizer is most successful in samples, followed by gifts and clinical trials and it is least successful in advertisements in medical journals followed by film shows. Telephone calls for all three of the firms have no mean score meaning none of the managers evaluated them in terms of success because they thought none of the firms utilized this promotional activity.

The last question of the third part is on opinion of managers on importance given to various promotional materials by Pfizer, Roche and Bifa. In this question managers were asked to rank the three promotional materials that the firms gave most importance in decending order. Table 3-5 gives the frequencies of mentions.

Table 3-5

Opinions of Managers on Importance Given to Various Promotional Materials by Pfizer, Roche and Bifa*

Activities	Frequencies								
	Pfizer			Roche			Bifa		
	I	II	III	I	II	III	I	II	III
Brochures	1		1		3				2
Samples	1	1	2			1	2	1	
S.Representatives				2			1	2	
Adv. in M.Journals	1								
Gifts		1		1		1			1
Symposia and Seminars		1							
Literature						1			

*Question 11a

According to the results in Table 3-5; Pfizer gives most importance to samples, since most of the mentions are for samples; It doesn't give any importance to sales representatives literature, film shows*, clinical trials*, mailings* and telephone calls*. Roche on the other hand gives most importance to brochures and does not give any importance to advertisements in medical journals, symposia, seminars, film shows, clinical trials, mailings and telephone calls. Bifa gives most importance to both samples and sales representatives while doesn't give any importance to advertisements in medical journals, symposia seminars, literature, film shows, clinical trials, mailings and telephone calls.

After describing the firms' characteristic and managers' opinions about promotional activities of their firms, the other two firms and pharmaceutical firms in general, it will now be possible to compare the managers views with firms' target group, the internists' perceptions.

The initial step for the analysis of the main study will be to observe frequencies of all variables. Since the questionnaire can be analyzed in three parts as mentioned in data collection procedure, the findings that we derived by frequencies are analyzed in three parts also. The second step will be analyzing differences among three firms; Pfizer, Roche and Bifa by conducting Anova tests. In this step, findings that were derived by frequencies will be utilized. In the last step cross-tab analysis will be done to get major relationships between variables.

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*It is not present in Table 3-5; but is in question 11a.

3.5.2. Summary of Major Findings: Frequency Distributions

a. General Opinions of Internists on Promotional Activities of Pharmaceutical firms.

In this part general opinions of internists on promotional activities are studied. The first question related with this part was a close ended question. The internists were to point out whether the promotional activities of pharmaceutical firms were very important, quite important somewhat important or not important at all. The findings are summarized in Table 3-6.

Table 3-6

The Importance of Promotional Activities of Pharmaceutical Firms According to Internists.*

	Mean 2.853*	Frequency	%
Quite important (3)		13	38.2
Somewhat important (2)		10	29.4
Very important (4)		9	26.5
Not important (1)		2	5.9

*Question 1

From the preceding table it may be observed that 38.2% of the internists think promotional activities are quite important, followed by 29.4% saying they are somewhat important, 26.5% mentioning them to be very important and 5.9% finding them not important at all.

The second question in this part was an open ended question taking opinions of internists on promotional activities of pharmaceutical firms in Turkey. The answers were analyzed and grouped as

seen in Table 3-7.

Table 3-7

The Opinions of Internists on Promotional Activities of Pharmaceutical Firms in Turkey.*

	Frequency	%
Insufficient	13	39.4
Commercial	7	21.2
Sufficient	6	18.2
Domestic firms are better	2	6.1
Brochures are thrown away although costs a lot	2	6.1
Same as in Western Countries	1	3.0
Foreign firms are better	1	3.0
Different names for products with same formula must be banned	1	3.0
No answer	1	3.0

*Question 2

Greatest percentage of internists (39.4%) thought that promotional activities were insufficient, they were followed by ones thinking these activities are commercial and sufficient (21.2% and 18.2% respectively).

Another question was measuring the effectiveness of promotional activities. Table 3-8 will present the effectiveness score by means. Higher mean meaning that specific activity has higher effectiveness score. Also percent of internists that selected one of "very effective", "quite effective", "somewhat effective" and "not effective" responses was pointed out in the table.

Table 3-8

Effectiveness of Promotional Activities According to Internists*

	Mean	Very Effective(4)	Qute Effective(3)	Somewhat Effective(2)	Not Effective
Symposia, Seminars	3.617	67.6	29.5	2.9	-
Literature	3.529	58.8	38.3	-	2.9
Clinical Trials	3.212	51.5	24.2	18.2	6.1
Samples	3.206	41.2	41.2	14.7	2.9
Film Shows	3.147	44.1	32.4	17.6	5.9
S.Representatives	2.853	29.4	29.4	38.3	2.9
Gifts	2.647	11.8	52.9	23.5	11.8
Adv.in Med.Journals	2.500	14.7	38.3	29.4	17.6
Brochures	2.412	11.8	32.4	41.4	14.6
Mailings	2.029	2.9	23.5	47.1	26.5
Telephone Calls	1.750	3.1	18.8	28.1	50.0
(other) Adv.in Newspapers	4.000	100.0	-	-	-

*Question 3a

According to the table above, symposia and seminars are the most effective promotional activities, followed by literature and clinical trials. On the other hand telephone calls are the least effective activities followed by mailings and brochures (Although advertisements in newspapers had higher mean score, they were not considered to be the most effective because only 4 out of 34 internists answered the "other" alternative and they all wrote advertisements in newspapers).

The three promotional activities in which foreign pharmaceutical firms were most successful are obtained from the internists also.

Table 3-9 summarizes these findings. The first column gives the percentage of internists that ranked a specific activity as number one in terms of success. The second column presents the percentage of internists that ranked a specific activity as number two in terms of success. And the same logic holds true for the 3rd column as in 1st and 2nd.

Table 3-9

Promotional Activities in which Foreign Pharmaceutical Firms are Most Successful.*

	1 %	2 %	3 %
Brochures	32.3	10.7	-
Samples	12.9	28.6	8.7
Propogandists	16.1	14.3	13.0
Gifts	3.2	3.6	26.2
Symposia and Seminar	16.1	21.3	17.4
Literature	6.5	14.3	17.4
Film Shows	6.5	3.6	-
Clinical Trials	3.2	-	8.7
Mailings	-	3.6	4.3
Medical Journal Advertisement	-	-	4.3
Indiscernible (can't say)	3.2	-	-

*Question 3b

It is seen from Table 3-9 that the activities with the highest percentage among those that were ranked as number 1 in terms of success are brochures while telephone calls, mailings and medical journal advertisements were not considered by anybody as successful in this group. Among activities that were ranked as number 2, samples had the highest percentage while clinical trials and again as in number 1, telephone calls, medical journal advertisements were not mentioned to be successful. And among those that were ranked as number 3 gifts had the highest percentage while this time brochures, film shows and again telephone coll were not considered by any body as successful.

One of the questions in this part was measuring how much internists could be affected by promotional activities when they were choosing among products with the same effect. Following table presents the findings in terms of mean, frequency and percentage.

Table 3-10

How much can Internist be Affected by Promotional Activities When Choosing Among Products with the Same Effect?*

	Mean	Frequency	%
	2.735		
Affected quite a lot(3)		11	32.4
Affected very much(4)		10	29.4
Affected somewhat(2)		7	20.6
Affected none(1)		6	17.6

*Question 4

As seen from table 3-10, internist mentioned at most (32.4%) that they were affected quite a lot by the promotional activities when choosing among products with the same effect. Only 17.6% told that they were not affected. Mean score summarizes the answers and points out that internists are nearer to being affected quite a lot by promotional activities.

With a close ended question containing various characteristics related with sales representatives and asking internists to assign these characteristics as "very important", "quite important", "somewhat important" and "not important", the opinions of internists on importance of representative characteristics were obtained. Means were calculated also in order to rankthe characteristics in order of importance. Results are seen in Table 3-11.

From the preceding table it may be concluded that internists want sales representatives to visit in suitable time at most; then comes giving information about product in short time followed by having good relationships with themselves. Good outlook and broad pharmacological education are the characteristics that are least important according to internists.

Table 3-12 will present findings on firms' frequency of consulting to internists to measure effectiveness of promotional activities. It was a close ended question asking internists to choose among "always", "sometimes" and "never" responses.

Table 3-12

Frequency of Consulting to Internists by Foreign Pharmaceutical Firms to Measure Effectiveness of Promotional Activities.*

	Mean	Frequency	%
	1.588		
Sometimes(2)		20	58.8
Never(1)		14	41.2
Always(3)		-	-

Question 10a

From Table 3-12 we can conclude that none of the internists hed reported that foreign pharmaceutical firms always consult to them to measure effectiveness of their promotional activities. Most reported firms consult sometimes and rest reported they never consult; however percent of those that reported "sometimes" and "never" are quite near to each other. Interpretation of the mean is that, frequency of consulting to internists for measuring effectiveness is

between "sometimes" and "never".

b. Personal Efforts of Internists to Follow up Promotional Activities of Pharmaceutical Firms.

The questions related with this part were designed to measure personal efforts of doctors to follow-up promotional activities of pharmaceutical firms. Table 3-13 summarizes all the findings related with this part giving means and the percentage of internists that assigned one of "always", "frequently", "seldom" and "never" responses in the questions.

Table 3-13

Personal Efforts of Internists to Fololw-up Promotional Activities.*

	Mean**	Always(4)	Frequenty(3)	Sedam(2)	Never(1)
Reading medical journals	3.441	50.0	44.1	5.9	-
Participating in symposia and seminars	2.941	14.7	64.7	20.6	-
Reading mails	2.500	20.6	29.4	29.4	20.6
Participating in film shows	2.147	5.9	26.5	44.1	23.5

*Questions 5 through 8

Looking at the means in the table above, we may say that, in terms of effort that is spent reading medical journal takes the first order, then comes participating in symposia and seminars, followed by reading mails. Participating in film shows is the last. Another conclusion that can be drawn from means is that internists read medical journals between "always" and frequently, while participate.

**These means will be used in conducting Anova tests (Section 3.5.3.).

in symposia and seminars frequently, read mails between "frequently" and "seldom" and participate in film shows "seldom".

c. Opinions of Internists about Promotional Activities of Pfizer, Roche and Bifa.

In this last part the opinions of internists about various promotional activities of Pfizer, Roche and Bifa are studied, The first question related with this part was an open ended question which tried to get general opinions of doctors on promotional activities of the three firms. The responses were analyzed and put into 7 categories. Table 3-14 shows these categories and presents response rates of internists as percentages.

Table 3-14

Opinions of Internists about Promotional Activities of Pfizer, Roche and Bifa.*

	Pfizer	Roche	Bifa
Sufficient	6.1	12.1	12.1
Quite Sufficient	3.0	3.0	9.1
Insufficient	24.2	15.2	9.1
Successful	45.5	45.5	51.5
Quite Successful	6.1	9.1	9.1
Unsuccessful	12.1	12.1	6.1
Commercial	3.0	3.0	3.0
No answer	-	-	-

*Question 2b

According to Table 3-14, most of the internists (45.5%) think Pfizer is successful, followed by internists saying it is insufficient (24.2)%. Only 3.0% perceives it as quite sufficient and commercial. Roche like Pfizer is perceived as successful by most of the internists (45.5%), followed by being insufficient. Again like Pfizer only 3% of the internist thought Roche was quite sufficient and commercial. Bifa like Pfizer and Roche is perceived as successful by most of the internists (51.5) but can be considered as more successful than the other two; followed by being sufficient (12.1%). Only 3% of the internists thought Bifa was commercial.

Looking at the above table we can conclude that Bifa is in the best position, it is followed by Roche, Pfizer unfortunately is in the worst position when compared with the other two.

Internists were asked to state the three promotional activities in which Pfizer, Roche and Bifa were most successful. Table 3-15 shows the percent of internists that rank specific activities as number 1, 2 or 3; number 1 being the activities that firms are most successful, followed by 2 and 3.

Table 3-15

The Promotional Activities in which Pfizer, Roche and Bifa are Most Successful*

	Pfizer			Roche			Bifa		
	1	2	3	1	2	3	1	2	3
Brochures	12.5	-	-	12.5	13.6	-	9.4	18.2	-
Samples	9.4	42.9	27.3	12.5	9.1	31.3	28.1	22.7	12.5
S.Representatives	9.4	21.4	9.1	9.4	22.7	6.3	9.4	22.7	6.3
Gifts	-	-	36.4	6.3	4.5	18.8	3.1	4.5	56.3
Symposia and Seminars	15.6	14.3	-	9.4	22.7	-	15.6	22.7	-
Literature	6.3	14.3		28.0	-	12.5	6.3	-	18.8
Advertisements in M.Jour.	6.3	-	-	3.1	9.1	-	3.1	-	-
Film shows	-	7.1	-	-	4.5	6.3	3.1	9.1	6.3
Clinical Trials	3.1	-	9.1	-	9.1	6.3	-	-	-
Mailings	3.1	-	9.1	-	4.5	18.8	-	-	-
Unsuccessful in all	6.3	-	-	3.1	-	-	3.1	-	-
Indiscernible(Can't say)	28.0	-	-	15.7	-	-	18.8	-	-

*Question 3c

The most important finding when we consider internists evaluation of Pfizer's most successful promotional activity is this: Quite a high percent of internists cannot differentiate in which activity Pfizer is most successful (28%). Than the next highest percent says it is most successful in symposia and seminars. Pfizer is second most successful in samples, followed by sales representatives, and third most successful in gifts followed by samples. When it comes to evaluating the activities that Pfizer is the least successful, it is more meaningful to look at all three of the columns related with Pfizer in the table and select the row with the lowest percentage. The same evaluation will be conducted for the other two firms also. So Pfizer seems to be least successful in films shows, clinical trials and mailings. A small percent of doctors thought Pfizer was unseccessful in all (6.3%).

Roche is observed to be most successful in literature (28.0%) according to internist. Then the next highest percent thought it was indiscernible. Roche was second most successful in sales representatives, symposia and seminars, It was third most successful in samples. Roche seems to be least successful in film shows, advertisements in medical journals and clinical trials. Only 3.1% of the internists stated that Roche was unsuccessful in all of the promotional activities.

Bifa on the other hand is considered to be most successful in samples by the highest percent of internists (28.1%). The next highest percent thought, to differentiate the activities in which Bifa was most successful was impossible. Bifa was second most successful in, sales representatives, symposia and seminars. It was thought to be third most successful in gifts. Bifa was perceived as least successful in clinical trials and mailings followed by advertisements in medical journals. Like Roche, only 3.1% of the internist thought Bifa was unsuccessful in all.

None of the internists evaluated telephone calls in terms of success.Looking at the table we can conclude that Pfizer is in the worst position, while Roche was in the best. Bifa stood in the middle. The reasons were: Quite a high percent (28.0%) of internists thought Pfizer's promotional activities could not be differentiated in terms of success due to not knowing the firms promotional activities. This percent was lowest for Roche (15.7%)Bifa was in the middle (18.8%). Also 6.1% of internists thought Pfizer was unsuccessful in all of the promotional activities. While this percent was 3.1 for Roche and Bifa.

The three firms were compared in terms of frequency of offering various promotional activities. The means that are calculated for each company on every promotional activity enable us to compare the firms. Table 3-16 summarizes the findings, giving the means and percentage of internists that had assigned one of "very frequently", "frequently" "seldom" and "never" responses.

Table 3-16

Frequency of Offering Various Promotional Activities by Pfizer, Roche and Bifa According to Internists.*

	Mean	VeryFrequently(4)	Frequently(3)	Seldom(2)	Never(1)
Advertisements in medical journals					
Roche	2.848	21.2	48.5	24.2	6.1
Bifa	2.636	12.1	48.5	30.3	9.1
Pfizer	2.576	12.1	39.4	42.4	6.1
Sending mails					
Roche	2.438	12.5	31.3	43.8	12.5
Bifa	2.375	6.3	43.8	31.3	18.8
Pfizer	2.281	9.4	31.3	37.5	21.9
Inviting to film shows					
Roche	1.882	8.8	14.7	32.4	44.1
Bifa	1.882	11.8	5.9	41.2	41.2
Pfizer	1.676	8.8	5.9	29.4	55.9
Inviting to symposia and seminars					
Roche	2.424	15.2	27.3	42.4	15.2
Bifa	2.273	12.1	24.2	42.4	21.2
Pfizer	2.121	15.2	15.2	36.4	33.3
Sending their representatives					
Bifa	2.794	17.6	50.0	26.5	5.9
Roche	2.765	20.6	44.1	26.5	8.8
Pfizer	2.529	11.8	47.1	23.5	17.6

*Questions 5 through 9.

As seen from the preceding table internists thought Roche was the leader in advertisements in medical journals, sending mails end inviting to symposia and seminars, while Bifa was the leader in the performance of its representatives.Roche and Bifa shared leadership in inviting to film shows. Here again although slight differences exist among firms we may realise that Bifa is in the best position followed by Roche and then by Pfizer.

Pfizer, Roche and Bifa were evaluated also to see in which 3 characteristics their representatives performed best. Following table is describing those characteristics.Percent of internists that rank each characteristics as 1,2, or 3 in terms of success is given in the Table 3-17.

Table 3-17

The Characteristics Related with Representatives in which Pfizer, Roche and Bifa are Most Successful.*

	Pfizer			Roche			Bifa		
	1	2	3	1	2	3	1	2	3
-Visit in suitable time	20.7	-	16.7	20.7	-	14.3	20.7	-	18.2
-Information about proudct in short time	13.8	7.7	-	17.2	5.9	-	13.8	23.1	9.1
-Full information about product	-	23.1	8.3	3.4	23.5	7.1	-	23.1	-
-Frequent visit	-	23.1	8.3	-	17.6	7.1	3.4	30.8	18.2
-Propogandists with good outlooks	3.4	-	8.3	6.9	-	7.1	-	-	9.1
-Good mannered propogandists	10.3	15.4	16.7	10.3	11.8	14.3	10.3	7.7	-
-Propogandists having broad pharmacological educations	3.4	15.4	8.3	3.4	17.6	7.1	3.4	15.4	-
-Good relationship between propogandists and doctors	-	-	16.7	-	-	21.4	-	-	18.2
-Propogandists coming with promotional materials	3.4	-	16.7	3.4	5.9	21.4	3.4	-	18.2
-Propogandists taking matters to responsible people and solving	-	-	-	3.4	-	-	-	-	-
-Indiscernible	31.0	-	-	20.6	-	-	30.9	-	-
-Successful in all	6.9	-	-	6.9	-	-	10.3	-	-
-Unsuccessful in all	6.9	-	-	3.4	-	-	3.4	-	-

*Question 9c

Looking at Table 3-17 it can be seen that representatives of the three firms can not be differentiated in terms of characteristics that they are successful by quite a high percent of internists due to mainly internists not knowing representatives characteristics because they don't come regularly and some don't come at all. This percentage is almost the same for Pfizer and Bifa but less for Roche, meaning representatives of Roche are known better.

Another important finding is that a slightly higher percent of internists thinks representatives of Bifa are successful in all of the characteristics while again a slightly higher percent thinks Pfizer's representatives are unsuccessful in all characteristics.

So, the last three rows of the above table may lead us to conclude that representatives of Roche and Bifa are perceived to be slightly in a better position in terms of performance than Pfizer's according to internists.

The characteristics that the representatives of the three firms are most successful can be summarized as follows. Pfizer's representatives are considered to be most successful in visiting in suitable time, next in giving full information about the product, visiting frequently and as the third most successful in having good manners and good relationships with the doctors and coming with promotional materials. They are least successful in taking matters to responsible people and solving. Representatives of Roche are most successful in visiting in suitable time, next in giving full information about the product and followed by having good relationships with doctors, coming with promotional materials as the third most successful. They are least successful in taking matters to responsible people and solving. Bifa's representatives are most successful in characteristics not much different than those of Pfizer's and Roche's. Representatives

of Bifa is most successful in visiting in suitable time, next in visiting frequently, then third most successful in having good relationships with doctors, coming with promotional materials. Again like Pfizer and Roche, representatives of Bifa are least successful in taking matters to responsible people and solving.

Internists were asked to state how frequently Pfizer, Roche and Bifa consult them to measure effectiveness of promotional activities. They were to assign one of "always", "sometimes" and "never responses". Below in Table 4-18 we will see percent of internists stating whether the firms consult them always, sometimes or never. Means indicate which firm consult more or less.

Table 3-18

Frequency of Consulting to Internists by Pfizer, Roche and Bifa to Measure Effectiveness of Promotional, Activities.*

	Pfizer	Roche	Bifa
Always (3)	3.0	3.0	6.0
Sometimes (2)	36.4	45.5	45.5
Never (1)	60.6	51.5	48.5
No answer	-	-	
Mean	1.424	1.515	1.576

*Question 10b

As can be seen from the above table Bifa consults to internists slightly more frequently than Roche and Pfizer. Roche comes the second and Pfizer the last in terms of consulting to internists to measure effectiveness of promotional activities.

Another important issue that can be derived looking at Table 3-18

is that, most of the internists say that Pfizer and Roche never consult to them. For Bifa not most of the internists but almost half of them (48.5%) mention the same thing.

Apart from asking the internists how frequently Pfizer, Roche and Bifa consult them to measure the effectiveness of promotional campaigns, they were also asked to state when the three firms consult them. The aim was to get whether the firms consult to internists before the campaigns, after the campaigns or both before and after campaigns. Responses were again "always", "sometimes", "never" and means helped for comparison of the firms. Results are in Table 3-19.

Table 3-19

When do Pfizer, Roche and Bifa Consult Internists to Measure Effectiveness of Promotional Campaigns?*

	Pfizer	Roche	Bifa
Before-only-Campaigns			
Always	-	-	3.3
Sometimes	10.0	6.7	10.0
Never	90.0	93.3	86.7
No answer	-	-	-
Mean	1.100	1.067	1.167
After-only-Campaigns			
Always	13.3	10.0	13.3
Sometimes	23.3	33.3	30.0
Never	63.4	56.7	56.7
No answer	-	-	-
Mean	1.500	1.533	1.567
Both before and after campaigns			
Always	-	-	3.3
Sometimes	10.0	6.7	10.0
Never	90.0	93.3	86.7
No answer	-	-	-
Mean	1.100	1.067	1.167

*Question 10c

From Table 3-19 it can be seen clearly that most of the internists admitted none of the firms consult them to measure the effectiveness of promotional campaigns both before and after the campaigns. The percent of internists saying that firms do not consult increases for before campaigns. This leads to the fact that the three firms almost never consult to the internists before tha campaigns. Very low means on the table clearly justify this finding; however they consult to internists more after the campaigns. There is a slight difference among firms in this issue. If we are to rank them for getting frequency of consulting before the campaigns start, Bifa consults to doctors most frequently, then comes, Pfizer and last comes Roche. After the campaigns again Bifa consults to internists most frequently, then comes Roche and last comes Pfizer. When we consider both before and after campaigns again Bifa is the first, then comes Pfizer and last comes Roche.

3.5.3. Analysis of Differences Among Three Firms: Pfizer, Roche, Bifa

Anova test was conducted to find out whether significant difference in frequency of utilizing specific tools of promotional mix and consulting to internists to measure effectiveness of promotional activities exist among Pfizer, Roche and Bifa. Especially the variables seen in Table 3-20 studied because they cover almost all of the activities of the firms (representatives during their visits give brochures, samples, and gifts to physicians, therefore in the fifth promotional activity studied brochures, samples and gifts may be thought to be included).

The means that are seen in Table 3-20 were discussed before in section 3.5.2 after Tables 3-16 and 3-18 in detail and were presented in both of the tables, therefore they will not be explained in this section.

Results were all insignificant meaning doctors could not

differentiate among Pfizer, Roche and Bifa in terms of these activities. Table 3-20 summarizes the findings of Anova test.

Table 3-20

Analysis of Differences Among Pfizer, Roche and Bifa in terms of Promotional Activities

Promotional Activities	Means*			
	Pfizer	Roche	Bifa	F Value
1.Advertisements in Medical Journals	2.576	2.848	2.636	.316
2.Sending mails to doctors	2.281	2.438	2.375	.002
3.Inviting doctors to film shows	1.676	1.882	1.882	.161
4.Inviting doctors to Symposia and Seminars	2.121	2.424	2.273	.246
5.Sending representatives to doctors	2.529	2.765	2.794	.293
6.Consulting doctors to measure effectiveness of promotional activities	1.424	1.515	1.576	.185

*Scale values: For items 1 through 5: 4=Very frequently; 3=Frequently; 2=Seldom; 1=Never,

For item 6: 3=Always; 2=Sometimes 1=Never

3.5.4. Major Relationships Derived by Cross Tab Analysis

In this part whether or not opinions of doctors varied depending on their experience levels and working conditions were analyzed.

The doctors were put into two groups according to their graduation years from the faculty. Those that had graduated before 1969 were considered experienced while those after 1970 were considered less experienced (Question i, Appendix 1, p.86). Relationships were searched between experience levels of doctors and importance they give to

promotional activities and campaigns; effectiveness of various promotional activities, effectiveness of promotion in general when choosing among products with the same effect; consultance frequency of firms to measure effectiveness of promotional activities and campaigns.

Above relationships were searched with working conditions of doctors also. Doctors were grouped into two groups as those working privately only and those working both privately and in hospitals or clinics (Question iii, Appendix 1, p.86).

Tables 3-21 through 3-28 will present the relationships mentioned above which were derived by cross tab analysis. Due to expected cell size limitations chi-square statistics and their significance levels will not be interpreted. However, break down of the sub samples can be seen in each table.

Table 3-21

Relationship between Experience Levels of Internists and Importance They Give to Promotional Activities

Experience Level of Doctors	Importance Level of Promotional Activities of Campaigns				Total Number of Doctors
	Not Important	Somewhat Important	Quite Important	Very Important	
Experienced (1969 and before)		31.8	36.4	31.8	64.7 100.0
Less Experienced (After 1970)	16.7	25.0	41.7	16.7	35.3 100.0
Total Number of Doctors	5.9	29.4	38.2	26.5	100.0

Chi Square: 4.5199 d.f.:3 Significance:.2105

Looking at above table we may say that greatest percent of experienced (36.4%) and less experienced internists (41.7%) think promotional activities are quite important. None of the experienced doctors perceives promotional activities as not important while 16.7% of less experienced internists perceive them as not important.

Table 3-22

Relationship between Experience Levels of Internists and How Much They are Affected by Promotional Activities

Experience Level of Doctors	Level of Being Affected by Promotional Activities				Total Number of Doctors
	Not Affected	Somewhat Affected	Quite Affected	Very Much Affected	
Experienced	13.6	9.1	36.4	40.9	64.7 100.0
Less Experienced	25.0	41.7	25.0	8.3	35.3 100.0
Total Number of Doctors	17.6	20.6	32.4	29.4	100.0

Chi Square: 7.6818 D.f.=3 Significance=.0531

As seen in Table 3-22 greatest percent of experienced internists (42.9%) are very much affected by promotional activities when choosing among products with the same effect, while less experienced ones are somewhat affected (41.7%). Only a small percent of experienced internists (9.1%) think they are somewhat affected by promotional activities, however, again only a small percent of less experienced ones (8.3%) think they are very much affected. Although this relation is statistically significant (α=.0531); due to small cell sizes, interpretation is unjustified.

Table 3-23

Relationship between Experience Levels of Internists and How Much They are Consulted By Foreign Pharmaceutical Firms to Measure Effectiveness of their Promotional Activities

Experience Level of Doctors	Consultance Frequently of Firms		
	Never	Sometimes	Total Number of Doctors
Experienced	31.8	68.2	64.7 100.0
Less Experienced	58.3	41.7	35.3 100.0
Total Number of Doctors	41.2	58.8	100.0

Chi Square:1.2920 D.f.:1 Significance=.2557

This table shows that most of the experienced internists (68.2%) are sometimes consulted by pharmaceutical firms to measure the effectiveness of promotional activities; while most of less experienced ones (58.3) are never consulted.

Table 3-24

Relationship between Working Conditions of Internists and Importance They Give to Promotional Activities

Working Conditions of Doctors	Importance Level of Promotional Activities				Total Number of Doctors
	Not Important	Somewhat Important	Quite Important	Very Important	
Only Private	7.7	30.8	23.1	38.5	38.2 100.0
Private and Hospitals or Clinics	4.8	28.6	47.6	19.0	61.8 100.0
Total Number of Doctors	5.9	29.4	38.2	26.5	100.0

Chi Square=2.5385 df=3 Significance=.4684

According to the above table most of the internists working only privately (38.5%) think promotional activities are very important, while most of those working both privately and in hospitals or clinics (47.6%) think promotional activities are quite important. Only a small percent of those working privately (7.7%) and those working both privately and in hospitals or clinics (4.8%) think that promotional activities are not important.

Table 3-25

Relationship between Working Conditions of Internists and How Much They are Affected by Promotional Activities

Working conditions of Doctors	Level of Being Affected by Promotional Activities				Total Number of Doctors
	Not Affected	Somewhat Affected	Quite Affected	Very Affected	
Only Private	30.8	23.1	23.1	23.1	38.2 100.0
Private and Hospitals or Clinic	9.5	19.0	38.1	33.3	61.8 100.0
Total Number of Doctors	17.6	20.6	32.4	29.4	100.0

Chi Square: 2.9640 df=3 Significance=.3972

Greatest percent of internist working only privately (30.8%) admits that they are not affected by promotional activities of pharmaceutical firms when they are choosing among products with the same effect. However greatest percent of those working both privately and in hospitals or clinics (38.1%) admit that they are quite affected. Only a small percent of those that are working both privately and in hospitals or clinics (9.5%) say they are not affected by promotional activities.

Table 3-26

Relationship between Working Conditions of Internists and How Much They are Consulted by Foreign Pharmaceutical Firms to Measure Effectiveness of their Promotional Activities and Campaigns

Working Conditions of Doctors	Consultance Frequency of Firms		
	Never	Sometimes	Total Number of Doctors
Only Private	30.8	69.2	33.2 100.0
Private and Hospitals or Clinics	47.6	52.4	61.8 100.0
Total Number of Doctors	41.2	58.8	100.0

Chi Square: .3740 d.f=1 Significance=.5408

Most of the internists working only privately (69.2%) and those working both privately and in hospitals or clinics (52.4%) are sometimes consulted by pharmaceutical firms to measure the effectiveness of promotional activities.

Relationship between Experience Level of Internists and Effectiveness of Various Promotional Activities According to Intern

EXPERIENCE LEVEL OF DOCTORS	EFFECTIVENESS OF VARIOUS PROMOTIONAL ACTIVITIES										CHI SQUARE VALUES
	NOT EFFECTIVE		SOMEWHAT EFFECTIVE		QUITE EFFECTIVE		VERY EFFECTIVE		TOTAL NUMBER OF DOCTORS		
	BROCHURES										
EXPERIENCED	2*	9.1	10	45.5	7	31.8	3	13.6	22	100.0	1.8045
LESS EXPERIEN	3	25.0	4	33.3	4	33.3	1	8.3	12	100.0	
	SAMPLES										
EXPERIENCED	1	4.5	2	9.1	9	40.9	10	45.5	22	100.0	2.1599
LESS EXPERIEN.			3	25.0	5	41.7	4	33.3	12	100.0	
	SALES REPRESENTATIVES										
EXPERIENCED	1	4.5	8	36.4	5	22.7	8	36.4	22	100.0	2.5737
LESS EXPERIEN.			5	41.7	5	41.7	2	16.7	12	100.0	
	GIFTS										
EXPERIENCED	2	9.1	5	22.7	12	54.5	3	13.6	22	100.0	.6117
LESS EXPERIEN.	2	16.7	3	25.0	6	50.0	1	8.3	12	100.0	
	SYMPOSIA AND SEMINARS										
EXPERIENCED					6	27.3	16	72.7	22	100.0	2.1681
LESS EXPERIEN.			1	8.3	4	33.3	7	58.3	12	100.0	
	LITERATURE										
EXPERIENCED					9	40.9	13	59.1	22	100.0	1.9506
LESS EXPERIEN.	1	8.3			4	33.3	7	58.3	12	100.0	
	ADVERTISEMENTS IN MEDICAL JOURNALS										
EXPERIENCED	3	13.6	6	27.3	9	40.9	4	18.2	22	100.0	1.2938
LESS EXPERIEN.	3	25.0	4	33.3	4	33.3	1	8.3	12	100.0	
	FILM SHOWS										
EXPERIENCED	2	9.1	3	13.6	6	27.3	11	50.0	22	100.0	2.6452
LESS EXPERIEN.			3	25.0	5	41.7	4	33.3	12	100.0	
	CLINICAL TRIALS										
EXPERIENCED	2	9.5	2	9.5	5	23.8	12	57.1	21	100.0	3.8833
LESS EXPERIEN.			4	33.3	3	25.0	5	41.7	12	100.0	
	MAILINGS										
EXPERIENCED	6	27.3	9	40.9	6	27.3	1	4.5	22	100.0	1.4827
LESS EXPERIEN.	3	25.0	7	58.3	2	16.7			12	100.0	
	TELEPHONE CALLS										
EXPERIENCED	9	42.9	6	28.6	5	23.8	1	4.8	21	100.0	1.9855
LESS EXPERIEN.	7	63.6	3	27.3	1	9.1			11	100.0	
	OTHER (ADVARTISEMENTS IN DAILY NEWSPAPERS)										
EXPERIENCED							2	100.0	2	100.0	-
LESS EXPERIEN.							2	100.0	2	100.0	

All relations in this table are insignificant at =.01

*In each cell containing numbers,the numberd on the left shows frequency while the one on the right shows percentage.

Among the experienced internists the three most effective promotional tools are; symposia and seminars, literature and clinical trials. For the less experienced internists, symposia, seminars and literature are equally effective, followed by clinical trials. Thus both experienced and less experienced doctors find the some tools to be promotionally effective.

Relationship between Working Conditions of Internists and Effectiveness of Various Promotional Activities According to Intern

WORKING CONDITIONS OF DOCTORS	EFFECTIVENESS OF VARIOUS PROMOTIONAL ACTIVITIES										CHI SQUARE VALUES
	NOT EFFECTIVE		SOMEWHAT EFFECTIVE		QUITE EFFECTIVE		VERY EFFECTIVE		TOTAL NUMBER OF DOCTORS		
	BROCHURES										
Only Private	2	15.4	6	46.2	4	30.8	1	7.7	13	100.0	
Private Hosp.Cl.	3	14.3	8	38.1	7	33.3	3	14.3	21	100.0	.4462
	SAMPLES										
Only Private			2	15.4	4	30.8	7	53.8	13	100.0	
Private Hosp.Cl.	1	4.8	3	14.3	10	47.6	7	33.3	21	100.0	1.9998
	SALES REPRESENTATIVES										
Only Private	1	7.7	2	15.4	5	38.5	5	38.5	13	100.0	
Private Hosp.Cl.			1	52.4	5	23.8	5	23.8	21	100.0	5.6619
	GIFTS										
Only Private	2	15.4	2	15.4	6	46.2	3	23.1	13	100.0	
Private Hosp.Cl.	2	9.5	6	28.6	12	57.1	1	4.8	21	100.0	3.3004
	SYMPOSIA AND SEMINARS										
Only Private					6	46.2	7	53.8	13	100.0	
Private Hosp.Cl.			1	4.8	4	19.0	16	76.2	21	100.0	3.2175
	LITERATURE										
Only Private					4	30.8	9	69.2	13	100.0	
Private Hosp.Cl.	1	4.8			9	42.9	11	52.4	21	100.0	1.3134
	ADVERTISEMENTS IN MEDICAL JOURNALS										
Only Private	1	7.7	4	30.8	5	38.5	3	23.1	13	100.0	
Private Hosp.Cl.	5	23.8	6	28.6	8	38.1	2	9.5	21	100.0	2.1983
	FILM SHOWS										
Only Private	1	7.7	3	23.1	3	23.1	6	46.2	13	100.0	
Private Hosp.Cl.	1	4.8	3	14.3	8	38.1	9	42.9	21	100.0	1.0484
	CLINICAL TRIALS										
Only Private	1	7.7	4	30.8	2	15.4	6	46.2	13	100.0	
Private Hosp.Cl.	1	5.0	2	10.0	6	30.0	11	55.0	20	100.0	2.7773
	MAILINGS										
Only Private	3	23.1	7	53.8	2	15.4	1	7.7	13	100.0	
Private Hosp.Cl.	6	28.6	9	42.9	6	28.6			21	100.0	2.5064
	TELEPHONE CALLS										
Only Private	6	50.0	3	25.0	2	16.7	1	8.3	12	100.0	
Private Hosp.Cl.	10	50.0	6	30.0	4	20.0			20	100.0	1.7777
	OTHER (ADVERTISEMENTS IN DAILY NEWSPAPERS)										
Only Private							2	100.0	2	100.0	
Private HospCl.							2	100.0	2	100.0	-

All relations in this table are insignificant at =.01

Among the internists that work only privately, the three most effective promotional tools are; literature, samples, symposia and seminars. For the internists that work both privately and in hospitals or clinics symposia and seminars, clinical trials and literature are the most effective promotional tools.

3.6. LIMITATIONS OF THE STUDY

Some technical limitations restricted the scope of the study. First of all because the study was a field survey it was difficults to have complete control over doctors and conditions of contact; however by designing each question as clearly as possible and writer being the interviewer who gave out the questionnaires to doctors herself; these difficulties were tried to be minimized.

Secondly, the sample size was small. Infact, 68 doctors were contacted but only 34 wanted to participate in the study because they didn't want to make comparison among Pfizer, Roche and Bifa owing to personal reasons. With a larger sample the results could have been more significant.

Limitation related with available time of the doctors occured also. The most suitable time to give the questionnaire was determined to be before the doctor left the office to go home, because then no patient would disturb him, however the doctor felt tired and uneasy then; therefore tried to answer the questions quickly. This created problems with open ended questions. As a result open ended questions did not contain much information.

Some problems arose in interviews made by managers of Pfizer, Roche and Bifa also. None of the managers wanted to answer the third question in the questionnaire (Appendix 2, p.93) which asked to group the products they produced pharmaceutically and give sales values for 1986. Instead they only gave number of products they produced. Also

only the marketing manager of Roche didn't want to publicize the increase in promotional spendings and sales of the company for the last five years which were asked by question 4 and 5.

All of the above problems limited the scope of the study to some extend.

IV. CONCLUSIONS, IMPLICATIONS AND CONTRIBUTIONS

This final chapter deals with conclusions of the study, implications of findings for pharmaceutical firms and for further studies as well as the contributions of the paper in terms of content and methodolgoy.

4.1. CONCLUSIONS ON RESEARCH FINDINGS

Conclusions on findings of internists study will be combined with manager interviews. The related opinions of managers of Pfizer, Roche and Bifa will be compared with the internists' findings.

Based on the findings greatest percent of internists think that promotional activities are important but insufficient meaning that they are not regular, do not cover all of the doctors and that the internists are not exposed to the messages completely. Managers had given their opinions on this subject only considering foreign firms and in general they had evaluated the promotional activities as successful.

The most effective promotional activities were chosen to be symposia and seminars, followed by literature and clinical trials. On the other hand telephone calls were the least effective activities, followed by mailings and brochures according to internists. Managers thought symposia and seminars, sales representatives as most effective activities; samples and clinical trials followed them. Like internists managers thought telephone calls were the least effective activities, followed by mailings and advertisements in medical journals.

The physicians thought foreign pharmaceutical firms were most successful in brochures, samples, gifts, symposia and seminars as promotional activities. But the firms were not considered to be successful in advertisements in medical journals, mailings and film shows according to internists.

Most of the internists admitted that they were affected quite a lot by promotional activities of the firms when they were making choices among

products with the same effect. They were followed by those saying they are affected very much. Internists saying that they were affected none was only 17.6%.

Sales representatives had to visit in suitable time according to internist; this factor was very important for most of the physicians; it was followed by giving information about the product in short time and having good relationships with the doctors. The least important factor about representatives was having good outlooks, followed by having broad pharmacological education.

None of the internists told that foreign pharmaceutical firms consult them always to measure effectiveness of their promotional activities and campaigns. More than half of them reported the firms consulted to them sometimes and the rest reported the firms consulted to them never.

Medical journal readership among doctors were quite high. Most of the internists always read medical journals; none stated that he/she never read. Participation rate in symposia nad seminars were high also. Most of the internists participated frequently. Mailings were read somewhat less frequently, while participating in film shows was seldom.

When it comes to getting ideas of internists about promotional activities of Pfizer, Roche and Bifa; it is observed that doctors cannot differentiate them much. This is reflected clearly in the answers to the questions about frequency of offering various promotional activities by the three firms. The means related with the three firms were very close. Still we may say Roche was the leading firm in frequency of offering advertisements in medical journals, sending mails and inviting to symposia and seminars, while Bifa was the leader in the frequency of sending its representatives. Roche and Bifa shared leadership in inviting to film shows. Although slight differences exist among firms we may realise that Roche is in the best position followed by Bifa and then by Pfizer.

Most of the internists evaluated both Pfizer and Roche as successful but insufficient in promotional activities. Bifa was considered to be successful also but not as much insufficient as Pfizer and Roche. Within this frame Bifa was in the best position, Roche in the second and Pfizer the last.

According to physicians Pfizer was most successful in symposia and seminars, followed by sales representatives, gifts, samples, but least successful in film shows, clinical trials and mailings. Roche was most successful in literature, followed by sales represenattives, symposia, seminars and samples while it seemed to be least successful in film shows, advertisements in medical journals and clinical trials. Bifa on the other hand was considered to be most successful in samples, followed by sales representatives, symposia,seminars and gifts. It was least successful in clinical trials and mailings followed by advertisements in medical journals. The most important finding related with this issue is that quite a high percent could not differentiate in which activities the firms were most successful and a small percent found them unsuccessful in all. When we evaluate the firms in the light of this issue we may say that Pfizer is in the worst position because cannot be differentiated and found unsuccessful by a higher percent; Roche is in the best position from this point of view and Bifa is in the middle. Managers on the other hand thought Pfizer was most successful in literature, Roche in brochures and Bifa in samples. Another finding is that Pfizer is considered to be least successful in samples. Roche in film shows and Bifa in advertisements in medical journals according to managers.

Pfizer's represantatives were considered to be most successful in visiting in suitable time, next in giving full information about the product and then in having good manners and good relationships with doctors. Representatives of Roche again were evaluated to be most successful in visiting in suitable time followed by giving full information

about the product having good relationships with the doctors and visiting doctors with promotional materials. Bifa's representatives were most successful in visiting in suitable time fllowed by visiting frequently and having good relationships with the doctors. All three of the firms were least successful in taking matters to responsible people and solving. Here again the internists could not differentiate in which characteristics representatives of the three firms were most successful due to representatives not visiting them regularly and adequately. Some of the internists stated that the firms were successful in all activities and others told that they were unsuccessful in all. Considering the last three points made we may conclude that representatives of Roche and Bifa are slightly in a better position in terms of performance then those of Pfizer's according to internists.

Finally most of the internists reported that all three of the firms never come to consult to doctors for measuring effectiveness of their promotional activities and campaigns both before and after campaigns. With a slight difference Bifa was reported to be consulting more frequently than Pfizer and Pfizer in turn more frequently than Roche. However the company managers had menitoned that they measure effectiveness both before and after campaigns. They had reported they do this activity frequently after campaigns, seldom before campaigns (Table 3-2, p.40).

These results are limited to the internists in Istanbul only. At this stage, the findings of the study can neither be generalized to internists in Turkey nor to physicians from other branches.

4.2. IMPLICATIONS OF THE STUDY

Although mainly three foreign pharmaceutical firms were studied in the research, this research will have implications for both foreign and domestic pharmaceutical firms as well as for further studies.

4.2.1. Implication for Pharmaceutical Firms

The implication of the study for pharmaceutical firms is that; firms may establish priorities for progress in the areas of promotion, where they were less effective and successful. For the three firms discussed these areas are clearly seen, but for those that were not included in the study, findings can be useful also, since opinions of physicians and managers about promotion of pharmaceutical products in general were taken also.

a. Implications for Pfizer

While evaluating promotional activities and performance of the representatives of the firms, quite a high percent of internists mentioned for all three of the firms that they couldn't evaluate the activities and performances because it was impossible to differentiate them due to not being exposed to much promotion by the firms. This reply was highest for Pfizer. Also only a small percent of internists thought that Pfizer was unsuccessful in all of the activities and representative performances. Therefore Pfizer may consider these two important issues and try to increase its promotional activities to expose doctors more to its promotions and establish priorities for progress in the areas of promotion where they are less successful.

Pfizer was found to be most successful in symposia and seminars followed by sales representatives, gifts and samples but was thought to be least successful in film shows, clinical trials and mailings according to internists. Being successful in symposia nad seminars is very adventageous for Pfizer because internists think symposia and seminars as the most effective promotional activities. However although internists find literature and clinical trials very effective, in clinical trials Pfizer is the least successful and in literature not much successful. These issues must be considered by Pfizer, along with the characteristics related with the performance of its representatives that will be

discussed later in this paragraph so that in activities and characteristics that it is not successful but should be according to internists, it will take precautions and establish priorities for progress. Pfizer's representatives are considered to be most successful in visiting in suitable time, followed by giving full information about the product. According to physicians sales representatives had to visit in suitable time and give information about the product in short time. Therefore in terms of visiting in suitable time Pfizer is adventageous but must give importance to giving information about the product in short time. Internists think representatives having good outlooks as the least important characteristics, but Pfizer's representatives have given least importance to taking matters to responsible people and solving them.

Another important implication is that Pfizer, like the other two firms doesn't give necessary importance to consulting to doctors to measure effectiveness of promotional activities and campaigns. However in order to be successful in promotional strategies, effectiveness of promotional activities must be measured. Only after measuring effectiveness, how the promotional activities are perceived by the target group can be understood and necessary steps can be taken.

b. Implications for Roche

Roche when compared with the other two firms is in a slightly better position then Pfizer but almost the some with Bifa.

Like the other two firms', activities of Roche cannot be differentiated in terms of success as seen in Table 3-15 and 3-17. However percent of doctors that finds the promotional activities and representative characteristic indiscernible is lower for Roche than the other two firms, but still it needs to be considered. Also there are internists who find it unsuccessful and insufficient in all of the promotional activities and representative characteristics. Reasons for being unsuccessful and insufficient were not given. It is up to Roche and the other two firms to

search for the reasons and take necessary steps to be more successful and sufficient.

Roche was thought to be most successful in literature, followed by sales representatives, symposia, seminars and samples. However least successful in film shows, advertisements in medical journals and clinical trials. Roche like Pfizer is adventageous in some respects because internists think literature, symposia and seminars as the most effective promotional activities. But Roche must give importance to clinical trials in which it is the least successful because physicians think clinical trials are very effective. Also in terms of characteristics of representatives Roche is most successful in visiting in suitable time followed by giving full information about the product. For internists visiting in suitable time was very important followed by giving information about the product in short time. So this may lead to saying representatives of Roche may be more effective if they give information about the products in short time. Internists think representatives' having good outlooks is the least important characteristic however representatives of Roche have given least importance to taking matters to responsible people and solving them.

Roche, like the other two firms doesn't consult to physicians much to measure effectiveness of promotional activities and campaigns, but must give some consideration to this issue to be more successful and sufficient in promotional activities and then in promotional strategies.

c. Implications for Bifa

Bifa is almost in the same position with Roche in terms of success and efficiency in promotional activities, but may be considered to be slightly better than Pfizer.

Some of the internists thought that promotional activities and sales representatives' characteristics of Bifa could not be differentiated due to not being much exposed to promotional activities of Bifa. And only

a smaller percent than that of Roche and Pfizer thought that it was unsuccessful and insufficient.

Bifa was found to be most succesful in samples, than in sales representatives followed by symposia, seminars and gifts. As mentioned before physicians think the most effective activities are symposia, seminars, literature and clinical tirals. Therefore Bifa must give some importance to literature and clinical trials which are the activities that are considered to be very effective according to internists. In terms of representative characteristics, Bifa is most successful in visiting in suitable time, visiting frequently and having good relationship with doctors while internists think giving information about product in short time is as important as visiting in suitable time. Therefore Bifa should give some importance to giving information about product in short time. While internists think having good outlook is the least important characteristic, representatives of Bifa give least importance to taking matters to responsible people and solving them.

Bifa like Pfizer and Roche does not give much importance to consulting to doctors to measure effectiveness of promotional activities and campaigns. But when compared with the other two firms it gives a little more importance. Still it is not enough. Necessary steps must be taken in this issue in order to be able to implement promotional strategies successfully and to be sufficient in promotional activities.

4.2.2. Implications for Further Studies

For further studies, attention may be directed to comparison of domestic and foreign pharmaceutical firms in terms of effectiveness of promotional strategies. Also the scope of the study may be widened more and physicians from all of the branches may be included. It can be also applied to physicians not just in Istanbul but all over Turkey.

Another study can be done in which each promotional activity or

one of them will be analyzed in more detail. For example the issue of sales representatives may be explored; effectiveness of sales representatives in achieving promotional success may be studied.

A further study may be conducted only among marketing and/or promotion managers of all the most important pharmaceutical firms in Turkey; may be with the top 30's managers. Their perceptions of the effectiveness of promotional activities and campaigns can form the base for the study.

This study is the first one which compares foreign pharmaceutical firms in Turkey in terms of promotional strategies.

The study concludes that much difference do not exist among the firms with respect to effectiveness of promotional activities and campaigns.

The findings are obtained with a small sample. Thus to generalize the research results it would be useful to extend the study all over Turkey and include physicians from all branches.

The research has contributions for the marketing and promotion managers of both foreign and domestic pharmaceutical firms. Managers of Pfizer, Roche and Bifa can benefit from the results of this study to assess their strengths and weaknesses in terms of promotional effectiveness. The managers of other foreign firms and domestic firms can also identify their position in terms of promotional strategies they apply within the pharmaceutical market they operate.

The study also has contributions for the academia. It may be a step to further analyze the promotional strategies of pharmaceutical firms which have important places in Turkish manufacturing industry.

Mezuniyet tarihi:

1960'dan önce : ☐

1960-1969 : ☐

1970-1979 : ☐

1980'dan sonra: ☐

ii. Cinsiyeti:

Bay: ☐

Bayan: ☐

iii. Çalışma şekli:

Sadece özel: ☐

Diğer: _____

1-İlaç firmalarının tanıtım faaliyetleri ve reklam kampanyaları sizin için:

Çok önemli	Oldukça önemli	Az önemli	Hiç önemli değil
☐	☐	☐	☐

2-a) Türkiyedeki ilaç firmalarının ilaç tanıtım faaliyetleri, reklam kampanyaları hakkında ne düşünüyorsunuz?

b) Aşağıdaki üç yabancı ilaç firmasının ilaç tanıtım faaliyetleri, reklam kampanyaları hakkındaki fikriniz nedir?

1. Pfizer

2. Roche

3. DIFA (Birleşik Alman İlaç Fab.) → (Bayer, Schering, Knoll ve Merck'i kapsamaktadır

3-a) Aşağıdaki ilaç tanıtım faaliyetlerini tanıtımdaki etkinliği açısından değerlendirir misiniz?

	Çok Etkili	Oldukca Etkili	Az Etkili	Hiç Etkili Değil
1. Broşür	☐	☐	☐	☐
2. Numune	☐	☐	☐	☐
3. Mümessillerle yapılan reklam, tanıtım	☐	☐	☐	☐
4. Çeşitli hediyeler	☐	☐	☐	☐
5. sempozyumlar, seminerler, vb.	☐	☐	☐	☐
6. Çeşitli literatür	☐	☐	☐	☐
7. Tıbbi dergilerdeki reklam ve tanıtımlar	☐	☐	☐	☐
8. Film gösterileri	☐	☐	☐	☐
9. Klinik araştırmalar	☐	☐	☐	☐
10. Mektupla yapılan tanıtım	☐	☐	☐	☐
11. Telefonla yapılan tanıtım	☐	☐	☐	☐
12. Diğer (Belirtiniz ve değerlendiriniz)				
_____ a)	☐	☐	☐	☐
_____ b)	☐	☐	☐	☐
_____ c)	☐	☐	☐	☐

b) Sizce Türkiye'deki yabancı ilaç firmaları ilaç tanıtım ve reklamında a şıkkındaki faaliyetlerden en çok hangi üçünde en başarılıdır? (1 en başarılı tanıtım, reklam faaliyeti olmak üzere sıralayınız.)

1. _____
2. _____
3. _____

Türkiye'deki yabancı ilaç firmaları:
1. Pfizer
2. Roche
3. Bifa
4. Sandoz
5. Türk Hoechst

c)Aşağıdaki üç yabancı firma ilaç tanıtım ve reklamlarında a şıkkındaki faaliyetlerden en çok hangi üçünde başarılıdır?

Pfizer 1. _____

2. _____

3. _____

Roche 1. _____

2. _____

3. _____

BIFA 1. _____

2. _____

3. _____

4- Aynı amaca hizmet eden ilaçlar arasında seçim yaparken yeterince reklamının,tanıtımının yapılmış olması sizi ne derece etkiler?

Çok etkiler	Oldukça etkiler	Az etkiler	Hiç etkilemez
☐	☐	☐	☐

5-a) Tıbbi dergiler okuyor musunuz?

Her zaman	Çoğu zaman	Nadiren	Hiç
☐	☐	☐	☐

b)Okuyorsanız, aşağıdaki üç firmanın reklamlarına veya her çesit tanıtım yazılarına ne sıklıkta rastlıyorsunuz?

	Çok sık	Oldukça sık	Nadiren	Hiç
Pfizer:	☐	☐	☐	☐
Roche:	☐	☐	☐	☐
BIFA:	☐	☐	☐	☐

6-a) Mektup yoluyla yapılan tanıtımları reklamları okuyor musunuz?

Her zaman	Çoğu zaman	Nadiren	Hiç
☐	☐	☐	☐

b)Aşağıdaki üç firmanın mektup yoluyla tanıtım ve reklamları size ne sıklıkta ulaşıyor?

	Çok sık	Oldukça sık	Nadiren	Hiç
Pfizer:	☐	☐	☐	☐
Roche:	☐	☐	☐	☐
BIFA:	☐	☐	☐	☐

7-a) Film gosterilerine katılıyor musunuz?

Her zaman	Çoğu zaman	Nadiren	Hiç
☐	☐	☐	☐

b) Asağıdaki üç firmanin film gösterilerine davet edilme sıklığınız nedir?

	Çok sık	Oldukça sık	Nadiren	Hiç
Pfizer:	☐	☐	☐	☐
Roche:	☐	☐	☐	☐
BIFA:	☐	☐	☐	☐

8-a) Sempozyumlara,kongre ve seminerlere katılıyor musunuz?

Her zaman	Çoğu zaman	Nadiren	Hiç
☐	☐	☐	☐

b) Aşağidaki üç firmanin sempozyum,kongre ve seminerlerine çağrılma sıklığınız nedir?

	Çok sık	Oldukça sık	Nadiren	Hiç
Pfizer:	☐	☐	☐	☐
Roche:	☐	☐	☐	☐
BIFA:	☐	☐	☐	☐

9-a)Aşağıdaki üç firma ne sıklıkta mümessil yolluyor?

	Çok sık	Oldukça sık	Nadiren	Hiç
Pfizer:	[ ]	[ ]	[ ]	[ ]
Roche:	[ ]	[ ]	[ ]	[ ]
BIFA:	[ ]	[ ]	[ ]	[ ]

b) Mümessillerin propogandalarını başarıyla yürütebilmeleri için asağıdaki faktörler sizce ne derece önemlidir?

	Çok Önemli	Oldukça Önemli	Az Önemli	Hiç Önemli Değil
1.Uygun zamanda ziyaret	[ ]	[ ]	[ ]	[ ]
2.Kısa zamanda bilgi verme	[ ]	[ ]	[ ]	[ ]
3.Ürün hakkında tam bilgi verme	[ ]	[ ]	[ ]	[ ]
4.Sık ziyaret	[ ]	[ ]	[ ]	[ ]
5.Ürünün önemli özellikleri hakkında ayrıntılı bilgi verme	[ ]	[ ]	[ ]	[ ]
6.Fiziksel görünümünün iyi olması	[ ]	[ ]	[ ]	[ ]
7.Davranışlarının iyi olması	[ ]	[ ]	[ ]	[ ]
8.Farmakolojik bilgisinin geniş olması	[ ]	[ ]	[ ]	[ ]
9. Mümessil doktor arasındaki ilişkinin iyi olması	[ ]	[ ]	[ ]	[ ]
10-Mümessillerin çeşitli propoganda materyali ile gelmesi	[ ]	[ ]	[ ]	[ ]
11-Şikayet ve istekleri ilgili mercilere ulaştırıp,çözümlemesi	[ ]	[ ]	[ ]	[ ]
12-Diğer(Belirtiniz ve değerlendiriniz)				
a)_____	[ ]	[ ]	[ ]	[ ]
b)_____	[ ]	[ ]	[ ]	[ ]
c)_____	[ ]	[ ]	[ ]	[ ]

c)Aşağıdaki üç firmanın mümessilleri b şıkkındaki özellikler-den hangi üçünde en başarılıdır?

Pfizer 1. _____

2. _____

3. _____

Roche 1. _____

2. _____

3. _____

BIFA 1. _____

2. _____

3. _____

10-a) Yabancı ilaç firmaları,reklam kampanyalarının ve tanıtım faaliyetlerinin etkinliğini ölçme amacıyla size başvurdukları oluyor mu?

Evet,her zaman	Bazen	Hayır, hiçbir zaman
☐	☐	☐

b) Aşağıdaki üç firma reklam kampanyalarının ve tanıtım faaliyetlerinin etkinliğini ölçmek amacıyla size başvurdukları oluyor

	Evet,her zaman	Bazen	Hayır, hiçbir zaman
Pfizer:	☐	☐	☐
Roche:	☐	☐	☐
BIFA:	☐	☐	☐

c) Aşağıdaki ilaç firmaları bir ürünün reklam kampanyası hakkındaki fikrinizi ne zaman soruyor?

	Her zaman	Bazen	Hicbir zaman
1.Reklam kampanyası başlamadan önce			
Pfizer:	☐	☐	☐
Roche:	☐	☐	☐
BIFA:	☐	☐	☐
2.Reklam kampanyası başladiktan sonra			
Pfizer:	☐	☐	☐
Roche:	☐	☐	☐
BIFA:	☐	☐	☐
3.Hem reklam kampanyasından önce hem de sonra			
Pfizer:	☐	☐	☐
Roche:	☐	☐	☐
BIFA:	☐	☐	☐

1- Firmaniz Turkiye'de kac yildir faaliyettedir? _____

2- Firmanizin Turkiye'deki sermaye orani nedir? _____

3- Firmanizca uretilen ilaclarin farmasotik gruplara gore ayrimini yapip,1986 yili satis miktar ve tutarlarini belirtir misiniz?

4- Firmanizin 1982-1986 devresinde toplam reklam ve tanitim harcamalarindaki artisi ~~reel anlamda~~ yuzde olarak belirtiniz.

1982	1983	1984	1985	1986
_____	_____	_____	_____	_____

5- Firmanizin 1982-1986 devresindeki toplam satislarindaki artisi ~~reel anlamda~~ yuzde olarak belirtiniz.

1982	1983	1984	1985	1986
_____	_____	_____	_____	_____

6- Firmanizda toplam kac kisi calismaktadir?

a. Teknik direktorluk _____
b. Finans _____
c. Pazarlama _____
d. Satis _____
e. Imalat _____
f. Diger _____

7- Firmanizdaki pazarlama ve satis birimlerinin organizasyon semasini cizebilir misiniz?

3- Asagida siralanmis olup firmanizin reklam ve tanitim faaliyetlerine verdiginiz onemi ve ne siklikta uyguladiginizi olcen soruları cevaplandirir misiniz?

	Onem derecesi				Uygulanis sikligi			
	ÇOK ÖNEMLİ	OLDUKÇA ÖNEMLİ	AZ ÖNEMLİ	HİÇ ÖNEMLİ DEĞİL	ÇOK SIK	OLDUKÇA SIK	NADİREN	HİÇ
a.Firmanizin doktor,eczane,hastane ve toptancilara (ecza depolari) yaptigi reklam ve tanitim faaliyetlerinin								
1.Tum sirket bazinda olmasi	_|	_|	_|	_|	_|	_|	_|	_|
2.Tek urun bazinda olmasi	_|	_|	_|	_|	_|	_|	_|	_|
b.Reklam ve tanitim faaliyetleriyle ilgili kampanyalarin etkinligini olcmek amaciyla								
1.Uygulamaya baslamadan once secilmis bir grup uzerinde piyasa arastirmasi yapmak	_|	_|	_|	_|	_|	_|	_|	_|
2.Kampanyadan sonra piyasa arastirmasi yapmak	_|	_|	_|	_|	_|	_|	_|	_|
3.Piyasa arastirmalarindan cikan sonuclari degerlendirip,stratejilere yon verecek sekilde kullanmak	_|	_|	_|	_|	_|	_|	_|	_|
c. Rakiplerin reklam ve tanitim faaliyetlerini takip etmek	_|	_|	_|	_|	_|	_|	_|	_|

4- Turkiye'deki yabanci ilac firmalarinin ilac tanitim faaliyetleri,reklam kampanyalari hakkinda ne dusunuyorsunuz?

b.Asagidaki 3 firmanin ilac tanitim faaliyetleri,reklam kampanyalari hakkindaki fikriniz nedir?

1.Pfizer

2.Roche

3.BIFA(Birlesik Alman Ilac Fab.)

10- Asagidaki reklam ve tanitim faaliyetlerindeki basari acisindan Pfizer,Roche ve BIFA'yi karsilastirir misiniz?(ilgili kutunun yanina p,r veya b koyarak belirtiniz.)

	Cok Basarili	Oldukca Basarili	Basarili	Az Basarili	Hic Basarili Degil
a.Brosur					
b.Numune					
c.Numessillerle yapilan reklam, tanitim					
d.Cesitli hediyeler					
e.Sempozyumlar, seminerler,vb.					
f.Cesitli literatur					
g.Tibbi dergilerdeki reklam ve tanitimlar					
h.Film gosterileri					
i.Klinik arastirmalar					
j.Mektupla yapilan tanitim					
k.Telefonla yapilan tanitim					
l.Diger(Belirtiniz ve degerlendiriniz) 1.					
2.					
3.					

11. a. Asagidaki tanitim faaliyetlerini degerlendirir misiniz?

		Cok Etkili	Oldukca Etkili	Az Etkili	Hic Etkili Degil
1. Brosur		_|	_|	_|	_|
2. Numune		_|	_|	_|	_|
3. Mumessillerle yapilan reklam, tanitim		_|	_|	_|	_|
4. Cesitli hediyeler		_|	_|	_|	_|
5. sempozyumlar, seminerler, vb.		_|	_|	_|	_|
6. Cesitli literatur		_|	_|	_|	_|
7. Tibbi dergilerdeki reklam ve tanitimlar		_|	_|	_|	_|
8. Film gosterileri		_|	_|	_|	_|
9. Klinik arastirmalar		_|	_|	_|	_|
10. Mektupla yapilan tanitim		_|	_|	_|	_|
11. Telefonla yapilan tanitim		_|	_|	_|	_|
12. Diger (Belirtiniz ve degerlendiriniz)	a)	_|	_|	_|	_|
	b)	_|	_|	_|	_|
	c)	_|	_|	_|	_|

...sagidaki 3 firma ilac tanitim ve promosyonlarinda a sikkin-daki faaliyetlerden en cok hangi uguna onem veriyor?(1 en onem-verilen olmak uzere siralayiniz)

Pfizer	1.	.....
	2.	.....
	3.	.....
Roche	1.	.....
	2.	.....
	3.	.....
BIFA	1.	.....
	2.	.....
	3.	.....

CODING SHEET

Page No / Ques No.	Variable No.	Variable Description	Column No.	Range Min	Range Max	Specification
			1			Kart No
			2-3	01	34	Doktor No
1/A	01	Mezuniyet Tarihi	4	0	4	0=Boş 1=1960'dan önce 2=1960-1969 3=1970-1979 4=1980 ve sonrası
1/B	02	Cinsiyeti	5	0	2	0=Boş 1=Bay 2=Bayan
1/C	03	Çalışma Şekli	6	0	4	0=Boş 1=Sadece özel 2=Özel+hastane 3=Özel+klinik 4=Özel+S.S.K
1/1	04	İlaç Firmalarının Tanıtım ve Reklamları	7	0	4	4=Çok önemli 3=Oldukça önemli 2=Az önemli 1=Hiç önemli değil 0=Boş
2/3a		Tanıtım Faaliyetlerinin Etkinliği				
1	05	Broşür	8			
	06	Numune	9			
	07	Mümessillerle yapılan reklam, tanıtım	10			
	08	Çeşitli hediyeler	11	0	9	4=Çok etkili 3=Oldukça etkili 2=Az etkili 1= Hiç etkili değil 0=Boş
	09	Sempozyum ve seminerler	12			
	10	Çeşitli literatür	13			
	11	Tıbbi dergilerdeki reklam ve tanıtım	14			
	12	Film gösterileri	15			
	13	Klinik araştırmalar	16			9=Ayırt edilmiyor
	14	Mektupla yapılan tanıtım	17			
	15	Telefonla yapılan tanıtım	18			
	16	Diğer(en çok bahsedilen gazete ilanları)	19			

Page/ No / Ques No.	Variable No.	Variable Description	Column No.	Range Min	Range Max	Specification
2/3b		Yabancı İlaç Firmaları hangi 3 de başarılı				00=Boş
	17	1.seçenek	20-21	0	98	01=Broşür
	18	2.seçenek	22-23			02=Numune
	19	3.seçenek	24-25			03=Mümessillerle reklam
						04=Hediyeler
						05=Sempozyumlar, Seminerler
						06=Çeşitli literatür
						07=Tıbbi dergilerdek reklam
						08=Film gösterileri
						09=Klinik araştırmal
						10=Mektup
						11=Telefon
						12=Diğer
3/3c		3 ilaç firması hangi 3 de en başarılı				96=Hepsinde başarılı yeterli
						97=Hepsinde başarısı yetersiz
						98=Ayırt edilemiyor
		Pfizer				
	20	1.seçenek	26-27			
	21	2.seçenek	28-29			
	22	3.seçenek	30-31			
		Roche				
	23	1.seçenek	32-33	0	98	
	24	2.seçenek	34-35			
	25	3.seçenek	36-37			
		Bifa				
	26	1.seçenek	38-39			
	27	2.seçenek	40-41			
	28	3.seçenek	42-43			
3/4	29	Aynı tür ilaçlar arasında seçim yaparken reklam	44	0	4	4=Çok etkiler
						3=Oldukça etkiler
						2=Az etkiler
						1=Hiç etkilemez
						0=Boş

Page No.	Ques No.	Variable No.	Variable Description	Column No.	Range Min	Range Max	Specification
	3/5a	30	Tıbbi dergiler okuma	45	0	4	4=Her zaman 3=Çoğu zaman 2=Nadiren 1=Hiç
	3/5b		Üç firmanın reklamlarına rastlama				
		31	Pfizer	46			4=Çok sık
		32	Roche	47	0	4	3=Oldukça sık
		33	BIFA	48			2=Nadiren 1=Hiç 0=Boş
	4/6a	34	Mektupları okuma	49	0	4	4=Her zaman 3=Çoğu zaman 2=Nadiren 1=Hiç 0=Boş
	4/6b		3 firmanın mektup yollaması				
		35	Pfizer	50			
		36	Roche	51	0	4	4=Çok sık
		37	BIFA	52			3=Oldukça sık 2=Nadiren 1=Hiç 0=Boş
	4/7a	38	Film gösterilerine katılma	53	0	4	4=Her zaman 3=Çoğu zaman 2=Nadiren 1=Hiç 0=Boş
	4/7b		3 firmanın film gösterilerine davet etme				4=Çok sık
		39	Pfizer	54			3=Oldukça sık
		40	Roche	55	0	4	2=Nadiren
		41	BIFA	56			1=Hiç 0=Boş
	4/8a	42	Sempozyum ve seminerlere katılma	57	0	4	4=Her zaman 3=Çoğu zaman 2=Nadiren 1=Hiç 0=Boş

Page No.	Ques No.	Variable No.	Variable Description	Column No.	Range Min	Range Max	Specification
	4/8b		3 firmanın sempozyum, seminerlere çağırma sıklığı				
		43	Pfizer	58			4=Çok sık
		44	Roche	59	0	4	3=Oldukça sık
		45	BIFA	60			2=Nadiren
							1=Hiç
							0=Boş
	5/9a		3 firmanın mümessil yollama sıklığı				
		46	Pfizer	61			4=Çok sık
		47	Roche	62	0	4	3=Oldukça sık
		48	BIFA	63			2=Nadiren
							1=Hiç
							0=Boş
	5/9b		Mümessillerin özellikleri				
		49	Uygun zamanda ziyaret	64			
		50	Kısa zamanda bilgi	65			4=Çok önemli
		51	Tam bilgi	66			3=Oldukça önemli
		52	Sık ziyaret	67			2=Az önemli
		53	Önemli özelliklerde ayrıntılı bilgi	68	0	4	1=Hiç önemli değil
		54	Fiziksel görünüm	69			0=Boş
		55	Davranış	70			
		56	Farmokolojik bilgi	71			
		57	Mümessil-doktor ilişkisi	72			
		58	Mümessilin propoganda materyali ile gelmesi	73			
		59	Şikayetleri çözme	74			
		60	Diğer (en çok bahsedilen)	75			
	6/9c		3 firmanın mümessillerinin başarılı olduğu özellikler				97=Hepsinde başarı
			Pfizer				96=Hepsinde başarı
		61	1.seçenek	76-77			95=Ayırt edemiyor
		62	2.seçenek	78-79			00=Boş
2.KART		63	3.seçenek	4-5			01=Uygun zamanda ziyaret
			Roche				02=Kısa zamanda b
		64	1.seçenek	6-7			03=Ürün hakkında bilgi
		65	2.seçenek	8-9	0	97	04=Sık ziyaret
		66	3.seçenek	10-11			05=Önemli özellik ayrıntılı bilg
							06=Fiziksel görün
							07=Davranış
							08=Farmakolojik b

ag o.	Ques No	Variable No	Variable Description	Column No.	Range Min	Range Max	Specification
			BIFA				09=Mümessil-doktor arası ilişki
		67	1.seçenek	12-13			10=Mümessilin propoganda materyeli i gelmesi
		68	2.seçenek	14-15			11=Şikayetleri ulaştırıp çözümleme
		69	3.seçenek	16-17			12=Diğer(9b de en çok bahsedilen)
	6/10a	70	Yabancı firmalar etkinlik ölçme amacıyla başvuruyorlar mı?	18	0	3	3=Evet,her zaman 2=Bazen 1=Hayır,hiçbir zaman 0=Boş
	6/10b		3 firma etkinlik ölçme amacıyla başvuruyorlar mı?				
		71	Pfizer	19			3=Evet, her zaman
		72	Roche	20	0	3	2=Bazen
		73	BIFA	21			1=Hayır,hiçbir zaman 0=Boş
	7/10c		3 firma fikrinizi Kampanyadan önce				
		74	Pfizer	22			
		75	Roche	23			3=Her zaman
		76	BIFA	24			2=Bazen
			Kampanyadan önce				1=Hiçbir zaman
		77	Pfizer	25	0	3	0=Boş
		78	Roche	26			
		79	BIFA	27			
			Hem önce, hem sonra				
		80	Pfizer	28			
		81	Roche	29			
		82	BIFA	30			

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